

PHILIPPINES

**Incorporating participation in  
the Philippines' e-LGU Project**

**Erwin A. Alampay**

Assistant Professor

National College of Public Administration and Governance

University of the Philippines

NCPAG, University of the Philippines, Diliman, Quezon City, Philippines 1101

Tel: 928-5411

[erwin\\_alampay@yahoo.com](mailto:erwin_alampay@yahoo.com)

## Abstract

The Jumpstarting Electronic Governance in Local Government Units (e-LGU) Project was implemented in 2002 to help local government units (LGU) have a head start in their computerization efforts. It was spearheaded by the National Computer Center (NCC). Among its objectives was to provide a web-presence for all local government units; install revenue generation systems in 100 pilot sites per year; and provide a network of 100 community e-centers per year to provide access to the Internet to marginalized sectors.

Since its implementation, the NCC reports that (1) 99.5% of LGUs now have web-presence; (2) that it is currently servicing over 248 pilot units for its open-source based revenue generation system; and (3) have 49 CeCs in place.

From the perspective of enhancing the participation of stakeholders, however, there is still much room for improvement. For one, the quality and usefulness of the content available in most LGU websites is lacking. Second, while the computer programs being developed use open-source, the philosophy behind it has not been fully embraced by the NCC and its implementation has been far from open. There is also a need to develop programs that are geared more specifically to planning and participation. Last, providing access for the marginalized via the Internet in order to communicate with the government ignores the fact that a more embedded and accessible technology already exists—the cell phone. Evidence comparing the use of the internet (e.g. email) and use of short messaging systems (SMS) among local chief executives (e.g. governors and mayors) show that SMS via cell phones are more useful in interacting with the local constituency.

# **Incorporating participation in the Philippines' e-LGU project**

*Erwin Alampay<sup>1</sup>*

*National College of Public Administration and Governance  
University of the Philippines*

## **Overview**

This paper reviews the Philippine government's key initiative for citizens' inclusion in the information society—the Jumpstarting Electronic Governance in Local Government Units (e-LGU) Project. It looks at three aspects of the project: 1) website development; 2) the creation of revenue generating systems; and 3) the provision of access to an ICT infrastructure through community e-centers.

This paper analyzes the importance of people's participation in the project by looking at (1) the process of developing content and systems for the program and (2) the creation of ICT-enabled platforms for encouraging citizen participation. While analyzing the e-LGU program, the paper will also discuss other initiatives developed independently by LGUs and NGOs at the local level that provide potential learning points or lessons.

## **Background of e-government in the Philippines**

E-government in the Philippines traces its origins to the early computerization efforts through the creation of the National Computer Center (NCC) in 1971 (Rye 2002, Siar 2005). The NCC was created to rationalize the country's use of information technology for national development.

In 1997, the government defined in IT21 the broad principles and strategies mentioned in previous National Information Technology Plans into more specific programs and activities. It delineated the roles of the government and the private sector in this endeavor. This was subsequently complimented by Administrative Order 232 which instructed all government agencies and instrumentalities including local government units to undertake electronic interconnection through the internet (Alampay 2005).

---

<sup>1</sup> You may contact the author for comments and feedback at: [erwin\\_alampay@yahoo.com](mailto:erwin_alampay@yahoo.com)

June 2000 saw the signing into law of Republic Act 8792, or more commonly referred to as the E-Commerce Act. This law directed all agencies of government, including local government units (LGU) to use electronic means in government transactions. Among the goals of this act was to get make ICTs integrated into LGU operations, in order to deliver more efficient and effective services to citizens, while at the same time generating higher revenues for themselves (Siar 2005).

In line with this RA8792, the e-LGU Project was undertaken by the NCC in 2002. It was meant to give LGUs a head start in computerization by making them more capable of embracing information and communications technology in their operations for better public service.

