E-Governance and Service Delivery Innovations in Malaysia: An Overview

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Introduction

One of the most significant developments in public service in recent times is the increasing application of information and communication technology (ICT). The rapid developments in this field and the massive prospects they hold in various spheres have not only heightened public expectations for improved governance, they have also put tremendous pressures on the government to reinvent itself to be able to meet the rising expectations of the population by offering improved services and innovative solutions to governance problems. Thus governments around the globe have embarked on programs and projects that seek to dramatically improve the delivery of public services through the adoption of ICT in the public sector. Variously known as e-government, e-governance and government online etc., this has in fact become a leading feature of the public sector reform in both developed and developing countries. Increasingly, ICT is applied to overcome the limitations of traditional bureaucracies and more so to enhance access to and delivery of public services. While initially e-government initiatives were aimed at increasing internal processes and operational efficiencies of public agencies, now increasing number of e-government projects are employed in an attempt to provide an integrated and connected services to the citizens, businesses and other stakeholders. E-government is also seen as a strategy that would broadly support national economic objectives and the Millennium Development Goals (MDGs).

Malaysia has followed the global trend and adopted e-government in order to improve governance and service delivery on the one hand and to foster national developmental goals on the other. Although Malaysia's journey towards 'knowledge economy' began with the unveiling of the Vision 2020 in 1991, it was the establishment of Multimedia Super Corridor (MSC) in 1996 that spurred the ICT adoption in the country. Concerted efforts have been made ever since seeking to support the nation's transition from production based-economy to a knowledge-based economy thereby leapfrog development using ICT as the enabler. E-government is among the leading flagship projects the MSC has promoted with twin objectives - to reinvent the government in terms of its service delivery through the use of ICT and to catalyze the successful development of MSC with ICT as the leading sector of the economy. Relevant government documents have outlined the vision of e-government which requires the government, businesses and citizens to work together for the benefit of the country and all its citizens. This vision underscores the need for creating a collaborative environment that fosters the development of the new technology. It also calls for reinventing the government using ICT and multimedia so as to make the government agencies efficient, effective and consequently more responsive to the needs of the citizens (MAMPU, 1997).

Since the early years, e-government in Malaysia has come to be seen as a key component of governmental strategy for achieving the national developmental goals. While such goals capture some essential elements of MDGs and Malaysia has already recorded significant gains in a number of MGD areas, challenges in other fields have made the task extremely critical for Malaysia to achieve a fully developed country status by 2020. In view of this, the Malaysian government has redoubled it efforts by initiating and implementing e-government programs and projects, alongside other policies and projects. As a result, the type and number of e-government projects have grown steadily with variety of services made

available electronically. All this has helped improve Malaysia's profile in global e-government ranking. The UN eGovernment report shows that Malaysia has jumped from 42 in 2004 to 34 position in 2008 (UN, 2008). Likewise, in the web measure index of the country has improved from 41 in 2005 to 17 in 2008 (UN, 2008). More importantly, governmental initiatives have produced significant innovations in various spheres. This paper provides an overview of some of these e-government schemes indicating the nature of innovations introduced and their significance in governance and service delivery.

E-Governance and Service Delivery Innovations in Malaysia: Selected Schemes

As elsewhere, e-government in Malaysia seeks to transform the way government operates internally as well as how it interacts with citizens and businesses through the adoption of ICT and multimedia to improve efficiency, productivity and responsiveness. The ultimate goal of e-government in Malaysia, however, is to achieve public service excellence by reducing paper work and by streamlining service processes so as to enable citizens to access government services anytime and from anywhere. With this end in view, a large number of e-government programs and projects have been initiated and implemented over the past years. While e-government flagships initially consisted of five pilot projects (namely Generic Office Environment, E-Services, E-Procurement, Human Resource management Information System and project Monitoring System (Karim and Khalid, 2003), subsequently a range of other applications have been added to ensure better and integrated service delivery to the citizens. Variety of egovernment projects initiated and implemented under the MSC have radically redefined the nature of public governance by introducing a range of innovations in government to citizens (G2C), government to businesses (G2B) and government to government (G2G) dimensions. This section provides an overview of some important e-government schemes currently underway in Malaysia and the nature of innovations they have introduced. The projects selected are significant because they are likely to contribute to towards the MDGs. They are also significant for they provide improved and convenient services to a large number of users and have demonstrated innovative solutions to complex problems to reach the benefits of ICT to target population.

