E-GOVERNANCE IN MALAYSIA:
The Challenges and Potentials of using ICT in Local Governance

MA. THERESA M. RIVERA

ABSTRACT:

The study presents and examines the status of electronic government applications in Malaysia and proceeds to discuss how e-governance induces changes in the delivery of government services and encourage citizen participation in the government. E-governance is studied in microcosm from selected local government settings in Malaysia, namely Ipoh and Penang. The study discusses the policies and applications of e-governance in Malaysia and the critical success factors and challenges confronting e-governance implementation.

The study revealed that ICT’s use to induce changes in governance presents a big potential in opening up governance processes, but it should be preceded by good governance foundations. Traditional governance processes, which have already been impeded by lack of citizen’s participation, poor performance of government services, lack of accountability and transparency, have to be revitalized in conjunction with the introduction of electronic governance mechanisms. At the same time, citizens have to undergo a mind-set change, overcome the “culture of fear” or the “culture of non-confrontation,” skepticism and lack of communal involvement in seeing to the welfare of their society.

The potential of ICT in governance can be harnessed by creating a space where citizens and government can both share and have affinity for the virtual space created and enhanced by a leadership that champions good governance, consensus-building, and multi-stakeholders’ participation.
INTRODUCTION

The terms e-government and e-governance are used interchangeably. Some have maintained the two as distinct, while others have merged both concepts and placed them under the all-encompassing term of e-democracy. This paper, however, contends that e-governance is distinct from the business of e-government and that the e-governance process, particularly e-local governance in the context of Malaysia, needs to be given focus to better understand the national e-Government initiatives.

The concept of e-Governance is defined as “the application of information and communications technology (ICT) to improve the efficiency and accountability of government (Asia Foundation, 2003). It is also called “digital governance,” which includes “the use of ICT-induced changes in the delivery of governance services and changes induced in the way citizens interact and participate in the governance sphere.” (Nath, 2000)

Thus, the “e” in e-governance stands for the use of electronic media, particularly the network of computer-mediated communications, in the practice of governance. Governance is defined in many ways, but all refer to the process of interaction among the government, business, and civil society to manage their political, social, and economic environment.

“E-governance is no more and no less than governance in an electronic environment. It is both governance of that environment and governance within that environment, using electronic tools. This is a very broad definition, reflecting the far-reaching implications of information and communication technologies.” (David Zussman, 2002)

The use of information and communication technology in the public sector is increasingly being adopted in many countries, including Malaysia. Technology, in the context of governance, is seen either as a tool or facilitator for change (Riley and Riley, 2003), or one which brings with it the prospects of democratization (Paquet, G., 2001), or revitalization of democracy (Topscott, D. 1996, Rheingold, H., 1992).
Despite these positive outcomes, there is caution that the study of the use of technology must not fall into the techno-centric analysis or into technological determinism, as well as unwarranted optimism or pessimism (Kellner, D. 1997, Heeks 2004). The study must also be seen in the way the technology impacts on the social context.

As De Sanctis and Poole (1994) pointed out in their *Adaptive Structuration Theory*, the change process resulting from the use of advanced information technologies can come from two vantage points: 1) the types of structures that are provided by the advanced technologies, and 2) the structures that actually emerge in human action as people interact with these technologies. The complexity of technology-organization relationships is best revealed, accordingly, by capturing these processes and tracing their impacts.

The use of information and communication technologies in governance does not guarantee that governance processes are enhanced, overall efficiency and productivity is increased, and citizen participation is ensured. The bottom line still rests on how the use of technology can stimulate overall government organizational change, as well as impact on the service delivery to the citizens while at the same time ensuring equity, privacy, security and universal access.

