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Innovations in Governance and Service Delivery: E-Government Experiments in Malaysia

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Introduction

The recent advancements in the field of information and communication technology (ICT) have opened up huge opportunities for governments and businesses alike to transform their operations and service delivery systems. They have also contributed to heighten public expectations and demands for increased and quality services from their respective agencies/service providers. Consequently, the governments world over have been forced to undertake programs and projects for ICT application in their operations aiming to inject speed and ease in service provision and thus achieve greater productivity and excellence. Commonly known as e-Government, the drive has become a major feature of the current administrative reforms globally. Increasing, it is seen and introduced as a popular strategy for transforming the delivery of public services, improving the performance of public institutions and making them more responsive to public needs. So popular is its appeal today that it is hard to find a government that has not initiated some programmes in terms of ICT application and online service provision (UN, 2002; Saxena, 2005). Despite differences in terms of their level of implementation such initiatives share some common objectives: they all seek to provide the citizens with more convenient access to information and services, improve the quality of services offered and enhance efficiency, transparency and accountability of the government (Commonwealth Secretariat, 2002). While the advanced countries like USA, UK, Canada and Australia have already achieved a remarkable success in their drives for e-Government and improved service delivery, in developing countries such attempts have produced only modest results. This is largely because, in the later case, e-Government initiatives have often been handicapped by a plethora of constraints and challenges (UN, 2004). This paper examines and analyzes Malaysia’s experience with e-Government and its impacts on service delivery. However, it begins with a brief overview of conceptual issues.

Conceptualizing E-Government

Generally speaking, e-Government refers to the use of technology in government institutions and operations to enhance access to and delivery of public services. Government agencies are neither insulated from the practices of the private sector nor can they ignore the rising expectations of their clients. As the private sector has taken the lead in ICT adoption and delivery of services electronically, the public organizations have found themselves under growing pressure to embrace new technologies to be able to perform better. The citizens, having experienced the ease and flexibility of online services delivered by private banks and a host of other agencies, started clamoring for similar improvements in public delivery systems. Their demands received further strength as a growing number of academic and professionals have made a strong case for e-Government. Such demands and advocacies have had a profound impact on government policies and decisions. Thus, e-Government represents governmental response to public demands and expectations for enhanced and better services by exploiting emerging technologies. Often used interchangeably with ‘digital government’, ‘networked government’ or ‘government online’, e-Government has been subject to various interpretations and definitions. However, a key element in all these definitions is the application of new technology - especially web-based Internet as a tool for enhancing public access to and the delivery of government services. Though e-Government has several other manifestations, in its ultimate form it entails ‘a process whereby the government agencies at various levels transact their businesses with clients online, strategically addressing client and internal business needs through the application of new ICT tools’ (NOIE, 2002). As a matter of fact, currently most writers see e-Government as electronically executed transactions between the government agencies and citizens. Therefore, e-Government is much more than just the application of technology since it seeks to improve both internal operations and external interface of the government by transforming the process in which public services are generated and delivered and the entire range of relationships that public bodies have with citizens, businesses and other governments (Leitner, 2003). It is about how the organizations in the public sector perceive and apply technology in order to bring about transformations in service provisions as well as in their relations with service users.

Since e-Government is seen as a means to promote efficiency in government operations and improve the delivery of public services, typically e-Government focuses on the following dimensions seeking to bring
about major changes in the quality of services, nature of interactions and governmental relations with relevant stakeholders.

Government to Citizens (G2C): Here the aim is to facilitate citizens’ interaction with the government through the development of user-friendly ‘one-stop’ centres offering high quality services.

Government to Business (G2B): This seeks to expedite business transactions between government and private agencies through improved communication and connectivity.

Government to Government (G2G): Here the focus is sharing data and conducting electronic transactions between governmental actors. This includes both intra and inter-agency interactions between employees, departments, ministries and even other governments (Yong, 2003).

E-Government programmes initiated thus far in most societies are essentially geared towards effecting changes in one or more of these dimensions. Clearly, these dimensions demand an effective and efficient networking of government agencies, citizens, and businesses so as to evolve a collaborative environment. It is only through this connectivity and collaboration between/among various parties and agencies that the goals of offering efficient, high quality services to the citizens and businesses can be achieved.