E-Services

E-services is among Malaysia's early initiatives of e-government. The Public Service Network (PSN) introduced in the early 1990s whereby the post offices throughout the country served as one-stop bill payment centres and other services was the precursor of e-Services. The success of the PSN experiment encouraged the government to expand the concept further and rename it as e-Services in 2002. E-Sevices project is aimed at enhancing the access to services by providing services and information anywhere anytime electronically. Implemented in three phases the project entails multiple electronic delivery channels that are widely accessible to the public and one-stop service windows where a range of services can be obtained at each delivery channel. Initially the project focused on integrating driving license, summons services and utility bills payment services in Klang Valley areas. Subsequently it was rolled out nationwide. Under the scheme services offered by Road Transport Department (RTD), Royal Malaysian Police (RMP), National Registration Department (NRD), Kuala Lumpur City Hall (DBKL), Legal Affairs Division, Prime Minister's Department (PMD) and private utility companies like *Tenaga Nasional Bhd* (TNB) and Telekom Malaysia (Telekom) are integrated to provide convenient access to

service users. Services include issuance and renewal of driving licenses, RTD summons and DBKL summons check and payment, utility bills check and payment and various legal documents are all available at one point. There are also provisions for multiple electronic channels as service s are available through internet, multimedia kiosks for the payment using credit card, debit card and ATM cards. Thus the citizens are provided with a choice of multiple delivery channels that allow access to 24 hours a day and 7 days a week. This means they are no longer required to conduct their transactions at agency branches and utility offices – they can do so from anywhere at their own convenience. Multiple language capabilities have also been introduced for each access device thus making it further convenient to various categories of users.

E-Syariah

Another important element in Malaysia's service delivery innovation is e-Syariah project. Introduced to upgrade the quality of services offered by syariah courts and to enhance their efficiency and internal management it consists of various modules such as Syariah Court Case Management System, Syariah Lawyers Registration System, E-Syariah Portal, Library Management System and Office Automation System. However, E-Syariah portal has come to be recognized as one of the best service delivery innovations (The Star, 19 April, 2007). The portal in operation since 2005, offers a range of services electronically and is now used by growing number of people to file cases of all kinds – civil suits, faraid matters and criminal cases. The portal now linked to all syariah courts across the country, allows the lawyers, prosecutors, plaintiffs, defendants, and the members of the public to file their suits and affidavits online, get hearing dates and follow-up the status of their cases. The portal also acts as one-stop counter on all matters of judiciary, enabling people to calculate faraid, download forms and refer to all enactments pertaining to courts administration. E-Syariah Version 2 currently in the process of implementation offers improved information management and additional features like scopes for viewing court decisions, checking personal profile of syariah lawyers, and monitoring of cases (MAMPU, 2009a). The authorities are now considering the possibility of upgrading the services even further to allow plaintiffs and respondents to meet face-to-face via video teleconferencing.

e-Tanah

As elsewhere in many developing countries, land administration in Malaysia has attracted public criticisms and negative media reporting for poor services, procedural rigidities and corruption, among others. Thus the need for modernizing land administration in order to improving the delivery of services was keenly felt. E-Tanah represents a major attempt in this regard and it is aimed at ensuring convenient and efficient services to the citizens on matters relating to land administration. Initiated by the Ministry of Natural Resources and Environment (NRE) the project is particularly focused on developing an integrated, comprehensive, user-friendly land management and administration system so as to provide a single point of contact at the counter at the same time making land-related information and services available online (MAMPU, 2009a).

