Citizen Integration through ICT and Community Networking

A Preliminary Study

Rugayah Hashim
Faculty of Administrative Science & Policy Studies
Universiti Teknologi MARA (UiTM)
Shah Alam, Selangor, Malaysia
guy73106@yahoo.com

Tajuddin Md. Jahi
Faculty of Mechanical Engineering
Universiti Te knologi MARA (UiTM)
Shah Alam, Selangor, Malaysia
tajud4241@yahoo.com

Norazah Abdul Rahman
Faculty of Chemical Engineering
Universiti Teknologi MARA (UiTM)
Shah Alam, Selangor, Malaysia
azra4241@yahoo.com

Mohd. Anuar Mazuki
Bursary – Accounts & Systems Dept.
Universiti Teknologi MARA (UiTM)
Shah Alam, Selangor, Malaysia
mam_3508@yahoo.com

Abstract— **The 1Malaysia concept is about unity and citizen integration. Re-integrating the three major races of Malaysia is possible through public engagement using information and communication technology (ICT) as the enabler. Therefore, the purpose of this study is to assess the availability of ICT peripherals of residents living in a sub-urban area of Klang, Selangor, as well as the association between citizen integration and community networking. Prior to the actual study, piloting was done to test the items in the questionnaire. The sample size for the pilot study was 40 residents living in Taman Klang Perdana and the response rate was 36 or 90%. The findings showed that 12.8% of the residents communicated with one another electronically through mobile phones or chance encounter, that is, the level of connectedness among citizens is still low. Consequently, this is reflected in the weak association between citizen engagement and community networking (r=.129, p=.456). However, there is a positive correlation between the two variables, that is, when citizen engagement increases, community networking also increases. Hence, active residents' participation between and among themselves can be achieved if the elected political leaders visit the constituents and interact with the grassroots regularly. As 58.3% of the residents are not highly educated, the need to believe and trust someone should come from the elected one.**

Keywords- community networking, ICT, social informatics, citizen integration, social inclusion, 1Malaysia

I. INTRODUCTION

In the face of a challenging global environment, it is very difficult for countries to achieve utopia, especially those with a melting pot populace like Malaysia. Racial harmony and toleration, which are characterized by diversity among the major ethnic groups of Malaysia, are no longer the same as they were five decades ago. Evidences of the erosion of citizen disunity have been significant the past five years and these have been highlighted by maverick politicians and the mass media. Furthermore, the results of the 12th General Election (held in March 2008) and various by-elections, have further deepened the chasm of citizen disintegration, specifically, the widening of racial disharmony [10]. As such, integration among the three major ethnic groups is important for Malaysia. Referring to Table 1, with a total citizenry of 28.3 million, the distribution of Malaysia's multi-racial populace consists of the Malays (14,015,000) which is the major ethnic and indigenous group followed by the Chinese (5,451,000), Indians (1,925,000) and other minorities (359,000) [5].

TABLE I.   POPULATION OF MALAYSIA BY ETHNIC GROUP (SOURCE: DEPARTMENT OF STATISTICS AND ECONOMIC PLANNING UNIT, 2010).

	2008	2009[(p)]	2010[(e)]
Malaysian Citizens	25,071,000	25,424,000	25,777,000
Bumiputra: Malay Other	13,575,000 2,936,000	13,794,000 2,981,000	14,015,000 3,027,000
Chinese	6,336,000	6,395,000	6,451,000
Indian	1,885,000	1,905,000	1,925,000
Others	340,000	349,000	359,000
Non Malaysians	2,469,000	2,471,000	2,474,000
TOTAL	**27,540,000**	**27,895,000**	**28,250,000**

Note: (p) Preliminary, (e) estimates

Attaining harmony, unity and integration among the citizens require ongoing interactions, trust, mutuality and reciprocity [6]. Along parallel lines, the 1Malaysia (One Malaysia) concept, which is the brainchild of the current Prime Minister, Dato' Sri Mohd. Najib Tun Abdul Razak, is a plea for all Malaysians to unite in the spirit of '1Malaysia: People First, Performance Now' [19].   Furthermore, it is also "a call for all Malaysians, regardless of socio-economic status, political ideology, religious beliefs, gender or ethnic group, to work together as One Malaysia, with shared values and norms and a common purpose to transform the country to a higher level of development, wealth creation, security and society well-being" [25]. Thus, in line with the Prime

Minister's vision of One Malaysia (1Malaysia), issues on the erosion of harmony, disintegration and dysfunctional neighborhoods, *inter alia*, formed the basis of this research.