In 2004, a Commission on Information and Communication Technologies (CICT) was created to take into account the convergence of telecommunications, broadcasting and computer technologies (Alampay 2005). This was to address what Rye (2002) described as a fragmented policy and program implementation of ICT activities in the country. Among the institutions that the CICT absorbed were the National Computer Center and the telecommunication planning office of the Department of Transportation and Communications. As such, the CICT became the primary institution for developing IT policy, programs and projects for the government, including the e-LGU project.

## **The Local Government Code, People's Participation & e-Governance**

The passage of the Local Government Code in 1991, was meant to empower local government units (LGU) and promote social development through the decentralization of power. It devolved basic services to the LGU, such as healthcare and education, and empowered it to increase local financing in order to make it more self-reliant. This is consistent with reforms done throughout the world that focus on improving governance by bringing government closer to the people and make them active participants in development (Brillantes 2003).

It is worth noting that the creation of the Philippines' Local Government Code came at the moment at a time when the ICT revolution was beginning. Hence, consistent with the call for reform and better public management inherent in the Code is the concept of electronic government or e-government. In ICT parlance, according to Lim (2003a:35), e-government *"implies an appropriate balance between technology as a tool to improve good governance by increasing the opportunities for interactions and dialogue between the government and those it serves, and an alternative channel for citizens to access government services, and participate in the decision-making process which strengthens the fundamental existence of governments to govern in a transparent, open and accountable manner."*

It is therefore worth investigating how ICTs, through e-government helps in the attainment of the Code's objectives, especially in terms of making local governments more self-reliant, empowered, and participatory.

Independent of each other, there have been local cases that show how the Local Government Code and ICTs can encourage people's participation in governance. For instance, the development of volunteer programs in Olongapo City; the use of comprehensive community surveys to improve local government programs in Malolos, Bulacan; and institutionalized sectoral representation in Naga's local councils are examples of innovations that have been brought about by the new Local Government Code (Brillantes 2003). Likewise, there have also been cases that show how ICTs can be used to make government more accountable to its people. For instance, at the national level, the use of cellphones and SMS is argued to have been instrumental in mobilizing people during EDSA 2, which eventually lead to the ouster of President Joseph Estrada. In a similar fashion, a 'virtual-NGO' called TxtPower lead an SMS campaign against a proposed legislation to tax text messaging (Molmisa 2006). While at the local level, Capiz used data generated from a crude geographic information systems in its participatory planning process (Cordenillo 2004).

However, the impact of ICTs may vary from one organization to another depending upon the purpose for which it was designed. How to encourage greater participation is the challenge for e-government policies and programs. Information and communication technologies can be used to either strengthen the centralization of operations, or its decentralization. The computerization in local government units is a good example of this dual possibility.

### *Arguments for centralized system development*

Centralization provides a number of advantages, such as efficiency, standardization and ease in aggregation.

Given that the information and system requirements of local government units are relatively uniform, going at it independently sacrifices the efficiency that can be gained by approaching it as a collective. This can also help reduce the cost and make e-government more affordable for poorer municipalities.

In addition, the advantage of having common "templates" for websites, assumes that there are minimum expectations of what a government website should have. The country, in fact, has a number of "best practice" LGU websites that other LGUs can already learn from.

The advantage of having a standard system can also facilitate reporting and aggregation of data, be it in the provincial, regional or national levels.

### *Decentralized concerns*

The disadvantage of approaching the problem from a central agency, however, is the difficulty of addressing the subtle differences between local government units. Although arguably, revenue generating systems are common applications that LGUs want, need and use, there are nuances on how they implement them. Because of the local government code, some LGUs may implement different taxation rates, have different interpretations about penalties to levy, and have different incentives.

Hence, from the perspective of e-governance, this has effectively made it more difficult to standardize computerization efforts. While bureaucratic structures are theoretically viable for computerization because of its standard processes; rules and regulations, however, the diversity in how these rules are currently being implemented because of the Local Government Code presents a challenge to the rapid creation of a standard computer system.