E-Tanah was started initially as a pilot project in the state of Penang. Following its successful implementation in the State Land and Mines Office and at the District Land Offices the project has been rolled out in two other states in West Malaysia - Melaka and Negri Sembilan. Plans are underway to expand the scheme to all states of the peninsular Malaysia gradually. The implementation of e-Tanah

system offers significant benefits to government as well as the citizens through cost–effective and quality services in all matters of land administration. While it allows the customers to access information and services through a single point of contact at the counter or via Internet *e-Tanah* also permits online title searches and transactions including payment of quit rent using internet and one stop payment agencies like post offices and TM Points. While the government is expected to benefit from enhanced efficiency and increased revenue, for clients it would make a real difference as they will no longer be required to go through the complex and time-consuming process of obtaining land-related services.

E-Perolehan

A key component of e-government in Malaysia is *e-Perolehan* which relates to government to business (G2B) dimension. It is designed to streamline the public procurement system to allow the suppliers to sell their products and services to the government through the Internet. Introduced in 1999 the *e-Perolehan* project sought to transform the existing manual procurement system into electronic procurement that eventually reduces turnaround time for procurement. Driven by the desire to ensure the best value for money as well as transparency and accountability in the public procurement process, the project allows both the suppliers and the government to conduct all procurement related businesses electronically. Using www the suppliers can obtain tender documents, advertise their goods and services, present their prices, process their orders and deliveries. They are equipped with smart cards that enable them to transact with the government electronically. The government can select the preferred bid for the items to be procured from the desktop, initiate an electronic approval processes and also create, submit and receive purchase and delivery orders and other related documents electronically.

Hence e-Perolehan supports the entire procurement cycle from alert notification to potential bids, submission of tenders for approval to approval and final payment to the successful bidders. Since its introduction in 1999 the program has seen steady progress being made: it is currently used by 25 ministries and 2249 cost-centres across the government (MAMPU, 2009a). Increasing number of private agencies have shown interests in e-Perolehan, more and more transactions relating to procurement are being done under e-Perolehan. Nearly 55,000 suppliers representing 57% of those registered with the Ministry of Finance (MoF) have been e-Perolehan enabled. In 2007 e-Perolehan has seen a total of 326,807 transactions with a gross value of RM 3.85 billion. In 2008 the figures jumped to 514,300 transactions worth over RM 6 billion (MAMPU, 2009b). More significant is the fact that it has marked a major shift in public procurement in Malaysia bringing about major benefits for both the government and the businesses. While it has enabled the government agencies to become smart buyers, the benefits to be derived by businesses are enormous. They will benefit from increased level of transparency in the new system and from faster and accurate payment through electronic fund transfers. The internationally recognized product classification means that the businesses would be able to extend their reach beyond national borders and reach new markets and customers on a global scale (MAMPU, 2009a). Needless to say that all this will enhance national competitiveness, foster economic development and help eradicate hardcore poverty and other goals.

JobsMalaysia

JobsMalaysia - formerly known as Electronic Labor Exchange (ELX)- was launched in 1999 with the objective of optimizing the utilization of human resources through an effective and integrated job

matching process (MAMPU, 2009a). It was designed to serve as a source of labor market information for government agencies, business organizations and the members of the public especially those seeking employment. The range of services it permits include registration of jobseekers and employers, job matching, generation of profile of job seekers for prospective employment and consolidation of labor market information from various sources. More specifically, it serves as a one-stop centre for job related and labor-market information allowing various client groups namely job-seekers and prospective employers who want to recruit new staff to share information and communicate on the same platform. The services offered by Jobs Malaysia are free and accessible both locally and overseas. Thus, besides local job seekers and employers it allows Malaysian students studying abroad and potential investors and those seeking to relocate businesses in Malaysia. Evidence shows that it has been popular with potential employees and employers. The popularity of *JobsMalaysia* is reflected in the number of employers registered and the number of positions posted since it has become functional in 2004. The number of employers registered with JobsMalaysia increased from an initial 4610 to 34836 employers in 2007 and the number of vacancies posted during this period increased from 6650 to an incredible 805612 in the same period (MAMPU, 2009b). Growing number of job seekers have succeeded in finding employment through JobsMalaysia.