The problem, according to Heeks (2004), is that “the heterogeneity of technology” is intertwined critically with the heterogeneity of context. Technology, as invented, designed, and deployed for e-government use, is critically connected to the social context at the time of its invention, design, and deployment. E-government technology invention and design must, therefore, be drawn from the social, political, and cultural contexts for which, and from which, it was designed. When applied or deployed for use, it is equally important to note the interplay of contexts that affect its users. As Heeks said, this complex interweaving between technology and context is critical in understanding the success or failure of an e-government project.
Heeks and Bhatnagar (2001) stated that seven dimensions can provide a model that can be applied to a wide range of case studies: information (data stores, data flows, etc.); technology (both hardware and software); processes (the activities of users and others); objectives and values (the key dimension, through which factors such as culture and politics are manifest); staffing and skills (both the quantitative and qualitative aspects of competencies); management systems and structures; and other resources (particularly time and money).

In the Asian context, the framework can be translated into measurable analysis factors (Sin, C.Y. 2003:29-36) such as the presence of an e-government vision and leadership, the budget allotment, the quality of e-readiness particular to infrastructure, telecommunication facilities’ availability and broad-band connectivity. Policies and programs for e-enabling citizens is also pointed out as an important component of the analysis as well as connectivity factors, reliability of infrastructure, e-literacy, and safeguards to public trust. On top of this, Sin proposed the study of how e-government is perceived in terms of its relevance and perceived value vis-à-vis the expectations and preferences of the users and citizens.

Central to the use of these frameworks is an analysis of the users’ or citizens’ perceptions of how the overall application of e-government technologies relate to their needs and impact on their lives.

Using Heeks and Bhatnagar’s framework, this study thus will analyze:

INFORMATION FLOWS
Vertical and horizontal integration

TECHNOLOGY
Infrastructure/E-readiness
Connectivity
PROCESSES
Service and transactions
Mode of access and use by the citizens
Political/citizen participation

OBJECTIVES AND VALUES
Implicit assumptions of the local government’s objectives and value framework

STAFFING AND SKILLS
E-literacy

MANAGEMENT SYSTEMS AND STRUCTURES

CITIZEN PERSPECTIVES ON E-GOVERNMENT
E-governance is divided into two possible applications: Internal ICT applications for e-government, which includes solutions for streamlining in-house processes such as data encoding, file retrieval, document processing, data transfer and other administrative tasks that exist in the government agencies. External/Front-line ICT applications act as an interface between the government and citizens or businesses. Front-line ICT applications interact or transact with the citizens via electronic media. It can be further categorized as Government-to-Citizen (G2C) or Government-To Business (G2B). This study will be limited only to studying the G2C services which are all services where the citizens interact with the government through ICT. These include information or transactions accessible via websites, processing of applications via kiosks, agency hotlines or call centers, online voting or council meetings, government payments with commercial banks, application status updates via landline or mobile phones and the like.

ICT tools can also be used in many ways. In this study, it will examine the nature of use of ICT as applied to governance in the country, which can range from being used for purely technical governance tasks, to facilitate or support interface of business, industry and government, or create other innovative mechanisms.
The concept of e-governance is still new in Malaysia as compared to other countries in the Asia, although Malaysia’s ICT infrastructure base is far ahead than its neighbors, except Singapore. However, Malaysia faces many constraints in terms of ICT use, especially for government purposes. Loo (2003) noted that these include the poor record of government response to online (and telephone) inquiries, ineffective interactive mechanisms inherent in government websites, a lack of Internet-savvy government bureaucrats and a fundamentally ambivalent Malaysian attitude towards public dialogue. These, by itself, are major problem areas in creating a basic e-government framework. However, the country’s leadership and sustained vision of pushing for a knowledge-based economy by the year 2020 keeps the machinery up on its toes. How Malaysia uses its vision and the benefits of ICT to create a shared communication base where citizens can actively participate in local government activities and build an effective e-government program is the focus of this study.

In analyzing the interplay of information technology and context and how it affects the application of a local e-government project, I proceed from an analysis of the policies and applications of e-governance in the national government of Malaysia and follow the path of analysis to the selected local e-government project application. This also follows from De Sanctis and Poole’s (1994) position of studying the application of information technologies from two vantage points: 1) the types of structures that are provided by the advanced technologies, and 2) the structures that actually emerge in human action as people interact with these technologies. Looking at a micro perspective from the vantage point of a local government setting enabled me to study the interplay of structures, both physical and human, and how this affects an e-government application.

