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## **CONNECTING THE SENIOR CITIZENS WITH ICT: THE DEVELOPMENT OF PORTAL KOMUNITI KITA**

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### **ABSTRACT**

The rapid growth of ICT experienced by many developed countries has brought about challenges to these governments to narrow the digital divide that exists between citizens of the country. The challenges faced by these governments reflect those faced by Malaysia. In embracing these challenges, the Malaysian government has put in tremendous effort towards building a development-oriented information society for all to enable Malaysian to access, utilize and share information and knowledge. This can be seen in the remarkable progress made towards a developed nation through the informatization strategy. However, certain groups of the population, in particular, the senior citizens are left behind in ICT, due to fear of technology, low or zero ICT literacy, lack of supporting infra and info-structures and community readiness. This paper reports on the process of developing a portal, aptly named Portal Komuniti Kita, focusing on the senior citizens. The study will also report on feedback received from a group of senior citizens who participated in the User Acceptance Test which was conducted in 2012. The development of Portal Komuniti Kita has been commissioned by the government with the aim of developing a portal for various groups of Malaysian citizens: children, teenagers, youth, women, senior citizens, people with special needs, small medium entrepreneur, and the indigenous people.

Keywords: senior citizens, ict, portal, komuniti kita

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### **INTRODUCTION**

A general definition for ICT is that it comprises a diverse set of technological tools and resources to create, disseminate, store and manage data and information, which allows ICT to be a key enabler of globalization. The emergence of computers, the Internet and wireless communication technology, along with powerful software for processing and integrating text, sound and video into electronic media resulted in the spread of the global electronic network of computers which has generated efficient and cost-effective flow of

information, people, products and capital across national and regional boundaries. ICT also has the potential to help various group in a country; the rich and the poor to make some kind of transition to various potential for development. For instance, ICT can help the rural poor to improve and empower themselves for development through provision and improvement of access to information, expansion of their market base, enhancing employment opportunities and providing access to government services.(citation). It cannot be denied then that the use of ICT is expanding at various level of development throughout the world. According to the United Nations Report (2006), ICT revolution is having an impact on economic and social conditions around the world, including developing countries of Asia and the Pacific. There has been a rapid increase and shift in relocating industrial activities to low-cost developing countries, such as India and China. As a result, ICT enables services to be provided by developing countries and delivered to developed countries. In addition, “these new outsourcing opportunities create employment, generate income and enable poor countries to participate in global market” (United Nations Report, 2006, p. 2). It is no doubt that ICT acts as a vital tool in helping to link society networks around various issues; from mere sharing of information to world concern such as global warming, issues on women’s empowerment and many more. Such is the attempt to make globalization more responsive to the diverse needs of countries around the world.

## **ICT IMPACT**

It is acknowledge that ICT is recognized as a key to improve allocation process of resources and to help with the efficient implementation of programmes, especially in improving the lives of people in rural areas. There are ample evidence on how ICT plays a vital role in poverty alleviation. The Centre for Research in Sustainable Agriculture and Rural Deevlopment of the M.S. Swaminathan Research Foundation in Chennai, Tamil Nadu, India provides rural farmers with data on agricultural practices, the cost and availability of farm inputs, which help to minimize cheating by unscrupulous traders on farm products. About 20 farmers visit the kiosk and telecenters each day to access information on crop cultivation practices and schedules, net income due to them, pest and disease control and marketing, among other topics. The farmers consider the Internet a better source of information than traditional sources such as traders, field officers, television, radio and the print media. Telecenters also play the essential role of equipping the community with the tools, skills and information they need for the purpose of helping the community compete on an economic level with others in their own country and throughout the world. Young et al’s ( ) study of telecenters in Australia showed that „telecenters can be used in a transitional phase where small business proprietors can gain exposure and training in the application of ICTs which can later be used to their economic benefit” (p.3).

