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People's Participation, Consensus-Building and Transparency through ICTs: Issues and Challenges for Governance in the Philippines

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E-governance is a two-edged sword. It has the power to include and exclude political participants as highlighted by the role of ICTs, especially the mobile phone technology, in the successes and failures of the recent People Power uprisings. A close comparison of EDSA 2 and 3 reveals how the digital divide could engender social divide. This makes technological intermediaries (traditional and social) crucial in bridging the gap between the information 'haves' and information 'have-nots'. To expedite the adoption of Internet among LGUs, the Philippine government embarked on the strengthening of the National Information Technology Plan 2000 (NITP 2000) and the Government Information Systems Plan (GISP) in 1994. Success stories of the undertakings include the Naga City public library and the information kiosks of Social Security System (SSS) and the Department of Agriculture (DA). It is observed that, in terms of e-government, the potential of cellular phone applications to foster participation and social cohesion is more pronounced compared to the e-mail and the Internet.

Questions remain on whether information and communication technologies (ICTs) can enable citizens to be better informed, more involved and participative in local governance. Access is the core problem. Access refers to one's ability to reach or obtain something, both physically and virtually. Applied to information, access concerns the presence of information that will meet one's needs and how it may be found and reached.[1] As the Philippines' national agencies and local government units (LGUs) construct more websites and put more content in the Internet, the issues of who have access to the Internet and other ICTs and whether those who have access make use of it remain.

The issue of access has various dimensions. Foremost is Sen's idea that different people have different ways of transforming the same bundle of goods.[2] Hence, even if people are provided with access to ICTs, how they use them may vary. For instance, a research by Blanchard and Horan[3] says that people who participate in on-line government services and local governance issues are more likely the same people who partcipate actively in community affairs. Studies have shown that access to ICTs may be a function of gender differences,[4] educational background,[5] age and environment,[6] among others. These are important to know

whether the views of people who participate using ICTs represent of the views of the general population. However, this paper will not go into the specific issues, but rather, will concentrate on the general issue of access and participation.

The paper will first discuss the process of participation in the context of a modified information chain that Heeks[7] proposes. The role and importance of ICTs will be explained using the modified chain as the framework for the participation cycle. The paper will give some examples and brief critiques of the current practices being done by local government units (LGUs) in the Philippines. The problem of access to ICTs will be highlighted and contextualized along the country's recent experiences with People Power uprisings. Next, it will discuss strategies and ways for bridging the problems of access, and in particular, highlight the importance of intermediaries in making participation broader and more dynamic. Traditional, real and virtual intermediaries, as well as alternative models of ICT use for participation, will be provided to show how the gaps to access could be filled.

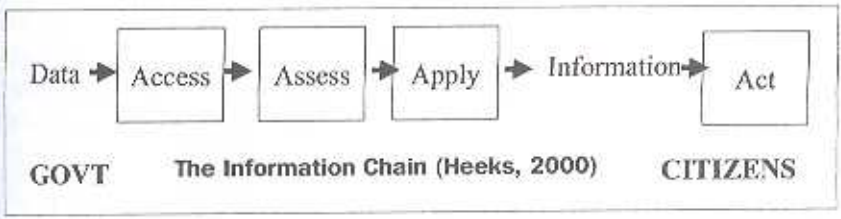
ICTs, Development and Participation

Basic services are "activities that lead to the satisfaction of 'basic needs."[8] The meaning of basic needs, range from the "minimum physiological needs"[9] to a set of package identified by Misra and Plantilla[10] :(a) needs that pertain to the three basic necessities of life — food, water, clothing, but already includes drinking water and fuel; (b) needs that enhance the general welfare of the people; (c) needs that improve access to the means of production and economic opportunities; and (d) needs which give a sense of security and freedom for decision making, such as human rights, political participation, social security, social defense and rule of law. Given this description of basic needs, the classification of ICTs as a basic service that helps satisfy basic needs (especially descriptions b, c, and d) can easily be appreciated. While ICTs may not be on the same level as food, shelter and clothing, it has potential of providing people with more opportunities, more choices and, hence, more freedom.