Although, e-Government is quite popular and promising, it is neither magical nor an automatically occurring phenomenon. It calls for a multitude of changes in terms of organizational structures, business processes, tools and strategies used and the relationship between the government and those governed. Hence, the transition from government to e-Government is far from easy and straight-forward; it is an evolutionary process - usually characterized by five major stages of development. The first, the country’s commitment to becoming an e-Government player is reflected in the presence of government in the Internet. Commonly known as the emerging presence stage, it is characterized by the existence of government websites providing the citizens with some information that are basic and limited. Most information available on the web remains static with few options for the citizens. In stage II - known as enhanced presence - greater amount of information on public policy and governance (e.g. policies, laws, regulations, reports, newsletters) are provided with downloadable databases. Though more sophisticated, interaction is primarily uni-directional with information flowing from the government to the citizens. In the interactive phase (stage III), the citizens are able to interact with the government via Internet and a wide variety of services are available online. Hence, the people are also able to search for specialized database and download forms and apply for services like tax payment, application forms for license renewal etc. online. To give the people current and up-to-date information, websites are regularly updated. This is followed by transactional stage (stage IV) where complete, secure and two-way transactions between the citizens and government is possible for a range of services like obtaining visa, passports, licenses, permits renewals, payment of taxes and other C2G interactions using online methods. Providers of goods and services are able to bid online for public contracts via secure links. Stage V represents the most sophisticated level, characterized by an integration of services delivered and the institutions offering them. Known as the integration phase, it seeks to remove the physical barriers and offer most, if not all, public services in a seamless fashion. Also, here the government encourages participatory decision making to involve the society in two-way open dialogues and uses interactive features to solicit citizens’ views on public policy, law making and a variety of issues (Yong, 2003; UN, 2004).

E-Government in Malaysia: Innovations in Governance & Service Delivery

In line with the global trend Malaysia has also embarked upon elaborate programmes seeking to improve the state of governance and service delivery systems through the application of emerging technologies. One of the early initiatives in this regard is the introduction of public service network in the early 1990s. As a step towards ICT application in the government and networking and integration of service delivery, this program has enabled the post offices throughout the country to act as one stop bill payment centres and provide other services. Services like renewal of various licenses, stamping and payment of road-tax for motor vehicles were made available at the same counter of post offices throughout the country.
Subsequently, additional services like the payment of local government assessment rates, sewerage charge and a number of private sector services have been added to make it convenient for the members of the public. The experience of the PSN model has encouraged the privatized utility agencies like Telekom Malaysia and Tenaga Nasional Bhd. to follow similar models. While the PSN initiatives have prepared the ground for a more integrated service delivery through information sharing and networking, the establishment of the Multimedia Super Corridor in 1996 is seen as a major landmark in Malaysia’s drive for e-Government and improved service delivery. The MSC is conceived as a principal vehicle for achieving a knowledge-based society through fusion of ideas in management, research in technology and dissemination of information and multimedia based products and services. Though computerization in both private and public sectors began much earlier, it was the MSC that essentially set off the process of a more robust implementation of e-Government initiatives. In order to achieve the objectives of MSC, a total of 7 flagship applications have been identified for implementation.

E-Government is one of the leading flagships applications of the MSC project. It aims at reinventing how the government works as well as improving the quality of its interactions with citizens and businesses through improved connectivity, better access to information and services. It envisons not only an efficient system of administration and service delivery but also a collaborative environment where the government, businesses and citizens will work together for the benefit of the nation as a whole (Karim and Khairuddin, 1999). Such a vision calls for reinventing government through the application of ICT and multimedia and making the governmental agencies more efficient, effective and consequently more responsive to the needs of the citizens. Thus the ultimate objective of e-Government is to achieve public service excellence by reducing paperwork and streamlining public service processes so as to enable the citizens to access public services anytime and from anywhere. It is to lead to dramatic improvements in service delivery systems for the outcomes e-Government is expected to achieve include convenience, speed, choice, accessibility and responsiveness (Khalid, 2004).

