"Promoting e-Government in the Context of New Public Management: The Case of the Local Government of Cebu, Philippines"

Mary Grace P. Mirandilla
Email: mmirandilla@adb.org;
gmirandilla@gmail.com
Mobile: +63 917 8167492

Abstract

e-Government—the application of ICTs to improve the activities of public sector organizations—is widely seen as a means to promote efficiency in public administration. As various studies have shown, e-Government goes beyond the introduction of technology. It calls for a paradigm shift—reforms in organizations, new forms of leadership, and transformation of public-private partnerships—to make its impact effective (Allen et al, 2001 cited in Ndou, 2004). e-Government entails changing process, which means changing policy. A change in policy results in changing the way people do things, which in turn changes culture. A major challenge, therefore, is for e-Government projects to consider the context in which they will be implemented.

The main aim of e-Government is to improve the overall performance of the public sector. As such, it can be seen as a product of the reforms being advanced by the New Public Management—an output-oriented, demand-driven approach that gives premium to providing high quality service to citizens (Schedler, K. & Scharf, C., 2001). Inevitably, e-Government will affect economic, legal, and democratic values in the realm of public administration (Snijkers, 2005). It also supports good governance, which upholds transparency, accountability, and participation by various stakeholders in society.

Analyzing e-Government as a means to achieve the goals of New Public Management, this paper aims to look at the case of the local government of Cebu City in the Philippines, one of the pioneer users of ICT in introducing reforms in the public sector. First, the paper will examine the different factors that contributed to the early adoption of e-Government by Cebu City, the barriers it encountered, and the challenges that remain in the implementation of e-Government projects. It will then look at Cebu City's e-government projects using the New Public Management approach.

The paper will also feature the latest and potentially most innovative e-Government project of Cebu City to date: the introduction of "digital land-titling" that aims to secure property rights. The Cebu City Local Government, which produces tax declarations for real property, and the Cebu City Register of Deeds (a decentralized office of the national government's Land Registration Authority), the repository of land titles, shared information to create a database of digital copies of land titles matched with their respective technical description and tax declaration. This activity is probably the first time that two government offices in the Philippines shared information for a reform project—something deemed almost impossible in the past. Finally, based on lessons from the Cebu City case study, the paper will recommend the various key elements that need to be present in implementing e-Government projects in the context of the Philippines.

Introduction

Effective government is one that responds to the changing times. Unfortunately, public institutions are some of the most rigid structures ran by a huge machinery—the bureaucracy—that is bound by rules and protocols. During the industrial era, public administration was done in a top-down, hierarchical, and impersonal fashion, with bureaucrats or civil servants delivering standardized services to a mass market. The citizens—the public sector's main clients—were dependent on the government monopoly that, in the absence of competitors, began to take them for granted (Osborne, 1993).

Over the years, there has been a growing demand for reforms in government as a result of socio-political and economic changes around the world. With changing needs, citizens are setting higher standards for public administration and clamoring for better services. In the 1960s, a movement in the United States initiated the push for a new kind of public administration that places emphasis on the role of public administrators as agents of change. Apart from good management, efficiency, and effectiveness, it also promoted the value of social equity as an important objective of public administration (Kramer 1973; Frederickson 1976 cited in Wise, 2002).

In the 1990s, the ***New Public Management (NPM)*** approach emerged as one kind of reform that shifted focus from traditional public administration to public *management*. The NPM approach takes its root from the assumption that ***governments can be more efficient and effective if it attempts to "introduce or simulate the performance incentives and the disciplines that exist in a market environment"*** (Moore, et. al. 1994 cited in Larbi 1999) and ***adopts key features of the economic market as a model for political and administrative relationships*** (Nagel, 1997 cited in Kaboolian, 1998). The main drivers of NPM as seen in Table 1.

Table 1. Main Drivers of NPM

- ***Increased efficiency***: improving the input:output ratio within the public sector in order to address the large amount of public sector expenditure and/or the inefficiency of many of its processes.
- ***Decentralization***: the transfer of decision-making to more localized levels of the public sector in order to reduce the costs of centralized decision-making and to create more flexible and responsive decision-making.
- ***Increased accountability***: making public sector staff more accountable for their decisions and actions in order to increase the pressure on staff to perform well, to make them more responsive to recipient groups, and to reduce inefficient or corrupt practices.
- ***Improved resource management***: increasing the effective use of human, financial and other resources, including a refocusing of the way the performance of these resources is planned, measured and managed.
- ***Marketization***: increasing the use of market forces to cover relationships within the public sector, relationships between citizens ('consumers') and the public sector, and relationships and boundaries between public and private sector in order drive costs down and increase efficiency and/or effectiveness of service delivery (Lane, 1997 cited in Cordello, 2007; Bhattacharaya, 1996; Maheshwari, 1996; Sengupta, 1995; Singh, 1996 cited in Heeks 1998).

NPM is a management theory about reforming government by:
- Replacing rigid hierarchical organizational structures with more dynamic networks of small organizational units (Pollit and Bouchaert, 2004 cited in Paliulis & Chlivickas, 2004). This is done by increasing the **autonomy *and* accountability of public managers** as well as the promotion of an "entrepreneurial" culture in order to use public resources for higher productivity and greater yield (Osborne, 1993; Borins, 1994 cited in Lam, 1997).
- Replacing authoritarian, top-down decision and policy-making practices with a more consensual, bottom-up approach, which facilitates the participation of as many stakeholders as possible, especially ordinary citizens (Pollit and Bouchaert, 2004 cited in Paliulis & Chlivickas, 2004) who are given more choices as consumers (Osborne, 1993). It aims to make structural or organizational choices that promote **decentralized control** through a wide variety of alternative service delivery mechanisms, including **quasi-**

markets with public and private service providers competing for resources from policymakers.

- Applying market principles to enhance efficiency and productivity (Pollit and Bouchaert, 2004 cited in Paliulis & Chlivickas, 2004). It promotes a management culture for the public sector that is **results-driven** (Self, 2000). Its main targets are more transparency, more efficiency, and more quality as well as reduction of expenditure. As such, it has been touted as the ideal process for creating a 'slim State' with 'slim Government' through 'slim Management' (Paliulis & Chlivickas, 2004).

The principles of NPM (Cordella, 2007) are seen in Table 2.

Table 2. Principles of New Public Management

Organizational forms	Coordination mechanism	Target
Decentralization Disaggregation Market	Prices Incentivization Competition	Customers

Although NPM is proving to be effective in some developing countries, and in pockets of government organizations within a country, it needs to be emphasized that public sector reforms take place in politico-administrative systems where there are both bureaucrats *and* politicians. Schedler (2003) argues that several influencing factors shape a specific rationality and that actors (in this case, politicians and managers) are limited by their own rationalities. Rationality that is typical for a certain role is a function of: (1) a set of external *incentives* that reward or punish a certain behavior of an actor in his or her specific role; (2) personal and historical *experiences* concerning the effects that came out of different conduct in this specific role context; (3) *knowledge* that has been gained by the person, particularly by certain forms of education and training; and (4) *basic assumptions and values* that are inherent in an institution, a person and/or its role, which reflects the cultural element of the model.

Using this formula, a glaring difference can be seen in the rationalities of managers and politicians. The rationality of *efficiency* and *effectiveness* of products in the market is typical in a managerial approach. The entrepreneur's criterion for success is the sale of his or her products and services on the market at a price that at least covers production costs. All management efforts therefore aim at sales, reflected in "success indicators" such as turnover, profit, market shares, etc. Political rationality, on the other hand, looks at majority at a formal ballot and is dependent on critical success factors such as the ability to form coalitions, skillful behavior in political bartering processes, the formation and manipulation of public opinion, respect, and the creation and activation of informal networks (Schedler, 2003).