At present, access to ICTs is crucial to development as they have become diffused "in all areas of human activity (and) is accelerating change in economies and society."[11] They are seen as a means for promoting good governance by 1) increasing transparency, information

and accountability; 2) facilitating accurate decision-making and public participation; and 3) enhancing the efficient delivery of goods and services.[12]

Figure 1: **The Information Chain**



Data from government becomes useful to citizens as illustrated by an "information chain."[13] This chain shows that barriers to using government data is not only an issue of access but also of understanding how to use them.

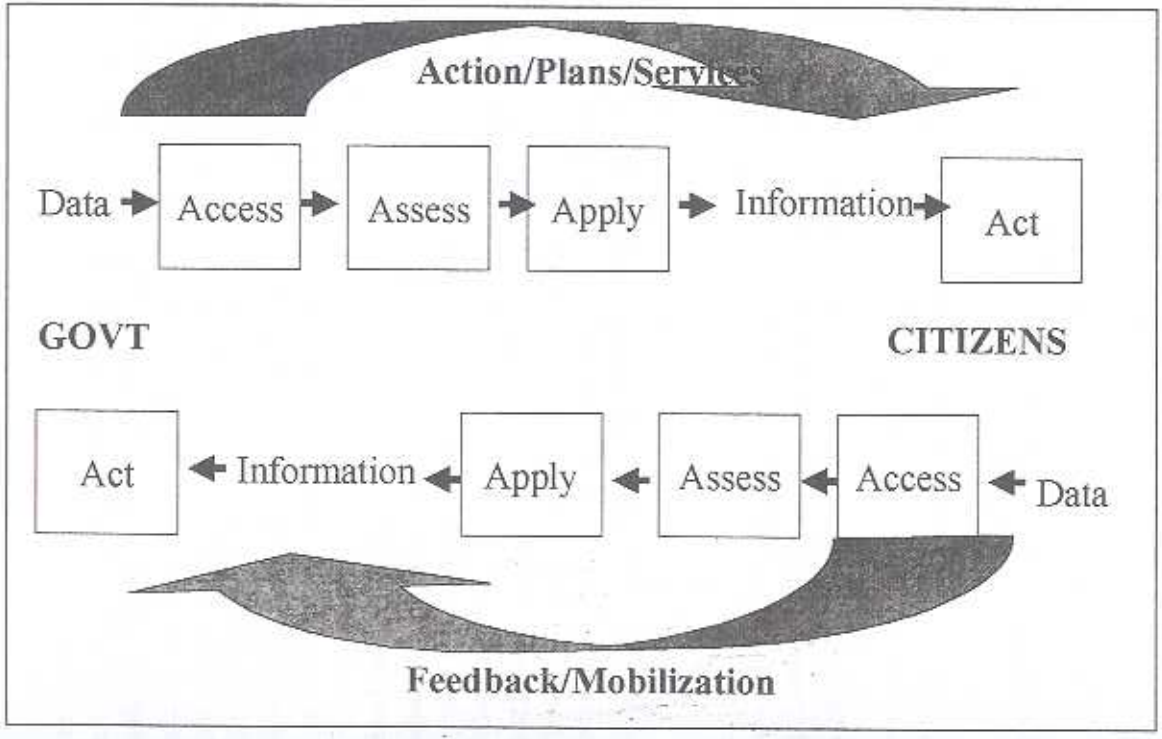
In a way, this information chain originating from government to citizens is consistent with the most basic and passive kind of participation. In passive participation, people participate by being told what is going to happen or has already happened.[14] The chain could also go the other direction, when government accesses data from citizens. The participation process becomes a cycle if the process is made more interactive. In this way, true participation is achieved if the government is made more transparent and uses feedback from its citizens to plan, act and deliver services (see Figure 2).

In a democracy, ordinary citizens participate in decision-making that concerns social and economic change. Traditional methods of public participation like voting representatives during elections, participating in rallies, and to a limited extent involving the public, at least those with a particular interest, in attending meetings.[15] ICTs are tools to further strengthen the participation process. They serve as conduits to speed up communication, get feedback from citizens and increase citizen's participation.

Use of ICTs in Local Government

Today, more modern technologies are being introduced in local governments units (LGUs).