### **The e-LGU Project**

The eLGU project was programmed to run for a period of three (3) years, starting from September 16, 2002 to September 15, 2005. Among its objectives were to:

1. Determine the state of local government computerization and readiness for e-governance through a nationwide survey.
2. Promote awareness and increase understanding and commitment of local government officials to e-governance through regional seminars targeting at least 1,000 officials by end of Year 1.
3. Provide 100 LGUs per year with a web-enabled information system using open source technology for better assessment and collection of property and business taxes in a more efficient and transparent manner.
4. Establish an emerging web presence for 79 provinces, 110 cities and 1,496 municipalities by Year 1 and an interactive, WAP-enabled web presence for pilot LGUs by Year 3 with all websites connected to a local government portal.
5. Institutionalize ICT in the LGUs through the preparation and approval of LGUs Information Systems Plans by 100 pilot LGUs by end of Year 1 and 300 LGUs by end of Year 3.

6. Facilitate data sharing and information exchange between government agencies and LGUs through the development of data standards for local government.

In summary, the project was meant to bring about the much-needed change in the local government system and transform the LGUs into e-enabled LGUs. Of the six objectives listed above, two objectives (#3, #4) are actual computerization projects that require the utilization of ICTs. These two projects involve the use of open-source technologies; and the establishment of web-presence among LGUs. The NCC also considers the recent initiative that involves the provision of access to the internet through community e-centers as a crucial component of the e-LGU Project.

These three initiatives will be the primary focus of the discussion in the next section.

## **Status of the e-LGU Project**

The e-LGU project's intended implementation period ended in September 2005. Whether it has achieved its desired objectives and whether it has enhanced people's participation can now be evaluated.

### ***Website development***

According to the National Computer Center (NCC), as of September 2005, almost all (99.5%) local government units already have web-presence (Refer to Table 1). Although this is a very noteworthy achievement, having a web-presence may not necessarily translate to actual services.

Based on NCC's own account, 74% of these websites are classified as being in an emerging phase of web-presence (Stage 1). In fact a cursory sampling of the 728 LGU websites linked to the e-LGU website shows that some sites have not been updated since 2002, which is incidentally also the year the program was implemented. (e.g. Bayang, Lanao del Sur; Ganassi, Lanao del Sur, and Dumarao, Capiz, Allacapan, Cagayan (2002)).<sup>2</sup>

Furthermore, a content analysis of all city government websites (n=102)<sup>3</sup> conducted by Siar (2005) found "minimal adoption of e-governance by majority of the city governments and the underutilization of their websites as e-governance tools." The study lamented how most information were geared towards informing people about the community's characteristics and promoting citizen awareness, with the bulk dealing only with standard information (i.e. topography, history, composition of the government, etc.). Few efficiency enhancing services, such as interactively

<sup>2</sup> See [http://elgu.ncc.gov.ph/index.php?option=com\\_weblinks&Itemid=4&catid=82](http://elgu.ncc.gov.ph/index.php?option=com_weblinks&Itemid=4&catid=82)

<sup>3</sup> It is noteworthy, however, that between a previous study by Ilago in 2001 and Siar's study in 2005, the number of cities with websites have increased by almost three-fold.

transacting with government and downloading forms were found and that the promotion of policy-making and participation in decision-making was negligible (Siar 2005:94).

**Table 1: LGU Web-presence (as of September 30, 2005)**

NATIONWIDE	With Website						
	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Total	%
Cities (n=117)	20	75	20	0	0	115	98.3
Provinces (n=79)	18	47	14	0	0	79	100.0
Municipalities (n= 1500)	1,215	229	50	0	0	1,494	99.6
Total (n=1696)	1,253	351	84	0	0	1,688	99.5

Source: National Computer Centre (2005)

In fact, when I was conducting my own research on health ordinances in 2005, I was only able to find one website (Naga City) where the actual ordinance can be downloaded. This is consistent with Siar's own account that only seven percent of cities put ordinances and resolutions online, with only one providing full document download.

Given the huge resources at the disposal of cities, it may be extrapolated from these findings that poorer municipalities may be in a worse situation in utilizing websites to encourage people's participation.