Besides the different rationalities found within the public sector of a country, there is also a rationality gap that exists in actors across countries (Heeks, 2002). In European countries such as the Netherlands or Switzerland, a major concern for adopting a market-oriented reform is its potential impact on democratic values. On the other hand, in many developing countries like the Philippines, opposition to reform is mostly due to concerns about its unwanted externalities—of exposing and abolishing internal processes that have worked well to fuel the personal election machinery of politicians or strengthen the economic power of the elite. In the politico-administrative system of a country like the Philippines, **policies have long been a source of *economic rent* for politicians and their patron oligarchic elites**. Economic rents are extraordinary profits, which make the oligarchic elites extraordinarily rich and give them greater economic power that, in turn, allows them to finance elections all over again (Philippine Center for Investigative Journalism [PCIJ], 2008 cited in Mirandilla, 2007). The great challenge, therefore, is whether NPM's promises can be realized in an environment hostile to reform, where rationality is different not only between actors but also from the ones expected of certain roles of actors in the context of Western, developed countries.

As in any approach, there are criticisms to the promises of NPM and what it has actually achieved. It is also being criticized for its potential effect in terms of sacrificing democratic values (Schedler, 2003). However, those criticisms will not be expounded in this paper. Instead, focus is given to how reforms using the NPM approach can be done effectively in the context of the Philippines.

e-Government

The economic transformations of the past were mostly driven by innovation (Reschenthaler and Thompson, 1996; Friedman, 2005). Modern agriculture, the steam engine, shipbuilding, and the internal combustion engine are some examples of inventions and innovations that have helped transform the world's economic markets in the first half of this era. But in the second half, it is developments in information and communications technologies (ICTs) such as the telegraph, telephones, personal computers, satellites, fiber-optic cable, and the early version of the World Wide Web, which acted as the dynamic forces behind the phenomenon of global integration (Friedman, 2005).

Innovation in ICTs, particularly the introduction of the Internet, has stimulated many current transformations that the world is undergoing. ICTs have facilitated the reduction of communication, logistics, and information-processing costs, which, in turn, is transforming the way people live and do business.

These technological changes have an enormous impact on government (Osborne, 1993). The application of modern ICTs in order to improve the activities of the public sector is called *e-Government*. But, apart from enhanced efficiency in delivering services, ICT has the potential to improve transparency in processes, impress accountability for outcomes, and allow greater participation by more stakeholders. When ICT is used to transform the relationship between government and its clients (i.e., other government organizations, businesses, and citizens), *e-Governance* takes place (Peña, 2007). However, for purposes of this paper, no distinction will be made between e-Government and e-Governance.

e-Government calls for a paradigm shift—reforms within organizations, new forms of leadership, and transformation of public-private partnerships—to make its impact effective (Allen et al, 2001 cited in Ndou, 2004). e-Government entails changing process, which means changing policy. A change in policy results in changing the way people do things, which in turn changes culture. Given its encompassing impact, it is expected that e-Government will affect economic, legal, and democratic values in the realm of public administration (Snijkers, 2005). The greatest challenge in e-Government, therefore, is how to manage change systematically and effectively given a particular context.

NPM through e-Government

The main aim of e-Government is to improve the overall performance of the public sector. As such, it can be seen as a product of the reforms being advanced by the New Public Management—an output-oriented, demand-driven approach that gives premium to providing high quality service to citizens (Schedler, K. & Scharf, C., 2001). In the same vein, NPM gained popularity as governments sought to lower costs, provide better service, contain deficits, and incorporate new technologies (Lindquist, 2006), objectives that e-government can help achieve.

e-Government and NPM are thus seen as complementary, with the former offering a means to enforce the latter. In his discourse on "reinventing government," Osborne (1993) explains how, under the competitive pressure of technological advances, public monopolies are breaking, thereby reforming government institutions. In the same vein, Schedler and Scharf (2001) posit that e-Government can be interpreted as a reform element that supports the idea behind the NPM and, with its technological equipment, eases modernization as a whole. Similar to NPM, e-

government culture promotes: (1) customer orientation, which uses the needs of the people as a guideline; (2) a culture of trust, which sees processes of departments being linked up and individuals collaborating, requiring an openness not only towards stakeholders but also towards co-workers; and (3) a disposition to technology in order to create a climate where computers are welcome (Schedler & Scharf, 2001).

Cordella (2007), in a research article, discusses how scholars like Bellamy and Taylor (1998), Fountain (2002) and Heeks (2002) consider e-Government as a next step in the rationalization of government activities along the line of NPM. Over the years, there is increasing attention devoted to the potential use of ICT as a shortcut to enforce the rationalization of the public administration (Malone et al., 1987; Ciborra, 1993) by not only improving the speed, transparency, and accountability of the action of the public organizations, but also **changing the nature of the services provided by public administration**. E-government projects are intrinsically embedded in combinations of political reforms and organizational changes designed to enact, support and push a profound transformation in the organization of the public sector. However, Cordella cautions that introducing change could threaten the work of bureaucratic institutions that enforce the democratic values of equality and impartiality of State actions. e-Government policies and strategies, therefore, may need more careful rethinking and may need to support, rather more readily, aspects of existing bureaucratic systems rather than use ICTs in order to dramatically reorganize and transform the public administration (Cordella, 2007).

However, context and rationalities are two critical factors in adopting ICT. Heeks (2002), in his analysis of the success and failures of information systems, points out that certain gaps exist between the design and the reality in which the IS operates in. The context of the country where the information system was designed, usually in developed countries, can affect the outcome of the implementation and use of the system. Certain rationalities that are assumed to be true may, in fact, not apply in the context of developing countries. More specifically, processes in developed countries are stable and straightforward; formal organizational objectives exist; and the staff are seen as rational beings whereas in developing countries, processes are flexible, complex, constrained, and often informal; objectives are personal and informal; and staff are viewed as political beings. Therefore, an understanding of the rationalities of actors is critical in NPM reform using e-government. Despite the apolitical and objective nature of ICTs, the political/behavioral realities of the people who will use them may differ and thus, create a different outcome. As the next section of this paper will show, the democratic institutions and values in the Philippines have evolved into different animals that behave very differently from the American model that they were meant to emulate.

Political Economy of Public Administration in the Philippines

Unlike its Western counterparts, the public administration system in the Philippines was not borne out of carefully studied and crafted institutions and legal underpinning. It is more a product of subjugation, negotiation, and experimentations, if you will, which started when the Western powers expanded their dominion of the New World. But, as history would show, government institutions and citizens have somehow managed to thrive amidst chaos and uncertainties but often at the expense of the common good.

Philippine public administration has undergone many changes throughout its known history—from a three century-long rule under Spanish colonizers, armed with their twin mission to spread the Catholic faith and promote the glory of the Spanish monarchy, the American rulers who brought education and modern bureaucracy, the short-lived Japanese occupation during World War II, and the succeeding American-led path to self-government (Corpuz, 1957).

Ideally, these changes and transformations have brought with them lessons to be learned for an independent republic. However, the Philippine public administration system inherited many flaws that promoted the importance of personal, rather than institutional, values from a protracted

colonial rule that stunted the development of an indigenous form of civilization. After 400 years of subjugation, the negative values were very much entrenched in the development of the country's formal administrative system, still very young after the country's independence in 1946. Briones (2003) pointed out that the purging of negative values, mainly due to the failure to implement laws and sanction misbehavior, was generally absent in the Philippines' history. This resulted in the perpetuation of corruption, greed, and self-interest even in the presence of the modern apparatuses of public administration. Negative values in tandem with either antiquated laws or policies tailor-made to fit particular interests result in bad governance, seen in government at all levels and scopes. Briones (2003) further explained how political figures came to control the Philippine civil service machinery, oftentimes during a crisis to benefit themselves. Even the much-celebrated administration of Pres. Corazon Aquino (1986-1992), which promised to put the country back on track after 21 years of rule under Pres. Ferdinand Marcos (1965-1986), lost its focus by dwelling much on purging the government of Marcos' legacy rather than investing in rebuilding public institutions and crafting a plan to regain the public trust. This inflicted more damage on the civil service system as it became obvious that the motivations of government leaders were *personal* rather than institutional interests (P. Tapales cited in Briones, 2003).

Against this background, the Philippines can be counted in the league of the so-called "captured state." In a recent study on governance, Kaufmann and Kraay (2002) described how the economies of Latin American countries, for example, have struggled to grow because "the fruits of income growth largely accrue to an elite that benefits from "misgovernance." As a result, any possible positive impact of income growth on governance could be offset by the effect of the elite's negative influence. "State capture" is manifest in "illicit influence by powerful elites in their past" such as the robber barons in the United States at the turn of the twentieth century. In the Philippines, an example of state capture is crony capitalism under the regime of President Marcos (Haber, 2001 cited in Kaufmann and Kraay, 2002).

