The Need for Community Informatics in Malaysia

Jayapragas Gnaniah
Universiti Malaysia Sarawak, Malaysia

Peter Songan
Universiti Malaysia Sarawak, Malaysia

Alvin W. Yeo
Universiti Malaysia Sarawak, Malaysia

Hushairi Zen
Universiti Malaysia Sarawak, Malaysia

Khairuddin Ab. Hamid
Universiti Malaysia Sarawak, Malaysia

THE NEED FOR COMMUNITY INFORMATICS

The Malaysian government, through many initiatives, has seriously looked into reducing and if possible eliminating, the digital divide that exists between the developed urban and the technologically impoverished rural communities. The e-Bario Project, a successful research showcase of Universiti Malaysia Sarawak, is one of the leading examples in Malaysia of such an attempt to bridge the digital gap and to achieve sustainable human development through the introduction of information and communication technologies (ICT). According to Harris, Bala, Songan, Khoo and Trang (2001), the World Bank had introduced a systematic approach to the application of ICT to meet the needs and bridge the digital divide of the rural community. The following are the steps to be taken in this systematic approach:

- *Identify the needs and priorities of the rural communities for areas such as agriculture, education, commerce, natural resource management, health, etc.*
- *Determine the types of information needed to help meet those needs, including information gathered from the rural population and transmitted to policy-makers and project designers, and information shared among rural communities.*
- *Determine the gaps between the information currently available and what is needed.*

- *Determine how ICT can close those gaps and build valuable synergies by mobilising information across sectors.*
  (Harris et al., 2001, p. 274)

Harris et al. (2001) further claimed that telecentres were being hailed in many countries in Africa, Latin America and Asia as the new solution to development problems to provide ICT access and bridge the digital gap. Gomez, Hunt and Lamourex (1999) defined telecentres as public-access facilities to provide electronic communications services, especially in marginalised or remote areas where commercial development of ICT is not prevalent.

A baseline study which aimed to determine the possibility of setting up a telecentre in Long Bedian was carried out, as part of the e-Bedian project. The e-Bedian project, modelled after the e-Bario project, was expected to become another successful, self-sustained rural ICT development project through the set-up of a telecentre. The baseline study was conducted in tandem with the recommendation provided by Harris et al. (2001), that is, as a systematic approach in introducing ICT to the rural communities to close the digital gap. The communication pattern and the socio-economic variables obtained from the study helped in planning the development of a telecentre in Long Bedian. The telecentre was expected to play the role of the central communication facility and ICT awareness centre for the village. Gomez et al. (1999) have suggested that a telecentre should provide a combined or integrated ICT based service, for instance, from a basic pay

Table 1. Demographic characteristic of respondents (n=186)

Variable	Category	Number	Percentage
Race	Iban	5	2.7
	Kayan	158	84.9
	Kelabit	12	6.5
	Kenyah	3	1.6
	Morek	2	1.1
	Punan	2	1.1
	Others	4	2.0
Religion	Christian	186	100
Gender	Male	110	59.1
	Female	76	40.9
Age	30 and below	58	31.2
	31 to 40	50	26.9
	41 to 50	40	21.5
	51 to 60	25	13.4
	61 and above	13	7.0
Mean age	*39.6 years*		
Education	Never went to school	52	28.0
	Primary School	47	25.3
	Lower Secondary	39	21.0
	School	43	23.1
	Upper Secondary	5	2.7
	School		
	University		
Occupation	Farmer	44	23.7
	Government employee	8	4.3
	Private sector employee	8	4.3
	Business person	20	10.8
	Labourers/General	1	0.5
	Workers	14	7.5
	Drivers	51	27.4
	Housewife	5	2.7
	Mechanic	1	0.5
	Tailor	13	7.0
	Timber logging	7	3.8
	Unemployed/retired	4	2.2
	Self employed	2	1.1
	Cook/Chef	5	2.7
	Student	1	0.5
	Contractor	2	1.0
	Others		
Monthly	RM250 and below	55	29.6
Household Income	RM251 to RM500	45	24.2
	RM501 to RM750	20	10.8
	RM751 to RM1000	29	15.6
	RM1, 001 and above	37	19.9
Mean Income	*RM830.20*		
Computer Usage	None	147	79.0
	Less than 1 year	16	8.6
	1-3 years	17	9.1
	4-6 years	5	2.7
	More than 6 years	1	0.5

phone connection to e-mails and Internet connection and services.

