

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) AMONG ETHNIC MINORITIES COMMUNITIES IN PENINSULAR MALAYSIA

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ABSTRACT

Information and Communication Technology (ICT) plays a crucial role in the present knowledge based globalization era and it has become a necessity for all members of the society in daily lives. It has pervaded every aspect of human life and has significantly changed the manner in which society communicate and interact which have profound implications on social development. While our country is moving towards a developed nation, there is need for developing ICT in which these technological innovations are indispensable for sustaining the socioeconomic development in this globalization era. However, the ICT adoption tend to be concern on economic, organization and education development, but only very limited attention and efforts have been given in enhancing cultural identity sustainability. Central to this paper is the discussion of the ICT adoption among the ethnic minorities and how it affects their cultural identity sustainability. The study involved 400 respondents consisted of six different ethnic minority groups that aged 13 to 74 years old, recruited by using convenience sampling technique. The findings of the study indicated that the ICT adoption is positively correlated with the cultural identity sustainability among the ethnic minorities.

Keywords: *ICT, Adoption, Ethnic Minorities, Cultural Identity, Sustainability*

ABSTRAK

Teknologi Maklumat dan Komunikasi (ICT) memainkan peranan penting dalam era globalisasi masa kini yang berasaskan pengetahuan dan ia telah menjadi satu keperluan bagi semua anggota masyarakat dalam kehidupan seharian. Ia telah menerap setiap aspek kehidupan manusia dan mengubah cara masyarakat berkomunikasi dan berinteraksi dan implikasi yang mendalam terhadap pembangunan sosial. Sedang negara kita menuju ke arah sebuah negara maju, terdapat keperluan untuk membangunkan ICT di mana inovasi teknologi ini adalah amat diperlukan untuk mengekalkan pembangunan sosioekonomi dalam era globalisasi ini. Namun begitu, penerimgunaan ICT lebih cenderung memberi perhatian dalam pembangunan ekonomi, organisasi dan pendidikan, tetapi hanya perhatian dan usaha yang sangat terhad telah diberi dalam meningkatkan kemampuan identiti budaya. Tumpuan kertas ini adalah perbincangan mengenai penerimgunaan ICT dalam kalangan etnik minoriti dan bagaimana ia memberi kesan terhadap kemampuan identiti budaya mereka. Kajian ini melibatkan 400 responden yang terdiri daripada enam kumpulan etnik minoriti yang berbeza yang berumur 13 hingga 74 tahun, dipilih

dengan menggunakan teknik persampelan mudah. Hasil kajian menunjukkan bahawa penerimgunaan ICT mempunyai perkaitan positif dengan kemampuan identiti budaya dalam kalangan etnik minoriti.

Kata Kunci: *ICT, Penerimgunaan, Etnik Minoriti, Identiti Budaya, Kemampuan*

INTRODUCTION

Information and Communication Technology (ICT) is not something new in this digital era. It has pervaded every aspect of human life and has become a necessity for all members of the society in daily lives. ICT has significantly changed the manner in which society communicate and interact. It plays a crucial role in this digital era which has profound implications on social development (Shanker, 2008).

While our country is moving towards a developed nation, there is a need for developing ICT in which these technological innovations are indispensable for sustaining the socioeconomic development in this globalization era. In light of this, Malaysia has put a lot of efforts for ICT development in order to enhance the ICT knowledge among the citizens. This could be seen through increasing emphasize on ICT developments in the national policies under the Eighth Malaysia Plan (2001-2005) and Ninth Malaysia Plan (2006-2010). However, ICT adoption tend to be concern on economic, organization and education development, but only very limited attention and efforts have been given in enhancing cultural identity sustainability.

The erosion of cultural identity is always seen as an embedded crisis behind the aggressive ICT development. This is supported by Mustafa (2006) who argued that our world is undergoing an identity crisis as we go through the global, postmodern and information era in which the identity construction has become increasingly complicated due to rapid innovations in ICT. ICT might be used to reinforce and accelerate the dominance of Western-based modes of thought, culture, and learning strategies which have resulted in massive and continuous exposure of the indigenous community to non-indigenous cultural values and information with few opportunities for reinforcement of their own cultural heritage and language (Dyson, 2004; Resta, 2011). Based on this view, ICT might have some huge impacts on the ethnic minorities' cultural identity as they adopt the new technologies, loading unsuitable Western values onto them in a modern form of cultural imperialism.

Despite ICT always seen as the cultural erosion catalyst, some researchers insisted that ICT can be very useful in maintaining ethnic identity and culture preservation. Lieberman (2003) argued that although ICT causes inevitable clashes with local traditions, however, it can be used to preserve, promote, and strengthen the indigenous language and culture. This is supported by Michael and Dunn (2006) who indicated that the potential uses of ICT in key areas fundamental to the continuing

presence of the culture. While this divergence among scholars persists, it is still crucial to research on the influence of ICT on culture from various perspectives; on diverse samples in different parts of the world. In light of this, this study is essential to fill in the gaps in past studies to investigate the adoption of ICT and its impacts on cultural identity sustainability among the ethnic minorities in Peninsular Malaysia.