This shortcoming, however, is not limited to the Philippines. Bhatnagar (2004) notes that governments in the Asia Pacific region have generally been weak in promoting two-way interaction with its citizens through the web. However, the failure is not only due to the limited capacities of the government, but is also sometimes due to the limited capabilities of its citizens.

### ***Revenue Generation Systems***

While the primary indicators for the establishment of websites have been encouraging, timely progress with respect to the implementation of the e-RPTS project has not been as efficient.

The goal of the e-RPTS was to provide a system for 100 LGUs per year (or 300 LGUs after three years of implementation). By the end of the three year period, the project had 248 pilot LGUs in varied stages of implementation<sup>4</sup>. While all 248

<sup>4</sup> This is based on the available data in the e-LGU website (downloaded Jan 23, 2006). However, in an email correspondence with Cheryl Ortega, NCC's field officer, she reports that the NCC now has 364 LGUs as pilot areas.

pilot sites have made or are in the process of finalizing their respective information systems strategic plans, only 51, had been fully evaluated and endorsed by the NCC.

Furthermore, no LGU has fully implemented the Real Property Tax System (eRPTS), Business Permit and Licensing System (eBPLS), and Treasury Operations and Management System (eTOMS)<sup>5</sup>. According to NCC field officer, Cheryl Ortega, the eBPLS systems development is still in the final stages of completion while eTOMS is still in its analysis and design phase. Of the three, the one with the farthest progress made is the eRPTS component.

While the NCC shoulders the cost of the development of the systems, the LGUs are required to pay for the training of its personnel. LGUs are also required to have a Local Area Network (LAN) in place in the Mayor's Office, Assessor's Office and Treasurer's Office. They should also have an official LGU website that is accessible online and a telephone system in place. The LGUs should also have a permanent employee assigned as its ICT personnel. It also prefers that an ICT unit is established.

In essence, while each LGU receives the eRPTS system for free, the cost of having a fully-functional system isn't without cost. There would still be expenses in terms of customizing the software for each LGU, the cost of database build-up, the cost of the hardware, and the training, among others.

The winning bidder to develop the eRPTS system was K2Interactive (K2I). According to K2I's system developers, the development of the open source software was originally estimated to take only one year. Essentially, open source is based on the ethos of peer review, constructive feedback and a decentralised approach to software development...[It] can be understood as applications and operating systems whose source codes are open for other parties to review, comment, refine and add to" (Lim 2003b:40).

After three years, full implementation in a pilot area has yet to be reported, more so duplication in other LGUs (see Table 2). K2I, as such, has already been operating at a loss from the original Php2.3Million allocated for this undertaking.

**Table 2: Status of e-RPTS Implementation**

Implementation stage	Number of LGUs
Users Training	87
Installation	43
Database Buildup	25
Parallel Run	0
Full Implementation	0

Source: summarized data from the National Computer Center (2006)

<sup>5</sup> The cost of developing these systems are shouldered by the NCC. According to the NCC's guidelines, the development cost for the RPTS is Php2.31 million, BPLS is Php 2.8 million, and the TOMS is Php3 million.

According to K2I, the original terms of reference for the contract stipulated that they would develop a flexible generic open source system that can be customized to the needs of varied local government units. K2I would also be responsible for its installation in one pilot area, while the NCC would be responsible for its full implementation in other pilot LGUs.

The development of the software, however, didn't develop as fast as anticipated. The way the pilot LGU of Dapitan conducted their assessment of land taxes had variances with other LGUs. In addition, consultations with city and municipal assessors didn't lead to any agreement on how assessments, taxation, penalties were computed. There were even differences on opinion in the interpretation of some provisions of the local government code. This, though, was the primary reason why a "generic system" that was flexible enough to be customized to all LGUs was of paramount importance. But this also contributed to the delay in the program's development.

When a generic system was finally developed, it had to be 'customized' again to the pilot LGU of Dapitan. According to the developer, it took approximately two man-months to customize the system. Unfortunately, once the customization that took into consideration some of the inputs gathered from the consultations had been made, there was an expressed preference to go back to a previous set-up upon the change in local administration as a result of local elections.

