E-governance at the Local Government Level in the Philippines: An Assessment of City Government Websites*

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ABSTRACT

The application of information and communication technology for improving governance by enhancing government's role in service delivery, public administration, and promotion of participatory democracy has been gaining momentum in many parts of the world. In Philippine local government, this has been witnessed lately in the significant rise in web presence of many cities, a development that was facilitated by the passage of the Electronic Commerce Act in 2000 and the implementation of subsequent programs to support the law's adoption by government. An assessment of the content of city government websites indicated, however, the minimal adoption of e-governance as well as the underutilization of websites as e-governance tools. Results also showed a clear absence of substantial information and resources that could enhance the quality and speed of service delivery, make government more transparent, facilitate public participation in decisionmaking and, ultimately, bring government, citizens, business, community organizations, and other groups in society together in the governance process.

INTRODUCTION

The move to reinvent government has spread incessantly over the last two decades in many parts of the world. Governments in developed and developing countries alike have faced increasing pressures to improve their role in service delivery and public administration. The reforms sought have not only called for better public service through improved efficiency and effectiveness, promotion of transparency, and increased responsiveness. They have also highlighted the necessity to transform governance—to move away from traditional, top-down approaches toward more decentralized and participatory systems.

The roots of this government reinvention can be traced back to a number of historical causes (Heeks 1999). One of them is the challenge confronting governments to keep or win back citizens' trust and confidence in public institutions, which has waned through the years with increasing reports of corruption. Another is the influence of the neoliberal thinking that emphasizes the efficiency of markets and the notion that the inefficiency of the public sector may be corrected by making it as similar as possible to the private sector. Corollary to this is the intensified pace of competition brought about by globalization, which could also explain why so many governments pursued many reform strategies so aggressively at much the same time (Kettl 2002).

Common in the new public sector reforms is the use of information and communication technology (ICT)[1] in improving government procedures and processes and the linkage between government, citizens, and other groups in governance to promote a more active and participatory political deliberation and decisionmaking—a strategy known as e-governance. Using the definition of Backus (2001), e-governance may be defined as the application of ICTs in refining and strengthening the interaction between government and citizens (G2C) and government, business and other groups (G2B), as well as improving internal government processes (G2G) to streamline and improve public administration. Although e-governance and e-government sound almost congruent, Backus noted that e-government is the utilization of ICTs by government to improve its internally focused operations (backoffice operations) and externally focused services (frontline operations) in order to facilitate a speedy, transparent, accountable, efficient, and effective process of performing its activities with the public, business, and other sectors.

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[1] ICT refers to both computer and communication technology. The OECD defines it as "any equipment or interconnected system (subsystem) of equipment that includes all forms of technology used to create, store, manipulate, manage, move, display, switch, interchange, transmit, or receive information in its various forms" (OECD Glossary of E-government Terms).

Objectives of the Study

To what extent have local governments in the Philippines implemented e-governance using websites as their medium? This study attempted to answer this question by looking into the resources and services that city governments provide to citizens and other groups in society through their websites. The focus of this research is the content of the websites, with cities as the representative local government units (LGUs), as they could be considered more progressive than municipalities and are thus better equipped to implement e-governance, which undoubtedly entails cost.

The advent of the use of ICTs in Philippine government could be traced to the creation of the National Computer Center (NCC) in 1971 and its subsequent designation in 1978 as the key agency in government tasked to direct IT use for national development and rationalize computerization in the country. This was followed by the creation of other ICT agencies to further promote ICT use in government as well as develop the country's ICT industry. In June 2000, the most important piece of legislation concerning ICT and e-governance was signed into law—Republic Act 8792, otherwise known as the E-commerce Act—which directs all agencies of government, including LGUs, to use electronic means in government transactions. At the LGU level, the Act aims to get "ICTs into the bloodstream of LGUs and enable better and faster delivery of government services to citizens at lesser costs, and, at the same time, generate higher revenues for themselves." A three-year project called *Jumpstarting Electronic Governance in Local Government Units* or eLGU, a joint undertaking of the NCC, the Department of Science and Technology, and the Information Technology E-commerce Council, was also started in September 2002 to assist local governments in the smooth transition to e-governance.

In one of the few studies on e-governance conducted at the local government level in the Philippines, Ilago (2001) found that only 14 percent of provinces (11 out of 79), 25 percent of cities (28 out of 113), and 1 percent of municipalities (14 out of 1,496) had an online presence. In terms of automation, however, some local governments were found to have achieved progress in real property tax administration, personnel management, administrative services, and even geographic information services.

By 2004, however, only three years after the implementation of the E-commerce Act, almost all local governments had an online presence.[2] Specifically, 97.5 percent of provinces (77 out of 79), 99 percent of cities (114 out of 115), and 99.7

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[2] Report as of 30 June 2004 by the e-LGU project (sent to the author by Ms Cuchie Echeveria, eLGU Project staff, in an email on 23 July 2004).

percent of municipalities (1,496 out of 1,500) had websites.[3] A major part of this development could be attributed to the enactment of the E-commerce Act and the implementation of subsequent programs to support the law's adoption by government agencies and LGUs.

Significance of the study

The present research is akin to some extent to a previous study conducted by Lallana et al. (2002) that categorized Philippine government websites based on the "five stages of e-government" developed by the United Nations-American Society for Public Administration (UN-ASPA): emerging, enhanced, interactive, transactional, and fully integrated. The same indicators are, in fact, being used by the eLGU Project in monitoring the progress of the websites every quarter. In general, the stages present a straightforward benchmark that objectively assesses a website's degree of sophistication (UN-ASPA 2001). Each stage is marked by certain features in which ascending to a higher stage means that the website has not only become richer in content but has also advanced in terms of the degree of interactivity between the government and its target audiences. But while the ASPA uses indicators that look into the content of a website, its approach is very general in that the indicators are not so concerned with the "actual" content or the exact information found on the website such as community news or financial data like the city budget.

Additionally, while Ilago's 2001 study reviewed local government websites' applications and content, it utilized Klaus Lenk's broad classification of a website's resources, namely, information and referral, communication and feedback, document download, and online transaction. This study, however, seeks to fill the gaps in, and update, these past studies as well as those of the ongoing eLGU Project by conducting a deeper and more comprehensive investigation of the content and information contained in each city government website and ascertaining their scope, usefulness, degree of transparency, and effectiveness in improving the governance process. In terms of coverage, this study is also by far wider in scope than Ilago's, which analyzed only 35 websites.

METHODOLOGY

A total of 102 websites were found to be accessible at the time of the study in 2004. Ten websites were inaccessible and two were under construction. Thus, this study covered a total 102 cases (Table 1). The list of the cities and their web addresses is given in Appendix 1.

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[3] As can be observed, the total figures according to province, city, and municipality of the NCC study differ from those of Ilago's study. The discrepancy lies in the total number of cities and municipalities. The numbers change whenever a new LGU is created or converted from one type to another.

Table 1.   Distribution of city government websites by region

Region	City websites (Total)	Accessible (No.)	Inaccessible (No.)	Under construction (No.)
Region 1 (Ilocos Region)	8	7	1	
Region 2 (Cagayan Valley)	3	3	0	
Region 3 (Central Luzon)	11	10	0	1
Region 4 (Southern Tagalog)	12	9	2	1
Region 5 (Bicol Region)	7	7	0	
Region 6 (Western Visayas)	16	13	3	
Region 7 (Central Visayas)	12	12	0	
Region 8 (Eastern Visayas)	4	3	1	
Region 9 (Zamboanga Peninsula)	5	4	1	
Region 10 (Northern Mindanao)	8	8	0	
Region 11 (Davao Region)	5	5	0	
Region 12 (SOCCSKSARGEN)	5	5	0	
Region 13 (CARAGA)	3	3	0	
Autonomous Region of Muslim Mindanao (ARMM)	1	1	0	
Cordillera Administrative Region (CAR)	1	0	1	
National Capital Region or NCR (Metro Manila)		13	12	1
Total	**114[a]**	**102 (89.47%)**	**10 (8.77%)**	**2 (1.75%)**

[a]The total number of Philippine city governments is 115 but one city (Palayan City) still had no website at the time of the study.

Each website was visited and the information contained therein was recorded and categorized based on a scheme. The evaluation ran for nearly a month, from September 1 to 25, 2004. Links in each website that could not be found were not considered part of the content (e.g., a downloadable but inaccessible form was not recorded). Relevant observations were also documented.