II. SIGNIFICANCE OF STUDY

The purpose of this study is to assess the level of citizen integration through the availability of ICT peripherals of citizens living in a sub-urban residential area of Klang, Selangor. Correspondingly, the association between citizen integration and community networking will also be evaluated. Needless to say, a networked community also requires the use of ICT where neighborhood or citizen interaction and engagement would induce citizen integration. As it is, this research comes at an opportune time as the government's apprehension has been metaphored into the 1Malaysia concept. Serendipitiously, the evolvment and spread of ICT has impacted Malaysians especially the computer savvy ones where information has been manipulated by certain parties for political gain. This is another cause for the rift. Thus, by having a properly set-up community informatics infrastructure, citizens, particularly those living in sub-urban and rural areas are informed and updated of the neighborhood activities. By communicating electronically using a community network, residents are getting valid and credible information. The interactions could, in turn, result in a better understanding of the neighborhood issues where closer ties and respect may be developed among the residents.

III. LITERATURE REVIEW

The Ninth Malaysia Plan 2006-2010 [23] emphasizes the augmentation of community development and national unity "where community level participation will be enhanced through a strong network of community services and the creation of opportunities for their engagement in social and economic activities." Also, the National Unity and Integration Plan 2006-2010 [21] states that,"Among the other objectives of the plan are to boost the spirit of unity and patriotism among Malaysians and to increase the level of tolerance and harmony among the various ethnic groups in the country." The components or institutions to enhance integrity are; family, community, civil society (NGOs), socio-culture (education, health, sports and recreation, media, arts, literature and heritage), religion, economy, politics and administration. As a continuum to these policies, the Tenth Malaysia Plan will leverage on 10 main premises and five strategic thrusts [19]. The latter is of relevance to this study where the First Strategic Thrust is on 'Designing government philosophy and approach to transform Malaysia using NKRA methodology'. The subset from the first thrust consists of four main pillars, where the first one is the '1Malaysia, people first, performance now' philosophy [19]. As such, the foundation of the research is based on that concept.

A. The 1Malaysia Concept and Citizen Integration

After the 12th General Election, the post-mortem conducted by the ruling government realized that Malaysians have different perspectives toward the country's well-being and that unity is gradually being eroded [10]. Recognizing the need to close the gap soon, the current Prime Minister launched the 1Malaysia concept. In his words, "1Malaysia is intended to provide a free and open forum to discuss the things that matter deeply to us as a Nation. It provides a chance to express and explore the many perspectives of our fellow citizens. What makes Malaysia unique is the diversity of our people. 1Malaysia's goal is to preserve and enhance this unity in diversity which has always been our strength and remains our best hope for the future. … Each of us — despite our differences — shares a desire for a better tomorrow. Each of us wants opportunity, respect, friendship, and understanding." [24]. Nevertheless, unifying citizens is a challenge for most governments of the world [3], thus, for Malaysia, enhancing the well-being of the people particularly in urban and rural areas will ensure that they enjoy the benefits of development in a peaceful and safe environment [20]. One way of resolving this issue is through citizen engagement via ICT [17]. Although literature provided extensive cases on this area, for the purpose of this study, citizen engagement is limited to just social informatics or communication between and among citizens in the same residential area that they live [12, 13, 7]. No doubt from here on, e-participation in nation building would be the next resultant. For now, by interacting with one another, the residents would build a close network and this is supported by Kingston's [16] study where citizens can participate in the delivery and management of everyday services in their neighborhood. This arrangement can be attainable if ICT skills and infrastructure are in place. Furthermore, citizen engagement is not about maintaining the local grapevine, but it is an advantageous step towards online interaction to organize politically and retain their social capital [17, 14, 15].

Without doubt, citizen unification would augur well for the country's political and socio-economic standing. Moreover, according to Mesch and Talmud [18], Internet connectivity on social involvement, civic participation, and community sentiments has recently received research attention. Previous studies have mostly been limited to just the Internet connectivity and community participation, where their study showed that "Internet connectivity and attitudes toward technology provide more channels for local civic participation. But, it is the active participation in locally based electronic forums over and above other forms of social capital (such as face-to-face neighborhood meetings, talking with friends, and membership in local organizations) that is associated with multiple measures of community participation. The formation and active participation in local community electronic networks not only adds but also amplifies civic participation and elevated sense of community attachment." [18]. Thus, using ICT, citizen engagement may result in positive benefits for all.