To accomplish this, in-depth key informant interviews with both national government officers in charge of e-government applications were conducted, as well as with the Majlis Bandaraya Ipoh, the local government of Ipoh. Citizen representatives and community volunteers from Ipoh, who helped promote the introduction of the e-
government project, were also interviewed. Secondary data analysis and websites’ review were also done.

I. E-GOVERNANCE AND THE STATE OF THE E-GOVERNMENT IN MALAYSIA

The Vision for E-Government

The vision for Malaysia’s e-government is presented below. The vision “calls for reinventing government and using multimedia/information technology to dramatically improve productivity, and creating a collaborative environment that fosters the on-going development of Malaysia’s multi-media industry.” (Ariff and Chuan, 2000).

The model outlines the benefits in the relationship of the government with business and the citizenry. It also presents the intra- and inter-agency improvements towards service delivery through the use of information technology and multimedia. This vision called for a “massive reengineering” of government operations on a grand scale. According to Abdul Karim and Khalid (2003), the “vision for e-government means fundamentally changing how government operates and implies a new set of responsibilities for public servants, businesses, and citizens.”

The e-government vision is rooted in the country’s Vision 2020 (Wawasan 2020), which states thus: “By the year 2020, Malaysia can be a united nation, with a confident Malaysian society, infused by strong moral and ethical values, living in a society that is democratic, liberal and tolerant, caring, economically just and equitable, progressive and prosperous, and in full possession of an economy that is competitive, dynamic, robust and resilient.”

Inherent in this vision is overcoming nine central strategic challenges, one of which is the establishment of “a scientific and progressive society, a society that is innovative and forward-looking, one that is not only a consumer of technology but also a contributor to the scientific and technological civilization of the future.” (www.Wawasan2020.com/vision)

This challenge, along with others, has pushed forward the creation of a modernization agenda for Malaysian society. Intrinsic to Vision 2020 is the move of Malaysia from an agrarian to industrial economy to the information economy.

The Multimedia Super Corridor (MSC) and the E-Government Vision
The MSC is both described as a physical area and a manifestation of Malaysian’s Vision 2020, which is the paradigm shift towards the new Information Age.

It is a dedicated 15 by 50 kilometer corridor stretching from the Petronas Twin Towers in the north to the Kuala Lumpur International Airport in the south. It encompasses
Cyberjaya, the Technology Core, and Putrajaya, the new administrative capital of Malaysia. The implementation of the MSC is divided into three phases from 1996-2020.

In Phase 1 (1996-2003), the MSC was successfully created. Every milestone set for Phase 1 was surpassed. In Phase 2, a web of similar corridors will be established in Malaysia, and a global framework of cyber laws will be passed. Furthermore, at least four of five intelligent cities will be linked to other global cities worldwide. In Phase 3, Malaysia will evolve into one Multimedia Super Corridor. An International Cyber Court of Justice will be established in the MSC and 12 intelligent cities will be linked to the global information highway. (Source: http://www.american.edu/initeb/ym6974a/nationalictpolicies.htm#MSC%20Vision)

The Malaysian Government has invested heavily in world-class infrastructure. The Multimedia Super Corridor (MSC) is designed to create an ideal environment for ICT-related production as well as provide the backbone for an information superhighway. The network contains a high-speed link (10 Gb/s network) that connects the MSC to Japan, the countries of the Association of Southeast Asian Nations, the U.S.A. and Europe. It can also support extensive public administration, education, and business applications. The intent of the superhighway is to provide quality access to global information as quickly and easily as possible. Simultaneously, the Demonstrator Application Grant Scheme (DAGS) is intended to facilitate social and economic progress through the innovative use of ICT. It provides funds for citizens to access the opportunities associated with the MSC and to be involved in multimedia development.