The emergence of ICT in rural areas has also generated the need and raise awareness in the community on the importance of updating oneself with what is happening in the country. ICT has the ability to make information easily available and provide customized information services for a particular community, which resulted in breaking down barriers to participation in a community (United Nations report, 2006). Although ICT have various potential to support economic growth, opportunities for and increase participation in a community or as players in the global market, many citizens of developing countries have not been able to take advantages of the opportunities offered by ICTs (Acılar 2011). The issue lies in access to and the use of ICTs; a phenomenon defined as global digital divide. There are also different types of digital divide within a country, such as the gender divide, the age divide and the income divide (Boje & Dragulanescu, 2003). In terms of age divide, the adoption rate of ICT among adult and elderly is still low. A study in Turkey (TurkStats) confirmed that computer and the Internet usage rate among young generation is considerably higher than that among elders (Acılar, 2011), which means that individuals in category of adults and elderly show little interest to use ICT.

The Malaysian government has been aggressive and innovative in achieving its 2020 missions by embracing Information and Communication Technologies (ICTs) as key enablers for national development. The provision of access to ICTs in the country shows that ICTs are targeted as one of the main tools for reducing socio-economic disparities of previously under-served sections of society, thereby bridging the digital divide. (United Nations Report, 2006). It is with this in mind that this study is conducted. This aim of this paper is to describe a nationwide project, aptly named Portal Komuniti Kita, which is initiated by the Economic Planning Unit (henceforth, EPU), which is one of the departments in the Prime Minister's Department.

## **BACKGROUND TO THE STUDY**

The project started in 2008 and eight groups were chosen as the target group. The data and results obtained from the preliminary findings provided the input in developing this portal, which was developed in 2009. The portal was then handed over to EPU in 2010. In 2011, EPU appointed the E-Community Research Center at Universiti Kebangsaan Malaysia (UKM) to improve and maintain the portal. This project will be completed in December, 2012.

Portal Komuniti Kita can be accessed at [www.komunitikita.my](http://www.komunitikita.my). It was developed to provide customized information for the relevant community, in an effort to bridge the digital divide among members of the community. The eight target group include children, youth, women, senior citizen, indigenous group, people with special needs (OKU) and small medium entrepreneurs. Figure 1 illustrates the main page of the Portal and figure 2 shows the main page of the Portal for the senior citizens.



Figure 1: Main page of Portal Komuniti Kita

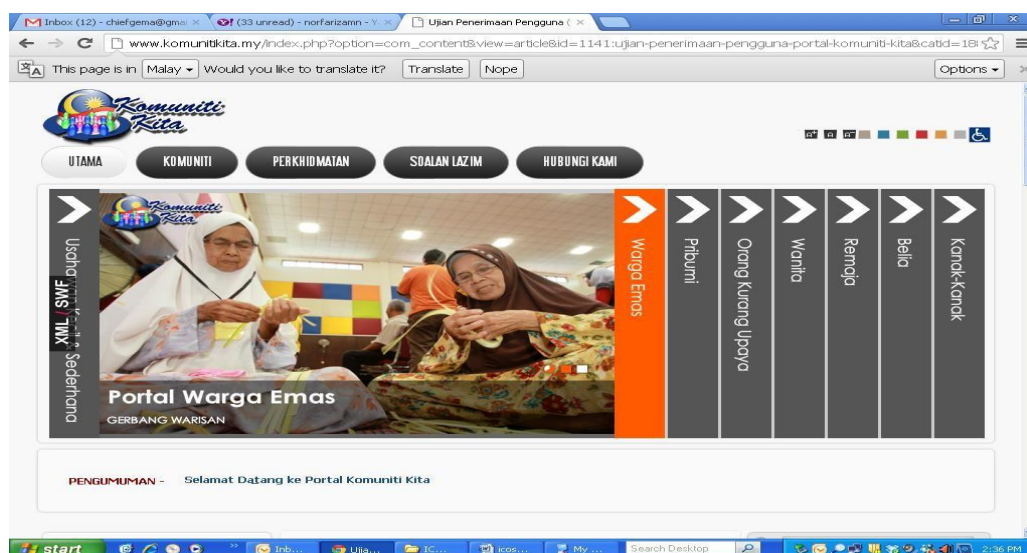


Figure 2: Main page for senior citizen group

## FEATURES OF THE PORTAL

As figure 3 shows, the main page has links to the relevant group or community, services offered, frequently asked questions and contact email address. When the user clicks on the main page, the user will be linked to the page shown in figure 4 below:



