Socio-Economic Benefits Of Telecentre Implementation In Peninsular Malaysia

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ABSTRACT

This paper is based on a research study to assess the socio-economic benefits of telecentre implementation throughout Peninsular Malaysia Telecentres are public access ICT facility that provide opportunities for communities to gain knowledge and skills in ICT particularly to address the issue of bridging the digital divide. Currently there are 1945 telecentres in Malaysia and this is expected to increase under the ninth Malaysia Plan with the recent announcement by the Government to build one telecentre in each mukim. With the proliferation of telecentre implementation it is timely to determine its potential contribution to the socio-economic development. For this, a survey was conducted involving 132 TCs drawn from a population comprising TCs implemented by state governments, NGOs, and private sectors. Result of the study shows that the highest social benefit of using TCs is education. In terms of economics, TCs have provided the community with more opportunity to improve their standard of living through access information on job opportunities. Evidence from the data also showed that community participation is necessary and crucial for the TCs to succeed.

Keywords
Rural ICT Development, Bridging the Digital Divide

1.0 INTRODUCTION

Telecentres (TCs) are physical space that provides public access to information and communication technology notably the Internet for educational, personal, social, and economic development (Riley & Gomez, 2001). TCs may be independent individual agencies or enterprises, part of a franchise, and in the case of Malaysia, projects of national agencies. These centres aim to stimulate and respond to the demand for information and communication services (Jensen & Esterhuysen, 2001). TC is also referred to as a one-stop centre that provides ICT resources for public access, dissemination of information and knowledge and e-government services, e-banking, e-health and others to improve the socio-economic status of targeted local communities (EPU, 2007). In Malaysia, there are a total of 1945 TCs based on a list compiled by the K-Economics Section, Economics Planning Unit, Prime Minister's Office (EPU, 2008). These TCs are combinations of Pusat Internet Desa, Medan InfoDesa, Community Access Centres, Computer Literacy Classes, and various state government telecentres set up to increase computer literacy and education, and empower rural communities to access and utilize information to improve their economic and social well-being.

This paper reports the findings of a study conducted in 2008 involving 132 telecentres throughout Peninsular Malaysia with the aim of making an assessment of the social, economic, and cultural benefits of the current usage of telecentres. Social benefits concern with social interaction, community interaction, and family interaction. Economic benefits emphasize on the improvement on standard of living whilst cultural benefits concern with the understanding of cross-culture/ethnic/custom.

Throughout this paper, a telecentre is abbreviated as TC and TCs in its plural form. The TCs that are being assessed consist of those initiated by the local state governments, Non-Governmental Organizations (NGOs) and private sectors.

2.0 METHODOLOGY

The approach used in this study is a survey type. Questionnaires were designed to capture the respondents' profiles and the benefits of ICT to the community. Types of questions used to capture responses include categorization, selection from list, and Likert scale. Respondents were asked to respond to a number of items which relate to the social, economic and cultural benefits of TCs to the community. Social benefits include social interaction, community interaction, social gap, youth social problems, promote healthcare services, mutual respect, education, access to community leader, and family interaction. Economic benefits include computer literacy, information literacy, willingness to spend for TC,

improved standard of living, career development, access to e-government services, and facilitate economic activities. Cultural benefits include local custom, life-long learning, cross-culture/ethnic understanding and tolerance, and political culture understanding.

Sampling was done based on a population list obtained via Internet searches, the K-Economy Section, Economics Planning Unit of the Prime Minister's Department, state government offices, and telephone calls to NGOs and private sector TCs. A total of 132 TCs were identified for this study. These are part of the 1945 TCs registered under the EPU list in addition to a few TCs not in the list. From the 132 TCs identified, a total number of 202 users (respondents) were obtained.

Data collection involved visiting 27 selected sites located in four regions, namely, the Northern Region (Perlis, Kedah, Penang, Perak), Central Region (Selangor, Wilayah Persekutuan, Negeri Sembilan), Southern Region (Malacca, Johore), and Eastern Region (Kelantan, Terengganu, Pahang). The rest of the TCs were contacted through telephones and questionnaires sent through mails, with self-addressed envelope. Data analysis was performed based on the responses and the findings were presented in the form of frequency, percentage and mean scores.

3.0 FINDINGS

Table 1 presents the distributions of questionnaire according to regions. A total of 1,314 questionnaires were sent through post as well as hand-delivered. The number of returned questionnaire was 202 representing a 15.4% rate of return.

Table 1. *TCs by regions*

Region	Total TCs	TCs Visited	TCs via mail	Total respondents
North	**44**	4	40	453
Central	**33**	6	27	311
South	**29**	9	20	290
East	**26**	8	18	260
Total	**132**	**27**	**105**	**1,314**

Findings indicate that majority of the respondents (76.0%) aged between 13 to 40 years old. The least age category is between 55 years and above (1.6%). There are also respondents that aged below twelve (17.6%). Relatively, the gender distribution of male and female respondents is similar (55.0% and 45.0% respectively) and most of them are still single (82.4%). In terms of academic qualifications, majority of the respondents' education background is at tertiary level. In terms of socio-economic, slightly more than 41.0% of the respondents are in the poor category with monthly income between RM677 to RM1500. However, more than half of the respondents (55.0%) owned computers at home. Out of this, only 26.4% have Internet connection, either through dial-up (22.8%) or broadband (18.2%). Most importantly, the findings suggest that majority of the respondents (74.2%) have experience using the TCs' facilities.