In developing a framework to measure the extent of e-governance implementation, the first step done was to operationalize the e-governance concept in terms of its functions as a strategy for reinventing government and improving the governance process. This was deemed important as the extent of e-governance implementation would be measured against the fulfillment of these functions. Then, since the unit of analysis was the content of the websites, the identification of relevant content supporting these e-governance functions came next. Because e-governance has a specific purpose, it also requires a particular content to meet that purpose. Thus it was assumed that specific types of information and resources were essential for the advancement of the e-governance

agenda, and that what the city governments had achieved in implementing e-governance could be measured against the presence of these types of information and resources on their web pages. Table 2 presents the output of this exercise—a scheme that matches the functions of e-governance with the types of information and resources that are related to each function. These functions were coined by the author based on existing literature and studies on e-governance. Box 1 summarizes the rationale for the types of information and resources that correspond to each e-governance function.

Table 2.   Functional categorization of information in the assessment of web content

Function	Relevant information/resource
1- Promote citizens' awareness and understanding of their community's characteristics	✦ Historical, cultural, physical, social, and economic information ✦ Political organization ✦ Community/city news
2 - Promote efficiency and effectiveness in the delivery of frontline services	✦ Government services and procedures ✦ Downloadable forms
3 - Promote transparency and accountability of government in operations and services	✦ Government services and procedures ✦ Programs and projects ✦ Procurement information and bid invitations· ✦ Ordinances ✦ Financial information
4 - Promote citizens' awareness of the policymaking process and their participation in decisionmaking	✦ Information on local policymaking process ✦ Ordinances ✦ Online polls and surveys
5 - Promote linkage and interaction between government and citizens and other groups in society: both vertical communication (between government and citizens and other groups in society) and horizontal communication (among the different groups in society)	✦ E-mail address, phone number of city officials; feedback form; online polls/surveys (vertical communication) ✦ Discussion forum, chat, and other similar online facilities (horizontal communication)
6 - Promote linkage between government and business	✦ Procurement information and bid invitations ✦ Economic and business profile ✦ Investment opportunities ✦ Tourism information

Box 1. E-governance functions and the types of information and resources that correspond to these functions

Function 1: Promote citizens' awareness and understanding of their community's characteristics. This could be considered as the most basic among the different types of information that the government should provide to their citizens and the usual starting point in building a local government website. Hale et al. (1999) identified citizen apathy as one of the factors that inhibits citizen participation in the political system. If the goal for a more active citizenry is to be pursued, then citizens should be aware first and foremost of the most basic facts about their community such as those pertaining to its physical, social, economic, and cultural characteristics. This type of information could help promote among the citizens a sense of belonging and pride in their locations' historical, cultural, and physical attributes. It would also help to draw the interest of external groups, which is beneficial to the community from a business and tourism point of view . Bringing citizens the most basic information about who makes up their government and how it works is also essential in raising their political awareness—considered an important precondition for their active participation in the political process.

Function 2: Promote effectiveness and efficiency in service delivery. The pursuit of improved effectiveness and efficiency has been one of the core objectives of the new public sector reforms (see Hood 1991; Pollitt and Bouckaert 2000; Kettl 2002). With e-governance, this could be achieved by providing information about frontline services such as those for securing civil registry documents, licenses and permits, or better yet, by giving the public a way by which they can apply for these services with just a click of their mouse. At the very least, local governments could post the procedures detailing the fees and requirements, the city hall department assigned, and the turnaround time. Posting forms that clients could download would eliminate the tediousness of physically going to the city hall to secure them. For the city hall staff, these could help accelerate their response to client request.

Function 3: Promote transparency and accountability of government in operations and services. By publishing information about their services and operations, programs/projects, local ordinances passed, and most importantly, finances, local governments could be made more accountable to their constituents. Furthermore, eliminating corruption in public procurement can be achieved by promoting openness and transparency in the bidding process. Schware (2000) noted that making government procedures more transparent reduces the ability of brokers, middlemen, or public officials to extract payments in return for information or expedited service. Additionally, the publication of employment notices does not only serve the purpose of expanding the options available to citizens and assisting them to improve their lives. Transparency in such kind of information can also help curb unjust practices of withholding or monopolizing information by government staff and officials for the benefit of their preferred candidates.

Function 4: Promote citizens' awareness of the policymaking process and their participation in decisionmaking. The increased availability of political information using e-governance is envisioned to improve participatory democracy. The publication of information on the local policymaking process such as those that could be found in the minutes of meetings of the City Council, the city's legislative body, promotes accountability of elected officials to their electorate, thus enhancing their representative role. For the citizens, information on both the process and the outcome (resulting ordinances) may raise their appreciation of the policymaking process, including the role of their elected officials, which may, in turn, increase their participation in the selection of local leaders. Consulting citizens through online polls and surveys facilitates direct feedback that could raise the quality of decisionmaking and help promote partnership.

Function 5: Promote linkage and interaction between government and citizens and other groups in society. Communication technologies have opened up new opportunities for linkage

and interaction, which reinforce the thrust for an informed and participative public and bridge information/data gaps and lapses that often lead to inappropriate planning and decisionmaking. The study distinguished between two types of communication: vertical and horizontal.[a] Content that may enable vertical communication includes the contact information of city officials (e-mail, phone number), feedback forms, and online polls/surveys. Horizontal or lateral communication involves the different actors/groups in the governance process regardless of organizational hierarchy. Content that may promote horizontal communication includes discussion forum, chat, and other similar online facilities.

Function 6: Promote linkage between government, business, nongovernment organizations, and other groups in society. E-governance as a reform strategy for improving the governance process could also improve the relationship between government and other groups in society, particularly the business sector. The business focus is in recognition of two things: (1) its importance as a service provider to government's own needs and, at the same time, as a partner of government in responding to the needs of the public through outsourcing, given government's limited capacity; and (2) the sector's apparent role in economic development. Tourism information also promotes linkage with business by providing a snapshot of the city's investment potentials, which private businesses need in their own decisionmaking processes. Such information could also help boost the local economy by attracting local and foreign tourists.

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[a] In an organizational setting, vertical communication involves communication between the top executives and the lowest levels in the organization; horizontal or lateral communication involves communication among persons who do not stand in hierarchical relation to one another such as among departments, managers, or employees on the same organizational level (Reece and Brandt 1970). In a local government, vertical communication could be viewed as that which occurs between the city government and the citizens as well other individuals and groups in the governance process (also regarded as the government's other clients) such as the business sector, community organizations, and civil society. This type of communication involves both downward and upward communication flows.

The above scheme, however, overlooked other important measures that could have otherwise made the assessment comprehensive. Admittedly, the scheme was geared toward the availability and quantity of information. Quality indicators, which are also very important, were excluded. Thus, to expand the assessment, two important factors that contribute to the quality of the websites were added.

The first is *usability*. Even if a website contains the relevant content, it is useless unless it is fully usable. Five indicators of usability from a 2003 study by Rutgers University and the Global e-Policy e-Government Institute were adapted in the present study: (1) consistent color and formatting, (2) consistent navigational bars and links, (3) adequate page length, (4) availability of a site map, and (5) availability of a search tool.

The second is *responsiveness*. New communication technologies not only promote greater interaction between the government and citizens; they also provide more opportunities for government to be more responsive to them. In this study, responsiveness was equated with attentiveness and alertness in respond-

ing to requests sent by e-mail. E-mail was chosen over phone or snail mail because e-governance is associated with the more advanced and newer methods of communication. West (2002) argued that while it is important to have e-mail addresses available on government websites, they serve no purpose unless someone actually reads and responds to the messages he receives. Likewise, Caves (2004) asserted that "having the ability to ask a simple question and to receive it or locate an answer represents a basic and fundamental right in an open society." The e-mail address in a website is an important resource for promoting linkage and interaction (Function 5 in the scheme). It will be useless in the pursuit of this governance function unless the city government has read the e-mail and responded to it.

Using the methodology of West for measuring responsiveness, each city government that provided a contact e-mail address in its website was sent a message with a simple question, that is: "I am trying to find out when your city hall is open. May I know your agency's official hours?" If the website contained several e-mail addresses, the message was sent to the mayor, being the city government's chief executive. If his or her e-mail address was not listed, the email was sent to any of the other email addresses given on the website, including that of the second highest-ranking official or some generic e-mail address (e.g., info@cityofbalanga.gov.ph). Bouncing inquiries were re-sent and forwarded to another address indicated on the website to make sure that they were received.