**Figure 4**

The left hand corner has links to government agencies, main stream and popular newspapers and several established and known financial institutions in Malaysia. The middle column contains current news about Malaysia, on topics which are considered relevant and important to the eight target community of this Portal. The right hand column provides users with access to general forum, feedback given to users if they participate in the forum and information on the number of visitors who accessed the Portal.

## PORTAL KOMUNITI KITA FOR SENIOR CITIZEN

There are five main categories in the portal. Each category contains information on a topic and related issues. The lifestyle category provides information about food, recreational activities, community activities, fashion and education. Matters concerning health issues which are of concern to the senior citizens is also one of the categories and this category has 17 sub sections, such as diet, common health problems experienced by senior citizens, tips for caretakers and others. There is a category on religion, which contains information on the three main religion in Malaysia (Islam, Buddhism and Hinduism), provides links to Youtube (religious talks, discussion on religion), counselling and others. Leisure category is concerned with cultural aspects in Malaysia. The final category provides links to and information on various government and private agencies. This category contains information on general counselling, service, health advice and support services for senior citizen.

In ensuring that the information and the links provided are relevant to the needs of the senior citizen, participants from government and private agencies, NGOs and supervisors of telecenters were invited to attend workshops held by the E-Community

Research Center. Discussions conducted during the workshops focused on the condition of senior citizens in Malaysia, their ICT knowledge, types of services and information which is needed and should be provided to the senior citizens. The senior citizens' portal which was undergoing construction were presented to the participants during the workshops and this sessions proved beneficial. Since the participants are in close contact with the senior citizens, they were able to provide insights into the lives of the senior citizens. Some of the comments given were:

Orang tua ni suka dengar muzik dan suka karaoke  
(*The senior citizens like to listen to music and they like to karaoke*)

Mata mereka dah kelabu jadi perkataan dalam portal perlu besar  
(*Their eyesight is not good and clear, hence, the words must be big*)

Orang tua-tua ni tak boleh focus lama. Maklumat perlu ringkas dan mudah difahami.  
(*The senior citizens don't have long attention span...they can't focus for long. Any information given should be concise and easy to understand*)

Mereka perlu diajar maklumat basic mengenai computer..bagaimana nak membuka dan menutup computer, nak pegang mouse dan apa yang nak dibaca di computer.

(*They have to be taught basic computer knowledge, such as how to switch on and switch off the computer, how to hold the mouse and what to read on screen*)

Information obtained from these workshops helped the researchers involved in the project to change, improve and add on to the Portal's content. In addition to conducting workshops, a user acceptance test was also held to obtain feedback from the concerned group.

## **USER ACCEPTANCE TEST**

The user acceptance test was held on April 2012 at a telecenter located in Pulau Meranti, Puchong, Selangor. The session was on voluntary basis. The telecenter's supervisor informed the community of Pulau Meranti about the user acceptance test session. There were five participants in the senior citizens group. The session began with a power point presentation of the Portal, followed by a question and answer session. The participants were then grouped according to the eight target group. The session was hands-on in order that the participants can have the experience on how to use and navigate their way when they logged in, into the portal. Questionnaires were distributed to the participants after the hands-on session.

The questionnaire was designed to gather information about the design, technical aspect and content of the portal. The questions are in Bahasa Melayu because this is Malaysia's national language. Besides, this project is funded by the Economic Planning Unit of the Prime Minister's Department. There are 42 questions which were categorized into four categories – (1) first impression, (2) content, (3) technical and (4) general. Each category is further divided into sub categories. The participants were asked to rate each question based on a 5 point Likert scale – (1) tiada (*none*), (2) lemah (*weak*), (3) sederhana (*average*), (4) baik (*good*) and (5) amat baik (*very good*).