Figure 2: **The Participation cycle**



Source:Heeks,2000

An easy measure of how ICTs are being utilized is by looking at websites being placed by LGUs on the Web. A study conducted by Ilago[16] shows that as of July 2001, only 14 percent of provinces, 25 percent of cities and one percent of municipalities had an on-line presence (see Table 1). The slow adoption of the Internet as a medium for providing information, especially at the municipal level is an important concern, considering that the deadline for the implementation of the E-Commerce Act expires in 2003. Research should be done to investigate the reasons why many of the municipalities find it difficult to establish presence in the Internet.Availability of skilled personnel who could put the information on the Web is another issue to consider.

In most LGUs websites, the features are limited to the basic kinds of participation; information from the government is given with little interactivity.

However, there are a couple of promising cases where feedback mechanisms have been put in place. Some LGUs offer interactive websites that allow people to e-mail their local official to report a crime or file a complaint.[17] These include the provinces of Bulacan, Bohol and more recently Bataan; and the cities of Pasay and Naga. Bulacan has been cited in a number of studies[18] especially with regard to its "Isumbong mo kay Governor" ("Tell it to the Governor") feature.

In cases where there are avenues for feedback, there are few evidence that these are being acted upon. Action on feedback from concerned citizens is important if their participation is to be sustained. Ilago cited a case of a concerned citizen in Bulacan who suggested including in its site a response and/or action corner. After five messages, without any reply, he gave up.[19]

An even larger concern is the limited number of citizens who have access to these modern ICTs. In Table 3, the number of participants in Naga's electronic survey and Bohol's electronic consultation is very low. These numbers are not necessarily the number of people who have access to these ICTs. There may be more. These people have access to the Internet and make use of it to access the LGUs site.

Table 1: **Philippine Local Government Unit Official Websites**

Level	Total # of LGUs	LGUs w/ websites	Percentage (%)	Inaccessible/ under construction
Province	79	11	13.9	5
City	113	28	24.8	10
Municipality	1,496	14	0.93	3
Barangay	42000*	0	0	N/A
Total	43688	53	0.12	

*estimate

Source: Ilago, as of July 2001

Table 2: **LGU Applications and Content in the Web**

Application/Content	# of LGUs with Content
INFORMATION and REFERRAL	
Profile, vision, mission	35
Directory and Org chart	32
Information and services offered	29
Policies, memoranda, regulations	7
COMMOMUNICATION/ FEEDBACK	
Email	31
FAQs	20
Online chat/Discussion forum	6
DOCUMENT DOWNLOAD	0
ON-LINE TRANSACTION	0

Source: Ilago, as of July 2001

Table 3: **Amount of Participation generated by online features**

Participatory Feature	Amount of feedback
Bulacan's Isumbong mo kay Gob	67 pages posted
Naga City's Electronic Survey	63 participants
Bohol's electronic consultation	52 answers

Source: Ilago, 2001

What about people who do not have access? What about people who have access but are not interested in checking the LGUs' site. In either case, this will result in an information divide. People with different concerns and interests could lead to different levels of participation. If left unchecked, this divide could even manifest into real social divides as the Philippine experience of People Power in EDSA 2 and 3 shows.

The Role of ICTs in People Power

At the national level, the role of ICTs in harnessing the power of the people in the Philippines has become more pronounced in the three so-called EDSAs or People Power the country has experienced between 1986-2001. It was also during this span of time that rapid developments have been made in information technologies.

EDSA I

During People Power I, people tuned in to AM Radio, in particular Radio Veritas, to coordinate rallies, hear political leaders from the opposition and phone in their sentiments. News that came from abroad were taped, recopied and distributed through Video Home System (VHS). Alternative media/newspapers such as Malaya, Mr. & Ms, and later the Philippine Daily Inquirer were at the forefront of providing the public with news and views different from the ones originating from the state-controlled media.

In contrast, by the turn of the century, in EDSA II, Filipinos turned to the Internet, e-mail, cellular phones and short messaging systems (SMS) to organize the updated version of People Power. This People Power was mobilized against Pres. Joseph Ejercito Estrada who was seen as the "darling of the masses." In ousting Estrada, ICTs allowed the rapid spread of news, rumors and jokes through the cellular telephone network.[20]

It should be noted, however, that even before Estrada held office, ICTs were already being used to inform the public and educate them during electoral periods. The Internet was used as a means for educating people about the different candidates and the electoral process.[21] For example, websites like www.halalan2001.com helped people understand the Philippine electoral process and inculcate in them the true meaning of suffrage. The site had information on relevant electoral laws and rules and a list of national parties and candidates. It even conducted a mock

election online that simulated the electoral process that gave on-line voters an "electronic" indelible ink on their "virtual" right forefinger.