RESEARCH OBJECTIVE

The purpose of this study is to determine the relationship between the adoption of ICT and the sustainability of cultural identity among the ethnic minorities in Peninsular Malaysia.

METHODOLOGY

The present research was conducted by using a survey technique. A self-administered questionnaire was the main tool employed to collect data in this research. The questionnaire used in this research was developed based on literature review in order to achieve the research objective. The questionnaire consisted of several sections which included the demographic profiles of the respondents, ownership of the ICT, the adoption of ICT in sustaining cultural identity and the cultural identity sustainability. The reliability of the instrument used in the present study was assured as all the items tested showed high Cronbach's alpha (above 0.7). This study involved 400 respondents consisted of six different ethnic minority groups namely Siam, Sikh, Baba Nyonya, Chitty, Portuguese and Orang Asli, that aged 13 to 74 years old and recruited by using convenience sampling technique. The study was conducted in Selangor and Melaka states in Peninsular Malaysia.

DEFINITION OF CONCEPTS

Adoption of ICT: Adoption encompass practice, mental and human feeling which include aspects of the purchase, acquisition, and consumerism that involves complex relationships and involvement of various objects and experiences. In this study, adoption of ICT is described as the ethnic minorities' use of ICT namely computer/tablet and mobile phones to preserve their culture.

Sustaining cultural identity: Culture consists of the values the members of a given group hold, the norms they follow, and the material goods they create (Giddens, 1994). Cultural identity is defined as one, shared culture, a sort of collective "one true self", hiding inside the many other, more superficial or artificially imposed "selves", which people with a shared history, and ancestry hold in common (Hall, 1990). In this study, sustaining cultural identity is described as the actions of learning, loving and

preserving the identity of the ethnic culture, in order to enhance the attainment of the cultural identity sustainability.

RESULTS AND DISCUSSION

Descriptive Analysis

Table 1: Demographic Profiles of the Respondents

	n	%
Age (Years)		
Less than 25	141	35.2
25-35	114	28.5
36-45	87	21.8
46-55	33	8.2
Above 55	25	6.2
Gender		
Male	185	46.2
Female	215	53.8
Ethnic		
Siam	48	12.0
Sikh	128	32.0
Baba Nyonya	52	13.0
Chitty	40	10.0
Portuguese	40	10.0
Orang Asli	92	23.0
Religion		
Islam	1	0.2
Buddhism	92	23.0
Hinduism	39	9.8
Christianity	48	12.0
Sikhism	128	32.0
Animisme	91	22.8
Others	1	0.2
Marital Status		
Single	196	49.0
Married	204	51.0

	n	%
Highest Education Qualification		
No formal education	14	3.5
Primary school	102	25.5
Secondary school	102	25.5
Certificate	39	9.8
Diploma	55	13.8
Bachelor degree	82	20.5
Postgraduate (Master/PhD)	6	1.5
Monthly Income (RM)		
0	146	36.5
<500	40	10.0
500-1000	45	11.2
1001-2000	44	11.0
2001-4000	73	18.2
4001-7000	40	10.0
>7000	12	3.0

According to Table 1, the total number of respondents comprised of 185 male respondents and 215 female respondents. The respondents involved in this study aged 13 to 74 years old. The highest proportion of respondents is Sikh (32%), followed by the Orang Asli (23%), Baba Nyonya (13%), Siam (12%), Chitty (10%) and Portuguese (10%). The respondents hold different religious beliefs which are Sikhism (32.0%), Buddhism (23.0%), Animisme (22.8%), Christianity (12.0%), Hinduism (9.8%), Islam (0.2%), and others (0.2%). More than half of the respondents are married (51.0%). In terms of level of education, majority of the respondents have formal education which are primary school (25.5%), secondary school (25.5%), Bachelor degree (20.5%), Diploma (13.8%), certificate (9.8%), postgraduate degree (1.5%), and only a small number of the respondents do not have formal education (3.5%). In terms of monthly income, the mean of monthly income is RM1734.68 with a standard deviation of 2291.26.

Table 2: Ownership of the ICT

Profile	Category	Amount	Percentage
Ownership of the computer/laptop/tablet	Have	296	74.0
	Do not have	104	26.0
Ownership of the mobile phone	Have	392	98.0
	Do not have	8	2.0

In general, Table 2 showed that 296 respondents (74.0%) out of the total respondents own a computer, laptop or tablet while 104 respondents (26.0%) do not possessed any of the computer, laptop or tablet due to some inhibiting factors such as financial problem. Meanwhile, majority of the respondents (98.0%) possessed a mobile phone while only a small portion of the respondents do not have a mobile phone. The findings revealed that the penetration of the mobile phone in ethnic minorities lives are higher compared with computer. This is consistent with the study by Osman et al. (2012) who indicated that mobile phone usage has proliferated in recent years and it is reported that about 86% of Malaysians own mobile phones (Malaysian Communications and Multimedia Commission, 2012).