At present, the K2I is not aware of the status of its implementation in the pilot LGU of Dapitan.

### ***Community-e-centers***

The establishment of nationwide network of Community e-Centers (CeCs) is of the Commission on ICTs. It is being integrated as a component of the eLGU Project.

A CeC is an outlet for providing the general public with affordable access to a variety of services using ICT, such as telephone/fax, Internet/e-mail, computer training, distance learning, on-line services and other kinds of services and information relevant to the community. Each CeC is equipped with four to five Internet-enabled computer units, a printer and fax machine including their cable connections.

The CeC component is national in scope and is carried out in close collaboration with key departments, LGUs and other organizations. It involves a number of sub-components, each of which is geared towards eventually making the local community capable in managing and utilizing the CeC for growth and development. Among them are the identification of pilot barangays based on evaluation of applications submitted, the provision of training to barangay officials and personnel on how to manage the CeCs; the conduct of a trainor's training for CeC

staff who will concurrently serve as ICT trainer and extension worker; and the integration of a CeC “portal” or related pages in pilot LGU websites.

So as not to start from scratch and to ensure high success rate, the project studied existing local CeC ‘best practices.’ It worked closely with officials of the Barangay.Net project of CVISNET and the Telehealth Project of DOST-PCHRD, pioneers of the telecenter movement in the Philippines, to replicate and strengthen recent CEC successes.

The goal of the project is to establish 100 CeCs per year, with at least two CECs per region (excluding NCR). They will be established in areas where there are already existing Postal and Telecommunications Office facilities, in order to provide the public with postal, telecommunications and Internet services all in one place. It prioritizes areas where Internet facilities are lacking.

Each CeC is provided with two computer units, printer and fax machine. The LGU provides another computer unit, Internet connection and manpower as counterpart.

As of November 2005, forty-nine (49) CeCs throughout the country were already operational and providing a host of ICT services to LGU constituents (NCC 2005).

## **Participation & the e-LGU project**

The previous section discussed the status of the different e-LGU programs in terms of their stated objectives. Most of these objectives were easily measurable (i.e. number of LGUs with websites, number of pilot areas, number of CeCs installed). However, they were not evaluated in terms of how it supports and enhances community participation—in the development of the program, or in actual government projects. As such, the following the section evaluates these programs in terms of this dimension.

### ***Website development***

If most of the local websites (74%) are still at Stage 1 in the UN-ASPA stages of e-government, this means that most of the information found are static and not regularly updated. Hence, information that is available on the web may not be very useful for people who want to participate in the affairs of the local government. This is why Siar concluded that there is still an “...*absence of appropriate and substantial content that could enhance local governance, ( because there is) limited use of electronic mechanisms for promoting public participation, and ... (there are) sites that barely contain information...*” (2005:62)

Furthermore, even though there may already be 99.5% web-presence, there may also be little awareness among residents (and even among municipal employees)

or the sites' presence. This was apparent in some workshops conducted by the NCPAG among local legislators when participants were asked about their respective websites, and few responded knowing about it or visiting the site if at all. Also, some websites are literally just templates with the names of the LGU. In some cases, the names of the local chief executives have not been updated. One reason this occurs, is that some of these sites were hosted or established by the NCC and not by the LGU. Hence, some LGUs do not have direct control over the content in their own websites.

More alarming is the fact that the local chief executives (mayors and governors) may themselves be unaware of their own website. In a pilot survey of 27 local chief executives in Luzon, only 44% reported that their LGU had a website (Refer to Appendix A).

### ***Revenue generation systems and participation***

The Local Government Code of 1991 is acknowledged as revolutionary and important in boosting local governance by devolving basic services; increasing local financing and allowing people to participate (Tapales 2002). Among its goals is to have a stronger democracy and more self-reliant communities (Co 2002).

Ironically, it is also this code, which has “impeded” the NCC’s own computerization efforts. Even as there are “basic” financing related functions in local government units, the Code now allows LGUs to vary how they are implemented. As such, the features of the bureaucracy for standard rules and regulations that should make computerization easier, was not realized. Hence, the advantage of performing this from a central agency of government, such as the NCC, was not apparent.