B. ICT and Community Networking

Akin to malignant cancer cells, information and communication technology (ICT) and the Internet have penetrated every nook and cranny of the globe, but the level of penetration for a developing nation like Malaysia requires

more efforts from the government. Although the broadband accessibility has further revolutionized communication between the citizens and the government, the digital chasm is still a challenge for folks in the rural areas. In fact, according to the Prime Minister in his speech to table the 2012 Budget, broadband penetration for Malaysia is currently at 25% which is far lower compared to 95% in the Republic of Korea, and 88% in Singapore [20]. Therefore, to attain Vision 2020 or the developed nation status, computer ownership and broadband penetration should be enhanced through tax relief on broadband subscription fee up to RM500 a year from 2010-2012 [20].

Along similar grounds, Sharma and Sturges [26] posed this question, "How can technology benefit those whose education and skills contain little that seems appropriate to the use of even the most basic of devices?" Doubtlessly, the growth in ICT has substantially spread to the poor and marginalized communities. This is evidenced in the high usage of mobile telecommunications but not computers for rural folks in Klang, Selangor. Nevertheless, the Malaysian government's 2011 Budget includes the strengthening of ICT through the implementation of High speed Broadband (HSBB) at a cost of RM11.3 billion [20]. This might seem an ambitious and unrealistic plan because for the lower income or under privileged population, daily expenses were tight. In essence, ICT access and usage is being recognized as fundamental elements in the successful achievement of a broad based strategy for economic development and, perhaps more importantly, for realizing the transformation of traditional and largely rural societies into innovative and productive "knowledge societies" [7, 8]. The understanding appears to be that if these societies are to truly flourish, economic opportunity and the capacity to innovate and participate in knowledge-intensive activities must be as widely accessible as possible; and this can only be realistically achieved through public (and community) access [8, 1]. In contradiction, how can this be possible for people who live in rural areas or even sub-urban locations (like Klang) when education is limited to those of acceptable income level? Putting in a community network infrastructure would be an atrocity if the residents are not able to understand the computer and internet jargons. Anyhow, what is seen in the developed countries is a retreat from a policy of broad based digital social inclusion or the notion of inclusive citizenship [8, 9]. Rather, "while some countries are putting into place the infrastructure for a robust and innovative Internet-enabled democracy, others are allowing for structured inequalities to persist and become socially embedded through differential access to knowledge and digitally enabled services and opportunities for participation." [8]. Yet the crux of the matter remains, if a community network is put into place and the residents are trained to use it, citizen integration is possible through these cyber meetings.

IV. RESEARCH METHODOLOGY

The research design for this study is cross-sectional where a survey of the respondents is the imminent approach. The instrument used was a questionnaire with appropriate measurements for the various antecedents derived from literature and interview feedbacks [22, 27]. In addition, this is a case study research as a sub-urban residential area was identified, which is Taman Klang Perdana, Klang, Selangor, Malaysia. For the first part, two key individuals were interviewed, namely the head of the residents association of Taman Klang Perdana, and an officer from the National Unity and Integration Department, Klang Division. The interviews were then transcribed, analyzed and transformed into relevant statements in the questionnaire. The questionnaire consisted of four parts, where Part A was on the demographic profiling followed by Part B – Citizen Integration, Part C – ICT and Community Networking, and lastly, Part D – Social Inclusion. The variables operationalized consisted of nominal and ordinal measurements (Part A), and scale measurements (Part B, C, and D). The scales were 1=Strongly Disagree to 5=Strongly Agree. Also, for Parts B, C, and D, an open-ended question was included. The open-ended questions allowed for the residents to provide their opinions, comments and ideas pertaining to the key variables. Data collection for the pilot study took a week to complete. For the purpose of piloting, convenience sampling was employed [11] for fast access to data with a sample size was 40. Data analysis was done using SPSS version 17 [4] where the first step was to ascertain reliability of instrument [2]. The reliability analysis on the data revealed a Cronbach Alpha score of .084 which indicated that the questionnaire is highly reliable and that the 24 items showed significant consistency.

V. FINDINGS

Forty questionnaires for the pilot study were administered to 40 residents living in Taman Klang Perdana, Klang, Selangor where, 36 or 90% completed ones were received. The distribution of respondents by gender showed that 88.9% were male while 11.1% were female (Table II).

TABLE II. DISTRIBUTION BY GENDER

Gender	Frequency	Percent (%)
Male	32	88.9
Female	4	11.1

TABLE III. DISTRIBUTION BY AGE

Age (years)	Frequency	Percent (%)
18-24	3	8.3
25-35	3	8.3
36-45	13	36.1
> 46	17	47.2
Total	36	100

Table III shows the respondents' age distribution where 47.2% are more than 46 years of age, followed by 36.1% who are between 36-45 years. The next two age ranges of 25-35 years and 18-24 years have three respondents, respectively. Next, for the distribution of respondents by

race, 83.3% were Malays, 11.1% were Chinese and 5.6% were Indians (Table IV).