E-mail and short messages system (SMS) also became new mediums for educating and campaigning for (and against) candidates and programs. During the last national elections, SMART telecoms developed an application wherein voters can know their precinct numbers simply by texting through their cellular phones. This application has the potential to preventing electoral cheating done by misinforming voters of their precincts, thereby disenfranchising them.

By the time Estrada assumed office, "net activists" were already primed to the task of holding his administration accountable. ICTs were mobilized to focus public opinion against him. Things eventually came to a boil when revelations were made in Congress of his linkages to illegal gambling syndicates.[22]

Mass actions initiated via the Internet included the attempt of sites like eLAGDA.com.ph to collect one million signatures in 21. This took advantage of the E-commerce Act of the Philippines allowing electronic documents such as e-mails to be considered legal documents. Although only 95,000 signed, the site went on to become a virtual community, with members that organized real world marches and demonstrations.[23] Simultaneously, TV, radio and print media also kept close watch on the impeachment trials of Estrada. Thus, virtually anywhere and everywhere the Estrada's impeachment proceeding was a topic.

Rallies were quickly organized using SMS. It succeded! because it was cheap, immediate and could be sent to many people simultaneously During EDSA II, messages that contain emotive messages (e.g. jokes and humor, anger, indignation, hope), messages of political beliefs, news, as well as calls for mobilization and mass action, were sent.[24]

EDSA 3

The role of ICTs in EDSA 2, however, should be contextualized against EDSA III, which happened three months later. EDSA 3 relied primarily on the "older" tried and tested ICTs such as AM radio and TV. While EDSA II was primarily a middle class affair, EDSA III was composed of the "masa" or the poorer segments of society.

The difference in the composition of people in the two EDSAs is a good example of how the digital divide can lead to a social divide. This is an example of the stratifications being created through communications technologies. It involves social processes that need deeper understanding. It involves issues of inclusion and exclusion and has corollary implications in people's participation in e-governance. Excluding certain groups disrupt their capability to participate effectively in society. Thus, "any analysis of social exclusion in the use of the information and communication infrastructure must consider how mechanisms of social differentiation confer advantage, and simultaneous disadvantage, on some people and not others, forming a basis for new inequalities to emerge."[25]

The above discussion highlights the danger of exclusion to information due to the lack of access to ICTs. ICTs require money, human capital and the proper economic environment before communities avail of the opportunities they provide. The lack thereof, slows the adoption of newer information technologies in most developing countries.[26]

Despite the limitations of the government to provide the necessary infrastructure, especially in local communities' access to ICTs, access to information available in the Internet is still possible. The next section discusses some strategies for bridging the information divide.

Addressing Access to Information

To bridge the digital divide and make participation broader, universal access to ICTs must be provided. There are three general means for accessing information in the Internet: 1) organizational, in which members are provided with connection through a local area network, 2) individual access at home through a connection to ISPs, and 3) community access through public institutions like libraries, city halls, museums, and Internet cafes , which theoretically approximates universal access.[27]

However, given the resource limitations in developing countries, universal access may not be realistic in the near future. Moreover, access in terms of infrastructure does not necessarily guarantee access to the information and its corollary services. The more pragmatic approach is to have intermediaries between those who have access to information and those who do not.