The local government represents a microcosm of the public administration system at the national level. The reenactment of the 1991 Local Government Code (LGC) institutionalized the empowerment of local government units to govern over provinces, cities, municipalities, and the *barangay*[1] (village). Fresh from a "people power" revolution or mass uprising that overthrew Marcos in 1987, the LGC devolved certain powers and functions—delivery of basic services and facilities, regulatory functions, and revenue-raising functions—from the national to the local governments. These services included agriculture, health, social welfare, environmental protection, public works, tourism, education, and minor functions related to trade, transportation, and communications. The law practically gave local governments their own kingdom to govern, but retained their dependence on the national budget through the internal revenue allotment (IRA) distributed among local governments regardless of their own income generated. This gave poor provinces little incentive to perform better. On the other hand, it also allowed competitive provinces to carve the path of their own development.

The LCG vested the local governments with the power to raise their own source of revenue, normally done through local taxation. **Real property taxation**—which includes the administration, appraisal, assessment, levy and collection of real property taxes (RPT)—is a major source of revenue for local governments. Proceeds from RPT are distributed to several levels of government (see Table 3).

Empowered by their autonomy, local governments have adopted reforms and innovation in order to improve the delivery of services and manage resources. The use of ICT has gained momentum among local governments, as evidenced in the rise in the number of provinces, cities, and municipalities that have developed their own websites. As of September 2007, around 99.1

---

[1] *Barangay*, also known by its former Spanish adopted name, *barrio*, is the smallest administrative division in the Philippines composed of 50 to 100 families. There are 41,995 barangays in the country as of December 2007. http://www.nscb.gov.ph/activestats/psgc/NSCB_PSGC_SUMMARY_Dec07.pdf.

% of all cities, provinces and municipalities nationwide (or 1,709) reportedly have their own website. This development was facilitated by the passage of the Electronic Commerce Act in 2000, supported by policies such as the National Computer Center's guidelines on the compliance to the E-Commerce Act and the United Nations American Society for Public Administration (UN/ASPA) Stages of E-Government (National Computer Center [NCC], 2003).

However, since local governments began implementing their own e-government projects and ICT strategies, there was little coordination about investments being made on models and systems that can be considered as "good practice," which can be replicated by others. Literature on the business model, approach, and strategy of local e-government projects are also scarce.

Table 3. Distribution of Proceeds from RPT

Provinces:
- 35% - General Fund
- 40% - General Fund of the municipality where the land is situated;
- 25% - Barangay where the property is located

City:
- 70% - General Fund
- 30% - all component barangays, which shall split 50/50. Barangay where property is located gets 50%, and the rest to all component barangays.

Land Management in the Philippines: Issues and Problems

Land represents the major asset holding and marker of wealth in the Philippines. Many commercial transactions are premised, and rely, on titled property. Banks, for example, honor real property tax declarations as collateral for loans. However, despite its huge potential as an asset and source of income especially for local governments, land management is marred by inefficiencies brought about by uncertainty over ownership of, and finality of, legal decisions over real property. These problems continue to exact numerous costs to the ability to do business or attract investments in the Philippines. The robustness of property rights as an institutional driver or hindrance of a country's economic development has to start with rights over real property (G. Pascual, 2008).

However, land administration in the Philippines is marred by inefficiencies and complex legal and jurisdictional problems. As shown in the brief history of public administrative system above, the mixed colonial legacy is also reflected in the country's land administration system. The Philippines has both a Spanish and American colonial history from which it inherited a judicially-based Torrens system imported from the State of Massachusetts in 1901. The Land Registration Act or R.A. 496 of 1903 institutionalized the Torrens system. As early as 1913, land classification has been introduced in the country. Unfortunately, nothing much has changed since then. More than half of the country is still legally classified as "forest." ***Under the current system, only approximately 20% of privately owned land is "registered land", with some of the balance relying on deeds[2] to establish rights in property and most of the remainder relying on informal systems.*** There are about 10 million registered titles in the Philippines, but there are significant problems with duplicate and overlapping titles, particularly in urban areas. About 6% of the Philippines remain unclassified – including much of Quezon City (where this author lives)– and rights in these areas are uncertain (World Bank, 2003).

---

[2] Deeds are legal documents concerning the ownership or tenure of property. The property in question may be tangible, such as land or buildings, or it may be intangible, such as a right or privilege, a rent charge and so on. Owners or holders of property are said to have a 'title' to that property. Deeds are documents which help to prove that title. http://www.nottingham.ac.uk/mss/learning/skills/deeds/index.phtml.

The current manual process of paper-based land titling is prone to errors and correcting them needs expensive and time-consuming judicial remedies. This is compounded by other problems such as blank judicial forms being for sale and multiple claimants of the same title. Titles are bound in volumes and stored in a vault with access to authorized employees only. Still, a very common problem is loss of records and titles, worn out titles due to poor storage facilities and exposure to humidity, and tampering of entries in a certificate of title by dishonest employees (E. Gimarino, personal communication, August 16, 2008).

Land titles, as legal documents, carry no graphical representation or reference. Thus, no one knows if there are overlapping titles and where the property is actually located. Nevertheless, banks, insurance companies, and developers—important drivers of economic growth—operate based on these titles, no matter how faulty they are. The challenge then is to increase the integrity of the land titling system.

These issues contribute to the larger problem of local tax administration, which, according to the Asian Development Bank (ADB) and the World Bank (WB) is weighed down by three overarching deficiencies: (1) local professional qualification of staff; inadequate automation of core tasks; and (3) weaknesses in supporting policies at the national government level. In particular, these problems affect various aspects of taxation: poor taxpayer registration systems and low-quality record keeping, which results in widespread tax delinquencies; tax audits and enforcement are inadequate, which erode the credibility of the system and results in low compliance; and limited availability of taxpayer services increases taxpayer compliance cost. These problems are manifested in the RPT collection efficiency in the provinces and cities, which ironically declined after the Local Government Code devolved revenue-raising powers to local governments. See Table 4 (ADB, internal document, 2007).

Table 4: Average Collection Rate of Current Year of Basic RPT, 1989-2000 (%)

Source: Commission on Audit, Bureau of Local Government Finance (cited in ADB, 2007)

This paper aims to contribute to building evidence-based research and analysis of local e-governance through a case study of Cebu City, with focus on ICT use for land management reform. For its theoretical foundation, the paper will analyze how Cebu City became a pioneer of e-government in the Philippines by adopting, whether successfully in part or in whole, the key principles of New Public Management (NPM). It will discuss the evolution of e-government initiatives in Cebu City and point out key milestones and major stakeholders. For its main section, it will analyze an on-going project—the Cebu City Electronic Land Market Project (ELMP)—which aims to secure real property through a localized, phased, and market-based e-government approach, designed for replication and national deployment in the Philippine local government context.

Cebu City: Early Adopter of NPM

Cebu City is located in the central eastern part of Cebu Province, an island at the center of the Visayas[3] in southern Philippines. With a total land area of 29,124.78 hectares (has.), Cebu City is comprised of only 19.22% urban area and the remaining 80.78% all rural. Cebu City has 80 barangay (villages), 50 of which are in the urban areas and 30 in the rural areas. Around 64% of the city's land is classified as *alienable and disposable*[4], while the rest are classified as forest and

---

[3] There are three major island groups in the Philippines—Luzon in the north, Mindanao in the south, and Visayas in the middle, which is composed of many islands.
[4] Alienable and disposable lands are land of the public domain, which have been the subject of the present system of classification and declared as not needed for forest purposes.

timberland. Over 76% of its land is covered under the National Integrated Protected Areas System (NIPAS), which comprise "outstanding remarkable areas and biologically important public lands that are habitats of rare and endangered species of plants and animals, biogeographic zones and related ecosystems, all of which shall be designated as protected areas" (Republic Act 7586). Around 23% of its 80 barangays are totally or partially located in the watershed areas.