Appendix 2 presents the schematic diagram of the overall framework used in assessing the websites.

RESULTS AND DISCUSSION
Content
Tables 3 to 8 present the specific information and resources contained in the 102 city government websites found to be accessible during the evaluation period. Data collected were categorized based on their e-governance-related functions, using the scheme discussed in the preceding section. (Detailed tables providing frequency counts by region are available in the full report.)

Content that promotes citizens' awareness and understanding of the city's characteristics could be divided into two: that which pertains to the city and that which relates to the city government (Table 3). Regarding the first, most websites contained information on the city's history (84%), physical or natural resources, tourist sites and similar attractions (66% each), and human resources (52%). Less than a third contained information about infrastructure, local economy, and public utilities. Community or city news and announcements—important to keep local residents updated—were provided by only 22 percent of the websites.

As for information about the city government, the majority of the websites contained the names of all elected officials (62%), with only a few having more

Table 3.   Content that promotes citizens' awareness and understanding of their city's physical, social, and political characteristics

Content	No. of city websites[a]
Information related to the city	
History	86 (84.31)
Physical resources (location, topography, climate, land area, geography, geology)	67 (65.69)
Cultural events and showcases:	
✦ sites and attraction	67 (65.69)
✦ festivals	31 (30.39)
Human resources (population/demographic information, electorate)	53 (51.96)
Infrastructure profile (roads, bridges, communication)	29 (28.43)
Local economy (trade and commerce, agricultural and fisheries sector, financial institutions, exports, business establishments/industries)	26 (25.49)
Public utilities (power supply, water supply, communications, mass media)	26 (25.49)
Land use and/or zoning plan	25 (24.51)
✦ land use map	3 (2.94)
Community or city news/announcements	22 (21.57)
Cityhood (how it became a city)	21 (20.59)
Selected socioeconomic indicators (poverty incidence, unemployment rate, crime statistics, etc.)	17 (16.67)
Socioeconomic profile	6 (5.88)
Information related to the city government	
Elected officials	
✦ Names of all elected officials	63 (61.76)
✦ Profile of all elected officials	8 (7.84)
✦ Names of past and present mayors	6 (5.88)
✦ Names of barangay (village) heads	20 (19.61)
Vision and mission	51 (50.0)
Departments and offices (names of heads)	36 (35.29)
Profile of city government projects	21 (20.59)
Organizational structure	12 (11.76)
Awards and recognitions received by city government or any of its members	10 (9.80)
Accomplishment report	8 (7.84)
Development plan, policies and/or strategies	7 (6.86)
Committees/commissions and their composition	6 (5.88)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion. Note: Content having a frequency of 5 and below or those found in just 5 percent of the total number of websites were taken out from the table to make the presentation more concise. The complete tables can be found in the full report.

substantive information such as the officials' profiles. More than 30 percent gave the names of the department or unit heads within the city hall. Fifty percent contained their vision and mission statements. Only 20 percent had information about

the programs and projects of their city governments while only 8 percent published their accomplishment reports.

Content that promotes efficiency and effectiveness in the delivery of frontline services appears to be quite few. A paltry number of websites contained information about their frontline services (Table 4). In fact, almost all city websites in Regions 2, 10, 11, 12, and 13 did not have this type of content while the region with the most number of city websites having this content was Region 5, with four out of seven cities. Only less than a third of the city websites in the NCR had such content.

Among those having information about their frontline services, the most commonly provided information was the application procedure for securing business and other related permits (16%), followed by information on securing local civil documents (9%). Few had downloadable forms, the most common of which was the application form for business permits (13%). Only one website (City of Manila) had online forms, consisting mainly of application forms for securing birth, marriage, and death certificates as well as business permits. By filling up the corresponding form and clicking the "Send" button, users can send their application.

Table 4.   Content that promotes efficiency and effectiveness in the delivery of frontline services

Content	No. of city websites [a]
Application procedures for securing different permits, licenses, and clearances	
✦ Business permits/licenses and application procedure (business application or renewal; business name registration; franchise permit; closure of business)	16 (15.69)
✦ Local civil documents (birth, marriage, and death certificates; marriage license; change of name; adoption; correction of clerical error on the birth, marriage, or death certificate; marriage annulment	9 (8.82)
✦ Application for engineering-related permits and documents (building or excavation permit; health/sanitation; fire safety; electrical; mechanical; occupancy)	6 (5.88)
Downloadable forms	
✦ Application for business permit	13 (12.74)
✦ Application for building permit	10 (9.80)
✦ Application for electrical permit	8 (7.84)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion. Note: Content having a frequency of 5 and below or those found in just 5 percent of the total number of websites were taken out from the table for a more concise presentation. The complete tables can be found in the full report.

Table 5.   Content that promotes transparency and accountability in operations and services

Content	No. of city websites [a]
City government services	
✦ Social services (education, health, social welfare, public order and safety)	22 (21.57)
✦ Public educational and health facilities	20 (19.61)
✦ Business-related services (e.g., securing permits)	16 (15.69)
✦ Civil registry	9 (8.82)
✦ Fire protection	9 (8.82)
✦ Sanitation (waste management)	8 (7.84)
✦ Engineering-related services	6 (5.88)
Profile of programs and projects	
✦ without cost	15 (14.70)
✦ with cost	4 (3.92)
Update or status of different projects	14 (13.72)
Bids and procurement (invitation to bid and details of required supplies, services, or equipment)	12 (11.76)
Employment opportunities	8 (7.84)
Ordinances and resolutions [b]	7 (6.86)
Budget and finances	
✦ Financial statement (either balance sheet, income statement, statement of expenditures, or statement of revenues and sources)	6 (5.88)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion.
[b] Except for one website wherein copies of ordinances or resolutions can be downloaded, information given by the rest contains only the titles of specific resolutions or ordinances.
Note: Content having a frequency of 5 and below or those found in less than 5 percent of the total number of websites were taken out from the table to make the presentation more concise. The complete tables can be found in the full report.

Moreover, results showed the lack of **transparency in providing information about services and operations** (Table 5). Websites of cities in Regions 2, 11, and 13 had the least amount of information belonging to this type of content, while city websites in Regions 5, 6, 7, and the NCR had the most information on this type of content.

Less than one-third of the total number of websites gave information about their services, which largely revolved around social services (22%), public educational and health facilities (20%), and business-related services (16%), such as those relating to applications for business permits (and other related documents) and tax incentives, among others. A little more than 10 percent each of the total number of websites gave the profile and the status of their projects, with only 4 percent publishing the project cost. Several websites provided bids and procurement information (12%). Only 7 percent published their ordinances and resolu-

tions. Transparency in finances was very low, as only 6 percent posted financial statements and 2 percent, the city budget.

Additionally, content that **promotes citizens' awareness of the policymaking process and that enhances their participation in local decisionmaking** was very limited. For instance, only seven websites contained ordinances (Table 6), of which the only information given was the title of the ordinances, except in Naga City where downloadable full texts of all the resolutions/ordinances were given.

Only three websites (Naga, Samal, and Davao) contained an online survey or poll, where their respective citizens could directly voice their views on specific issues (Table 6). Samal City's and Davao City's polls focused on local issues, namely, bridge construction and the most appropriate investment for the city, respectively. Naga City's poll tackled a national issue, the proposed two-child policy pending in the House of Representatives. Only one website contained the minutes of the City Council meetings.

For content that facilitates vertical communication, which is part of **promoting linkage and interaction** (Table 7), the most commonly provided information was the mayor's telephone number (45%), followed by his or her e-mail address (32%). Other officials' or offices' contact information was also often given, usually

Table 6.   **Content that promotes citizens' awareness of policymaking process and their participation in decisionmaking**

Content	No. of city websites [a]
Ordinances and resolution	7 (6.86) [b]
Online surveys and polls	3 (2.94)
✦ Naga City: Are you in favor of the two-child policy suggested by Congress? Yes, No, Undecided	
✦ Samal City: Do you favor the construction of a bridge to connect the Island Garden City of Samal and Davao City? Yes, No, Undecided, I don't care, I don't know.	
✦ Davao City: What do you think would be the most appropriate business investment in Davao City? Tourism and recreational facilities; Agribusiness and food processing; Light manufacturing and assembly; Property development; Transshipment facilities; Establishment of foreign bank branches; Medical, educational, training, and sports facilities; Environmental enhancement and protection projects; Telecommunications and information technology	
Minutes of meeting of City Council	1 (0.98)
Local election results	1 (0.98)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion.
[b] Except for one website wherein copies of ordinances or resolutions can be downloaded, information given by the rest consists only of the titles of the city resolutions or ordinances.