Government access strategies

In 1994, the government adopted the National Information Technology Plan 2000 (NITP 2000) and created the National Information Technology Council (NITC) as the central policy body of ICT matters in the country. This was done in 1994 through Executive Order190 (amended by EO 469 in 1998, and EO 125 in 1999). In its Government Information Systems Plan (GISP), it stressed the need to address issues that continue to hamper the more rapid growth and wider application of ICTs in the country, in particular the high telecommunications costs and limited access in many areas of the country. The telecommunications and network infrastructure – consisting of basic telephone lines and networking equipment like servers, routers, hubs, modems and computers – must be available, accessible, affordable, reliable, and of good quality. The rationale for this is that the presence of these features would be crucial to the implementation of an electronic governance (and electronic commerce) strategy.[28]

The high cost of owning a personal computer and using high-end browser-based Internet access are seen as major barriers to the effective application of e-governance. Hence, the Philippine National Computer Center (NCC) was considering low-cost, low-end technology solutions in order to provide poorer people with access to online data even through DOS-based browsers. The NCC proposed the use of surplus computer and hardware from advanced countries to increase Internet penetration in poorer regions in the country. The problem with this proposal, however, is that government auditing regulations still prohibit the government form purchasing surplus computer hardware. In this regard, a crucial aspect of any policy on the adoption of ICTs is the right balance in investing in new technologies and overcoming its obsolescence. The rapid rate of change does not always have to be an obstacle to developing countries. Technological obsolescence should not be equated with operational obsolescence. "Obsolete technologies" can be acquired and utilized by developing countries as a springboard to newer – though not necessarily state-of the art technology. In most cases, the ramifications of a new technology are overlooked since the primary focus is on technological innovation, not commercial applications or long-term economic development. These issues directly impact the selection of new technology. Selection criteria for new technology must include the technology's application, projected life cycle, its costs and payback in terms of useful life, and its social, political and economic impact.[29] While this goes against the idea of "leapfrogging" technologies, it still recognizes the

importance of good information systems. This is a practical view considering the limited resources at the disposal of developing nations who could ill-afford to regularly upgrade its information systems given their other development priorities.

Another option the government is looking at is the leasing out of its existing network of 672 public calling offices (PCOs) to existing carriers and transforming them into multi-purpose telecenters with Internet facilities. This strategy is consistent with the idea of providing more local access points in public places. Examples of these include libraries, schools and other meeting places that are crucial for people who do not have access at home. This, in theory, could approximate universal access.[30]

An example of local public access places is the public library in Naga City which was the first local government-owned library in the country to provide Internet access to its clients. The City of Naga (www.naga.gov.ph), already had a presence in the Internet as early as March 1996.[31] At the national level, the Philippine National Library was made online in 2001 (www.nlp.gov.ph). This has allowed students, researchers, and practically anybody with Internet access to search the library's Online Public Access Catalog (OPAC) for certain publications. In fact, 205 public libraries in the provincial, city and municipal levels have been linked as part of the Public Library Information Network (Publin) project.[32] This is potentially a good network and platform from which information crucial for successful implementation of e-governance could be established.

Another model for accessing government information that is already being done at the national level is the use of computer kiosks. For instance, the Social Security System (SSS) provides computer kiosks that are placed in public places such as malls where ordinary people can gain access to information on contributions to insurance and loans.[33] The Department of Agriculture also does this on a limited basis. Their kiosk, depending on the area it is located, makes available information about predominant crops in the area, including price, market data, production and post-production technology packages. The Civil Service Commission (CSC), on the other hand, has an information kiosk in its central office that allows clients to access information on eligibilities, tracking documents, cases, exam schedules, vacant government positions, and job placement.[34] Access through this kind of model, can easily be duplicated by simply putting up kiosks in municipal halls. Thus, even without computer access,

ordinary folks will have physical access to the information made available in the Internet.

Still, the successful provision of universal access to ICT services and information would require the participation of private organizations and civil society groups. Quoting Cariño, "The access strategy is primarily the task of government but it cannot work without its public and private organizations."[35] The role of private and non-governmental organizations will go beyond the provision of physical access to ICTs. They also have a role to play in processing the data, organizing the public and providing a platform from which consultations could be made. With so much information already available, they could also serve as filters to make sure that the right information goes to the right person. In these cases, the role of intermediaries in the participation process will persist.

Role of intermediaries

Intermediaries are "go-betweens" which will help bridge the so-called information divide (see Fig. 3). They may be real or virtual. Their task is to push and retrieve information originating from government to citizens and vice-versa. They may be located in traditional areas of social convergence like the church, school or office. They may also be in more modern places like gaming stations and Internet cafes. Intermediaries may also be the traditional avenues for which public consultations are made, such as non-governmental organizations (NGOs), community groups and religious societies. They can be websites that serve as potential links to information which government may want to push. Lastly, intermediaries may also use other ICTs that are more accessible, such as radio, TV, telephone and cellular phones, to push the needed information. Some local applications of this include agricultural extension work, voter registration, inquiry and payment of public services and disaster and emergency response coordination.

