

## **SSIL E-COMMUNITY PROJECT: BRIDGING THE DIGITAL DIVIDE OF LABUAN COMMUNITY**

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### **ABSTRACT**

The problem of digital divide keeps haunting both developed and developing nations like Malaysia. Although a lot of continuous hard works have been made, the digital divide seems continue to exist. This is where the universities should play their roles in helping to narrow this digital gap. The objective of this paper is to discuss how the UMSKAL and Labuan School of Informatics Science (SSIL) in particular, plays their roles to diminish the gap among Labuan community. The school activities such as e-community will be discussed and its benefits are highlighted.

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**Keywords:** *E-Community, Digital, Gap, UMSKAL*

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## **Introduction**

### ***Overview of Digital Divide in Malaysia***

An aggressive effort to strengthen Information Communication Technology (ICT) literacy was started in Malaysia when Multimedia Super Corridor (MSC) was initiated. MSC has 7 Flagships Applications, which one of them is Smart School. Smart School Project aims to equip schools with latest facilities and teachers with knowledge of ICT. Various schools have been selected as the pilot project. To ensure its success, Ministry of Education has injected millions of money for installing high quality of ICT infrastructure such as high speed Internet, modern computer labs, and classes with state of the art facilities. In other words, teaching and learning practices as well as school management have been reinvented to prepare children for Information Age (Rozhan, M. Idrus & Hanafi A., 2004).

Malaysia is fortunate as the Government has realized the importance of ICT earlier. The Government believes that ICT is one the main elements that should be in place if VISION 2020 wanted to be achieved. Therefore, in 9<sup>th</sup> Malaysia Plan, RM180 millions have been allocated for ICT sectors. This shows a serious commitment and effort from the government to improve ICT infrastructures particularly the Internet as well as the ICT literacy among the whole Malaysian society.

It is indisputable that ICT has brought more benefits than harmful for Malaysian populations. However, disorganized distribution of ICT infrastructure has brought a new problem so-called “Digital Divide” among societies. Apart from that factor (unfairly distribution), economic and education are also highlighted as the other influencing factors of digital divide. A study in America has strongly associated the problem of digital divide with economic and education level as they argued that these two factors can determine the persons’ ability to buy a computers and to have Internet connections (Coley, Cradler, and Engel 1997).

The digital divide in Malaysia is still growing and this calls for serious and concerted efforts to overcome it (Zaitun & Crump, 2005). The paper reported that up until June 2003, the number of Internet subscribers in Malaysia was only 2.73 millions, a very small number compared to total population. Various major efforts have been made by several parties – state governments, giant national corporations and multi-national companies (ibid). For instance, Government State of Sarawak has implemented e-Bario which utilises computers, telephones and Very Small Aperture Terminals (VSATs) to connect villagers in the remote areas to the Internet. The Selangor State has also initiated the project called The Mobile Internet Unit in 2004. Its main purpose is to provide Internet connection to the remote villagers in Selangor

Although the government has been continuously working hard to narrow the digital divide gap, the problem is still critical and could be a threat to nation development if it cannot be resolved promptly. An integrated effort involving whole parties should be implemented. The National Information Technology Council (NITC) has stressed that to address digital divide, all groups of society, including geographically isolated communities such as the native of Sabah and Sarawak, women, youths, the disabled,

small and medium sized enterprise (SMEs) and senior citizens, must work together (Manecksha, 2002).

Universities should play its roles to bridge the digital divide. More IT related activities and information should be disseminated and made available to the public.

### ***UMSKAL as a Public University in Labuan***

Geographically, Labuan Island is located off the coast of Borneo at South China Sea. The island was previously part of Sabah state until 1984, when Labuan was declared as a Federal Territory of Malaysia. It was then declared as the International Offshore Financial Centre in 1990.

Based on the year 2000, Labuan population was only about 78,000. Almost half of the total populations are people with age of 25 years old and above. Only 56% of the total land is developed for residential, tourism development, shipbuilding, oil and gas industries and manufacturing activities.