Table 7. Content that promotes linkage and interaction

Content	No. of city websites [a]
Vertical communication (between city government and citizens and other groups/ actors in the governance process)	
Telephone or fax	
✦ Mayor	46 (45.10)
✦ Offices and departments	29 (28.43)
✦ General telephone/fax no.	25 (24.51)
✦ Vice Mayor	22 (21.57)
✦ Councilors	16 (15.69)
✦ Selected government offices within the city	7 (6.86)
E-mail	
✦ Mayor	33 (32.35)
✦ General e-mail	19 (18.63)
✦ Vice Mayor	16 (15.69)
✦ Website administrator	16 (15.69)
✦ City planning and development officer	11 (10.78)
✦ City information office	9 (8.82)
Guestbook	14 (13.72)
Feedback form	10 (9.80)
Webmail (for city government personnel only)	8 (7.84)
Horizontal communication (among the different groups/actors in the governance process; does not consider hierarchy)	
Discussion forum	14 (13.72)
Chat	9 (8.82)
Telephone number and/or address of private businesses/institutions within the city	
✦ Hotels and inns	8 (7.84)
Links to other websites[b]	
✦ National government portal (www.gov.ph)	58 (56.86)
✦ Provincial website	7 (6.86)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion.
[b] Promotes either vertical or horizontal communication.
Note: Content having a frequency of 5 and below or those found in just 5 percent of the total number of websites were taken out from the table for a more concise presentation. The complete tables can be found in the full report.

consisting of the telephone numbers of the relevant offices and departments (28%), the vice mayor (22%), and the councilors (16%) as well as the e-mail addresses of the vice mayor and the website administrator (16% each) and the planning and development officer (11%). In general, the websites contained generic contact information—e-mail address (19%) or telephone number (25%) which, based on the study, are two of the most commonly provided information to promote citizen interaction with the city government.

Regions 2, 10, 11, and 12 had the least number of websites with contact details—either phone number or e-mail. Examples in the Mindanao area (Regions 10, 11, and 12) are the cities of Malaybalay, Oroqueta, Ozamis, Tangub, Samal, Tagum, Digos, General Santos, and Kidapawan.

If only a few local government websites had email addresses as contact information, this is in many ways connected to the fact that the short messaging system (SMS), popularly known as texting via cellular phones, is more popular than sending messages via e-mail. As of 2003, there were at least 15 million cellular phone users (ITU 2003) as against 5.5. million Internet users in the country (Toral et al. 2004). The preference for SMS over sending messages via the fixed phone and even the Internet is primarily because of its cheaper cost. Sending an SMS is eight times less expensive than a one-minute peak period voice call (ITU 2002). But although cellular phones are widely used in the Philippines, they are mainly used for SMS and voice calls. By and large, Filipinos do not use them to connect to the Internet because apart from the high connection fee, more advanced (and thus costlier) handsets are required. This could explain the slow progress of e-governance in the country using the Internet. Indeed, relying on websites and other web-enabled applications alone as e-governance tools appears unwise in a developing country like the Philippines.

Only 14 percent of the local government websites had guest books. In 10 percent of the websites, feedback forms were available. Only 3 percent each had an online poll and information on how to send SMS to the city mayor.

The inclusion of features or tools for horizontal communication was rare. Only 14 percent had an active (i.e., contained messages) discussion forum. Although a bigger percentage of the websites surveyed had this kind of online facility, the majority of them were still empty, which means they have never been used. Only 9 percent had an active chat facility.

For websites with interactive features such as discussion forum or chat—active or empty—it was observed that almost all did not provide any background information on how to use them. For example, there was no information posted on most of the websites to inform visitors that they would need to sign up or register first before they could join the chat or forum. It was assumed that web visitors already knew what to do. This lack of helpful information may turn away beginners. This could also be one reason why most discussion forums remained unutilized, containing not a single post. It is worth noting, however, that some websites with discussion forums, particularly those in Region 10, were being used.

Another reason for the apparent underutilization of websites is the limited, or inexistent, access to the Internet in many areas, which undoubtedly impedes the potential of Internet-enabled technologies as tools for growth and development. In the rural areas, many cities and municipalities still have limited or no access to

Internet-based technologies and only a small percentage of the population has access to them. This reflects a wide digital divide, which is also one of the reasons for the low appreciation for websites and other web-enabled technologies in certain parts of the country, the limited use of electronic facilities such as e-mail and discussion forums to enhance community participation and interaction, and the irregular updating and lack of enhancement of most local government websites.

Only a few websites contained the contact details of private institutions within the city. The telephone numbers and addresses of hotels/inns, however, were common (8%).

As to links to other websites intended to promote either vertical or horizontal communication, the most frequently used link was to the national government portal, www.gov.ph, which was included in more than 50 percent of the websites. Apart from this, only a few had other links, which include, among others, the provincial website (7%). Websites with links to community organizations and other groups in civil society were almost negligible.

Table 8 shows the presence of **information that promotes increased connection between government and business**. There is a noticeable bias for tourism-

Table 8.   Content that promotes linkage between government and business

Content	No. of city websites [a]
Tourism-related information	
✦ Sites and attraction	67 (65.69)
✦ Festivals	31 (30.39)
✦ Getting to the city (location; how to get by land, air, or sea)	15 (14.70)
✦ City map	8 (7.84)
✦ Names, addresses, and/or phone numbers of hotels in the city	8 (7.84)
Economy and business-related information	
✦ Agriculture and/or fisheries sector	26 (25.49)
✦ Business establishments or industries	22 (21.57)
✦ Business and/or industrial profile	10 (9.80)
Business condition/climate (competitive advantages)	18 (17.65)
Investment-related information	
✦ Investment code: tax incentives and how to avail	13 (12.74)
✦ Priority or preferred investment or industries	11 (10.78)
Bids and procurement (invitation to bid and details of required supplies, services, or equipment)	12 (11.76)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion. Note: Content having a frequency of 5 and below or those found in just 5 percent of the total number of websites were taken out from the table for a more concise presentation. The complete tables can be found in the full report.

related information. More than 60 percent contained information about tourism sites or destinations in their respective cities. The number of websites with information about festivals (30%) was even greater than those containing economic and business data, such as those on agriculture and/or fisheries (25%) and business establishments or industries (22%).

Across the regions, the importance accorded to tourism information was evident. This shows a conscious effort on the part of the national government to promote the country as a tourism destination in Asia. An online eLGU project update (i.e., "Establishment of LGU Web Presence," dated 19 February 2004) supports this observation. In this document, tourism development—touted as a primary engine of economic growth—is cited as one of the government's objectives for helping local governments develop a web presence. It may be recalled that former tourism secretary Richard Gordon had been known to be actively pushing for the creation of a website in each local government as a way of helping the country improve the local tourism industry and therefore generate more jobs in the countryside.

It seemed, however, that information on the local economy and the cities' business climate, which is particularly important for attracting local investments, was sacrificed in favor of tourism-related information. Only the city websites in Regions 5, 6, and 7 gave equal importance to these kinds of information. The websites of Regions 2, 8, 13, and ARMM had the least information on the local economy, investment opportunities, or tourism.

About 18 percent of the websites contained information on the competitive advantages of their cities, while 15 percent, obviously targeting tourists and visitors, had information on how to get to their cities (Table 8). Some websites included information on how to invest in their cities by putting their investment code (13%) and their priority or preferred investments or industries (11%). Only 12 percent posted bid notices.