Traditional Intermediaries

The church and the university are communities with their own needs and interests. They provide an example of different strategies which have implications on reaching people and getting their feedback.

More recently, the church has seen declining popularity and has been battered by sex scandals among priests. The use of ICTs is one important component in their strategy to regain their lost popularity and bring their flock back to the fold. They recently launched an Internet service provider (ISP) called CBCP World. It is their strategy to maximize the opportunities of the Internet to offer opportunities for evangelization, disseminate information and make possible an initial encounter with the Christian message especially among the youth. At the same time CBCP World's services will filter its congregation from unwanted information and sites in cyberspace.[36] The problem with this model is the ability of the church to attract groups that it has already alienated. Also, by literally censoring certain sites, how can the church assure the people that it is transparent and not only using the Internet merely for its own public relations agenda?

The university (e.g. U.P., Ateneo, etc.), on the other hand, uses a model by which reaching its constituency is made easier. Through the available infrastructure, individual members access their site by default. Members of the community, students, faculty and researchers are easily updated with any new developments occurring within the university. But even in a captured market there is no assurance that people actually read the information posted on the university's site. Moreover, there is also no assurance that they are concerned with issues that may be raised. This is echoed by those who are somewhat pessimistic about the public's enthusiasm for participating in decision-making.[37] Aside from posting information on websites, there are also designated conduits of information that push the information to members of the community, with direct specific interests, particularly through e-mail messaging.

Nonetheless, physical access is only one of the barriers which exclude people from utilizing ICTs. Another important component is the issue of cost. In areas where schools could not afford broad band access, privately owned Internet cafes provide the service as in the case of Pal-Isla Campus Café in the Province of Palawan. To make access more affordable, customers sometimes go in groups of three or four, rent one PC and share the cost.[38] A similar "sharing" also occurs with the use of cellular phones. Some keep multiple numbers (or access number) by regularly using the cell phones of his network of friends to send text or SMS.[39]

The Social Intermediaries

For ICTs to work at any level, it is important to consider how communities are traditionally mobilized. This is because ICTs, by themselves, do not guarantee benefits to the people and that focus on the processes, the organization and people should not be forgotten,[40] especially the social context in which it is to be applied.[41]

For instance, the church plays a significant role in Philippine politics and other movements. During elections, voters often consider the endorsement of their parish in deciding whom to vote. Since most churches are located at town centers, church bells are often used as signals to call people into action. During the Philippine-American War at the turn of the 20th century, the church bells of Balangiga in Samar were used as a signal for Filipinos in the community to attack a garrison of Americans in the island. In contemporary times, in the town of Carmona, the ringing of bells serve as a signal for the people to rush to the streets and rally against a proposed landfill in the municipality. In both situations, it can be assumed that some formal meetings were made regarding the plans to use the bells. In both cases, the bell-ringing instantaneously got the people's participation in a mass action. A similar model, this time using ICTs, is the use of rural radio in the province of Quezon.[42]. Radio is used to educate communities on agriculture. Distance education is made interactive by having facilitators to answer the queries of households which gathered and listened to the radio broadcast as a group. In this case, ICTs and old-fashioned community organizing are used. For any medium or ICT to be successful in encouraging people's participation, it must reach its target audience, send messages rapidly and provide venues for real discussions. As such, cellular phones applications seem more effective in achieving this end, as compared to the e-mail and the Internet. This could be seen in how texting is used in radio and TV surveys and popular games shows. The Government Social Insurance System (GSIS) has recently launched a wireless application where one can inquire about loan applications and the status of contributions simply by text messaging.

Linking the use of ICTs with traditional methods of participation and organizing is consistent with Heeks' 'design-actuality gaps',[43] Niles and Hanson's socio-spatial context[44] and Mansell and Steinmueller's "social and cultural environments of their everyday lives."[45] A case in point is the Department of Agriculture's provision of kiosks with information specifically catered to areas and regions with particular products or crops.[46]

Conclusion

Because of the digital divide, disparity between those who will have access to the information and services that can be delivered and provided through the Internet will remain. The experience in EDSA shows the potential pitfalls of relying solely on one form of ICT that has not been fully diffused in a society characterized by division between social classes.