In terms of ICT infrastructure, Labuan has fiber optic cable enabled with network capacity of 15,000 lines. At present, there are only around 10,000 telephone subscribes.

The Island has 1 International School, 14 Primary Schools, 7 Secondary Schools, 1 Technical School, 1 Matriculation College and 1 public University. The public university is a branch campus of Universiti Malaysia Sabah (UMS), called Labuan International Campus (LIC). The main campus is located in Kota Kinabalu, Sabah.

UMS was established in November 2004 as the 9<sup>th</sup> public university in Malaysia. Teaching and research commenced in 1995 in renting buildings at Kota Kinabalu, whereas the management office started activities at the Ministry of Education in Kuala Lumpur. The universities occupation of the permanent campus started in 1999 and was completed in 2000. In 1999, the government also granted approval to UMS to setup a branch campus in the Federal Territory of Labuan. This campus is currently housing two schools; the School of International Business and Finance (SPKAL) and the School of Informatics Science (SSIL). SPKAL focuses on courses related to international business and finance such as international marketing, international Islamic banking, international offshore banking etc. Whereas SSIL focuses on information technology related courses i.e. multimedia technology and e-commerce. The coexistence of these two schools will complement each other as a value added to its graduates.

Labuan Island, although one of the federal territories, is a little bit lagged behind compared to the other federal territories in terms of ICT literacy. Its isolated location could be one of the reasons of being laggard. Therefore, the opening of UMS branch campus here was said to be a good move in terms of economic and education improvement. Being the only public university here, stakeholders have a very high hope that UMS can take part in boosting economic and of course narrowing the gap of digital divide among societies.

The purpose of this paper is to explore and discuss the roles and impacts of Labuan School of Informatics Science through its recent e-Community Project in narrowing the digital gap among Labuan society.

## **SSIL E-Community Project**

SSIL E-Community Project is a project organized by the School of Informatics Science as part of their community service activities. Among the objectives are – to reduce digital divide among Labuan society; and to work closely with and be part of local people. As the jump-start of this project, the school introduced e-community.

E-community or Virtual communities' goal is to create people with same interest and have them interact through specific medium. Though they are separated by geographical boundaries, the goal was to direct these communities to a mutual interest so that a common goal can be achieved. Interest group varies by demographics, behaviors and regions. In the case of Labuan, the creation of e-community program was to reduce the digital divide amongst the 24 villages in the island and the outside world. This does not mean that villages in Labuan are far behind in terms of ICT.

The E-Community program was specifically designed for the rural areas (villages) in Labuan. The main activity was to create a blogs for each village and help them understand the importance of IT and how to leverage the power of the Internet in their day to day living. Basically, blogs is continuously updated page in terms of posting entries which consist of details such as date, time and author. Each post may be commented upon by the readership of the community with several of them mainly focused on single issues such as politics, religion or scientific topics (John S.W., 2008). Nowadays, blogs has become major social movement by various communities such as academician, researchers, politician, and musician.

Realizing that UMSKAL and SSIL in particular have big roles in bridging the digital divide among communities in Labuan, SSIL conducted an introductory program on August 2009. First, the school had identified 24 villages to visit and had selected 20 of them. These villages were selected randomly and students from the E-Marketing (or E-Commerce) class were assigned to assist in the program implementation. Students have been briefed about the program before visiting the villages. This method is chosen based on two reasons; 1) to expose the students with real world experience, and 2) to enable the knowledge transfer from SSIL to the community.

The first visit from these groups of students started in September 2009; the first few visits were an introductory visit to give information and insights of the intended program. The response from the community was outstanding and positive.

After the initial phase, the second phase was to train people from these selected villages on how to build blogs. For that purpose of training, a class was setup and students of E-Commerce (SSIL) have conducted training on building blogs.