Table 9 lists the top 20 content across different content types and their corresponding e-governance functions. The prevalence of typical information—those pertaining to the social, cultural, and political characteristics of the cities—was apparent. Historical information topped the list, followed by physical resources, sites and attraction, the names of elected officials, human resources, and vision/mission. Beyond this, less than 50 percent contained contact information (either their e-mail address or telephone number) to facilitate easy and direct access to the city government. Critical information needed to promote an informed citizenry, such as community news and information about programs and projects, was provided by only 22 and 15 percent of the websites, respectively. Information on city government services and procedures was also seldom given. Efficiency-enhancing content such as procedures for obtaining documents, permits, and licenses

was included in only a few websites, with business permit application procedure as the most commonly provided information (16%). Fostering linkage with the

Table 9. Top 20 content, overall

Content	E-governance function[b]	No. of city websites[a]
1. History	Function 1	86 (84.31)
2. Physical resources	Function 1	67 (65.69)
Sites and attraction	Function 1	67 (65.69)
3. Names of elected officials	Function 1	63 (61.76)
4. Human resources	Function 1	53 (51.96)
5. Vision/mission	Function 1	51 (50.00)
6. City mayor's telephone number	Function 5	46 (45.10)
7. Names of department/office heads	Function 1	36 (35.29)
8. City mayor's e-mail address	Function 5	33 (32.35)
9. Festivals	Function 1,6	31 (30.39)
10. Infrastructure	Function 1	29 (28.43)
11. Local economy	Function 1	26 (25.49)
Public utilities	Function 1	26 (25.49)
Agriculture/fisheries profile	Function 1,6	26 (25.49)
12. Land use plan	Function 1	25 (24.51)
General or nonspecific telephone number of city government	Function 5	25 (24.51)
13. Community news	Function 1	22 (21.57)
Social services	Function 3	22 (21.57)
Business establishments and industries	Function 6	22 (21.57)
14. Cityhood	Function 1	21 (20.59)
15. Public educational and health facilities	Function 3	20 (19.61)
Names of barangay (village) heads	Function 1	20 (19.61)
16. General or nonspecific e-mail address of city government	Function 5	19 (18.63)
17. Competitive advantage	Function 6	18 (17.65)
18. Selected socioeconomic indicators (poverty incidence, unemployment rate, crime statistics)	Function 1	17 (16.67)
19. Application procedure for business permit and other business-related licenses	Function 2	16 (15.69)
20. Profile of projects (without cost)	Function 3	15 (14.70)
Getting to the city (tourist information)	Function 6	15 (14.70)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion.
[b] Function 1: Content that promotes citizens' awareness and understanding of their city's physical, cultural, and political characteristics; 2: Content that promotes effectiveness and efficiency in service delivery; 3: Content that promotes transparency and accountability of government operations and services; 4: Content that promotes citizens' awareness of the policymaking process and their participation in decisionmaking; 5: Content that promotes linkage and interaction between government and citizens and other groups in society; 6: Content that promotes increased connection between government and business.

business sector to support economic development was only slightly pursued; much of the information under this category revolved around the profiles of the fisheries/agriculture industries (25%), business establishments and industries (22%), and the cities' competitive advantage (18%). Transparency-promoting content such as the city budget and bid announcements did not even make it to the top 20.

By e-governance function, information supportive of Function 1 dominated the websites while there was little information promoting the other functions, suggesting an unbalanced content.

Quality

In terms of usability, about 92 percent of the total number of websites had adequate page lengths, 91 percent with consistent navigational bars and links, and 89 percent with consistent color and format (Table 10). Although the format and structure varied by website, it was noticeable that websites whose web addresses contained the letters "ncc" (which refers to the National Computer Center) used a specific template, resulting in almost the same appearance across these sites. The template was supplied by the eLGU Project to local governments with no website as part of its mandate to get all Philippine local governments online, with initially at least a static web presence (Stage 1 in the UN-ASPA Stages of E-government).[4] The goal is for them to develop their websites and progress to the next two higher stages of e-government: Stage 2 (characterized by the presence of downloadable forms, search function/site map, message board/feedback form, and newsletters or publications/purchase information) and Stage 3 (characterized by the presence of downloadable forms, specialized databases, online forms, chat/forum/discussion board, and user log-in and password). By 2005, the project's third year, it was envisioned that all websites shall have reached Stage 3 (see eLGU website for details).

As for the presence of a site map, only 47 percent recognized its importance as a tool for navigation for users and as a pathway for search engine robots. About 63 percent had a search tool capable of keyword-search only. One website

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[4] The template, however, is flexible, as emphasized by eLGU Project Director for Field Operations Ma. Teresa Camba. Local governments could add or modify sections of the template. Also, the template was provided to target users along with the necessary training. Several one-day LGU Website Development Training sessions (initially at the provincial level and later on at the city or municipal level) were conducted to orient users on the website template, which also involved hands-on sessions on the creation of the website using the NCC-developed template. Prior to the training, the participants were also instructed to bring relevant materials (text and images) that they could already upload online. Each local government was assigned a Universal Resource Locator (URL) and password for use in accessing the website template's content management system for them to work on the completion and enhancement of their respective sites after the training.

Table 10.   Usability indicators

Indicator	No. of city websites [a]
Adequate page length	94 (92.16)
Consistent navigational bars and links	93 (91.18)
Consistent color and formatting	91 (89.21)
Availability of a site map	48 (47.06)
Availability of a search tool	63 (61.76)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion.

(Zamboanga City's) used the Google search engine, thus enabling it to generate search results present in other websites.

Additionally, several websites were found to be mostly empty. Technically, they have a web presence, but considering their negligible content, these websites are almost useless. These include the websites of Cauayan (Region 2); Malolos, Cabanatuan, San Jose, and Angeles (Region 3); Kabankalan (Region 6); Pagadian (Region 9); and Panabo (Region 11). The poor quality of downloadable forms available in some websites also negates the usefulness of these forms. An example is the website of Valenzuela in the NCR (and Candon in Region 2) that had downloadable permits (e.g., sanitation permit, electrical permit), that turned out to be mere scanned images (JPEG). When printed, these forms were too small, occupying only a third of a standard paper size and thus could not be used.

The next indicator of quality that was measured was responsiveness. Although 72 city governments (71%) gave their e-mail addresses, sending messages to these was useful only to the extent that the messages elicited replies (Function 5). Following the methodology of West (2000), each city government that provided an e-mail address or addresses in its website was sent a message with a simple question: "I am trying to find out when your city hall is open. May I know your agency's official hours?" Response to the message was timed by the number of days it took the sender to get a reply.

Based on the results, the responsiveness of the city governments was very poor (Table 11). Only 28 percent responded to the inquiry, with the most number of responses coming from cities in Regions 5 and 7. Only three cities in Metro Manila sent a response, which reflects the low level of responsiveness of Philippine local governments, including those in the central region.

About 14 percent of the e-mailed inquiries bounced. Reasons given by the notification of delivery failure included full mailbox, invalid user account, address rejected/unknown user, and connection timed out (system downtime). Emails that bounced were re-sent after two days. One e-mail was sent successfully while the rest bounced again.

Table 11.   Responsiveness

Response to e-mail inquiry	No. of city websites[a]
Within the same day	3 (4.17)
After 1 day	5 (6.94)
After 2 days	2 (2.78)
After 3 days	4 (5.56)
After 4 days	1 (1.39)
After 5 days	2 (2.78)
After 6 days	1 (1.39)
After 7 days or longer	2 (2.78)
Total that responded	20 (27.78)
No response	52 (72.22)
E-mails that bounced back	10 (13.89)

[a] Figures in parentheses are percentages. These were rounded off to whole numbers in the discussion.

Of those that responded, the majority responded after a day, the others three days. The longest duration for a response was at least one week. The responses also varied in length. Some gave short answers, responding only to the main question of the city hall's official hours. Others were more detailed; some offered advice on the best day to visit the city hall as well as other means by which to access it. Examples are the following:

✦ From Cebu City (mayor@cebucity.gov.ph):
"The Cebu City Hall is open from Monday to Friday, 8:00 in the morning to 5:00 in the afternoon. For any inquiry, you can visit our website at http://www.cebucity.gov.ph or you may call our Customer Service at (032) 254-8762 or (032) 253-8124, look for Sandra or Malou. Hope we could be of service to you."

✦ From Parañaque City (palanyag@yahoo.com)
"Parañaque City Hall is open from Monday to Friday, 8 am to 5 pm Insider's tip: if you want an almost complete attendance of department heads, be there on Monday mornings; if you prefer days when there are less people, be there Tuesdays and Thursdays."

✦ From Tarlac City (mayoraro@mozcom.com)
"For your information and guidance, Tarlac City Hall is open during weekdays from 8:00 am to 5:00 pm. But there is one unit under the Mayor's Office that is open any time, 24 hours a day, to attend to emergency situations. This is the EMERGENCY RESPONSE UNIT (ERU) located in front of the Tarlac Cathedral.
Thank you for your inquiry. For complaints, comments or suggestions, e-text Mayor ARO, just type MAYORARO<space>MESSAGE<space>name

& address<space> and send to 2960."

One city government was even apologetic for its delayed response (after nine days).