While initially five pilot projects were selected for the first phase of implementation, subsequently more projects were added to cover all three types namely intra-agency, inter-agency and government to citizens/businesses service applications. Thus currently a total of eight projects of e-Government flagship applications are at various stages of implementation/roll-out. These are Electronic Services (E-Services), E-Procurement (EP), General Office Environment (GOE), Human Resource Management Information System (HRMIS), Project Monitoring System (PMS), Electronic Labour Exchange (ELX), EG-AG Integration and E-Syariah. Here we focus on a few of these applications and some MSC flagships that have significant bearing on service delivery.

E-Services

E-Services scheme was among the five pilot projects chosen by the government for the first phase of the implementation. The primary objective of this project is to enhance service access through multiple electronic delivery channels that are widely accessible to the public and one stop service windows where multiple services can be obtained at each delivery channel. Under the scheme, the citizens are able to conveniently access the services offered by a variety of departments/agencies: issuance and renewal of driving licenses, payment for summons, payment of electricity, telephone and internet bills are available at one point (Karim and Khalid, 2003). Also, there are provisions for multiple electronic channels as services are also available through Internet, multimedia kiosks, IVR telephone and wireless devices with facilities for payment using credit card, debit and ATM cards and other modes of payment. Thus the citizens are provided with a choice of multiple delivery channels with 24 hours a day and 7 days a week. In other words, they are no longer required to conduct transactions at agency branches and utility offices; they can do so from anywhere at their convenience. To make it more user-friendly, multiple language capabilities for each access device has later been introduced. The implementation of the project has resulted in, apart from ease and public convenience, significant improvements in public service delivery. It has encouraged the users to be more responsive in paying their bills (Karim, 2003:196).
**E-Perolehan (E-Procurement)**

Given that the government in Malaysia is a major purchaser of goods and services from the private sector spending a total of RM 35 billion annually, e-Procurement project has been launched with the objective of ensuring value for money as well as transparency and accountability in the public procurement process. The project seeks to reengineer and automate the existing manual procurement system within the public sector to transform it into an online marketplace for suppliers and government agencies. Under the project initiated in 1999 and implemented in phases, the government and suppliers are allowed to conduct procurement activities electronically. It allows the suppliers to present their products on the internet, receive, manage, and process purchase orders and eventually receive the payment from government agencies via Internet. It allows the government agencies to approve and submit the purchase orders and also select items to be purchased, initiate approval process - all electronically. Thus, e-procurement system supports the entire procurement cycle from submission of tender/contract to approval and payment including alert notifications to the potential bidders. For the government, it would lead to cost savings through shortened procurement cycle (due to electronic retrieval and submission of quotations) and the creation of centralized products and supply databases across agencies. It will also enable the government to be smart buyer as well as improve control and accuracy in ordering and billing process. The suppliers – small or large - will also benefit from increased transparency and faster and accurate payment through electronic fund transfers (Karim and Khalid, 2003). With the creation of electronic catalogue with internationally recognized product classifications, suppliers will also be able to reach new customers on a global scale.

**Electronic Labour Exchange**

The Electronic Labor Exchange (ELX) was launched in 1999 as a new e-Government pilot project that aims at serving as the nation’s single source of labour market information for the government agencies, businesses and members of the public. The three applications of EXL viz. Job Clearing System, Labour Market Database, and the Office Productivity System permit the registration of job-seekers and employers, job matching and the generation of profile of candidates for prospective employment, consolidation of labour market data from various sources and a variety of other functions. Thus the EXL serves as a one-stop centre for labour market information facilitating sharing of such information by various parties both locally and overseas. Such availability of information enables the Malaysian students studying overseas and potential foreign investors to make informed decisions about their career and investment respectively. It also helps improve mobilization of human resources and optimize manpower utilization through systematic matching of job-seekers and job-vacancies (Karim, 2003).