### ***Implementation of SSIL E-community Project***

To implement the project, 72 students of SSIL were divided into 20 groups. Each group

was assigned to a particular village and given only for two months to implement this project. Each group were required to conduct a series of meeting and training with the head of the villages and people selected in the village. During the meeting and training, they (head and people selected) were briefed and exposed to general information about web blogs; its advantages and disadvantages; and some tutorial on developing and maintaining the web blogs. All web blogs were created using [www.webs.com](http://www.webs.com). Webs.com is a free web development page, which provides several built-in web applications such as blogs, forums, photo gallery, video gallery, calendar, links, online business transaction etc. The users of the blogs may upload their ideas, report on the village activities, upload photos on special occasion and discuss virtually with the village community. Variety templates on the application shall produce a creative web blogs suite with the village environment. Though there were 20 villages involved, but only 13 villages managed to create web blogs successfully. Some of the blogs are discussed and highlighted as following:



Figure 2.1: Kampung Ganggarak's weblogs. (<http://kkganggarak-merinding.webs.com>)

Kampung Ganggarak/Merinding was among the villages involved in this pilot test program. A discussion was held between students with Mr. Asmawi, the head of the village. Because of no Internet connection in the Village Community Center, tutorials and short trainings were held in Asmawi's house. Figure 2.1 above shows a snapshot of Kampung Ganggarak's weblogs. The main page of the web blog shows the blog writing section that allowing registered members to post comments on the topic.

Figure 2.2 shows the main page of Kampung Sungai Miri/Pagar's weblogs, which is presenting the history of initial establishment of the village. Several tutorials were conducted by 3 students. The contents of the weblogs were provided by the villagers and the head of the village, Tn. Hj. Tajudin B. Umar.

Kampung Lajau is among the three villages that has Internet connection and mini library at the Village Community Service Center. The head of the village is Mr. Suddin. With the

facilities they have, the students were able to present and give tutorial in a proper class type setting.

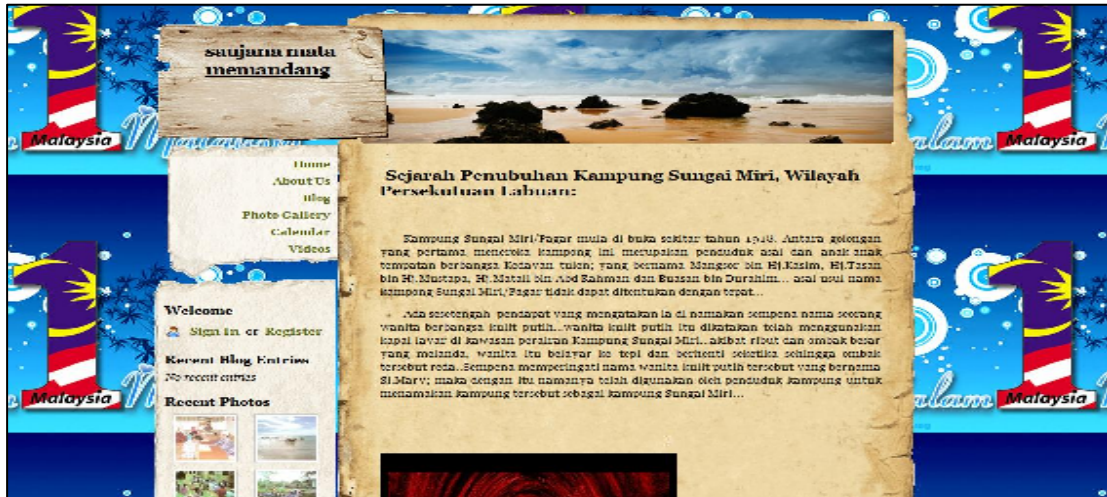


Figure 2.2: Kampung Sungai Miri/Pagar 's weblogs. (<http://mirihometown.webs.com>)

Figure 2.3 shows the weblogs of Kampung Lajau. Besides blogging, webs.com is also providing “static information web pages”, which can be used to display history or facts about the village. For instance, Figure 2.3 above shows the history of how the village got its name. Moreover, photos and videos can also be uploaded in web blogs, which creating an interactive session of discussion. Photos could be uploaded in main page section, photo gallery and on the blog page itself. Villagers could share their community activities and memorable moments with the users or visitors of the web blogs.