✦   From Toledo City (toledoinfo@yahoo.com)
    "The Toledo City Hall is open Mondays through Fridays, 8:00 a.m. to
    5:00 p.m., except when there is a declared non-working holiday.
    We apologize for the delay of this response, since we forgot the e-mail
    account password and have to use every resource at our disposal to
    recall it."

The foregoing discussion shows the extent to which city governments in the Philippines have implemented the e-governance concept as a strategy for improving local governance. Notwithstanding a significant rise in web presence among local governments, this is diminished by the status of the websites, particularly the content provided to the public. The results indicated the absence of appropriate and substantial content that could enhance local governance, the still-static nature of the websites, the limited use of electronic mechanisms for promoting public participation, and the presence of sites that barely contained information—all of which reduce the usefulness of the websites and the effectiveness of e-governance at the local government level.

The paltry information available on the websites somehow reflects the reluctance of local governments to share information with the public. The promotion of transparency and accountability has been one of the main goals of the public sector reforms. The practice of democracy demands public access to government information and services (Caves 2004). Much depends on the government, therefore, as the holder and supplier of information. Unfortunately, even with new technologies that could assist the government in facilitating public access to information, and despite the existence of laws upholding the people's right to information, a culture of secrecy in government is still palpable. Although the Philippines has yet to enact a law on freedom of access to information, it remains the only country in Southeast Asia to have enshrined in its Constitution the right of the people to public information (Chua 2001).[5] Chua asserted that the reluc-

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[5] Said right, however, is not absolute. There are various restrictions imposed on various occasions. The most comprehensive list of exceptions to the right is found in the implementing rules of Republic Act 6713, or the Code of Conduct and Ethical Standards for Public Officials and Employees, issued by the Civil Service Commission. Examples of exceptions include information that must be kept secret in the interest of national defense or security or the conduct of foreign affairs, information that will endanger the life and safety of an individual, information of a personal nature such as physician-patient privilege, information whose premature disclosure may endanger the stability of a financial institution, and information that may interfere with enforcement proceedings and may deprive a person of a fair trial or an impartial adjudication (Chua 2001).

tance of civil servants to provide information stems from their belief that providing access is not integral to their work. Another is the fear that the information they release might be used against them in lawsuits and other cases. Prof. Ben Lim, a political scientist interviewed by Chua, also cited as reasons the incompetence, lack of professionalism, and the plain simple-mindedness of government officials and employees. Many government workers, he said, lack skills in recordkeeping, filing, and organizing documents in usable and retrievable form. Indeed, in many state agencies and departments, and especially in many LGUs, the records section and library have yet to be computerized. Hence, information available in electronic format that can be shared through e-mails and websites is negligible.

The poor content and quality of most websites is also related to the weak ICT organization in the LGUs. The 2002 LGU e-Governance Survey conducted under the eLGU Project to assess the ICT resources and status of e-governance in the LGUs revealed the poor state of IT development. One indicator of the deplorable state of IT development is the absence of an office in more than half of the survey respondents (399 out of 707)[6] that can handle their computerization requirements. A second indicator is the limited number of ICT personnel within their organization.[7] Only 2,403 ICT personnel were reported, a measly 2 percent of the total reported LGU personnel population of 114,541. Then, almost half of the ICT personnel are on casual employment. Also, not all ICT personnel possess the qualifications to handle the technical demands of e-governance. Over 35 percent have neither taken an ICT-related degree in college nor have undergone any ICT-related training. These problems are compounded by personnel turnover that not only affects program continuity but also results in the need to train new staff.

The lack of appreciation by local governments of the value of websites as e-governance tools is also another constraint. Although the eLGU Project is present to assist the local governments, the initiative to enhance their websites and regu-

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[6] The survey, which started in August 2002, targeted a total population of 1,690 local governments classified as follows: 79 provinces, 115 cities, and 1,496 municipalities. However, at the end of the survey period (April 2003), only a total of 707 local governments (74 cities, 56 provinces, and 577 municipalities) submitted accomplished questionnaires, resulting in a response rate of 41.83 percent. The analysis, therefore, was limited to this sampling. The full text of the survey report may be downloaded from the eLGU project website at http://eLGU.ncc.gov.ph/.

[7] eLGU Project Director Ma. Teresa Camba noted in an interview on 16 December 2004 that this could be attributed somehow to the inability of many local governments to create new permanent positions, specifically for IT, having already reached the prescribed ceiling for permanent staff and thus the lack of funds to hire any additional staff even on a contractual basis. Some innovative local governments, however, managed to sidestep this seeming constraint by setting up economic enterprises (since they have the power and authority to create their own sources of revenue under Section 18 of the Local Government Code) and then creating IT positions whose salaries could be charged to these projects.

larly update them is the local governments' responsibility. In the opinion of the eLGU Project field director, many local governments still do not see the value of websites as a tool for disseminating information and delivering services and as a means of fostering closer linkage with citizens. Part of the reason is attributable to the technological barriers that impede e-governance. Many local governments believe that that it would be useless to have a website when only a small percentage of the population could view it. Another reason often mentioned is the inadequacy of budget to implement e-governance. While these two reasons are indeed major obstacles, a number of LGUs in the country have managed to find ways to hurdle them. And central to the success of these LGUs is the presence of a strong and committed political leadership that appreciates the potentials of ICTs for development.

Additionally, as with any program, the change in leadership is a critical issue because, by and large, it leads to changes in priorities. Almost 50 percent of the LGUs (provinces, cities, municipalities) changed their leaders in the 2004 national/ local elections. According to Director Camba, this meant starting all over again the building of appreciation among the newly elected officials of the usefulness of ICTs and the benefits of e-governance.

CONCLUSIONS AND RECOMMENDATIONS

Results of the assessment indicated the minimal adoption of e-governance by the majority of the city governments and the underutilization of their websites as e-governance tools. Most of the information provided was only geared toward promoting citizens' awareness and understanding of their community's characteristics. Yet, whatever information provided on this aspect also has to be enhanced since it was limited to standard information only such as demography, history and culture, and a few political information focused mostly on the composition of the city government.

Efficiency-enhancing content such as procedures for transacting with the city government and downloadable forms was present in only a few websites. Content promoting citizens' awareness of the local policymaking process and their participation in decisionmaking was negligible. In terms of content that promotes linkage and interaction with the citizens, only a small number of websites had contact information (e.g., phone number and email address) and online facilities for interaction such as discussion forums. Content fostering linkage with the business sector to support economic development was very limited. Transparency-promoting content, such as financial information and bids and procurement information, was given by only a few websites.

There is clearly a dearth of substantial information and resources that could enhance the quality and speed of service delivery, promote transparency, facilitate

public participation in decisionmaking, and, ultimately, bring government, citizens, business, community organizations, and other groups in society together in the governance process. If the government will continue to exclude citizens' voice and participation in local governance and remain indifferent to their information needs, this could only exacerbate the gap between them, which as Caves (2004) put it, may only increase citizens' frustration over the government's lack of adequate response and ultimately make them even more distrustful of it.

As for the usability of the websites, the majority lacked useful tools for navigation such as site maps and search capability. Several websites also barely contained information while others had poor-quality images and downloadable forms. Also, the responsiveness of city governments was found to be poor. Only a small percentage of city websites with email addresses responded to the simple message inquiring about their official hours.

Time and again, technological access has been pinpointed as the most serious constraint to the slow adoption and application of ICTs for governance. Indeed, it would take time to eradicate the digital divide, as it is not simply an issue of connectivity, lack of access, or low computer and Internet literacy. It is a gap that, as Sy (2002) noted, is conditioned by traditional social divisions of class, income, education, gender, age, ethnicity, and social geography.

However, aside from the problem of digital divide, the study identified other equally critical issues that require serious attention, because they impinge on the availability of information itself and the organizational capacity and motivation of the government to embrace the e-governance concept. These issues include: (1) the apathy of the government to provide information despite the existence of a "right to information" of the people that is enshrined in the Constitution and a Code of Conduct and Ethical Standards for Public Officials and Employees that requires them to make public records accessible to the public; (2) the lack of appreciation by local governments of the value of e-governance tools such as websites, which is partly attributable to access and connectivity issues, especially in the rural areas, resulting in low motivation among many cities to utilize ICTs (in most cases, however, it is not just technological barriers that impede the adoption but the absence of political leadership that can provide the needed impetus for e-governance efforts); (3) the leadership turnovers that often lead to changes in priorities; (4) the weak ICT organization in many local governments; and (5) the greater popularity of text messaging over Internet and web-enabled applications.