Often, it has been the case that some other LGUs contract a private sector developer to develop their revenue generation systems. In other cases, some LGUs with manpower capacities to develop their software, develop the needed system in-house. As such, even as the NCC has yet to have a fully implemented system in any of its pilot LGUs, other LGUs have proceeded independently of them (e.g. Antipolo City, Caloocan City, Naga City).

One such case was Cagayan de Oro City. In fact, Cagayan de Oro originally sought the help of the NCC. Given the slow pace by which the NCC developed their software, Cagayan de Oro was able to develop their system independently. Furthermore, they replicated their system to 137 other LGUs (Mendoza 2004). Whether such a system is compatible or replicable in other LGUs is altogether another question. But obviously, the advantage of adopting an existing system is the same challenge that the eLGU is programmed to address and Cagayan de Oro has successfully demonstrated this already.

Furthermore, by approaching the problem via open-source, points to a possible solution to the problem of developing a centralized, albeit flexible solution. That is, if the philosophy of participation, inherent in the nature of an open source community is encouraged.

However, as it stands, while the generic open source software has already been developed, it has yet to be officially licensed and released. In 2005, a non-governmental organization, the Institute for Popular Democracy (IPD), launched its own free and open-source software project, with the same intention, that of promoting ICT-use in the governance of local government units. They wanted to get a copy of the the source code and system architecture used for the e-NGAS<sup>6</sup>, however, was not given by the Commission on Audit (COA) for the simple reason that the IPD was not an LGU.

It is interesting, nonetheless, that IPD (a non-governmental organization) and K2I (the private developer of the e-RPTS system) both share the belief that the solution lies in the open source community. Both groups recognize the limitation of their own capacity to develop programs for all the varied needs of the thousands of LGUs in the country. But both also agree that enough talent resides in the country from which a dedicated open source community for LGUs can be harnessed to make the needed systems that can be tailor-fitted to the needs of local communities and LGUs.

### *Community e-Centers*

The establishment of CeCs as a means of providing the public with access to the internet, and thereby interact with the government (e.g. through its websites) ignores a potentially more viable infrastructure in the form of mobile telephones. One problem with how the CeCs are being implemented is the fact that its implementation simply rides on the existing infrastructure of the TELOF. Hence, it also inherits the limitations of the TELOF network. For one, access to the TELOF network of public calling offices, is in itself difficult. Limited facilities and distance and time to travel to these facilities are among the barriers to people's use (Alampay 2005).

Furthermore, the establishment of the CeCs precludes the investigation of community needs for these services. Often the issue of access has been tackled from the supply side and not the demand side. It is in the demand-side where people's participation should be encouraged, especially when determining the design of telecenters and services that they would make available. For example, what purpose would people need CeCs?

Even if pursuing it from a supply perspective, the whole premise assumes that the same services can not be delivered through alternative means. Easily, one can argue that there are other types of ICTs whose infrastructure is more widespread and more appropriate, and therefore be more effective means to transmit (e.g. radio) and collect information (e.g. cellular phones). For instance, even as Bulacan Province has been touted as one of the pioneers in computerization initiatives among LGUs, it was awarded a 'Galing Pook' award in 2002 for its program on Constituent Responsive Governance that uses survey research methods to get a truly representative citizen's

---

<sup>6</sup> National Government Accounting System

feedback on projects in order to minimize costly mistakes. At the same time, the province also uses community radio to inform them about its plans, projects and other local developments.

Finally, in a small pilot survey of mayors and governors I conducted last year, only 59% (n=16) of the local chief executives reported having an email address of their own, and only 44% (n=12) said they had a website for their LGU. A counterpoint to this is the fact that all respondents surveyed said they had a cell phone and that they receive on the average 130 text messages (SMS) per week; and spend on the average Php10,100/month<sup>7</sup> for their cellular phone expenses (See Appendix A). This simply reflects how embedded SMS-use is, and how farther behind access to the internet is (compared to access to mobile phones) in the Philippines. As such, viewing e-government readiness along the dimensions of maturity of technical infrastructure and back-office use would clearly show the greater potential of delivering e-government services via SMS.