Figure 2.3: Kampung Lajau's weblogs. (<http://lajau.webs.com>)

Figure 2.4 shows a snapshot of uploaded photos uploaded of Kampung Gersik/Saguking. There is nine more villages with their own web blogs. The villages include Kampung Batu Manikar, Kampung Batu Arang, Kampung Lubuk Temiang, Kampung Bukit Kalam, Kampung Bukit Kuda, Kampung Layang-layangan, Kampung Sungai Bangat, Kampung Bedaun, and Kampung Ranche-Ranche. Only 3 villages have Internet connections and mini library at their Community Service Center namely; Kampung Lajau, Kampung Batu Manikar and Kampung Sungai Labu.



Figure 2.4: Kampung Gersik/Saguking's weblogs. (<http://kkggersik.webs.com>)

### Benefits to the community

The role that SSIL play in knowledge transfer to its surroundings is crucial. Through the school, the communities in Labuan can tap the vast resource that can be offered from the University and particularly from the School. With its abundance of resources such as the various computer labs, research facilities and experts from the schools in various IT domains, this wealth of knowledge is waiting to be reaped from its surroundings.

The school can also serve distance education program for the communities in obtaining short courses for IT related topics to life long learning of tertiary education program. This program can be conducted outside of the traditional university program time frame. Educational program can be offered based on the interest of the communities especially tailored for their needs. The program that can be offered can be based on the objectives that these communities wanted to achieve. It could be to obtained tertiary education for long life learning, to obtained current knowledge on new technologies, or it could be used as a means to use technology or its related tools in solving daily tasks.

In addition, UMS-KAL can act as a center that can also serve as a physical infrastructure to provide E-Community services. E-Community centers are public-access telecenter facilities that provide electronic communication services, to remote areas where IT related facilities are not prevalent. The facilities serves as avenues for providing universal access communications and multimedia services to rural communities as the center

provide telephone, faxes, computers, internet, photocopiers and other equipment services. These newly created centers could add to the many centers that has been set-up by the government in theses villages. Though not all villages were provided for such buildings, this is where UMS-KAL can play its role.

The E-Community centers can have several functions. The main function is to provide facilities which enable the communities to access new knowledge and information that can be incorporated into their local knowledge and context, such as information on employment opportunities, educational resources, government services, and information on agriculture and fisheries. The center can also encourage entrepreneurship and increase the monetary income of its community by encouraging local made products to be marketed over the web through various business portals. Entrepreneurs in these communities can utilize the facilities to plan and prepare their business arrangements and to communicate with partners and potential clients form everywhere.

In this respect, UMS-KAL is opening communication opportunities that can be benefited by its surroundings. It is hoped that through this project, the usage of ICT will become more common and be accepted as part of their everyday life, regardless of – who they are; where they are coming from; their education background; and their monthly income.

### **Conclusion**

There are many projects have been made by the government in order to shrink the gap of digital divide in Malaysia. In Labuan, UMSKAL has been playing important roles to boost the socio-economic and to decrease the digital divide among the societies. Nevertheless, narrowing the digital gap is not an easy task. It is not the job of one parties, but involving whole parties – government, private sectors, and public societies. Apart from lacking of ICT infrastructures and awareness, economic status and education level are also influencing the technology gap as been exposed by Coley, Cradler, and Engel (1997).

Therefore, in order to reduce the gap, the Government has big task to play with. The Government should consider how to improve economic status and education level as both are identified as the influencing factors of digital divide. Being the only public university in this island, UMSKAL carries huge responsibilities to address the issue. The stakeholders like Ministry of Higher Education and societies have a high hope for UMSKAL to bring Labuan into higher level of economic status, education level, as well as to lessen the digital gap. After 10 years in operation, since it was opened in 1999, the university is subject to be discussed whether or not it has fulfilled its main objectives. We have a strong believe that UMSKAL can achieve its purpose of establishment and therefore fulfilling the dreams of Labuan's societies to be at least at the same par with other states or territories in Malaysia. With good leaders, supportive infrastructure, politic stability, and the will power that we have, we believe we can do it.

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