The present apathy of government to voluntarily provide information is a significant constraint to e-governance. The 2000 E-commerce Law that mandated the adoption of e-governance by government should be complemented by a stronger and more liberal legislation that upholds the people's right to information and its more proactive compliance by government. Sadly, however, even with new

technologies that could assist it in making information delivery more effective and efficient and despite the existence of relevant legislation, the government is slow to respond to the challenge of e-governance. There is a strong opinion that the current charter on the right to information enshrined in the Constitution is prohibitive and subjective, given its many exceptions, hence the need for revisions or for the enactment of a separate Freedom of Information Law, similar to what Thailand did in 1997. A similar bill passed third reading in the 11th Congress; six bills addressing the right to information remained pending in the Senate (Chua 2001). This suggests the need for a more vigorous lobbying by concerned groups such as the media, grassroots organizations, and civil society to "repeal restrictive legislation or to enact a liberal information law" (Coronel 2001).

In addressing the problem of digital divide, the choice of appropriate strategies is critical. Otherwise, these strategies could only exacerbate the gap and lead to greater socioeconomic inequalities. The government seems to be on the right track for choosing the community e-center as one of its strategies for widening access to ICTs. For one thing, providing universal access to ICTs to every person in the country—the concept of "a computer for every desk" or a "telephone in every home"—requires huge capital and therefore is not a logical strategy for a cash-strapped government like the Philippines. The concept of publicly owned, publicly accessible facilities with community e-centers facilitates resource pooling and resource sharing, and effectively addresses resource insufficiency. Community ownership and management of ICT infrastructure also promote broad-based stakeholdership in development.

However, making the concept work is a huge challenge. A community e-center is just like any enterprise whose success depends on the clients' or the residents' patronage. Planning an e-center should be no different from designing a private enterprise; important factors such as affordability, proximity and convenience, and the residents' perceived usefulness of the products and services it offers should be considered. Making it sustainable requires the residents to appreciate the value of the e-center in their daily lives. Thus, groundwork activities in the community such as local meetings and consultation prior to its setting up are crucial to ensure residents' support. Determining their priority information and service requirements is needed for designing application systems and solutions that cater to their needs. The presence of these need-specific services would highlight the uniqueness of community e-centers over privately owned ones such as commercial Internet cafes.

Another recommendable strategy for addressing digital divide—which is also the strategy being pursued by best-practice cases in e-governance such as the city of Naga—is the use of the formal education system to increase ICT literacy. Undoubtedly, education is still the most effective strategy for building

people's awareness and imparting the correct knowledge and attitude. By strengthening the current ICT-related efforts of the Department of Education through its Cyberschool project, the city government of Naga is helping to build a core of adopters with an assured multiplier effect that can contribute to the sustainability of ICT acceptability and adoption. This will guarantee the presence of a population with an appreciation for ICT.

The right combination of ICT tools for e-governance is likewise important. Reliance on the Internet and web-enabled applications as e-governance tools appears unwise in the Philippines where Internet literacy and access is still in the enhancement stage. The present reality that points to the effectiveness of SMS, given its wide popularity, signifies the need for government to be more exhaustive in promoting its use in service delivery. It also signals the urgency of developing more SMS-enabled applications.

At present, the use of information technologies to promote democratic governance has barely taken off at the local government level and even at the national level. There is little recognition by government of the democratic and development potentials of ICTs. In general, the utilization of ICTs has remained fairly conservative, as they are mainly used for improving internal government processes and, of late, for information and service delivery. As formal tools in participatory and deliberative processes of democracy, however, ICTs in the Philippines have yet to achieve this status. Schove (cited in Anttiroiko 2004) attributes this reluctance to the conservative view of technology. He said what is needed is a better understanding of technology along more democratic lines, a perception of ICTs as potentially capable of strengthening democracy by creating closer relationships between public administration and citizens.
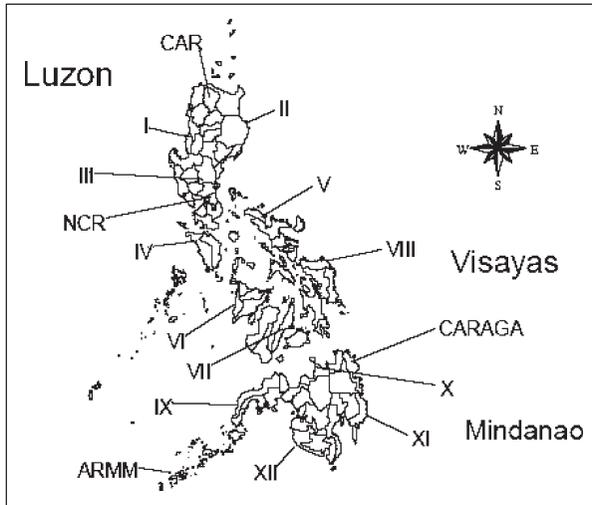
Promoting the wider application of ICTs by government in interacting with the public may help to diffuse the concept. However, LGUs still have a lot of work to do to enhance the content of their websites, which are deficient of even basic information or tools (e-mail address, feedback form) necessary for promoting communication and linkage between government and citizens. Local governments must also endeavor to improve their responsiveness to citizens' requests, which also turned out to be very low at present.

Gradually introducing ICTs as legitimate tools in formal procedures to get the citizens' voice, such as electronic referendums, opinion polls and surveys, feedback systems, and ultimately, in voting/election, is important to speed up the adoption process. Thomas (2004) said that public administrators should not be reluctant to experiment with new technologies, but he also cautioned that they should not proceed too naively and should plan carefully before using these technologies for public involvement. New technological options, he noted, could dramatically alter the character of public involvement.

However, because access to ICTs is still limited, these electronic tools of participation should not be used as substitutes for the more conventional methods of face-to-face communication and paper technology, especially in a setting like the Philippines where the digital divide is still wide. Instead, these should be used to augment existing tools and strategies for eliciting participation. The goal should be to broaden people's access to decisionmaking by opening up more avenues by which they can participate, and giving them various options on how they can do it. That in itself is democracy at work. Low level of participation has also been linked to the high cost of participation—in terms of the time and money a person expends to participate. ICTs could lower the cost of participation and could thus enhance the level of citizen involvement.

APPENDIX

Appendix 1. Location of the different regions in the Philippine map, the cities belonging to each region, and their web addresses as of September 2004

Region/City	Web address	Region/City	Web address
Region I (8)		*Region III continued*	
Laoag	elgu2.ncc.gov.ph/laoag	Muñoz	elgu2.ncc.gov.ph/munoz
Candon	elgu2.ncc.gov.ph/cityofcandon	Palayan	still no website
Vigan	www.vigan.gov.ph	San Jose	elgu2.ncc.gov.ph/nejose
San Fernando	www.sanfernandocity.gov.ph	Angeles	elgu2.ncc.gov.ph/pampanga
Alaminos*	www.alaminos.gov.ph	San Fernando	elgu2.ncc.gov.ph/sanfernando-
Dagupan	www.dagupan.gov.ph		pampanga
San Carlos	www.vmuf.edu.ph/sancarloscity	Tarlac	www.tarlac.com.ph
Urdaneta	elgu2.ncc.gov.ph/urdcty	Olongapo**	www.olongapocity.gov.ph
Region II (3)		Balanga	www.cityofbalanga.gov.ph
Tuguegarao	elgu2.ncc.gov.ph/tuguegarao	*Region IV (12)*	
Cauayan	elgu2.ncc.gov.ph/cauayancity-	Batangas	elgu2.ncc.gov.ph/batangascity
	isabela	Lipa	elgu2.ncc.gov.ph/lipacity
Santiago	www.geocities.com/cityofsantiago	Tanauan	elgu2.ncc.gov.ph/tanauan
Region III (12)		Cavite	elgu2.ncc.gov.ph/cavitecity
Malolos	elgu2.ncc.gov.ph/malolos	Tagaytay**	www.tagaytaycity.net
San Jose		Trece Martires*	elgu2.ncc.gov.ph/trecemarti-
del Monte	elgu2.ncc.gov.ph/sjdmcity		rescity
Cabanatuan	elgu2.ncc.gov.ph/cabanatuan	Calamba	elgu2.ncc.gov.ph/cityofcalamba
Gapan	elgu2.ncc.gov.ph/gapan	San Pablo	www.msc.net.ph/spc