THE E-GOVERNMENT TECHNOLOGY

Key ICT Information for E-government implementation

Infrastructure/E-readiness Indicators:

As of 2003, there are 8,692,100 internet users in Malaysia, with 107,971 Internet hosts spread all over the country. There are 4,571,600 telephone main lines while 11,124,100 use the mobile phones. (CIA Fact Book)
As of the first quarter of 2004, fixed line penetration rate per 100 inhabitants is 17.9%, while cellular phone penetration rate is 46.2%. Internet dial-up penetration rate is 12.4%, while DSL broadband penetration rate is a measly 5.6%.

I. E-GOVERNANCE initiatives in the local governments of Penang and Ipoh

The national e-government initiatives are funneled down to the local governments through what is called as the Smart Local Government’s Governance (SLGGA) Agenda, which is expected to promote e-government among the local authorities. The project requires that a web portal be established in all local authorities to enable the public to source for the latest information about the activities and services of their local governments. The website should have at least five functions: e-complaints, e-submission, e-tax, e-collection and e-licensing. Most of the local governments studied have actually done more than what is required and have enlivened local governance by adapting the community’s needs into the digital sphere of e-government.

Most areas in Penang are covered with fiber optics. Penang is well-linked to other major Malaysian towns either by inland optical fiber, microwave, or satellite stations. Some 375,000 communication lines are being utilized, with a telephone penetration rate of 259.0 per 1,000 people (residential) and 128.2 per 1,000 people (business). According to Department of Statistics data for 1998 and the NITC estimates for 2000, the number of telephone sets per 1,000 people (residential) in Penang was higher than the national average (172.7 per 1,000 people) and ranked second only to Selangor (309.1 per 1,000 people). In business, Penang ranked second behind Selangor (153 per 1,000 people). As the second most-industrialized state and primarily a production and manufacturing site, it can be assumed that a large proportion of the national ICT investment in manufacturing, totaling RM1.2 billion in 2000, came from the multinational companies and the small- and medium-scale industries in Penang. Of the 334 schools in Penang, 83% have a multimedia corner, 50% have a computer laboratory, and 30% have a website.
The Internet penetration rate in Penang was estimated at 51.9 subscribers per 1000 population in 2000, which was higher than the national average of 39.5 subscribers per 1,000. Compared to Kuala Lumpur with an Internet penetration rate of 103.9 per 1,000 people, and Selangor with 84.9 per 1,000 people, Penang with 51.9 subscribers per 1000 people is still lagging, although it ranks third by states in the nation. (Penang K ICT, 2002)

A Penang K-ICT Blueprint was made to provide a roadmap for the development of the k-economy to support the goal of a fully developed state by 2010. Part of the blueprint is the concept of Penang i-Land, with an E-Learning, E-business and E-manufacturing component, including an E-government. In an interview with YB Dato' Dr. Toh Kin Woon, the State Minister for Education, Human resources and Innovation, he said that “The State Government will play an enabling role by creating an environment conducive to investments in new ICT, growth of knowledge enabling industries, and the development of ICT skills and knowledge. Its role is essentially as a catalyst and facilitator.”

Today, Penang’s K ICT initiatives are focused on identifying high value-added services in the field of information technologies, and in developing the ICT linkage to the community, particularly to NGOs and other civil-society organizations. At the time of interview and research, their focus, however, is more on what they called the Penang E-Community Volunteer Centre Portal, an interactive website that will enable the community to access information on community services and volunteer opportunities. This is a creative, high-profile, low-cost, service-oriented project that will use new communication technologies and link the e-communities of Penang, UN and the state think-tank, the Socio-Economic and Environmental Research Institute (SERI) with the community, matching the community’s needs with volunteer services. It is a one-stop portal for all NGOs and civil societies in Penang. At the time of research, however, this portal is still to be launched and volunteers still to be recruited, hence, the inability of the researcher to see the concrete workings of the e-governance scenario. What has been existing is the Penang State government portal, http://www.penang.gov.my, a
comprehensive portal for the state that provides a multitude of services such as tender announcements, house/land assessment, checking of license status, property issues, parking compound fines inquiry, online inquiry on availability of housing projects, online search of factories in the Penang Development Corporation (PDC) industrial area, and online inquiries to purchase industrial land, and to check on outstanding rental/purchase amounts of PDC housing units. It also has such services as e-student housing and a GIS map browser on Penang. Its use, however, has not been adequately studied, since much of the focus of the Penang ICT Council is still on developing its knowledge workers’ base by training its people to use these new media, setting up e-learning centers to e-enable these future knowledge workers, overall computerization of its intra- and inter-networking systems and the training of its government workers, particularly the councillorship, using ICT to replace paperwork in committee deliberations and decision-making.