Cebu City played a key role in Philippine history because it was there where Portuguese explorer Ferdinand Magellan—who went on a voyage of exploration under the flag of Spain—first landed and established its Christianized communities in 1521. The charter of Cebu City was granted in 1937.

After years of traditional governance, the Cebu City Government (from hereon referred to as Cebu City) began adopting reforms in public administration that focused on simple yet effective measures.

In the early 1990s, Cebu City adopted a service improvement orientation called ***SPRING (Systems and Procedures Rationalization in Government)***, a systematic, step-by-step, results-driven approach to program management introduced by the Philippine Department of Budget Management (DBM).

The key steps in SPRING include:
- Documentation of current service processes
- Analysis of impact on service objective and standards
- Design of improved service
- Plan that will bring about the desired service processes
- Implementation of the plan and monitoring of progress
- Assessment of results

In managing a program, the SPRING approach asks the following key questions:
- Does this activity contribute to achieving the service objective and standards?
- Who does the activity? Is he the best person to do this? Can it be done better by another person, or if the actor is re-educated or re-trained?
- Where is the activity being done? Is this the best place to do it? Can it be done better in another location?
- When is the activity being done? Is this the best time to do it? Is this the best place in the sequence of activities to do it? Can it be done better at another time, or at another place in the sequence of activities?
- How is this activity being done? Is this activity being done with the best tools, method, or materials? Can it be improved with the use of other methods, materials, or tools, including ICT?

Cebu City and e-Government

Cebu City is an early adopter of ICT for public administration. Cebu City's first ICT acquisitions included the Burrough's Machine,[5] Systems 36,[6] and the AS/400,[7] which were used in creating simple databases in the early 1990s (Sanapo, 2008).

---

[5] In the early 1980s, Burroughs Corporation began producing personal computers, the B20 and B25 lines. These ran the BTOS operating system, which implemented an early Local Area Network to share a hard disk between workgroup users.

[6] The IBM System/36 was a minicomputer marketed by IBM from 1983 to 2000. Like its successor, the System/34 and the older System/32, the System/36 was primarily programmed in the RPG II language. One of its more interesting features was an off-line storage mechanism that utilized "magazines"—boxes of 8-inch floppies that the machine could load and eject in a non-sequential fashion. The System/36 also had

A key person who introduced SPRING to Cebu City is Mr. Rene Sanapo, a political appointee who rose up the ranks, starting from utility work to his current position as deputy mayor. After attending two DBM workshops on SPRING, Sanapo, a trusted staff member of Mayor Tomas Osmeña, began introducing incremental reforms to simple government procedures, such as filing of documents or issuance of permits (personal communication, July and August 2008). In the process, Cebu City acquired computers to support pockets of process reform, making it an early adopter of ICT to improve public-administration efficiency.

As a first step to adopting SPRING, Sanapo, who was then already executive secretary to the mayor, was instructed to keep track of all communications of the Cebu City government. Back then, an index card-based form containing multiple "jobs" was used for making, processing, and filing requests. Finding this system cumbersome and prone to error, Sanapo's first recommendation was to use a "one-problem-only per request" form system. This simple yet innovative measure ensured that specific requests will go to the correct department assigned to address a specific issue. Using the SPRING training, a common language for describing processes was also used, which made things easy and convenient for all parties concerned. After some time, Sanapo decided to replace the paper-based manual system with a simple, computerized database (an IBM-compatible 8088) in order to digitize and organize the filing of requests. As a result of these innovations, Cebu City was able to identify specific problems and issues, and helped them develop an issue-specific database, which the government uses as a guide to effectively keep track of a whole gamut of activities, problem areas, and projects.

In 1993, Cebu City set up a one-stop shop for the issuance and renewal of business permits. At the time, the government was processing permits for as many as 15,000 establishments a year With the use of ICT, the processing time was shortened—estimated at less than 15 minutes per business permit[8]—and provided convenience for the applicants. The use of computers enabled the government to minimize the steps for processing and eventually create an effective "express lane" for permit renewal. But, aside from ICT, Cebu City adopted the necessary "soft interventions"—(1) issuance of complementary policy, (2) revision of forms, and (3) selection of a centralized venue where data can be securely managed. As Sanapo emphasized, ICT has always been a tool to support policy and was not an end in and of itself (personal communication, 29 August 2008).

One good example of an ICT application developed *and* used by Cebu City is the **Real Property Tax Information System (RPTIS)**, which digitized records of real property appraisal (determining the value of a property) and assessment (real property tax payment) using the AS/400. The RPTIS is an investment that has reaped not only economic benefits but good governance for Cebu City. On the first year of using AS/400, Cebu City's revenue reportedly increased by almost 300 percent! Through the RPTIS, the city government was also able to expose some anomalies happening in their city assessor's office. A thorough review of the paper documents to be digitized revealed that some changes were made in a number of real property tax declarations, i.e., certain tax declarations of properties, particularly those of local golf clubs, had several versions with different amounts. In response to the discrepancies discovered, Cebu City raided its own assessor's office and filed around 250 counts of fraud against the city assessor. The case, which reached the Supreme Court (highest court in the Philippines), was decided in favor of Cebu City.

---

many mainframe features such as programmable job queues and scheduling priority levels. http://en.wikipedia.org/wiki/IBM_System/36.

[7] The AS/400 was introduced in 1988 by IBM as a minicomputer for general business and departmental use. It underwent several re-branding until its last re-brand in 2000 to the name of IBM System i. It remained in production until April 2008 when it was replaced by the IBM Power Systems line. It uses an object-based library-based operating system called IBMi. http://en.wikipedia.org/wiki/AS/400.

[8] Prior to the one-stop shop, the city government was processing around the same amount of business permits. Although the processing time was not given, the deputy mayor said that less than 15 minutes was considered efficient and definitely faster than the previous procedure.

Cebu City has also pioneered the use of the Geographic Information System (GIS), an information system used for capturing, storing, analyzing, managing and presenting data which are spatially referenced or linked to a location). In 1993, GIS was initiated for actual land use mapping. Later on, GIS maps were developed for a variety of other applications, including:

- Case monitoring system for *dengue* (a lethal disease transmitted by mosquitoes) that plots the areas where the disease occurred
- e-Blotter, a digitized system for precinct blotter records, which connects all police stations via wide area network (WAN). The project was worth P2.3 million (hardware, software and connection)
- Inventory of street lamps, which identifies specific locations around the city where street lamps have been installed
- Maintenance of Parcel files for real property

The use of ICT is a challenge, especially when the local chief executive is not computer-literate or resistant to change. As such, according to Sanapo, the support of the mayor and the city council was a key factor that led to ICT-led reforms. Support is not something abstract and can be quantified by the funding approval of ICT projects, for example. At the end of the day, a desire to change the processes is necessary before using ICT for reforms.

Despite its achievements, Cebu City still lack an information systems policy and master plan to guide its e-government initiatives. As a result, what it has been able to achieve to date are incremental improvements through reforms focused on specific problems or issues. While these "islands of reforms" have triggered improvements in other sectors as well, *ICT projects need an enabling policy environment and clear institutional arrangements, among others, in order to be sustainable* (Batchelor, et. al., 2003). Although an e-government plan is under discussion, there is a huge challenge for Cebu City to develop a policy framework and strategy that will enable a more seamless implementation of ICT projects and institutionalized reforms. For example, Sanapo reports that Cebu City's GIS maps have yet to fulfill its potential as a multi-purpose and interactive application, as not all departments and offices in Cebu City use them to carry out their functions (Sanapo, 2008). There is also a need to establish a more systematic and integrated approach to implementing ICT projects so that investments can be maximized and impact expanded.

Cebu City Electronic Land Markets Project: NPM at Work

Recognizing the problem and demand for a solution to land management problems, and realizing the huge untapped resources in real property, an e-government project called "*Electronic Land Markets*" was initiated by the *Ateneo Center for Economic Research and Development (ACERD)*[9] with support from *The Asia Foundation (TAF)*[10]*-Philippines* and the *United States Agency for International Development (USAID)*. The main objective of the Electronic Land Markets project (ELMP) is to create a system that will create secure property rights in the Philippines through the support of information systems. ACERD's team leader emphasizes that *"this is not just another IT project."* The project aims *to provide clarity to legal issues and operationalize dematerialized digital documents by establishing digital documents, land titles in this case, as capable of standing alone on their own merits in a court of law* (G. Pascual, 2008).