**Government Multi-purpose Card (MyKad)**

The Government Multi-purpose Card, commonly known as MyKad is one of the major innovations promoted by MSC. With the introduction of MyKad (which is to replace the old identity card) in 2002, Malaysia has become the first country in the world to have a multipurpose smart card that facilitates transactions with government agencies and private organizations. The single smart card contains the owner’s identity code, electronic signature in a plastic card with an embedded micro processor chip. The national identification document and driving license are combined into one card that serves as a key to managing access to many other services. Instant passport information facilitates efficient exit and re-entry of Malaysians at immigration checkpoints; health information available on MyKad is found to be extremely useful as instant source of personal health data during emergencies and general treatment. E-cash facilities enable cashless financial transactions at government agencies, restaurants, clinics, bookshops, and petrol stations throughout the country. With additional facilities currently being added, MyKad is expected to serve as a vehicle of convenience in all aspects of the Malaysians’ life (Karim, 2003).

**Telehealth**

One of the major flagships of MSC telehealth project is aimed at promoting Malaysia as a leading regional centre for tele-medicine. It also seeks to widen public access to healthcare facilities as well as their knowledge of healthcare. A key element of the project is to link the rural clinics with medical experts in the
city and renowned clinics worldwide using new tele-instruments for remote diagnosis (Karim and Khalid, 2003). Thus the project is essentially geared towards developing an efficient and user-oriented healthcare system. Both public and private healthcare agencies will be involved and connectivity will be ensured via Internet access and call centres. Thus once completed, the project is expected to transform the country’s healthcare system so as to ensure integrated, accessible and high quality healthcare services to the citizens. Four pilot projects are being currently implemented in areas spanning from provision of health information/education to the public to distant healthcare consultation and referrals. It is expected that full implementation of this project will allow individuals to manage their own personal health and eventually lead to an integrated and user-oriented health care system.

Since e-Government is high on the agenda of the government, it has received strong financial, institutional and legal supports. The massive revised allocation made for the development of ICT and e-Government projects to the tune of RM 7.7 billion under the Eighth Malaysia Plan (EPU, 2003) clearly reflects the government’s commitment to develop this sector. The government has also developed necessary institutional framework and coordination mechanisms with regard to e-initiatives. At the highest level, is the powerful e-Government Steering Committee (EGSC) vi responsible for providing policy directions, approving e-Government programmes and activities, and monitoring their implementation. The Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) serves as the secretariat of the EGSC besides acting as the central agency in planning and devising e-Government initiatives. Also there are IT Councils at national as well as state levels. The National IT Council (NITC) represents the highest forum that acts as a think-tank advising the government on relevant strategies. At the agency level, the post of Chief Information Officer (CIO) has been created with the task of overseeing the implementation of ICT agenda in respective agencies. He is also to determine the strategies for achieving the vision and business needs of the organization, provide leadership and direction, coordinate and allocate resources and keep abreast with new knowledge and continuous change in the field of ICT (MAMPU, 2000).

The implementation of e-Government in Malaysia has taken a holistic approach encompassing elements such as applications, networks, security, process engineering, operations and support, change management and skills and knowledge (see, Karim and Khalid, 2003). Four guiding principles have been identified namely, collaboration between public and private sectors, sharing of data and information, customer satisfaction and data/information security (UNESCO, 2002). In keeping pace with developments in ICT infrastructure and usage the government has also introduced a set of legislations that are essential to curb abuse in the new digital environment. These laws cover such issues as information security, integrity and confidentiality, legal recognition of online transactions and the protection of intellectual property rights vii.

Since the development of adequate infrastructure is critical in realizing the full benefits of ICT revolution and the vision of e-Government, the Malaysian government has made continuous efforts to develop and strengthen necessary infrastructure in the country. The Government Integrated Telecommunications Network (GITN) is a major step towards this end. The Civil Service Link (CSL) established in 1994 as a tool to disseminate government information to the public has later been upgraded and renamed as Malaysian Civil Service Link (MCSL). Further improvements are now underway to replace it with the Malaysian Government Portal or myGOV that will serve as a single gateway for gaining access to all government services and making online payments. Continuous efforts are being made by the government to encourage agencies to create and use their websites as a means to diversify public service delivery mechanisms. At present, virtually every agency in the public sector maintains its own website displaying some key information. Evidence shows that not only the quality of websites and the types of information available have improved, but also an increasing number of people have visited these websites (Nair, 2002).