## **Conclusions & recommendations**

The implementation of the e-LGU project has been highly centralized and top-down. This is evident in how (1) hosting and control over the content of websites do not fully reside in LGUs, (2) how the choice of ICT applications for LGUs to consider is currently limited to three revenue generations systems, (3) how the systems being developed, at present remain the responsibility of one contracted developer instead of a community of developers and (4) how CeCs are the primary mode of access to linking people with government online services. This kind of approach has been seen as one of the drivers of e-government initiatives in the Asia-Pacific (Bhatnagar 2004). However, it is also for this reason that, from a participatory perspective, the e-LGU has shortcomings that need to be addressed.

Along these lines it is recommended that:

1. Local government units be given more control over their content. For this to work, there is also a need for local leaders to appreciate the use and potential of the internet. As noted, for instance, not all mayors and governors currently have an email address. Teaching them how to email and making their addresses available would be a logical starting point for making them accessible to more people.
2. The government should explore other applications aside from revenue generation. There is a dearth of systems being developed that maximizes the potential use of ICTs for planning. For instance, there are actually a number of local units (i.e. Naga; Bohol) who have incorporated informal surveys and consultations using their websites.

---

<sup>7</sup> Approximately US\$190/month

3. While each LGU can not be compelled to adopt the same computer system (e.g. for revenue generation, for planning, etc.), there is a need to develop common standards for database architecture. Hence, while a “generic system” is developed by the national government, other LGUs who develop systems internally, or through private vendors should be compelled to follow the database schema used by the NCC. This would allow for easier data aggregation, especially when planning at the provincial and national level.
4. The open source software being developed by the NCC be licensed and shared as soon as possible. It should also make a more concerted effort in helping build an open-source community dedicated to improving the software for local governments, and participate in the needed modification and installation of the software to fit the nuances of different LGU.
5. Gaining access to the information society can involve various forms. Reaching the ‘first mile’ or the marginalized would require appropriate technologies that take into consideration social, technical and economic conditions. Hence, community e-centers and access to the information society, in general, can not be approached in one ‘packaged’ form. People need to be consulted on what form this would take. Government should also consider using a mix of technologies and intermediaries for the purposes of eliciting the maximum interaction and response from the communities (see Alampay 2002, Alampay, et. al. 2003). Furthermore, given the inherent advantages of the mobile phone (how it is easily more available and accessible), there is a need to consider developing more applications to encourage people’s participation that uses this technology<sup>8</sup>.

Finally, for all these to work, it is important to create a culture in government that values information and knowledge sharing. Apathy to release information has been previously cited as an impediment to the development of websites (Siar 2005). The same problem can be found when investigating the development of software created for LGUs, and in internalizing the open-source philosophy.

In the end, ICTs can not empower people unless the government and its leadership allow people to gain access to the information they keep.

---

<sup>8</sup> Interestingly, the eRPTS system developed by K2I also has a component for SMS integration that is intended to the near instantaneous notification of tax payers of their liabilities.