It is clear that the kind of disintermediation that ICT brings about in the Northern countries will not be achieved, at least in the short-term, in the developing countries.[47] The direct individual access by citizens shall be limited to a few. While short of providing its own network for everyone to access the Internet in the municipality, LGUs can learn from what the church and universities are doing. Providing a website and content on the Internet is not enough. To start the communication process, there must be strategies to push the information to the people. For a true consensus to be achieved, intermediaries that can relay or broadcast the same information to citizens remain crucial.

As Heeks says, "For the medium-term, the majority of citizens will remain on the wrong side of the digital divide. They create a substantial need for a third model – of those who are neither direct owners nor direct users of ICTs. To benefit from e-governance, these citizens will have to rely on reintermediation models that insert a human intermediary between the citizen and the growing digital infrastructure of e-governance. Where institutionally-based, these can be thought of as 'intelligent intermediaries' that add human skills and knowledge to the presence of ICTs."[48] Realistic e-governance for development projects will therefore have to identify and nurture such intermediaries. They may be existing professionals, public servants or NGOs and community-based organizations, private sector organizations, or other public institutions.[49] This is echoed by Anderson et al.[50] and raised by Carver saying, "technological approaches need to be grounded on a good understanding of the issues, and an application of the technology within a framework of more traditional means of outreach and participation."[51]

Thus, NGOs, religion, and other areas where people converge, be it virtual or real, and the use of electronic[52] and non-electronic media and process, have roles to play in improving consensus-building and transparency. The issue of sustainability is not only about the financial

sustainability of maintaining Internet technologies, but also about the sustainability of the communication process between the Internet-equipped intermediaries and the community which does not have connectivity or access to the needed information.[53] The sustainability of transparency and participation through ICTs are also dependent on the quick response on feedback given by the citizens.

The channels for sending information and enabling people to participate must allow for broad and real discussion. Real interactivity must fully simulate how people traditionally participate and be integrated with local communication networks.[54] In this sense, cellular phone applications seem to hold greater potential for increasing participation as compared to the e-mail and the Internet. While the rapid diffusion of cellular phones in the country is a good sign, the EDSA experience has shown that it has not yet diffused evenly enough. It is important that research be made on how these technologies are being used and diffused in all segments of society. Now is the time to establish the baseline for these studies.

While ICTs have developed rapidly, society is not changing as fast. Norms, values, habits and social realities which exist cannot be ignored, and must be used to make participation thru e-governance broader and true.

Endnotes

1 Niles and Hanson, 2002:1.
2 Sen, 1999.
3 Blanchard and Horan, 2000.
4 Colle and Roman, 2002.
5 Lopez, and Villaseca, 1996.
6 O'Farell, 2001 and Heeks, 2001.
7 Heeks, 2000.
8 Cariño, 1983:10.
9 Wolfe, 1981 as cited by Cariño, 1983.
10 Misra and Plantilla, 1981, as cited in Cariño, 1983.
11 Gaudette, 1995 as cited in Bedi, 1999:1.
12 Magno and Serafica, 2001:2.
13 Heeks, 2000.
14 Pretty et al., 1995, as cited in Ilago 2001.
15 Carver, 2001.
16 Ilago, 2001.
17 Magno, 2002; Alampay, 2001.

18 Alampay 2001, Magno 2002, Ilago, 2001.
19 Ilago, 2001.
20 Robles, 2001; Montiel, 2001, Alampay 2001.
21 Robles, 2001; Alampay, 2001.
22 Robles, 2001:15.
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24 Montiel, 2001.
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27 Mansell and Steinmueller, 2000:66-67.
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29 Lopez and Villaseca, 1996.
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32 Lacuarta, 2001.
33 Magno and Serafica, 2001, Alampay 2001.
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35 Carino, 1983:27.
36 Jimenez, 2002.
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40 Anderson, et al., 1998.
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53 McDonnel, 1999; Richardson, 1997.
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