The pervasive nature of ICT and the demand for skills and knowledge in the emerging technology have posed a serious challenge to the governments worldwide. The smart school flagship of MSC is intended to address such critical challenge of manpower needs. Equipped with multimedia technology, the smart schools are to prepare students for ICT era and develop a new generation of graduates who are creative, innovative and capable of utilizing ICT to leverage the wealth of information and knowledge in the
information age. With the same aims and objectives in mind, a new Multimedia University has also been established. The government is investing heavily in high quality and comprehensive education system designed to meet the demands of the evolving workplace. Training institutions like the National Institute of Public Administration (INTAN) have made sustained efforts to equip the public servants with relevant knowledge, skills and attitudes. As an organization responsible for creating a critical mass of ICT users to support e-Government initiatives, INTAN has undertaken various other programmes. The government has also been aware of the widening gap between 'IT-haves' and 'have-nots' within the community and between the urban and rural areas and the potential dangers it poses. Therefore, programmes like Medan Infodesa, Internet Desa, Pondok Harmoni and the establishment of e-Services kiosks at community and public areas have been launched aimed at bridging the digital divide. While Medan Infodesa provides training and hardware to rural communities, the Internet Desa and Pondok Harmoni entail the supply of PCs and Internet access to rural communities.

E-Government and Service Delivery: Achievements & Limitations

Malaysia has made concerted and sustained efforts towards ensuring the successful implementation of e-Government. Apart from the implementation of various e-Government flagships, Malaysia has developed and put in place institutional frameworks and coordination mechanisms all these supported by necessary guidelines and ICT policies and legislations. The government has also embarked upon various novel initiatives to reinvent itself and its service delivery, empower state and local authorities to ICT application and set up special committees to oversee the implementation of e-Government initiatives. It has also adopted various strategies and schemes to enhance ICT literacy and skills in the society in an attempt to support the application and diffusion of ICT. The smart school initiative under the MSC project, responds to the manpower and skills needed to make the transition from an industrial to knowledge based economy. Since much of the e-initiatives are still either in the process of pilot testing or at the initial stage of roll-out, it is too premature to make any definitive judgment on their impacts. However, initial indications suggest that they have quite favorable impacts on governance and service delivery.

In line with the objective of providing efficient and quality services to the public electronically, various ministries and agencies within the government have, as noted earlier, introduced websites. Virtually every agency in Malaysia has its web-presence which displays its vision, mission, objectives, charters, services available and a host of other useful information for its clients. As more and more information are being posted, the citizens also increasingly find the websites as useful source for downloading relevant information. Given that such websites often allow the members of the public to express their views and opinions about the quality of services provided and lodge their complaints/grievances, these also serve as effective tools for public consultation and engagement (Khalid, 2004). Some agencies have gone beyond this stage by offering services online thereby allowing the members of the public to use the facilities and services in a far more convenient manner than before. The Ministry of International Trade and Industry (MITI)'s e-portal is a case in point. It has not only enhanced sharing of trade-related information and resources, but also expedited the approval of licenses and permits. The potential entrepreneurs now can obtain useful information and guidelines on how to start a business and get it registered all online (EPU, 2003). Similarly, the introduction of STS self-assessment and e-calculation systems by the Inland Revenue Board allows tax payers to access online information, perform self-assessment as well as submit tax returns in a more convenient way. Such initiatives are said to have helped modernize and streamline the tax administration and contributed to enhance the level of income tax compliance (Aziz, 2003).

Thus e-Government initiatives have led to a new mode of governance whereby the conventional method of offering services at office counters is being increasingly replaced by new methods. Provisions for online services have been particularly convenient as the citizens are not required to make transactions over the service counter of the agency; it is possible now to make such transactions online using Internet, multimedia kiosks and other channels. The integration of services offered my multiple agencies means that the 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. Therefore, the members of the public are now getting better services that are often streamlined and integrated with other services offered by government and private agencies. As elaborated earlier, under the E-Services
system, 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. In some case, long queue at service counters has now become a matter of the past. Even those members of the public not electronically connected at home may conduct the business with government agencies by using community based centres/kiosks. While the customers and businesses enjoy the convenience and ease of accessing multiple services at one point, such networking of services has relieved the departments and agencies of excessive workload. They can now focus on control and data integrity while leaving the onerous job of direct delivery of services to a network of providers.