BASELINE STUDY OF THE LONG BEDIAN COMMUNITY

Long Bedian is located in the Apoh Tutoh region of the Baram district, in the Miri Division of Sarawak. The village comprised 180 houses and has a total population of 1,686 people. There are only two ways to get to Long Bedian from Miri town. The first way is to take an express boat from Kuala Baram, Miri to Marudi, and then transfer to another express boat to Long Lama. The total express boat journey takes about seven hours. Then from Long Lama, another hour's drive is required by 4-wheel drive (4WD) to Long Bedian. The second alternative is to take

a 4.5-hour drive from Miri, which was just introduced recently. The journey takes about 3.5 hours through the timber logging route, nicknamed "the bone-shaker route," using a 4WD vehicle. The village functions as a trading centre for the nearby villages, particularly for the Penan community. It also provides education and health services to the Long Bedian and Penan community.

Information and communication technology is hardly available in this village. Quite a number of families own radios while very few could afford television sets. While radio reception is quite good for two channels (i.e., the Malay and Kayan service), it is not possible to receive other channels that are commonly available in the urban areas. Television channel reception is also quite poor, with only one out of nine nationwide channels available and sufficiently viewable in Long Bedian. The projected image is often quite fuzzy. The TV antennas have to be set up on tall bamboo poles. A few of the richer families could afford to purchase satellite dish from neighbouring Indonesia, and obtain worldwide channels.

For the purpose of the baseline study, 186 respondents were selected randomly from a population of all the households in the village. This was to ensure that the study will have representation across the whole Long Bedian community. As shown in Table 1, the respondents are made up of various ethnic groups with the Kayan group making up 84.9% of the respondents and the Kelabit as the second biggest ethnic group (6.5%). The other ethnic groups such as Kenyah, Morek, Punan, and other minorities contribute to less than 6% of the respondents. This ratio is in tandem to the community population as a whole.

More than half of the respondents were between the ages of 31 to 50, while 31.2% were below 30 years of age. The remaining respondents were more than 51 years of age. The mean age of the respondents was 39.6 years, signifying that the respondents and community were mainly middle-aged people. Approximately 25% finished their primary education, while 21% and 23.1% of the respondents completed their lower and higher secondary education respectively. However, only 2.7% completed their tertiary education while about 28% of the respondents had no schooling. The respondents in this last category would most likely be those who are 40 years and older.

The respondents were mainly farmers and housewives with a representation of 23.7% and 27.4%, respectively. Business persons, drivers and timber logging workers, together comprised approximately 7% of the respondents. The mean income of the respondents was RM830.20 per month. Nevertheless, more than 43% of the respondents earned less than RM500.00 per month, with 29.6% of them earning less than RM250.00 of monthly income.

Related Content

Recombining Place: COVID-19 and Community Action Networks in South Africa
Nancy Odendaal (2021). *International Journal of E-Planning Research (pp. 124-131).*
www.irma-international.org/article/recombining-place/262514

We Are Martinsville (WAM): Leveraging Mobile Gaming for Community Engagement and Improving Health
Mona El Khafif, Kathy Hsu Wibberly, Elgin Cleckley, Tho H. Nguyenand Marcus H. Divers (2021). *International Journal of E-Planning Research (pp. 63-87).*
www.irma-international.org/article/we-are-martinsville-wam/279271

The Influence of Communal Networks on the Growth of Free Enterprise: A Case Study by Pioneers of the Social Network in Karachi
Soobia Saeed, N. Z. Jhanjhi, Mehmood Naqviand Mamona Humayun (2021). *ICT Solutions for Improving Smart Communities in Asia (pp. 277-294).*
www.irma-international.org/chapter/the-influence-of-communal-networks-on-the-growth-of-free-enterprise/272461

The TOSCA Case: How Open-Source Spatial and Digital Decision Support Tools Help Urban Agglomerations to Leapfrog Towards Smart Sustainable Cities
Maria Moleiro, Arjama Mukherjeeand Joerg Rainer Noennig (2023). *International Journal of E-Planning Research (pp. 1-16).*
www.irma-international.org/article/the-tosca-case/319370

Just City, Spatial Justice and the Right to the City: What Role for E-Planning?
Carlos Nunes Silva (2012). *International Journal of E-Planning Research (pp. 88-91).*
www.irma-international.org/article/just-city-spatial-justice-right/66414