## References

- Alampay, Erwin A. (2005) 'Re-thinking universal access using the capability approach: the case of access to information and communication technologies in the Philippines.' Doctoral thesis submitted to the School of Environment and Development, University of Manchester.
- Alampay, Erwin Gaspar A. (2002) 'People's participation, consensus building and transparency through ICTs: issues and challenges for governance in the Philippines' *KASARINLAN* Vol. 17 No. 2: 273-292.
- Alampay, Erwin Gaspar A., Richard Heeks & Peter Paul A. Soliva (2003) *Bridging the Information Divide: A Philippine Guidebook*. Asian Media Information and Communication Centre (AMIC), the International Development Research Centre (IDRC) of Canada and the Asia-Pacific Development Information Programme (APDIP) of UNDP.
- Bhatanagar, S. (2004) 'The Role and Responsibility of Government in ICT for Development' in *ICT Policies and e-Strategies in the Asia-Pacific: A critical assessment of the way forward*, Sayo, P., Chacko, G. and Pradhan, G. (Eds). APDIP. Elsevier, pp. 103-114.
- Brillantes, Alex B. Jr. (2003) *Innovations and Excellence. Understanding Local Governments in the Philippines*. Center for Local and Regional Governance. National College of Public Administration and Governance. University of the Philippines.
- Co, E. (2002) "Raising an Old Question: Is There People's Participation in Local Governance?" in Tapales, P. & Brillantes, A. (Eds), *Local Government in the Philippines: A Book of Readings, National College of Public Administration and Governance*, pp.391-398
- Cordenillo, R. (2004) 'The Capiz GIS Experience' presented in the ICT4D Mindanao Conference, held at the Grand Caprice Ballroom, Cagayan de Oro City on August 11, 2004.
- Lauengco, G. ( n.d.) 'Antipolo's GIS experience: a case presentation.'
- Lim, Sharon Y.P. (2003a) ICT and Governance: *Tana Otsustan Mina (Today, I'm Deciding)* in Understanding ICT4D Thematics in Malaysia: A Sourcebook. United Nations Development Programme (UNDP).
- Lim, Sharon Y.P. (2003b) 'Open Source Software and Development: Should developing countries be open to the idea?' in *Understanding ICT4D Thematics in Malaysia: A Sourcebook*. United Nations Development Programme (UNDP).
- Mendoza, R. (2004) 'Cagayan de Oro's Revenue Generation System and its Replication' presented in the ICT4D Mindanao Conference, held at the Grand Caprice Ballroom, Cagayan de Oro City on August 11, 2004.
- Rye, Ranjit S. (2002) 'E-governance in the Philippines: Insights for Policy Making,' *KASARINLAN* 17(2):101-138.

Siar, Sheila V. (2005) 'E-governance in Philippine Local Government: Content Analysis of City Websites and Study of a Best Practice Case' a thesis presented to the Division of Public Administration, Graduate School of International Christian University (11 May 2005).

Tapales, P. (2002) "The Philippine Local Government System and Decentralized Development" in Tapales, P. & Brillantes, A. (Eds), *Local Government in the Philippines: A Book of Readings, National College of Public Administration and Governance*, pp.49-58.

***Email correspondence:***

Cheryl Ortega, National Computer Center field officer

Riko Vinluan, Naga City Librarian

***Focus group participants:***

Greg Igaya – Project Manager, EU-FOSS project, Institute for Popular Democracy

Melay Abao – Project Director, EU-FOSS project, Institute for Popular Democracy

Reuben Ravago – former Managing Director of K2 Interactive

Alex Osias – Group Head, Information Technology Services, K2 Interactive

Randy Villa- Manager, K2 Interactive

***National Computer Center documents***

NCC Guidelines for Non-pilot LGUs. Jumpstarting Electronic Governance in Local Government Units (e-LGU) Project

NCC Memorandum Circular 2003-001

***Websites:***

NCC's e\_LGU project

<http://elgu.ncc.gov.ph/index.php?option=content&task=blogcategory&id=66&Itemid=52> (downloaded January 10, 2006)

Galing Pook –

[http://www.galingpook.org/awardees/2002/2002\\_admin\\_bulacan.htm](http://www.galingpook.org/awardees/2002/2002_admin_bulacan.htm)  
(downloaded Jan. 28, 2006)

## Appendix A

### ICT use and awareness among Local Chief Executives in Luzon (n=27)

ICT use	Indicator
<b>EMAIL</b>	
Percentage with email	59%
Average number of email received from local constituents, per week	15
Ave. number of email received from outsiders, per week	5
<b>CELLULAR PHONE</b>	
Percentage with cellular phone	100%
Average monthly expense for cellular phone use (PhP)	10,100
Average number of SMS from local constituents, per week	130
Ave. number of SMS received from outsiders, per week	48
<b>LGU-WEBSITE</b>	
% who reported having a LGU website	44%