Similarly, the telehealth project marks a new chapter in country’s healthcare system especially in rural and remote areas. Now available in 41 clinics, the programme offers remote diagnosis and consultation as well as continuous medical training through the use of virtual resources (EPU, 2003). The patients from these areas are no longer required to make expensive and often troublesome trips to major urban centres and even overseas to seek consultation and medication from specialist physicians; such facilities are now made available locally for their benefit. Likewise, National Registration Department’s MyKad already issued to over 15 million Malaysians (New Straits Times, 25 April, 2005) has become truly a vehicle of convenience in a variety of areas. While information like personal identification, driving license, health and passport details facilitate a number of functions related to government, with cash, touch-n-go and ATM facilities it also enables them to make transactions with private agencies.

E-Government initiatives are also contributing significantly to enhance the efficiency of public agencies in terms of service delivery – the benefits of which are enjoyed by citizens, businesses and the government alike. E-Procurement by government ministries is not only reducing the government’s procurement costs but also making the operations faster and steadier contributing to the satisfaction of all parties. For the private contractors, the introduction of e-Procurement has meant a significant increase in overall efficiency since it has led to the reduction of the time taken for application for registration and approval of supplies from 36 days to 20 days; number of lost supplier registration documents has fallen from 5 to 1 percent (Karim, 2003). Similar improvements have been reported elsewhere: it now takes the Immigration Department just two days to issue an international passport while time taken for the same task was eight weeks prior to the introduction of e-Government (Aziz, 2003). E-Government has also improved the efficiency of port authorities and Customs Department considerably. The Electronic Data Interchange (EDI) enables the port authorities across the country to process applications for import and export in a nearly paperless environment.

Despite such gains and silver linings in service delivery and governmental efficiency, the overall impacts of e-Government in Malaysia have remained limited. E-Government has promised a lot, but for bulk of the population such promise could not be realized because of some serious constraints and limitations, as shown below.

While the potentials of ICT in general and e-Government in particular are enormous for both government and the citizens, the unlocking of such potentials requires sufficient ICT infrastructure including the presence of computers, telecommunications capacity in terms of wireless and broadband networks, among others. Therefore, the lack of such infrastructure or inadequate infrastructure and capacity will seriously hamper the delivery of services through Internet. Although Malaysia fares well in terms of her ICT infrastructure when compared with the regional average (Karim, 2003) and those of developing countries generally, the facilities have still remained poor in overall terms. This is clear when Malaysia’s position is compared with those of the regional leaders. As table 1 shows, in terms of most vital infrastructure like ownership of personal computers (PCs), access to Internet and telephone connections Malaysia is lagging far behind South Korea, Australia and the neighboring Singapore. Consequently, Malaysia’s score in Global E-Readiness Index and E-Readiness Rank have been notably poor, although significant progress has been made over the years.

<table>
<thead>
<tr>
<th>Internet User</th>
<th>PCs (per Population)</th>
<th>Online</th>
<th>Telephone (per 000)</th>
<th>Mobile phone</th>
<th>TV sets</th>
<th>E-Govt. Readiness</th>
<th>E-Readiness</th>
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Table 1: E-Government Readiness in Malaysia and Selected Countries in Asia Pacific Region
Despite governmental initiatives and strong emphasis put on multimedia, broadband usage level has remained relatively low (Yong, 2003). In fact, apart from the corporate sector and government departments/agencies, number of households with broadband connections in Malaysia has been negligible. This explains why Internet penetration rate has been slow and the proportion of population receiving benefits of e-Government initiatives has not been high. There are also regional variations and variations across socio-economic groups. Because of inadequate ICT infrastructure Internet facility is not easily and widely accessible to all and from all parts of the country. While, services are generally accessible in Klang Valley and in major urban centres, those from other areas and especially in geographically isolated regions are not that fortunate to access many of the services online. Poorer groups and people with economic and social disabilities have neither the capacity nor the ability to use online technologies. The programmes like *InfoDesa* and *Internet Desa* are yet bring a significant proportion of rural population under their coverage. In some areas problems of electrical power makes the job even more difficult (Yong, 2003).