---

[9] Founded in 1989, ACERD is the research unit of the Ateneo de Manila University's Department of Economics in economics and economic policy. http://www.admu.edu.ph/index.php?p=282.
[10] The Asia Foundation (TAF) is a non-profit, non-governmental organization committed to the development of a peaceful, prosperous, just, and open Asia Pacific region. TAF has 17 offices throughout Asia, an office in Washington, D.C., and headquarters in San Francisco. http://asiafoundation.org/.

The ELMP model is more inductive than deductive. First, it looked at the interests of various stakeholders, what motivates them to do things and what they are willing to do, and then designed the project from there. Based on an understanding of the political economy of land administration in the Philippines, the ELMP also used an approach that is rooted in the assumptions that "*all politics is local"* and that *"national-level reform is locally-driven*."

For its pilot, the ELMP identified Cebu City as the most suitable area among several local governments. Apart from having readily available digitized tax declarations and a GIS map (see discussion above), the two key offices working within the Cebu City Government, the **Register of Deeds (RoD)** and the **City Assessor**, had agreed to share and integrate their respective databases, and subject them to outside scrutiny--probably the first time that this has ever been done for any e-government project in the Philippines!

The Cebu City Register of Deeds is a unit of the Land Registration Authority (LRA)[11] mandated as the repository of all land records involving registered or titled lands in the territory of Cebu City and is responsible for transcribing decrees of registration issued by the LRA and is likewise solely tasked to issue all subsequent or transfer certificates of title derived from the original certificates of title which may either be issued judicially or administratively. As such, collaboration of the RoD is critical to establishing the integrity and bankability of the digitized titles.

Meanwhile, the City Assessor is primarily tasked to manage the real property tax administration system for the Cebu City Government. The local assessor takes charge of the discovery, classification, appraisal, assessment and uniform valuation of all real properties within Cebu City's territorial jurisdiction to be used as the basis for taxation.

A crucial feature of the ELMP is the way it adopts a *multi-stakeholder approach*. A number of stakeholders are taking part in this project. In order to express their commitment, the Cebu City Government, the Cebu City RoD signed, and the ACERD signed a tri-partite memorandum of agreement to formally signify their commitment. Interestingly, it is not the MOA that guarantees the actual commitment and cooperation of the stakeholders but "real, tangible incentives." Unlike many donor-funded projects that assume the ideal, the ELMP starts by asking the practical question: *"What's in it for me?"* See Table 5 for a list of various stakeholders and the incentives that drive them to participate willingly in the e-government project.

For example, despite the presence of policies and guidelines on how to secure land titles, which all registries are supposed to adopt, Atty. Emmanuel Gimarino, Cebu City Register of Deeds, says that everything boils down to how trustworthy and dedicated the people in charge of the vault are. *"In a manual system of operation, you can only hope that everyone is doing his job properly. In Cebu, we have three vault keepers, each earns a monthly salary of PhP8,500 (US$189) a month including allowances. With this kind of pay vis-a-vis the important records that they handle, you could imagine the potential for wrongdoing."* (E. Gimarino, personal communication, August 16, 2008). Apart from the RoD and City Assessor, other stakeholders include the City Treasurer and the Bureau of Internal Revenue, to which the tax declarations are reported.

In analyzing the components of the ELMP, this paper will use the new operating framework for reforming public service based on the NPM approach introduced by Sandford Borins (Borins,

---

[11] The LRA is an agency attached to the Department of Justice mandated to issue decrees of registration and certificates of title and register documents, patents and other land transaction for the benefit of landowners, Agrarian Reform-beneficiaries and the registering public in general; to provide a secure, stable and trustworthy record of land ownership and recorded interests therein so as to promote social and economic well-being and contribute national development. http://www.doj.gov.ph/agencies/lra.html.

2002 cited in Lindquist, 2006 and Borins, 1994 cited in Lam, 1997), which summarizes the principles and main drivers of NPM previously discussed. Below are the key elements of NPM (Borins, 1994 and 2002) and how the ELMP approach is able to adopt them (G. Pascual, personal communication, 2008):

Table 5. Multi-stakeholder Approach: *"What's in it for me?"*

For Cebu City:
- For the mayor
    - That Cebu is the place to invest in because he has secure property rights;
    - That Cebu is doing things differently from the rest of the country
- For the city planner
    - That he can expand business and compete with Thailand
- For the tax assessor
    - More revenues, today!
    - New sources of revenue

For the RoD:
- That checks and balances are in place
- That interagency cooperation is effective short of legislation in terms of integration

---

- ***Provision of high-quality services that citizens value.*** As discussed above, real property is a measure of wealth by citizens, used in many commercial transactions, honored as collateral for bank loans, and a key factor for risk assessment by insurance companies. The ELMP aims to create an environment where property rights are secure and reliable in order to maximize the full potential of real property.

- ***Autonomy of managers***. The ELMP does not take the usual route of donor-funded agencies that adopt the top-down approach, which focuses on implementing projects through the heads of national government agencies. The key players in the ELMP are local administrators—the RoD and city assessor—those who manage day-to-day land administration in a particular territory.

- ***Performance-based rewards for individuals and organizations***. In ELMP, good performance by the implementing administrators will be rewarded by proxy incentives such as: (1) less administrative burden due to tedious handling process for land titles (See Appendix 1); (2) more productive use of what little resources they have; (3) and better real property tax collection for the city. A more secure property rights will also pose less risk for insurance purposes and attract more investments.

- ***Maximization of human and technological resources to produce maximum output with minimum cost***. The ELMP aims to make land titles reliable as a valuable asset. Using land as collateral in making loans, for example, can be a tedious process that costs time and effort for both the administrators and clients (See Appendix 1). Since ELMP takes off from existing ICT-based resources provided by Cebu City (digital tax declarations and GIS map), the cost of implementation, compared to most e-government projects, is minimal (See Appendix 2).

  Although the total cost per individual client for securing land as collateral for a bank loan may appear minimal (USD 3.50), the manual, "per-transaction" process is cumbersome and prone to error. The length of time needed for a transaction ranges from over an hour to over a week. For a "good case,"[12] the whole process only takes 1 hour and 20 minutes. However,

---

[12] A "good case" is one wherein: (1) the title number, lot number, and name are provided for verification; (2) the certified true copy of the tax declaration is obtained; and (3) the tax payment is cleared as "fully paid."

for "problematic cases,"[13] the process may take more than one month (See "Problems" under Step 1 in Appendix 1).

The manual system has the following major weaknesses:
- Prone to human error and corruption (each vault keeper earns US$189 per month including allowances)
- Loss of records and titles (due to simple misplacement of documents)
- Worn out titles due to poor storage facilities and exposure to humidity
- Tampering of entries in a certificate of title by dishonest employees
- Index card filing system prone to wear and tear, and inefficient
- Workflow process moves from one step to the next on a per-transaction basis

Under the ELMP, these steps will be integrated in a database that contains the digital records of the land title, the tax declarations, and the technical specifications of the property. The ELMP aims to offer a cost-effective system that can generate more income for Cebu City due to **higher productivity** (faster process and more transactions per day), a **more credible basis** for settling multiple claims, and **stronger incentive** for land owners to pay the right property tax.

- ***Competition and consumer orientation***. Similar to private markets, the ELMP's goal is to let different local governments compete with each other in terms of having the most secure and reliable property rights. The assumption is that a secure, titled land will produce very minimal risks and problems for an investment, thereby have more value. ELMP looks at what citizens—the consumers of the service—actually need and demand. It asks the question: "*What do people really care about?*" In this case, citizens, banks, and businesses need a secure land title. At the end of the day, it's a "win-win" situation for the citizens, banks, investors, and the local government (See Table 5).

- ***Quality assurance processes***. The ELMP adopts a targeted, phased approach to ensure the validity and viability of the system every step of the way. Each phase of project implementation has clear objectives, stakeholders, and expected outcomes. Phase 1, for example, will undergo a pilot stage for the prototype before the support of the key regulatory agencies will be sought (See Table 6).