eKL

While a range of public sector reform initiatives introduced since the early 1980s helped improve the quality of government services, yet Malaysia's ranking in global competitive report has remained far from satisfactory. This is partly because although many of the services are available online they are not well integrated. The recent eKL project is part of the governmental drives to enhance the delivery of government services that meets the demands of globalization and enhances national competitiveness. Launched by MAMPU in 2007 eKL seeks to develop public services through an integrated and connected Klang Valley (MAMPU, 2009a). Based on the theme of 'One Government- Many Agencies' eKL project sought to integrate service delivery across agencies so as to ensure that services are delivered in standardized, systematic and seamless manner(The Edge, 29 Dec, 2008). In other words, it seeks to broaden the scope of sharing of resources and information among government agencies thereby facilitating the provision of end-to-end interactive online services 24X365 via multiple service delivery channels. As such, it pushes for inter and intra-agency collaboration and reengineering process so that the clients are able to access wide range of services offered by various agencies in a far more convenient manner than before.

Under eKL a number of innovations have already been introduced. *MyBayar* is the online payment gateway that offers citizens with a convenient and secured way to making online payment to the government. *MyForms* is the centralized forms directory that makes forms available to citizens and businesses with down-loadable and online submission options. *MySMS15888* - the short messaging system is another channel that enables people on the move to stay connected to government services. It provides two-way communication between government agencies and citizens where governmental information, news and services are made available to mobile phone subscribers anytime and anywhere.

eBario

One of the most significant and widely acclaimed e-government projects in Malaysia is e-Bario. The remote district Bario in the Borneo State of Sarawak is located about 400 km Southeast of Miri. It is inhabited by small farming community of 1000 people mostly of Kelabit ethnic group. Because of its poor communication infrastructure and the rough and rugged terrain the district is only accessible by air from Miri. It takes a minimum of 4-5 days to reach Bario from Miri on land and water routes. The district not only lacks the basic amenities such as regular electricity, piped water and telecommunication infrastructure, most people never saw a computer far less had the chance to use it. Thus while the rest of Malaysia has seen ICT revolution, Bario has remained virtually untouched. The school children in Bario are already disadvantaged both economically and socially and have little or no exposure to the outside world. (Zen et al, 2004). It is against this backdrop that a group of researchers from the Universiti Malaysia Sarawak (UNIMAS) conceptualized e-Bario project seeking to connect the community to the internet with the ultimate objective of promoting their socio-economic development in a sustainable manner. Supported by the State government of Sarawak, the Ministry of Energy, Communication and Multimedia and the International Development Research Centre (IDRC), Canada and the national IT Council the project led to the establishment of two computer labs in local schools (10 PCs at a primary school and 12 PCs at the secondary school) and a publicly accessible telecentre with four computers thus connecting the Bario population to the global information network. Because of lack of regular electricity supply, diesel generators were used to power the computers at the school. On the other hand, the computers at the telecentre have been solar-powered and the Internet access is provided through a satellite using solar powered VSAT system. Thus e-Bario project has successfully tackled a major challenge of connecting a marginalized community to the Internet. The project has shown promising results and impacts. While computer labs have allowed the school children to get access to Internet and telecenters enabled the villagers to communicate and share information with people outside. While the initial costs were borne by the project, revenue generated through telecentre has helped sustain the project. Thus eBario serves as an example of innovation in bridging digital divide. It also demonstrates how public and private sectors can work together to improve the lives of marginalized groups. The success of e-Bario has earned it several awards locally and internationally and inspired similar projects elsewhere.