A study on the adoption of ICT in the public sector and its impacts on service delivery in Malaysia observes that in most cases ICT has been deployed in internal processes or what is known as backroom operations. These activities remain invisible to the public although they directly affect the services provided to them. It further observes that the delivery of services through special kiosks is highly limited and so is the delivery of services via Internet (Abdullah and Ahmad, 2001). Although things have certainly improved since then, evidence shows that the progress has been rather slow especially with regard to online delivery of services. Still, many agencies use ICT more to facilitate their internal operations than to augment online delivery and transactions. Consequently, large majority of services continue to be offered through traditional methods. Even in terms of level of information access and dissemination between government and the citizens Malaysia is still considered low (Karim, 2003). This is also evident in Malaysia’s overall e-Government maturity level. As the following table demonstrates, compared with those of world and regional leaders of e-Government Malaysia’s e-maturity has been particularly low. While it comes as no surprise that countries like Singapore, South Korea and Australia have higher e-maturity scores than Malaysia, it is striking to note that with their respective e-maturity scores of 53.6 and 50.4 even India and Thailand stand ahead of Malaysia (46.4). A close look at the table also shows that Malaysia has still remained somewhat bogged down between stage II and stage III. This basically suggests that while government websites provide some useful information and some services are made available online, the scopes for transactions between citizens and government and service delivery in a seamless fashion are extremely limited. Therefore, more robust policy initiatives are called for to tackle such challenge and improve public access to services significantly.

### Table 2: E-Government Maturity of Malaysia vis-à-vis World and Regional Leaders

<table>
<thead>
<tr>
<th></th>
<th>Stage I</th>
<th>Stage II</th>
<th>Stage III</th>
<th>Stage IV</th>
<th>Stage V</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A.</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>92.7</td>
<td>77.8</td>
<td>94.5</td>
</tr>
<tr>
<td>U.K.</td>
<td>100.0</td>
<td>97.7</td>
<td>94.0</td>
<td>92.7</td>
<td>77.8</td>
<td>92.0</td>
</tr>
<tr>
<td>Singapore</td>
<td>100.0</td>
<td>95.4</td>
<td>98.8</td>
<td>85.4</td>
<td>77.8</td>
<td>91.6</td>
</tr>
<tr>
<td>S. Korea</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>70.7</td>
<td>68.5</td>
<td>89.4</td>
</tr>
<tr>
<td>Australia</td>
<td>100.0</td>
<td>93.1</td>
<td>91.7</td>
<td>61.0</td>
<td>44.4</td>
<td>78.5</td>
</tr>
<tr>
<td>India</td>
<td>100.0</td>
<td>73.6</td>
<td>70.2</td>
<td>17.1</td>
<td>16.7</td>
<td>53.6</td>
</tr>
<tr>
<td>Thailand</td>
<td>87.5</td>
<td>79.3</td>
<td>50.0</td>
<td>0.0</td>
<td>37.0</td>
<td>50.4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>100.0</td>
<td>67.8</td>
<td>53.6</td>
<td>17.1</td>
<td>14.8</td>
<td>46.4</td>
</tr>
</tbody>
</table>

Despite all the improvements and continuous efforts that are being made, it is not uncommon to find web-links that are either non-functional or under construction or have not been updated for a long period of time. In some cases, no multi-lingual options are available, despite professed policy in this regard. Road Transport Department’s website available only in Bahasa Melayu is not user-friendly especially those not adept in local language. Inland Revenue Board’s e-Payment is yet to be functional; Immigration Department only provides downloadable forms with no provision for e-lodgment for new passports, renewal of existing ones. Likewise, the benefits of e-procurement can not be fully enjoyed by either the government agencies or the suppliers since a very small fraction of total government contacts are managed online. Only 1000 out of total 4288 government agencies are currently using e-procurement. Likewise, out of over 35000 suppliers nationwide, only 500 have been IT enabled i.e., equipped with smart cards that allow them to do transactions electronically (Yong, 2005). One may find a host of other anomalies and limitations of the present e-Government programmes.