Table 2 shows the mean scores of respondents on the items that contribute to social, economic and cultural benefits of TCs to the community. From the table the highest social benefits of using TCs ranked by the respondents is education with a mean score of 4.235. Education has been recognized to be one of the most important socio-economic developments, particularly in a rapidly developing country like Malaysia. With access to computers and the internet in community TCs, school children can now spend more productive time to explore and look for references and additional materials related to their studies outside their school time. The second and third highest social benefits of using TCs are to facilitate interaction i.e community and social interaction, respectively. Community interaction refers to people that leave close together in a community or neighbourhood, whereas social interaction involves people from outside the community but have common interests and intentions to pursue.

Table 2. *Social, economic and cultural benefits of TCs*

Benefit	Rank	Item	Mean Score	Std Dev.
Social	1	Enhance education initiatives	4.235	1.020
	2	Facilitate community interaction	4.148	0.989
	3	Facilitate social interaction	3.973	1.071
	4	Access to community leader	3.746	1.175
	5	Bridge social gap	3.736	1.252
	6	Enhance family interaction	3.577	1.345
	7	Resolve youth social problems	3.571	1.341
	8	Promote healthcare services	3.553	3.181
	9	Mutual respect	3.401	1.483
Econo-mic	1	Improved standard of living	4.301	0.950
	2	Information knowledge	4.244	0.999

	3	Career advancement	4.227	0.931
	4	Promote cottage industries	4.095	1.050
	5	Deal with other agencies	3.798	1.670
	6	Access to e-government services	3.603	1.639
	7	Willingness to spend to learn IT skills	3.513	1.147
	8	Provide information on economic activities	3.433	1.534
Culture	1	Promote life-long learning	3.968	1.080
	2	Cross-culture/ethnic tolerance	3.770	1.090
	3	Promote local custom understanding	3.749	1.130
	4	Promote political culture understanding	3.326	1.568

Other social benefits of TCs ranked lower by respondents but having mean scores of above 3.000 include access to community leader, ability of TCs to bridge the social gap in the community, enhance family interaction particularly between parents and their children, ability to resolve social problems among youths, promote healthcare services by providing access for check-up appointments, diagnosis and health profile, and mutual respect that has the least mean score. This may suggest that whilst respect for individual rights is important, groups like family, extended family, neighbours and community are seen to be more important.

From the economic perspective, it can be deduced that TCs can serve as a means to improve one's standard of living. TCs are recognized as centres that advocate knowledge and information acquisition. Based on the responses, the respondents have ranked TCs to be a one-stop centre which allows youth to seek career prospects, particularly in the current demanding job-market scenario. From another dimension, TCs can well serve as a platform for local entrepreneurs to promote their local products. This will further help support the cottage industries.

The respondents agreed that they need to be IT literate in order to facilitate their dealings with various government and private agencies, particularly in accessing e-government services. For this purpose, the respondents have clearly indicated that their willingness to invest a nominal amount to further improve their IT skills. It is of their opinion that access to IT services will enhance their economic visibility, thus improving their quality of life.

In term of cultural benefits, education as being mentioned in the social section has been ranked as the highest compared to the others. The usage of ICT through the implementation of TC can promote and facilitate the culture of life-long learning. TC has provided an easy access for this purpose with a lot of flexibility in terms of place and time availability. The second ranked item in cultural benefit of TC implementation is promoting cross culture/ethnic tolerance. In its diversified society, Malaysia requires a strong understanding between different races and the Internet can be a very important source for information for this purpose. The pervasiveness of blogs today is evidence of this phenomenon.

Meanwhile, promoting local customs and understanding has been ranked at the third place. TC has provided a common place where people in the community can meet and understand their local custom within their communities. In addition, TCs also provide a place for making any announcement for new local customs that need to be followed by the communities. The last cultural benefits can be gained through the implementation of TC is to promote political cultural understanding. The Internet has been identified as one of the major source for alternative information for Malaysian voters to be more political savvy in their decision in the last general election. In addition, the overall understanding of political parties' movement, parties' manifestos and issues raised has been improved through the Internet channel such as websites and blogs.

CONCLUSION

Results of this study show that the highest social benefit of using TCs is education. The TCs have provided a platform especially for school children in the areas covered by the research to be connected to the Internet. For example, they are able to find further information through the Internet for the subject matter they learnt in school. Other important social benefits include community and social interaction. Using TCs, access to ICT can facilitate community and social interactions. ICT tools such as bulletin board and e-mail have been used to facilitate communication between community members.

In terms of economics, TCs have provided the community with more opportunity to improve their standard of living through access information on job opportunities. For local entrepreneurs, the TCs have provided them with the avenues to promote their products and services to the global market. In addition, the findings found that the

access to e-government services through TCs has facilitated their dealings with government agencies.

With regards to cultural benefits, education is again highlighted in terms of promoting lifelong learning. With the presence of TCs, it can provide easy access and flexibility to access learning content over the Internet. Apart from that, TC has played an important role in cross-culture and ethnic tolerance particularly in multi-racial society like Malaysia. TC has been used as a channel to promote the understanding of local customs and political culture.

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