Table 3 indicated the ICT adoption in sustaining cultural identity among the ethnic minorities. In general, although the findings showed that the penetration of ICT among the ethnic minorities was considered high, however the adoption of ICT for the purpose of sustaining their cultural identity still need to be improved. The mean score for ICT adoption in sustaining cultural identity among the ethnic minorities was presented in Table 3.

Table 3: The Mean Score for ICT Adoption in sustaining Cultural Identity Sustainability

	Mean	S.D.
I use ICT to find information about my ethnic customs.	2.72	1.200
I use ICT to learn about my ethnic language.	2.52	1.187
I use ICT to learn about my ethnic arts (music, dance).	2.72	1.258
I use ICT to find information about my ethnic arts (sculpture, embroidery, ceramics, house of worship).	2.66	1.206
I share videos about my ethnic arts (music, dance) through ICT.	2.76	1.263
I share videos about my ethnic arts (sculpture, embroidery, ceramics, house of worship).	2.70	1.245
I use ICT to find information about my ethnic traditional knowledge (medical knowledge).	2.66	1.190
I use ICT to learn information about my ethnic traditional knowledge (medical knowledge).	2.67	1.197
I share my ethnic traditional knowledge in my social networking sites.	2.74	1.267

Note: 1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5 = very often

Furthermore, the variable was computed based on the median score. Score lower than median (median= 26) was categorized as low level of ICT adoption while score equal or higher than median was grouped as high level of ICT adoption. The level of ICT adoption in sustaining cultural identity among the ethnic minorities was showed in the Table 4.

Table 4: The Level of ICT Adoption in sustaining Cultural Identity among the Ethnic Minorities

	Ethnic					
	Siam	Sikh	Baba Nyonya	Chitty	Portuguese	Orang Asli
ICT Adoption	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Low (score <26)	7 (14.6)	47 (36.7)	30 (57.7)	16 (40)	21 (52.5)	73 (79.3)
High (score >25)	41 (85.4)	81 (63.3)	22 (42.3)	24 (60)	19 (47.5)	19 (20.7)

According to the data presented in Table 4, majority of the Siam respondents (85.3%) showed high level of ICT adoption in sustaining their cultural identity. Meanwhile, majority of the Sikh respondents also have high level of ICT adoption in which about 63.3% of the respondents showed they adopt ICT well to preserve and promote their cultural identity. Majority of the Chitty respondents (60%) also showed a high level of adoption towards ICT. However, the situation was different with the Baba Nyonya, Portuguese and Orang Asli respondents. More than half of the Portuguese (52.5%) respondents also showed that they have low level of ICT adoption in preserving and promoting their cultural identity. Besides that, more than half of the Baba Nyonya respondents (57.7%) involved in this study also showed low level of adoption towards ICT in attaining their cultural identity sustainability. Majority of the Orang Asli respondents (79.3%) have low level of ICT adoption in sustaining their cultural identity.

The findings of the present study revealed that most of the ethnic minorities showed positive attitude towards the adoption of ICT in enhancing their cultural identity sustainability. However, for the ethnic minorities who are still not adopting ICT well in preserving their cultural identity, indicated that they were inhibited by some factors such as poverty, inadequate resources and infrastructure and lack of technical skills and knowledge. This is supported by Sarjit et al. (2009) who indicated that the Orang Asli are in the digital divide not because of their value and beliefs but mostly due to insufficient knowledge, skills and infrastructure to facilitate their access to ICT. Hence, the government should not only pay attention in meeting the

basic needs of the ethnic minorities but should also intensify the participation of ethnic minorities in the mainstream of national development, whereby they can enjoy the same development as the other mainstream community.

The adoption of ICT on the cultural identity sustainability were measured through four sustainability dimensions; language, customs, arts and traditional knowledge. The mean value obtained was showed in Table 5.