Conclusion

Malaysia is among the leading countries in the developing world to embark upon huge e-Government programmes. The unwavering support from the leadership of the country and generous allocations for the development of ICT sector in general and e-Government in particular has helped build necessary e-government infrastructure and facilities. The various e-Government and MSC projects that are currently being experimented and rolled out have shown enormous promises in different spheres. The provision for online services has made a fundamental difference in public access to government information and facilities. The distance between the government and the citizens has been reduced and the members of the public are able to obtain services conveniently without any loss of time. Thus it has signaled a new relationship between the government and the citizens. The old relationship characterized by rigidity, long delays, unnecessary complexity and public sufferings is being replaced by a new relationship, which is characterized by speed, enhanced public access, reduced cost and public ease and convenience. The e-initiatives have not only helped the agencies to be more efficient and effective in their operations but also be more responsive to the needs of their respective clients. The websites maintained by most public agencies not only provide information about their activities and programmes, many of them also offer feedback options thereby allowing the members of the public to express their views, needs and problems. Though it is difficult to ascertain the impact of such feedback on government policies and decisions, mere presence of such provisions indicate an increasing public orientation on part of relevant agencies.

However, as the paper shows, despite such promises and positive trends, the overall impact of e-Government in Malaysia has remained limited due to a plethora of infrastructural constraints and the slow pace in e-Government implementation. Presently, Malaysia is placed behind many other developing countries in terms of e-readiness and e-maturity levels. Broadening public access to ICT significantly and bridging the digital divide in the society represents major challenge for the Malaysian leadership. Recent policy measures initiated by the government allowing EPF contributors to withdraw a portion of their savings to purchase computers as well as interest free computer loans for civil servants are steps in the right direction. Likewise, the initiatives to enhance community access to Internet in both urban and rural areas through publicly provided facilities are bold attempts at leveling the access gap. However, much more needs to be done in terms of widening public access to e-Government and Internet facilities in other remote areas. While infrastructure is critical, people also need awareness, skills and motivation to make use of such facilities. Training in e-technology is necessary for senior citizens both in rural and urban areas so that they can make use of e-kiosks and other new channels.

References

Economic Planning Unit (EPU) (2003), *Mid-Term Review of Eighth Malaysia Plan*, EPU; Prime Minister’s Department.


**Notes**

1 E-Government has been presented as something that is likely to remedy many of the ills of public sector management. It has been argued that e-Government will reduce costs and delays in service delivery, widen citizens’ access to government information and services, reinforce innovations in public agencies and increase transparency and accountability, among others (Pardo, 2000; Yong, 2003).

2 It is, in fact, a part of government’s larger policy objective which seeks to develop Malaysia as a regional and global hub for ICT and multimedia.
iii The MSC is a 750 square km area spanning from the KL city centre project in the north to Putrajaya in the south and extending to KLIA in Sepang. Located within this corridor are two smart cities Putrajaya – the new seat of the federal government and Cyberjaya – the site for ICT companies investing in the country. Apart from providing the best ICT infrastructure and high quality multimedia test bed, the MSC also offers access to and opportunities for sophisticated R&D, a set of cyber laws and the benefits of modern and futuristic lifestyle with new highways, high quality houses, schools, shopping malls and business and recreation centres.

iv These are e-Government, Telehealth, Government Multipurpose-card (Smart Card), Smart School, R&D Cluster, World Wide Manufacturing Web and Borderless Marketing. The implementation of these flagships is expected to improve the nation’s productivity and competitiveness through the use of multimedia technology.

v The agencies involved in this case are Road Transport Department, Ministry of Health, Tenaga Nasional Bhd., Telekom Malaysia Bhd., and the Police Department.

vi Chaired by the Chief Secretary to the government, the committee members include representatives from Economic Planning Unit, Implementation and Coordination Unit, INTAN, Treasury, Ministry of Energy, Communication and Multimedia, MAMPU, Office of the Attorney General, Public Service Department, and Multimedia Development Corporation.


viii During 2001-2003 period, a total of 16 Internet Desa and another 15 InfoDesa were established nationwide which now function as one-stop centre for information and government services (EPU, 2003).