One of the two local authorities in the State of Penang, the Seberang Perai municipal council (Majlis Perbandaran Seberang Perai or MPSP, http://www.mpsp.gov.my/) has been actively pursuing a wireless government since 1999. The MPSP has developed this interactive homepage where residents can “check their car parking compounds, print their house and land assessment bills, check for any tender notices, and also submit and later track their complaints/suggestions. Suppliers can also track the status of their invoices.” (http://www.mpsp.gov.my) Besides the homepage, non-internet savvy residents of MPSP can also go to a centralized counter, with a computerized information system, which tracks and puts on database the types of services transacted, including complaints received from residents, and compiles them daily, for a systematic tracking of popular services and even of complaints directed to the local authority. It has also provided laptops and Internet connectivity to each of its councilors and has used these to communicate with them on various concerns of the municipality. A councilor’s website, Pintas (http://sukaweb.penang.gov.my/pkn/suarabaru.nsf) was also set up to provide a forum for councilors.
In an interview with Ms. Lee, Moon Ho, SP in charge of ICT for MPSP, she stressed that this mechanism has enabled the MPSP to speed up decision-making in various committee meetings of the council, enable a paperless environment and enhance the overall K-worker image of the municipal authority. However, she noted that despite these innovative tools, there is still the “human problem” of slow adaptability to the new media, training demands and ICT competencies of the councilors, and compatibility of each other’s goals. What are needed are still the basic values of teamwork, communication, and human relationship.

Ipoh is the capital of Perak, the second largest state in Peninsular Malaysia, which was the heartland of Malaysia’s once-thriving tin industry. In the 19th century and the early part of the 20th, Ipoh was known as the town of tin miners. Now it takes pride in being dubbed as a Virtual City by virtue of its projects involving the use of Internet and computer-mediated communication to automate government services to the citizens. Ipoh has a total of 3,420 households, of which 75% are Chinese, and ten percent each of Malays and Indians. It has been dubbed a retirement city, since many members of its population (70% adults, 5% retired citizens) are mostly senior or adult citizens. Ipoh boasts of a high Internet penetration rate of 85%. There are 37 Internet cafes-shops in 2003 (sourced from MBI).

With the nation moving towards a knowledge economy, Ipoh City follows suit with the conceptualization of a Smart City Project where its services to its population would be based on e-Government principle, i.e. information dissemination, information communication, and transaction of services to citizens, businesses, and within government departments.

Based on the framework of using ICT to promote productivity, Ipoh City has adopted the ICT channel to deliver its services to the public, facilitate a better environment to promote business and development, and improve the productivity of its employees. Ipoh City is aiming to be Malaysia’s first “Smart City.” With this objective, it has established a sophisticated networking system with the aim to make Ipoh a Virtual City.
An EU-Ipoh Virtual City (EIVC) is a pilot Smart City project co-funded by the Asia IT & C Program, the European Commission and jointly promoted by the Ipoh City Council (Malaysia), City of Vienna (Austria), Danish Technological Institute (Denmark) and Dublin Chamber of Commerce (Ireland). Various good practices of e-government such as Providing Innovative Service Models and Assessment (PRISMA) completed ICT project, e-Vienna and Dublin Online have been identified by the project promoters to form the knowledge architecture of this initiative.