TABLE IV.   DISTRIBUTION BY RACE

Gender	Frequency	Percent (%)
Malay	30	83.3
Chinese	4	11.1
Indian	2	5.6

TABLE V.   LEVEL OF RESIDENT INTEGRATION

Level of Integration	Frequency	(%)	Cumulative %
Extremely Satisfactory	5	13.9	13.9
Satisfactory	17	47.2	61.1
Not Satisfactory	13	36.1	97.2
Extremely Not Satisfactory	1	2.8	100.0

The level of resident integration is shown in Table V where 47.2% said that it is satisfactory, 36.1% responded as not satisfactory and 13.9% are extremely satisfied with the integration level at Taman Klang Perdana.

TABLE VI.   ICT AND COMMUNITY NETWORKING

Items	Yes	No	Not Sure
Own computers	34 (94.4%)	1 (2.8%)	1 (2.8%)
Internet Access	29 (80.6%)	6 (16.7%)	1 (2.8%)
Broadband Access	24 (66.7%)	9 (25%)	3 (8.3%)
Has e-mail account	24 (66.7%)	10 (27.8%)	2 (5.6%)
Has own web site	17 (47.2%)	18 (50%)	1 (2.8%)

Next, Table VI shows items that form part of the assessment on availability of ICT and the ability to be part of the community's network. With regards to ownership of computers, 94.4% have a computer set in their house with 80.6% having internet hook-ups. On the other hand only 66.7% have broadband access, 25% do not and the remaining 8.3% are not sure whether they have broadband or other modes of internet accessibility. Next, 66.7% of the respondents have e-mail accounts, while 27.8% do not and 5.6% are not sure of their situation. Lastly, 50% of the respondents do not have their own web site while 47.2% admitted to having their own homepage (Table VI).

TABLE VII.   COMMUNICATE WITH OTHER RESIDENTS VIA E-MAIL

Response	Frequency	Percent (%)
Yes	14	38.9
No	18	50
Not Sure	4	11.1

Based on Table VII, 50% of the residents do not communicate with their neighborhood clan using e-mail while 38.9% said they do. The remaining 11.1% are not sure if they do communicate via e-mail or not.

TABLE VIII.   ASSOCIATION BETWEEN CITIZEN ENGAGEMENT AND COMMUNITY NETWORKING

		Community Networking	Citizen Engagement
Community Networking	Pearson Correlation (r) Sig. (2-tailed) (p) N	1 36	.128 .456 36
Citizen Engagement	Pearson Correlation (r) Sig. (2-tailed) (p) N	.128 .456 36	1 36

Lastly, Pearson's product moment correlation coefficient ($r=.129$, $p=.456$) (Table VII) shows that that there is a weak relationship between citizen engagement and community networking. However, there is a positive correlation between the two variables. This means that as one variable increases in value, the second variable also increases in value. In other words, when citizen engagement increases, community networking also increases. Henceforth, the implication and conclusion of these findings will be discussed in the next section.

VI.   DISCUSSIONS AND CONCLUSION

First of all, since this is a preliminary study, there are limitations which are; the small number of respondents and that the findings cannot be generalized. Anyhow, based on the results, the association between citizen engagement and community networking is weak or that there is no relationship at all. This result contradicts the outcome from Table 5, where 47.2% are satisfied with the level of integration but 36.1% said that it is not satisfactory. This is where a bigger scope would allow for realistic empirical evidence. Other disparities include the lop-sided gender distribution of the respondents where there are more male (88.9%) respondents than there are female (11.1%) ones. The same goes for the racial breakdown, where more Malays (83.3%) completed the questionnaire than the Chinese or Indian residents. Also noteworthy is the age distribution where 47.2% are more than 47 years old and 36.1% are between the age of 36-45 years. This signifies maturity and their understanding of the research area. Hence, it can be concluded that active residents' participation between and among themselves can be achieved if the community network infrastructure is in place and that the elected political leaders are there to assure the residents of the benefits of being connected. This can be done by having

more regular visits of the constituents and the interaction with the grassroots by the political leaders. Furthermore, since 58.3% of the residents are not highly educated, the need to believe and trust someone should come from the elected ones. Indeed the well-being of Malaysians is top priority for the current government as indicated in the Budget 2011 speech where the people should be able to enjoy the benefits of development in a peaceful and safe environment [20].

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