E-Governance and Service Delivery Innovations: Prospects and Challenges

The preceding discussions show that Malaysia has made considerable inroads in the transforming governance and service delivery through the implementation of e-government programs. The variety of programs initiated and implemented since the mid-1990s have brought about considerable improvements in the way government operates its businesses internally and how it interacts with citizens and businesses. A close look at the ongoing e-initiatives and their impacts reveals a number of promising features/ trends:

1. E-government initiatives have led to a new mode of governance whereby the conventional method of service delivery is being replaced by new methods. The provisions of online services have been particularly convenient as citizens are no longer required to make transactions over service counters, it is possible to make such transactions online using Internet, multimedia kiosks and other channels. Such developments in effect indicate a shift towards people-centered government. Improved access, simplicity and convenience of clients are among the goals of e-

government initiatives. As such, some innovations like SMS mobile technology enable citizens on the move to stay connected to government news, alerts, information and services. Such innovations have not only reduced the distance between the government and citizens they have fostered increased interactions between them.

- 2. The integration of services offered by multiple agencies means that customers are no longer required to visit each and every agency to access services; a single agency is able to provide all these services in a more convenient and hassle-free manner. Thus the members of the public are now able to access better services that are streamlined and integrated. As noted, under e-Services the clients of several public and private agencies are able to access multiple services at one point. Moreover, the availability of services 24 hours a day and 7 days a week means that services are available without any loss of time; service-users are able to access them at their own convenience. Provision of online transactions and multiple payment options have made a huge difference in the way citizens deal with the government. *MyBayer* scheme allows citizens to make payment anywhere and anytime at their comfort through several modes namely direct debit, credit card, prepaid and cash. It also provides them with multiple options: payments can be made online via Internet banking and online payment through *myGov* portal.
- 3. E-government initiatives have also contributed significantly to enhance the efficiency of public agencies in terms of service delivery and variety of other benefits for citizens, businesses and the government alike (Siddiquee, 2008). E-Perolehan scheme has not only reduced the government's procurement costs, but also made the government operations faster and steadier contributing to the satisfaction of all parties involved. For the private contractors e-Perolehan has meant a significant increase in overall efficiency. Given that it has improved transparency in the procurement process it has reduced scopes for corruption. Similarly, *e-Tanah* project offers considerable benefits to all parties involved. It allows the clients to obtain services at single point of contact counter in less than 10 minutes in place of offer 60 minutes previously. Besides promoting public access and convenience in service delivery and reducing scopes for corruption, the implementation of *e-Tanah* project has increased State government revenue in Penang: the revenue from land administration has increased from RM 74.1 million in 2007 to 83.5 million in 2008 (MAMPU, 2009b)
- 4. While today increasing amount of information and transactions are available online, lack of access to ICT especially the Internet impacts severely on the ability of citizens to access such information and services from the government. It is such lack of access to technology that may hinder the socio-economic development of the people especially those in a disadvantaged position socially and economically. Mindful of this the government of Malaysia has made efforts to ensure that equity of access to e-government as well as access to Internet for educational and social purposes. *E-Bario* is a case in point. This along with community based Internet kiosks and similar other initiatives have contributed to increase the access of disadvantaged groups. The SMS15888 service has greatly helped close the digital divide by integrating SMS with agencies databases thus making information and services available to 25 million mobile phone subscribers anytime anywhere. It has not only created an alternative and direct delivery channel (as opposed to counter, online and telephone services) it has eliminated the distance between the government

- agencies and citizens. Such developments are expected to have major impacts in improving economic and social well-being of the poor and under-privileged groups.
- 5. Apart from being seen as a tool with which to improve governmental efficiency, e-government is also viewed as a strategy that helps the government to keep pace with the demands of people and businesses in the fast changing environment. This is particularly true in Malaysia where e-government schemes are expected to increase country's attractiveness as a location of business. Some of the e-government projects facilitate interactions between government and businesses and assist private firms in the development of market and strategic advantage at home and abroad. Projects like e-Perolehan have transformed public procurement, provided greater access to government information and contracts and allowed private businesses to do transactions with government online. Besides efficiency, transparency and timeliness e-Perolehan has opened up possibilities for agencies to expand their businesses to a new level. JobsMalaysia project assists the businesses not only with labor market information they are able to use it to hire the required type and number of employees in a convenient manner. Another innovation Business Licensing Electronic Support System (BLESS) introduced as a one stop service centre assists investors and businesses to obtain information, business licenses and approvals (MAMPU, 2009c). Thus BLESS is expected to promote expansion of business, employment and hence economic growth.