The aim of the Virtual City project is to make city services and community information accessible to all the residents through a Multi-Channel Delivery System (MDS). It will also connect households and businesses to the information system of the city and to all community systems through a state-of-art MDS, which include:

- The Internet through the Ipoh council website (www.mbi.gov.my). The website allows Ipoh citizens to do the following:
  - electronic inquiry (e-inquiry)
  - electronic payment (e-payment)
  - e-submission
  - e-feedback
  - e-license
  - property assessment
  - compound fine
  - rental payments

- an Interactive Voice Response (IVR) phone system by dialing 05-244(city) or 05-2442489 (if outside the city), anyone can call and be directed to services of the Ipoh City Council

- Public Kiosks which, at the time of writing, are still being set up in community centers and schools’ computer laboratories. The kiosks will have a computer terminal with a touch-screen function for easy use.

A Government to Citizen (G2C) Pilot Project: the I-demmos project
Apart from the city’s web portal, the MBI has also worked with the government and private sector to test an interactive community site. The platform is the first tri-partnership between the government, the community, and the private sector in the planning and implementation of a project that involves the environment, economic, health, and the future of a community and city through the use of ICT. It is a government-funded demonstrator Applicator Grant Scheme (DAGS) project under the 8th Malaysia Plan to enable local population to interact and integrate with their own local authorities. This DAGS project aims to develop all three sectors—public, private, and community—through meaningful participation in ICT-based projects. It uses the 3W2R1A tri-sectoral partnership model (3W-win, win, win: 2R-Risk taking and reward sharing; 1A-one common action).

IDEMMOS, which stands for Integrated Decision Making Monitoring System, is a virtual platform designed to give the citizens of Ipoh a chance to voice out their ideas, concerns, suggestion and visions for their city. This platform aims at giving the citizens a voice in the development and decisions made in their city. It aims to give them the opportunity to participate in the decision-making along with their local council, the NGOs, private sector and other relevant government agencies. It uses Information Communication Technology (ICT) to get its citizens involved and, in turn, work to improve the quality of life of its citizens and ensure that Ipoh becomes a model of a sustainable city and society within Malaysia and all over the world.

It employs online moderators who not only facilitate the contribution process but also ensure that each contribution is channeled to the right authorities or departments who then look into the issue. Apart from facilitation, the moderators are also involved in regular discussions with the community by holding regular discussions through virtual forum in order to identify and recognize the issues faced by the citizens and by the city, keeping the community well-informed on all the development in the city through a bulletin and the regular receiving of feedback on issues faced by the citizens.
IDEMMOS is designed as an interactive webpage based on the Local Agenda 21 (LA21) initiative, which aims to enable the community to have a say in developing an environmentally rich, economically strong, and sustainable neighborhood for current and future generations of Ipoh citizens. At the time of writing, the I-Demmos platform was still due to be launched officially by the MBI. However, prior to that, a group of “community volunteers” were recruited from among the key sectors of Ipoh to help in promoting the project and also act as the community “champions” in the use of ICT for government communication. A beta (Test) version of the website was also prepared by a private ICT software developer, and was shown to the public during orientations on the project.

ICT FOR Local GOVERNANCE: The Social Context
The use of new media technologies, particularly the computers and the Internet, is not new to Malaysians, especially to Ipoh residents. Ipoh has a high Internet Penetration of 85%, but not all are Internet-savvy. Most of all, many do not use the Internet to communicate with their government, particularly the MBI. The local government was perceived to be ineffective, as some responses here indicate:

“Actually, governance does not exist at all. We are trying to promote it now.”

“Sampa (rubbish), longkang (drain), padang (entertainment). That was the main emphasis of the MBI council throughout the years.”

“Many people have no faith in the town council.”

“No feed backing as far as most of us know. Local council must have a platform for grievances from community and speedy response to issues raised by the constituents.”

“The political powers do not really think of good governance.”

At the same time, the people in Ipoh perceive themselves as lacking in initiatives to communicate with their government.

*Problem in Ipoh: No communal involvement*
Lack of individual to individual consciousness; of being conscious of other people’s needs

In Malaysia, people take things for granted. We are in comfort zone, why move?
There is self-censorship and fear.

There is the culture of non-confrontation.
They do not perceive immediate values.