The ELMP Cebu Pilot is estimated to cost around PhP4 million **(US$89,000)**, with Phase 1 worth PhP1 million (US$22,000) supported by external funding (See Appendix 2 for the estimated total cost of the ELMP Cebu Pilot).

Since the staff of the Cebu City Hall and Register of Deeds will be trained to manage the system, there is no extra cost for the government and no threat of layoffs. In order to sustain operations, a *40% overhead cost* may be imposed from the original cost of each transaction (G. Pascual, personal communication, August 1, 2008). Thus, a one-step process for securing land as collateral for a bank loan may cost PhP218.40 **(US$4.85)** per client.

If more clients can be served per day, the RoD and Cebu City government can expect more revenue to pour in. Assuming 100 transactions per day for the whole process, the ELMP can earn as much as PhP21,840 **(US$485.30)** per day or PhP480,480 **(US$10,677.30)** per month. *Ceteris paribus*, with this regular monthly income, the initial capital expenditure of the local government for investing in the ELMP system can be redeemed in a little over eight (8) months.

---

[13] A "problematic case" is one wherein: (1) the title number, lot number, and name for verification are missing; (2) the certified true copy of the tax declaration is not obtained; and (3) the tax payment is not yet fully paid.

The ELMP has three major phases: (1) Feasibility of interagency cooperation; (2) Developing sustainable business model(s); and (3) Developing a national roll-out strategy.

Table 6: Phases of the Electronic Land Markets Project

Phase	Objective	End Product
1	• Create a common digital base map that will serve as the reference point for land titling and tax collection activities 1:1 matching of tax parcels and land titles • Demonstrate the RoD is prepared to work with graphical representations of technical descriptions of registered titles	• An automated, preferably web-based, platform for depicting Cebu City titles in GIS form • An integrated map that shows that digital land title, technical description of the property, and the tax declaration
2	• Establish a proof of concept • Promote policies that support the use of the integrated platform	• An example of proof of concept of technology and cooperation to entice investors to establish a database management bureau: ○ Insurance companies ○ Property developers ○ Commercial banks ○ Appraisers • Policy and Regulatory ○ LGU and Cadastral Council ○ Central Bank regulations ○ Insurance Commission
3	• National roll-out strategy • Advocate the passage of legislation, an executive order, or department administrative order to effect the reconciliation of errors introduced by the revisions in survey techniques and standards dating back to the 1900s	• National policy supporting the new system

The implementation of **Phase 1** presented a challenge to the team and various stakeholders who were just beginning to gain each other's trust. Since the tax declarations and GIS map were already in place, the main activity was to digitize the paper-based land titles. The scanning was outsourced to a team from the **Development Bank of the Philippines Data Center, Inc. (DBP-DCI)**, a full-scale, wholly-owned subsidiary of the DBP that is in the business of providing IT services. The DBP-DCI was the appropriate choice because it has first hand knowledge of the nuances and difficulties being faced by various government agencies in implementing IT infrastructure projects. From its years of experience, the DCI has adopted a set of practical guiding principles when dealing with government IT projects. *"Call a spade a spade,"* there should be no mincing of words when discussing the real situation. *"Brutal honestly,"* those affected by, or involved in, the problem at hand should not take it personally (DBP-DCI, 2008).

Working with the Cebu City RoD, the DBP-DCI scanned, inspected, encoded, and recorded 180,000 land titles at PhP1.39 (US$3 cents) per image. In total, the cost of managing and implementing the scanning of titles[14] for Phase 1 was PhP1 million (US$22,222). The scanned titles were then integrated with the digitized tax declarations and the GIS map from the Cebu City Government's database. This is probably the first time that two government offices shared and integrated their respective databases for an e-government project in the Philippines. To make the process credible, the scanning was done for three (3) months inside the RoD vault where the land titles were kept. Phase 1 was completed in May 2008.

With the accomplishment of ELMP's Phase 1—a simple activity of *scanning a picture*—a number of key lessons and measurable achievements can be determined:

---

[14] The scanned land titles were stored in PDF/A format in compliance with ISO 19005-1 standard for management of electronic document files for long-term preservation.

(1) It is possible that not all local government officials, as commonly perceived, are corrupt. The mere fact that the RoD opened his vault for the scrutiny of outsiders was enough indication.
(2) It is possible to link two government agencies for a reform project in the context of the Philippines. This is an indication that Cebu City wants to initiate reform by creating a good verification environment in the Philippines;
(3) With the integration of land titles and tax declarations, things are definitely better off today than yesterday. This can help make real property credible as a collateral, thereby increasing investment.

Now armed with the practical knowledge from implementing Phase 1, the next big challenge in **Phase 2** is verification. As a first step, the project needs to show a proof of concept that will convince the various policy and regulatory institutions that will affect the use of the digital land titles that the system works. This phase emphasizes an often-overlooked but crucial facet of e-government projects. Normally, when talking about e-government, the focus is on the policy and regulatory environment created by telecommunications and ICT policymakers and regulators. However, for sector-specific projects such as real property, regulators can take the form of the Insurance Commission and the Central Bank.

The ***Insurance Commission*** is the government entity mandated to regulate and supervise the insurance industry in order to ensure that adequate insurance protection is available to the public at a fair and reasonable cost and to assure the financial stability of the insurance industry so that all legitimate claims of the insuring public are met promptly and equitably. The Insurance Commission is mainly interested in *ensuring that the appraisal of property values are accurate and reliable, as land is a critical factor in valuating risks*.

The ***Central Bank of the Philippines***, on the other hand, provides policy directions in the areas of money, banking and credit. It supervises operations of banks and exercises regulatory powers over non-bank financial institutions with quasi-banking functions. As such, the Central Bank *regulates the commercial banks, which provide loans that use land as collateral.* With a more secure property rights in Cebu City, the loans should be cheaper because there are less risks. As a result, this will make Cebu City more attractive to investors compared to other locations.

These two regulators need to uphold that digital land titles will be binding and stand in the court of law. Their support is a necessary factor to the effectiveness and significance of the project. However, if this were the case, why were the two regulators not included from the start of the project? The answer goes back to the market-based approach of ELMP, which assumes that confidence and support can only be gained if the project can show something that works, in the same way that investments in private markets are made for products that work. The key, therefore, was to complete a prototype, in this case the Cebu City digital land title system, and demonstrate its viability to gain the support of the regulators concerned.

Phase 3 will focus on developing a national roll-out strategy. Once the Cebu City pilot has been proven successful and the necessary policy instruments are issued by the concerned regulators, the pro-competition strategy will be adopted for the national roll-out. The approach is to show the other local governments a credible electronic land market system that works, a standard that is duly recognized and supported by a national policy, and a secure business environment that would attract investors. In the process, natural competition among the local governments is expected to drive the national roll-out strategy. A first step can be in the form of policy at the local level supporting and promoting the adoption the ELMP as part of a local government's development plan.

On August 21, 2008, the project team presented the prototype to the Insurance Commission, which expressed positive interest. However, a month later, the USAID-funded project supporting the ELMP ended, leaving the remaining phases unfinished. As in many e-government projects, more time was needed for the ELMP preparatory stage. Given the strong interest expressed by

the Insurance Commission, the key question now is who will pick up from where the project left off? Does the Cebu City government have the political will and resources to push the project forward? Will USAID or other funding agencies continue providing support for this promising local e-government pilot? Is there an opportunity for the private sector to come in, adopt the business model, and provide the service?

Conclusion

The New Public Management (NPM) is an approach to introducing reform in the public sector that looks to the private markets as a model for efficiency. It promotes a government that is customer-oriented, performance-based, pro-competition, and decentralized. On the other hand, e-Government is the use of ICTs to improve the activities of the public sector. Therefore, e-Government, is seen as a reform element that can support and enforce the NPM.

e-Government, in the context of NPM, however, need to take into consideration the rationalities that may not necessarily be present in developing countries such as the Philippines where processes are often complex, flexible, and informal unlike those found in developed countries. There needs to be an understanding of the political economy of public administration, the interests of the actors involved, and specific objectives that can be achieved given the constraints.