Despite such innovations, promises and improvements, the benefits and impacts of innovations have been less than optimal. Various studies and assessments show that the benefits and prospects of e-initiatives have been undermined by a range of weaknesses and shortcomings. Many of the e-government schemes including e-Perolehan, e-Tanah and eSyariah are all at the early stage of implementation. Although they offer enormous benefits and promises, many of the benefits cannot be derived because of partial implementation of the programs. Evidence shows that currently only a small fraction of the suppliers are active users of e-Perolehan (Kalianan and Awang, 2008). This means that the vast majority of suppliers still use traditional methods and e-Perolehan has yet to transform the public procurement system as envisaged. Benefits of e-Tanah have remained confined in Penang as the project is still far away from being replicated nationwide to transform land administration and offer improved services to the citizens. Secondly, despite relative ease and convenience offered by various e-government projects, many of the service users have low levels of trust with security and privacy issues. Consequently, they are unwilling to send their personal and financial information via the Internet and do transactions with government online (Kaur and Dalila, 2008). Thirdly, notwithstanding e-government initiatives and progresses made digital divide has remained a serious challenge of e-government in Malaysia. This manifests itself in various ways: regional variations, rural vs. urban difference, income difference, language and content of government websites and similar dimensions (see, Feissal, 2005). Finally, MAMPU's own evaluation of the e-government shows that while some e-government programs are not fully utilized, others are not user-friendly especially to new users. It also shows that the progress of e-initiatives is thwarted as they are facing high turnover of skilled and experienced staff, high costs of development and implementation of new programs and inadequate plans for knowledge transfer (MAMPU, 2009b). All this poses a huge challenge to goals and visions of e-government. However, the international experience shows that there is hardly any quick fix for such challenges. What is important in the current context is the continuous drive on part of the government to identify and tackle the challenges and pitfalls. It is encouraging to note that in Malaysia there is no shortage in the resolve and enthusiasm to carry the task forward.

References

Feissal, T. M. F (2005). 'Issues of Digital Divide in Malaysia: Challenges in Closing the Digital Gap', INTAN Management Journal, 7(1): 81-108.

Kalianan, M. and H. Awang (2008). 'ICT to Enhance Administrative Performance: A Case Study from Malaysia', *International Journal of Business and Management*, 3(5): 78-84

Karim, MRA and N.M. Khalid (2003). E-Government in Malaysia, Subang Jaya: Pelanduk Publications.

Kaur, J. and N. Dalila (2008). 'Malaysian Electronic Government Adoption Barriers', *Public Sector ICT Management Review*, 2(1): 38-43.

MAMPU (1997). *Towards a Vision for a New Electronic Government in Malaysia*, MAMPU/Multimedia Super Corridor.

MAMPU (2009a). Electronic Government: Transforming Lifestyles, MAMPU: Prime Ministers Department

MAMPU (2009b). Malaysia - Electronic Government Report, 2008/2009, MAMPU/PMD.

MAMPU (2009c). Business Licensing Electronic Support System (BLESS), InfoEG, 2: 5-7

Siddiquee, N.A (2008). 'E-Government and Innovation in Service Delivery: The Malaysian Experience', *International Journal of Public Administration*, 31(7): 797-815

Zen, H. et al. (2004). Bridging Digital Divide- the e-Bario and e-Bedian Telecommunication Framework', in Khalid, H.M., M.G. Helander, and A.W. Yeo (eds). *Work with Computing Systems*, Damai Sciences: Kuala Lumpur: 277-281.

United Nations (UN) (2008). *E-Government Survey- From E-Government to Connected Governance,* New York.