## RESULTS AND DISCUSSION

The results revealed that the four categories were generally rated as either good or very good. But there were also questions which received weak and average scores. One participant gave weak score for questions 1, 3 and 4. Two participants gave weak and average scores for questions 10, 11, 12, 21, 22, 27 and 28. Three participants gave average scores for questions 32, 33, 34, 35, 38, 40 and 42. Table 1 contains information about the questions.

**Table 1:**  
**Questions**

No	Question
1	Kelihatan menarik ( <i>Looks attractive</i> )
3	Kreatif dan inovatif ( <i>Creative and innovative</i> )
4	Maklumat pemilik/pengusaha Portal ( <i>Information on the who owns the portal</i> )
5	Susunatur muka hadapan laman web ( <i>Front page of the web</i> )
10	Istilah atau terma sesuai, tepat ( <i>Suitable and correct terms</i> )
11	Maklumat tersusun dan memadai pada satu-satu laman ( <i>Good arrangement of information and enough information on a web page</i> )
12	Kebergunaan maklumat ( <i>Helpful and useful information</i> )
21	Pautan laman social – Twitter, facebook, Youtube dan RSS ( <i>Links to social networking sites</i> )
22	Kadar kelajuan navigasi ( <i>Navigation speed</i> )
27	Peta laman ( <i>Site map</i> )
28	Penggunaan animaton (sesuai, saiz) ( <i>Use of animation – size and suitability</i> )
32	Format laman ( <i>Format of the web page</i> )
33	Butang navigasi ( <i>Navigation button</i> )
34	Kemudahan navigasi untuk OKU – saiz paparan (huruf, size font), suara, warna latarbelakang (jika ada) ( <i>Navigation for people with special needs – font size, speech recognition, suitability of background colour</i> )
35	Menu laman web – mudah difahami dan penggunaan frasa yang bertetapan dengan nama menu ( <i>Menu on web page – easily understood or not, suitable use of phrases and word</i> )
38	Kreatif ( <i>Creative</i> )
40	Ekonomi dari segi masa ( <i>Economical with regard to time</i> )
42	Neutral – bebas sentiment politik dan agama ( <i>Neutral – free from religious and political</i> )

sentiment)
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Although there were only five participants, the feedback given was considered helpful to improve the Portal. Based on the first impression category, two participants commented that the Portal obtained weak scores for attractiveness, creativity and lack of information on the owner of the website. For the content category, average scores were given for terms and reference, arrangement of information and usefulness and helpfulness of information in the web page. The technical category obtained weak and average scores with regard to links to social networking sites, site map, use of animation, format of the web page, ease of use for the navigation button, ease of use for people with special needs and the menu on every web page of the Portal. It appears that the technical category needs particular attention with regards to links to social networking sites and ease of use of the navigation buttons. For the general category, average scores were given for creativity, time and neutrality of information in the Portal.

As the creativity category was rated as weak and average, this calls for particular attention. The researcher concluded that there should be more graphics and animation, instead of textual information. Majority of the senior citizens do not have clear eyesight, hence, they do not want to spend time reading textual materials. More links should be provided to Youtube, for instance, because there is animation in Youtube. Attention should also be paid to navigation buttons because the senior citizens do not have good or lack the sensory motor. Finally, religious and political issues must be screened carefully before links to or reading materials on these topics are given.

## CONCLUSION

The rapid and progressive growth in ICT will continue in the foreseeable future, but it can only be used for development if the crucial problem of the digital divide is addressed, in terms of gender, class, age, ethnicity, language, geographical location and physical ability. Portal Komuniti Kita is an example of initiative by the Malaysian government to reach out to specific communities in the country in order that they can be part of and participate in their community via virtual space. It is also hoped that this initiative will see more participation from private agencies, NGOs and individuals concerned in playing a greater role in improving the lives of the targeted groups.

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