Using the Cebu City Electronic Land Markets Project as a case example, the following key lessons can be derived:

e-Government projects that enforce the principles of New Public Management can thrive in the Philippine context. In the case of Cebu City, the selective adoption of certain NPM principles—particularly, decentralization and the use of market incentives—as a guide to using ICT seems to be effective. The key is to use a market-based, bottom-up approach, i.e., beginning at the local level, supported by an understanding of the key stakeholders, the incentives that motivate local actors, and a strategy that has the potential for national leveraging. As a result of the powers and functions devolved to local governments, many of the country's problems and their solutions often stem from the implementation at the local level. It can be deduced, therefore, that national-level reform is locally-driven. The ability of a local government to implement reform and adopt change, however, depends not only on its elected leaders but the presence of able and willing administrators who have the influence or authority to enforce reforms.

ICT-led reforms can exist in harmony with bureaucratic institutions even in developing countries. The ELMP shows that bureaucratic institutions at the local level can be open to change if their jobs and tenure are not threatened. ICT can be used to make processes more efficient and reliable without necessarily overhauling the existing information system or abolishing the bureaucratic institution. ICT is introduced as a tool to help integrate existing information flows, in this case land titles and tax declarations. e-Government does not intend to replace the bureaucrats or reduce their role in land administration but rather to introduce changes that will ease their workload. The challenge, however, is whether an efficient land administration can be sustained if it threatens the interest of some administrators that act as *street-level bureaucrats* or those that make decisions about policy as they implement it. As in the case of the past city assessor of Cebu, this kind of administrator may be revealed in the process of implementing the project.

ICT becomes more relevant when integrated into an existing information system (Curtain, 2004 and UNDP, 2001). According to a UNDP study, ICTs become more relevant and meaningful when they render more effective existing or clearly desired information flows. The ELMP shows that, just like the ATM networks of banks, digitizing land titles is not reinventing the process but merely improving the procedures to make land titles more credible and reliable. The

integration of tax declarations and land titles does not abolish the use of paper-based documents because the scanned copies still need to come from an original document. Simple procedures and ICT, are more often than not, the easiest to integrate and, therefore, the most acceptable means to introduce reforms. The ELMP is basically about scanning of titles and use of a GIS map, which already exists in Cebu City. In effect, the project changes the medium without drastically changing the information system.

Cultural change through policy reform is a key factor to implementing e-government.
Schedler and Scharf (2001) identify administrative change as a crucial lesson in implementing e-government. Apart from the introduction of ICT, a sensitive approach towards cultural change is crucial for e-government because, as their research reveals, change takes significantly longer than most project managers and champions of the NPM have expected and that implementation barriers are cultural to a high degree rather than instrumental or mechanistic. The key, therefore, is to change culture.

Changing culture in public administration needs to be supported by a change in policy. Cebu City is a pioneer in e-Government because it has adopted and enforced a number of policy reforms necessary to introduce incremental improvements in specific areas. The challenge, however, is for Cebu City to develop a broad policy framework that will guide its e-government projects into an integrated strategy aimed at a common goal. This way, reforms resulting from e-government can be institutionalized and continued even when the current actors and stakeholders are no longer in office.

At the end of the day, however, promising e-Government pilots such as the ELMP need the luxury of time and resources to be designed, tried, tested, and re-designed. Despite having a sound design, good momentum, strong political support, and huge potential for success, it is *time and budget* that will define the fate of pilot e-government projects. With the end of its funding support, ELMP is now faced with a challenge common in many pilot projects—***how do we move forward?*** This challenge, however, may present a good opportunity for the local government and the private sector to collaborate. After all, the ELMP's model was designed in such a way that the mutual interests of the government and private sector for secure property rights are recognized and addressed.

References

Batchelor, N. et al. (November 2003). *ICT for Development Contributing to the Millennium Development Goals: Lessons Learned from Seventeen infoDev Projects*. World Bank. Retrieved July 9, 2008 from http://www.infodev.org/en/Publication.19.html.

Briones, L. (2003). *The Political Economy of Civil Service Reforms*. Quezon City: University of the Philippines Institute of Public Administration.

Cordella, A. (2007). E-government: Towards the e-bureaucratic form? *Journal of Information Technology*, 22, 265–274. Retrieved August 17, 2008 from http://www.palgrave-journals.com/jit/journal/v22/n3/pdf/2000105a.pdf.

Corpuz, O.D., (1957). *Bureaucracy in the Philippines.* Quezon City: University of the Philippines Institute of Public Administration, 235-248.

Curtain, R. (2004, January), "Information and Communications Technologies and Development: Help or Hindrance?" Australian Agency for International Development (AusAID). Retrieved July 8, 2008 from http://www.developmentgateway.com.au/jahia/webdav/site/adg/shared/CurtainICT4DJan04.pdf.

DBP-DCI. (2008, May 15). The Challenges of Implementing Information Technology Infrastructure in Government. A presentation at the Electronic Land Markets: The Cebu Initiative, Boracay, Aklan, Philippines.

Friedman, T. (2005). The World is Flat. *MIT World*, Retrieved June 18, 2008 from http://mitworld.mit.edu/video/266/.

Heeks, R. (1998, October). Information Age Reform of the Public Sector: The Potential and Problems of IT for India. *Information Systems for Public Sector Management Working Paper Series No. 6,* Institute for Development Policy and Management, University of Manchester, UK. Retrieved December 4, 2007 from http://www.man.ac.uk/idpm/idpm_dp.htm#isps_wp.

Heeks, R. (2002). Failure, Success and Improvisation of Information Systems Projects in Developing Countries. *Development Informatics Working Paper Series Paper No. 11,* Institute for Development Policy and Management, University of Manchester, UK. Retrieved July 11, 2008 from http://www.man.ac.uk/idpm/idpm_dp.htm#devinf_wp.

Kaboolian, L. (1998). The New Public Management: Challenging the Boundaries of the Management vs. Administration Debate. *Public Administration Review*, 58 (3), May to June, 189-193. Retrieved August 25, 2008 from http://www.jstor.org/stable/976558.

Lam, J. (1997). Transformation from Public Administration to Management: Success and Challenges of Public Sector Reform in Hong Kong. *Public Productivity & Management Review*, 20 (4), June, 405-418. Retrieved August 25, 2008 from http://www.jstor.org/stable/3380681.

Larbi, G. (1999). The New Public Management Approach and Crisis States. United Nations Research Institute for Social Development (UNRISD) Discussion Paper No. 112, September. Retrieved August 21, 2008 from http://www.unrisd.org/unrisd/website/document.nsf/0/5F280B19C6125F4380256B6600448FDB?OpenDocument.

Lindquist, E. (2006). A Critical Moment: Capturing and Conveying the Evolution of the Canadian Public Service. Canada School of Public Service (CSPS) Special Studies Series. Retrieved November 2, 2008 from http://www.csps-efpc.gc.ca/Research/publications/pdfs/p134_e.pdf.

Mirandilla, M. (2007, December 15-17). *Achieving Universal Access through Liberalization, Regulation, and Deregulation: The Case of the Philippine Telecommunications and ICT Sector*. Paper presented at the Communication Policy Research (CPR) *south*2 conference, Chennai, India.

NCC. (2003). Guidelines on Compliance to the E-Commerce Act (R.A. 8792) and Stage Two and Three of the UN-ASPA Five Stages of E-Government. NCC Memorandum Circular 2003-01. Retrieved February 28, 2008 from http://www.ncc.gov.ph/.

Ndou, V. (2004). E-Government for Developing Countries: Opportunities and Challenges. *Electronic Journal on Information Systems in Developing Countries,* 18, 1, 1-24.

Osborne, D. (1993). Reinventing Government. *Public Productivity & Management Review*, 16 (4), *Fiscal Pressures and Productive Solutions: Proceedings of the Fifth National Public Sector Productivity Conference*, 349-356. Retrieved August 17, 2008 from http://www.jstor.org/stable/3381012.

Pascual, G. (2008). *The Project Overview: ACERD Land Management and Property Rights Project*. Paper presented at the Electronic Land Markets: The Cebu Initiative. Boracay, Aklan, Philippines, May 15-16.