Region/City	Web address	Region/City	Web address
Region IV continued		*Region VII continued*	
Lucena	elgu2.ncc.gov.ph/lucenacity	Lapu-lapu	elgu.ncc.gov.ph/ecommunity/ lapulapu-city
Antipolo	www.antipolocity		
Calapan*	www.cityofcalapan.gov.ph	Mandaue	www.mandauecity.gov.ph
Puerto		Talisay	www.talisaycitycebu.gov.ph
Princesa	elgu2.ncc.gov.ph/puertoprincesa	Toledo	elgu.ncc.gov.ph/ecommunity/ toledoy-city
Region V (7)			
Iriga	elgu2.ncc.gov.ph/iriga	Bais	elgu.ncc.gov.ph/ecommunity/bais
Naga	www.naga.gov.ph	Bayawan	elgu.ncc.gov.ph/ecommunity/ himaymalan-city
Masbate	elgu2.ncc.gov.ph/masbatecity		
Sorsogon	elgu2.ncc.gov.ph/sorsogoncity	Canlaon	elgu.ncc.gov.ph/ecommunity/ canlaon-city
Legazpi	elgu2.ncc.gov.ph/legazpicity		
Ligao	elgu2.ncc.gov.ph/ligaocity	Dumaguete	elgu.ncc.gov.ph/ecommunity/ dumaguete-city
Tabaco	elgu2.ncc.gov.ph/tabacocity		
Region VI (16)		Tanjay	elgu.ncc.gov.ph/ecommunity/ himaymalan-city
Roxas	elgu.ncc.gov.ph/ecommunity/ roxascity		
		Region VIII (4)	
Iloilo	www.iloilocity.cjb.net	Ormoc	elgu.ncc.gov.ph/ecommunity/ ormoc
Passi	elgu.ncc.gov.ph/ ecommunity/ passicity-iloilo		
		Tacloban	elgu.ncc.gov.ph/ecommunity/ tacloban
Bacolod	www.bacolodcity.gov.ph		
Bago	elgu.ncc.gov.ph/ecommunity/ bagocity	Calbayog	elgu.ncc.gov.ph/ecommunity/ calbayogcity-wsamar
Cadiz	www.cadizcity.gov.ph	Maasin*	elgu.ncc.gov.ph/ecommunity/ maasincity
Escalante	www.escalantecity.gov.ph		
Himaymalan	elgu.ncc.gov.ph/ecommunity/ himaymalan-city	*Region IX (5)*	
		Dapitan	www.dapitan.com
Kabankalan	elgu.ncc.gov.ph/ecommunity/ kabankalan	Dipolog	dipologcity.gov.ph
		Pagadian	elgu.ncc.gov.ph/ecommunity/ pagadian
La Carlota*	www.lacarlotacity.gov.ph		
Sagay	www.sagay-city.com.ph	Zamboanga	www.zamboanga.com
San Carlos	www.sancarlos.com.ph	Isabela*	elgu.ncc.gov.ph/ecommunity/ isabelacity
Silay	www.silaycity.gov.ph		
Sipalay	elgu.ncc.gov.ph/ecommunity/ sipalay-city	*Region X (8)*	
		Malaybalay	www.philcom.ph/gov/malaybalay
Talisay*	elgu2.ncc.gov.ph/ecommunity/ talisaycity-negocc	Valencia	elgu.ncc.gov.ph/ecommunity/ Valencia
Victorias*	www.victoriascity.gov.ph	Oroquieta	elgu.ncc.gov.ph/ecommunity/ oroquieta
Region VII (12)			
Tagbilaran	www.tagbilaran.gov.ph	Ozamis	www.ozamis.com
Cebu	www.cebuycity.gov.ph	Tangub	www.tangub.net
Danao	elgu.ncc.gov.ph/ecommunity/ danao-city	Cagayan	
		de Oro	elgu.ncc.gov.ph/ecommunity/ cagayandeoro

| Region/City	Web address	Region/City	Web address
Region X continued		*Region XIII continued*	
Gingoog	elgu.ncc.gov.ph/ecommunity/gingoog	Surigao	caraga13.gov.ph/surigaocity
		Bislig	caraga13.gov.ph/bisligcity
Iligan	www.iligan-city.net	*ARMM (1)*	
Region XI (5)		Marawi	elgu.ncc.gov.ph/ecommunity/marawicity
Panabo	elgu.ncc.gov.ph/ecommunity/panabo		
		CAR (1)	
Samal	www.samalcity.gov.ph	Baguio**	www.baguio.gov.ph
Tagum	tagumcity.20m.com	*NCR (13)*	
Davao	www.davaocity.gov.ph	Manila	www.cityofmanila.com.ph
Digos	elgu.ncc.gov.ph/ecommunity/digos	Mandaluyong	www.mandaluyong.gov.ph
		Marikina	www.marikina.gov.ph
Region XII (5)		Pasig	www.pasig-city.gov.ph
General Santos	www.mindanao.com/gensan	Quezon City	www.quezoncity.gov.ph
Koronadal	elgu.ncc.gov.ph/ecommunity/koronadal	Kalookan*	www.caloocan.gov.ph
		Malabon	www.mlabon.gov.ph
Tacurong	elgu.ncc.gov.ph/ecommunity/tacurong	Valenzuela	elgu2.ncc.gov.ph/valenzuela
		Las Piñas	www.geocities.com/laspinascity
Kidapawan	elgu.ncc.gov.ph/ecommunity/kidapawan	Makati	www.makati.gov.ph
		Muntinlupa	www.muntinlupacity.gov.ph
Cotabato	www.cotabato.gov.ph	Parañaque	www.geocities.com/palanyag/government.html
Region XIII (3)			
Butuan	caraga13.gov.ph/butuancity	Pasay	elgu2.ncc.gov.ph/pasay

* Inaccessible; **Under construction/renovation during the evaluation period.

Sources: (1) Map: http://hdr.undp.org/docs/publications/background_papers/2003/Philippines/Philippines_2003_Annex_1.pdf
           (2) Web addresses: eLGU project document

Note: The web addresses of the city governments were as of September 2004, as gathered from the eLGU project website. Some city governments may have changed their addresses and made updates after the evaluation was conducted.

Appendix 2. Framework used for assessing the city government websites
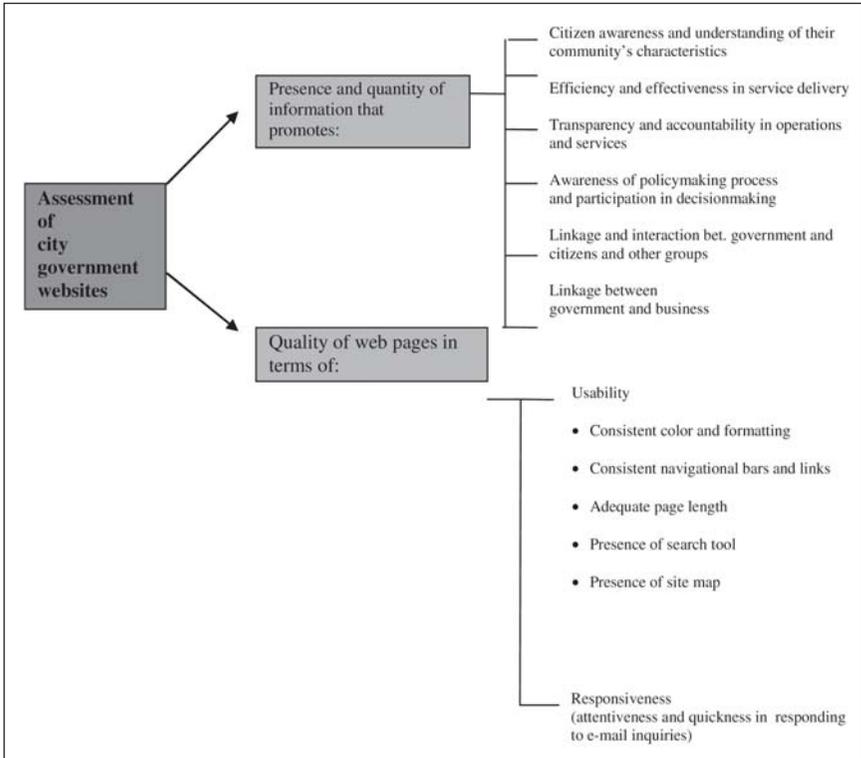
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