The introduction of new technology, particularly technology for government processes and operations, is both an advantage and a challenge, judging from this social context. It can open up the service delivery and consultative processes in government or it may hamper it if people do not have knowledge of and access to the technology itself. One senior respondent sees it another way.

Need for good leadership and partnership with community. “They need to be concerned with the overall development of the city. Elected officials have power in their hands; and should use this to be able to administer and listen. The administrator is a trustee; the stakeholders are the people. There should be transparency; the community wants to know what they are doing. Sustainable development can only come through partnership. We must be able to communicate, to say what’s in our hearts and minds as individuals, social or economic, or private sector.” (Mr. Subramaniam, iv 30 years old, teacher, Volunteer for Idemmos Project)

Another also sees it as a need for a change in the people’s mind-set. “People should get out of their mind-set and not to be self-centered. Destiny is linked, but people do not feel that their destiny is linked to each other. The people of Ipoh are not reactive; they are not just given the opportunity to see beyond. Ipoh has retained its provincial mentality, but the government should take advantage of this. The success of project depends on the people.” (Mr. Sneevasigam, Managing Director, Syuen Hotel and Col Fathol, Ipoh City Watch, NGO)v

Good local governance. Many of the respondents see the need for a foundation of good local governance as key.
“A good local government should be able to provide basic, clean reachable facilities to its community. It must also work together with the other departments like the police force, the welfare department, and the other NGOs so that all can work hand in hand with each other. We need a local government that listens to the voice of the public. The women’s role in society is increasing; therefore, our local government should take advantage of this situation. I represent a small group of disadvantaged women and this would be an opportunity for them to voice out their concerns about the plight of disadvantaged women in Ipoh’s community. (Yip Siew Keen, Secretary, Perak Women for Women Society)\textsuperscript{vi}

CONCLUSIONS AND RECOMMENDATIONS

Citizen involvement and engagement with Information and Communication Technologies (ICT) rest so much on the citizen’s attitudes and mind-set with regard to their local government’s performance and delivery of services. Local governance in Malaysia is a concrete microcosm of the national government, yet it also mirrors the dynamics of politics and culture in a more distinct way.

From a study of Ipoh and Penang, much can be gleaned from the people’s use of, access to, and understanding of ICT vis-à-vis their government. Thus, it becomes imperative that this dynamic be drawn to be able to see its implications in the larger context of the national government. Hence this study concludes:

* The less credible the local government is, the slower is citizen’s involvement and response to any project, whether ICT-led or not;

* The more responsive, more sensitive the government authority is to people, the more positive participation is generated;

* Power relationship should be shared between the government and the citizens;
* Respect for citizen’s potentials to participate and citizen’s feedback is of prime importance;

* Consensus-building with the key sectors of the society is important to build up confidence in government’s programs; and

* Integration of government agency’s services

* The emphasis of ICT-driven projects should be to create a space where citizens have an affinity for the virtual space created and is citizen-driven, rather than government-driven space.

* Community Champions and Institutional Champions are needed for the success of an e-governance project. These champions believe in, are passionate about, and are committed to seeing the success of the project.

* Integrate ICT training from the earliest educational level of the community. There is a need to coordinate with the educational system so that the technology becomes familiar as they grow along.

REFERENCES:


**Websites:**
http://www.asiafoundation.org/e-government
http://www.asia-planet.net/malaysia/information.htm
http://www.cmc.gov.my/facts_figures/stats/index.as
http://www.comnet.mt/unesco/CountryProfilesProject/malaysia.htm
http://www.eivc.org/
http://idpm.man.ac.uk/publications/wp/igov/index.shtml
http://www.ktkm.gov.my/
http://www.uta.edu/huma/illuminations/kell25.htm

1 Interviewed in Penang on April 16, 2004.
3 As per interviews with Community volunteers in Ipoh, April-June 2004.
4 Mr. Subramaniam is the most senior community volunteer at 75 years old. He leads the group in almost all initiatives towards promoting the use of ICT. Interviewed in Ipoh on April 14, 2004.
5 Both were interviewed in Ipoh on April 14, 2004.