Paliulis, N. & Chlivickas E. E-Government as a Challenge of Public Management Development. *Public Management. Electronic Journal 4(10), September 2004, pp. 1-9.* Retrieved August 17, 2008 from http://e-journal.spa.msu.ru/images/File/2004/paliulis.pdf

PCIJ. (2008). "Reforming the political economy according to Neri." Retrieved February 20, 2008, from http://www.pcij.org/blog/?p=2188#comments.

Peña, V. (2007, September 7). E-Government vs. e-Governance. *Philippine Daily Inquirer.* Retrieved from http://business.inquirer.net/money/columns/view_article.php?article_id=86195.

Reschenthaler, G.B. and Thompson, F. (1996). The Information Revolution and the New Public Management. *Journal of Public Administration Research and Theory*, 6, January, 125-143.

Sanapo, R. (2008, May 15). *Cebu City and Information and Communication Technology*. Paper presented at Electronic Land Markets: The Cebu Initiative, Boracay, Aklan, Philippines.

Schedler, K. (2003). '… And Politics: Public Management Developments in the Light of Two Rationalities.' *Public Management Review 5(4)*, 533-550. Retrieved August 17, 2008 from http://www.alexandria.unisg.ch/EXPORT/DL/21698.pdf.

Schedler, K. & Scharf, C. (2001, October). *Exploring the Interrelations Between Electronic Government and the New Public Management: A Managerial Framework for Electronic Government*. Paper presented at I3E Conference, Zurich. No italics for conf paper titles

Snijkers, K. (2005). *E-Government: ICT from a Public Management Perspective*. Paper presented at the 13th Annual NISPAcee Conference, Moscow Russia, May 19-21.

UNDP Evaluation Office (2001, September). 'Information Communications Technology for Development', Essentials: Synthesis of Lessons Learned. No 5, September. Retrieved July 11, 2008 from http://www.undp.org/eo/documents/essentials_5.PDF.

Wise, L. (2002). Public Management Reform: Competing Drivers of Change. *Public Administration Review*, 62 (5), September to October, 555-567. Retrieved August 17, 2008 from http://www.jstor.org/stable/3110016.

World Bank. (2003, March). Comparative Study of Land Administration Systems: Global Synthesis of Critical Issues and Future Challenges. Australia. Retrieved April 20, 2007 from http://siteresources.worldbank.org/RPDLPROGRAM/Resources/459596-1161903702549/S8_Burns.pdf.

Appendix 1[15]

Requirements for Getting a Bank Loan with Land as Collateral

1) Verification of Land Title – Certification from the Register of Deeds
2) Tax Declaration
3) Tax Clearance

STEP 1: Verification of Land Title – Cebu City Register of Deeds[16]	
1. Get an application form from a Register of Deeds clerk 2. Proceed to the vault keeper – Vault keeper, together with two assistants/ helpers, looks for the title. Once found, title is photocopied. 3. Recording - Transaction is recorded by the records officer 4. Certification of title – Certified copy is duly signed and certified by the Register of Deeds records officer 5. Pay cashier – Photocopying and Certification fees 6. Release of Document	
Costs	Photocopying = PhP2 (US$0.04)[17]/page (titles usually have 4 pages) Verification fee = PhP12 (US$0.27) Certification fee = PhP36 (US$0.80) **TOTAL = PhP56 (US$1.24)**
Personnel	1 Clerk (receives applications) 1 Vault keeper 2 Helpers 1 Records Officer (concurrently admin officer) 1 cashier (same for all transactions) (Total Cebu City RoD personnel: 22)
Average number of verifications	40-50/day
Average Length of Time per transaction	If *all in order* (title number, lot number, name provided): **20 minutes** If *not* (missing info): **3 days to 1 week**
Average income with 50 clients:	**Per day: PhP2,800 (US$62.20)** **Per month: PhP61,600 (US$1,368.90)**
Problems	**Index card sorting:** When searching for names, index cards are the only way to find specific title/s. The problem is that index cards are not organized, alphabetical ordering not updated (only index cards A to E are properly alphabetized). **Title misplacement:** Sometimes titles are misplaced during transactions, commonly placed in different folders. When a client tries to verify, misplaced titles will appear to be "not on file" (when in fact the title is still there, albeit in a different folder). The client will be given a certification of "no land holdings" and will have no other recourse than to seek a title reconstitution. The reconstitution process takes up to a month (due to court hearings).
Other matters	**Accomplishment Reports:**

[15] Based on research conducted by ACERD, January to May 2008.
[16] Based on an interview conducted by ACERD with Ms. Evelyn A. Buaya (May 2008).
[17] Foreign exchange at P45 to $1 as of writing (31 August 2008).

	- Number of transactions received (titles issued, etc.) - title certifications not included - No explicit reporting, no targets or quotas. Title verifications/certifications are recorded in a logbook but not really kept track of in terms of number.
	Workflow processing: Moves from one step to the next on a per-transaction or per-case basis. "First in, first out" system used, for as long as all is in order. If not, delays are unavoidable. There have also been cases of *"palakasan"* or influence-peddling. There are no explicit measures taken to avoid this.
	Banks: Banks use the verification service especially to trace history of titles submitted to them (same fees). Banks tend to submit queries by bulk.

STEP 2: Tax Declaration – Cebu City Hall[18]

1. Get an application form from the counter (Tax Assessor – 2nd Floor, City Hall)
2. Pay the cashier at the first floor (1st Floor City Hall)
3. Get signatures of the following:
    a. Administrative Officer
    b. Chief of the Building and Machinery Division of the specific district the building is located (if living in a building); Chief of the Land Division of the specific district the property is located (Note: Cebu City has 80 Barangays separated into districts)
    c. City Assessor
4. Get Documentary Stamp

Costs	Documentary Stamp = PhP20 (US$0.44) Tax Declaration fee = PhP30 (US$0.67) **Total = PhP50 (US$1.10)**
Personnel	1 Clerk (receives applications) 1 Cashier 3 Signatories
Average number of verifications	40/day sometimes 70/day (if tax declarations involving subdivisions)
Average Length of Time per transaction	For *single property* (Certified True Copy): **30 minutes** For all properties in a *subdivision*: at most **3 days** For an owner with *many properties* – at most **3 days**
Average income with 40 clients:	**Per day: PhP2,000 (US$44.40)** **Per month: PhP44,000 (US$977.78)**

STEP 3: Tax Clearance – Cebu City Hall[19]

1. Bring tax declaration/ tax receipt of property
2. Verification of the tax declaration at the verification section (1st Floor City Hall) – print-out to be generated
3. Computation of Taxes to be paid (if not yet fully paid)
    If there are:

---

[18] Based on an interview of ACERD with Mr. Antonio Abellana of the Cebu City Hall (May 2008).
[19] Based on an interview of ACERD with Mr. F. delos Angeles (May 2008).

- *No payables* – proceed to step # 5
- *With payables* – payment to be made at the cashier first, then proceed to step # 5
4. Proceed to Miscellaneous Window for Tax Clearance payment
5. Proceed to Tax Clearance Section for issuance
6. Get Documentary Stamp

Costs	Documentary Stamp = PhP20 (US$0.44) Tax Clearance fee = PhP30 (US$0.67) **Total = PhP50 (US$1.10)**
Personnel	1 Clerk (receives applications) 1 Cashier
Average number of clearances	100/day
Average Length of Time per transaction	If taxes are already *fully paid*: **30 minutes** If taxes are *not yet fully paid*: **1 hour**
Average income with 100 clients:	**Per day: PhP5,000 (US$111.10)** **Per month: PhP110,000 (US$2,444.40)**
Total cost for client to secure land as collateral	**PhP156 (US$3.50)**

APPENDIX 2[20]

Requirements	Cost
Scanning of 180,000 titles	PhP1 million (US$22,000)
GIS map	PhP0 (already in place)
Digitized tax declarations	PhP0 (already in place)
Hardware (Full system for preproduction) • Relational database capable of storing pdf documents • Scanners • Printers • Applications Server + Web Serverat RD vault • Back up server in NCR • Internet connection to the vault	PhP3 million (US$67,000)
Software	PhP 0 (Open source)
Personnel	No addition at the RoD or Cebu City level New servicing company will need to be organized and run by private sector to ensure sustainability.

---

[20] Gamaliel Pascual, ACERD team leader, personal communication, August 17. 2008.