Table 5: The Mean Score for Cultural Identity Sustainability

Indicators	Mean	S.D.
I understand more about the origin of my native language through ICT.	3.01	1.176
I am proud to use my native language when using ICT.	3.27	1.141
Using my native language when using ICT enhances the sense of belonging to my ethnicity.	3.27	1.162
I feel people from other cultures have to appreciate the beauty of my native language when using ICT.	3.33	1.166
Through ICT, I feel that my native language is better than other languages.	3.20	1.115
I know more about the traditional customs of my ethnicity through ICT.	3.18	1.127
I love my traditional customs more after I understand more deeply about it through ICT.	3.25	1.169
I would practice my ethnic traditional customs more after knowing its importance through ICT.	3.18	1.097
Through ICT, I feel that my ethnic customs should be the role model for other cultures.	3.30	1.085
I know the origin of my ethnic arts more deeply through ICT.	3.19	1.121
My interest towards my ethnic arts (music, dance) increased after understand the meaning of the arts through ICT.	3.24	1.137
My interest towards my ethnic arts (sculpture, embroidery, ceramics, house of worship) increased after understand the meaning of the arts through ICT.	3.16	1.127

	Mean	S.D.
I am proud of the uniqueness of my ethnic arts through ICT.	3.45	1.160
Through ICT, I feel that my ethnic arts are more meaningful than other cultures.	3.30	1.073
I understand better about the origin of my ethnic traditional knowledge through ICT.	3.28	1.133
I appreciate the traditional knowledge of my ethnicity more after understand the meaning of such knowledge through ICT.	3.34	1.128
I feel that the traditional knowledge of my ethnicity passed down from generation to generation need to be shared with people from other cultures through ICT.	3.61	1.103
Through ICT, I feel that the traditional knowledge of my ethnicity is more meaningful compared to other cultures.	3.46	1.099

Note: 1 = Strongly disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; 5 = Strongly agree

The correlation between the adoption of ICT and the sustainability of cultural identity among the ethnic minorities was determined. The result was presented in the Table 5 below.

Table 6: Correlation of the ICT Adoption and the Sustainable Cultural Identity among the Ethnic Minorities

Variable	Sustainable Cultural Identity (N=400)	
	r	p
ICT adoption	.602***	.000

*** p < .001 (2-tailed)

According to Table 5, the results indicated that there is a significant and positive relationship between ICT adoption and the sustainable cultural identity ($r = .602, p < .001$). The findings denoted that the adoption of ICT plays an important role in sustaining the ethnic minorities' cultural identity. ICT can be viewed in various ways; optimistically or pessimistically. If ICT viewed in pessimistic way, it is seen as agent that eroded the minorities' cultural identity. As suggested by Mustafa (2006) that rapid innovations in ICT cause identity construction become increasingly complicated as

it has minimized geographic constraints and enabled virtual relationships and new social identities through instantaneous global communications. The development of such relationships certainly facilitated the intercultural contact between different minority groups and thus increasing opportunities for cultural and social exchanges between and among them. However, cultural exchanges do not mean that the minorities' cultural identity will be eroded. In contrast, with today sophisticated ICT, the ethnic minorities should use this advantage to learn, preserve and promote their culture through convey information which embodied language, customs, arts and traditional knowledge that shape their cultural identity.

Furthermore, some scholars argued that ICT is embedded with values and ideologies that shape people's consciousness and changing the ways of communication that lead to an emerging new culture (Postman, 1993; Castells, 1996). ICT encourage individuals to participate in this globalization era; a borderless condition characterized by the interconnectedness of economic, social, political and cultural activities (Castells, 1996). Indeed, such condition is profound as it challenges the diverse locality and traditional values, reduces the sense of social and cultural distance between communities, and affects our relationship to time and space, the fundamental coordinates of experiential reality (Giddens, 1994). Undeniably, ICT adoption might bring huge changes to the ethnic minorities' culture in which it changed the traditional ways of the ethnic minorities communicate and interact at both material and virtual level. Nonetheless, some researchers viewed ICT can be very useful in sustaining minorities' cultural identity if it is utilized wisely. In recent years, many developed countries have created free electronic archives and have made relevant attempts at digitizing their cultural heritage (UNESCO, 2005). This certainly helps in preserving and promoting the indigenous culture (Lieberman, 2003), and other ethnic minorities' culture as well for the present study. This is supported by Michael and Dunn (2006) who indicated that the potential uses of ICT in key areas fundamental to the continuing presence of the cultural identity.

CONCLUSION

ICT plays a crucial role in the present knowledge based globalization era and it has become a necessity for all members of the society in daily lives. It has significantly changed the ways in which society communicate and interact is an undeniable fact. ICT in this borderless globalization era certainly encourage the interconnectedness of social and cultural activities which causes inevitable clashes with local ethnic minorities traditions. Indeed, ICT always seen as the cultural erosion catalyst. However, from a different point of view, ICT is merely a tool and humans itself is the final decider who can optimize the ICT adoption in enhancing their cultural identity sustainability. Again, the findings of the present study showed that ICT plays an important role in sustaining the ethnic minorities' cultural identity. At the same time, the present study revealed that more efforts need to be done in order to minimize the digital

divide among and between the ethnic minorities with no ethnic being marginalized, in order to optimize the adoption of ICT among the ethnic minorities in preserving their cultural identity and thus achieving a holistic sustainable development.

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