

Hybrid Approach of e-Government on Malaysian e-Government Experience

Razlini Mohd Ramli

Abstract—Many governments in the world believe that a new wave of Information and Communication Technology (ICT) will have a significant impact on their administration. The Malaysian government embraced the idea of e-government enthusiastically by introducing Multimedia Super Corridor (MSC) in 1996. By adopting the notion of e-government, the government's image of a better and more modern government may be enhanced, forming new ways of managing public services whilst improving the efficiency of government apparatus. This study presents the status of implementation of e-government initiatives in Malaysia and a hybrid approach that may well suit the Malaysian government in managing e-government will also be discussed in this paper.

Index Terms—competence, e-government, hybrid, Malaysia

I. INTRODUCTION

The emergence of e-government does not come out of the blue. Rather, it has become a mantra that has been chanted by all governments all over the world to enhance services and perfect their governing processes. As a result, the internet has changed the way in which the government interacts with citizens and businesses, and has also had a significant impact on government administration and operations. The Malaysian government embarked upon this notion under the Multimedia Super Corridor (MSC) initiatives, which were launched in August 1996 [1] with e-government as one of its flagships. She believes that by embracing this notion it could improve the quality of public services, making them more efficient and effective, and also increases productivity in the economy by maximising the use of information and communication technology (ICT) within the governmental system. This was championed by Silcock's point of view [2] that this can transform government administration to be more responsive, open and cleaner. Not only has it become the heart of the government's agenda, but it is also of prime significance in terms of public value.

Therefore, in this paper the author will give an overview of e-government and Malaysian e-government. Next, the status of three e-government projects in Malaysia (e-syariah, e-land and pemudah (e-business), which represents the relations with Government to Government (G2G), Government to Citizen (G2C) and Government to Business (G2B) respectively will be presented. From here, an appropriate approach to e-government management will be introduced in this paper as

a suggestion to smooth the implementation of Malaysian e-government

II. OVERVIEW ON E-GOVERNMENT

E-Government is becoming a global phenomenon that has created numerous views and opinions about how it is to be understood and how to execute the notion so that it has an impact on people's lives. This can be seen in the different definitions of e-government that abound in the literature, for instance;

‘.....it is the use of technology to enhance the access to and delivery of government services to benefit citizens, business partners and employees....’ [3]

‘E-Government is the delivery of government information and services through the Internet 24 hours a day, seven days per week’ [4].

‘.....the use of ICTs, and particularly the Internet, as a tool to achieve better government’ [5]

‘ We therefore define e-government as public organizations’ use of modern ICTs, especially Internet and Web technology, to support or redefine the existing and/ or future (information, communication and transaction) relations with stakeholders in their internal and external environments’ [6]

‘It has the power to shape new mode of public service where all public organization deliver a modernized, integrated and seamless service for their citizens’ [2].

Despite having numerous debates on e-government interpretations, the notion undoubtedly contributes to the same aim of enhancing the relationship between government, citizens and businesses. It is unique in the way the ubiquity of the technology can improve the ways government do its business. It has become known as a means whereby administrative reform can transform every facet of government operations both externally and internally [7]. While government sees the notion as a new method of transforming its operations, citizens portray it as an indispensable tool which offers a wide range of channels for delivering government services and pledges for services to be more convenient, personalised, more accessible, more responsive, quicker, with lower transaction costs, greater flexibility leading to more efficiency. Hence it can lessen common complaints directed towards government services, for instance the problem of ‘red tape’ producing inconvenient

Manuscript received June 5, 2012; revised July 9, 2012.

Razlini Mohd Ramli is with School of Social Sciences, University Science Malaysia, Malaysia, but currently pursuing PhD in Lancaster University, United Kingdom (e-mail: mohdramli@exchange.lancs.ac.uk).

and inefficient services. Meanwhile, in the business context, e-commerce or e-business will make the business world even more efficient and brings customers closer to businesses. Moreover, government can start using e-procurement applications which make the process of getting supplies and transacting business much easier.

III. MALAYSIAN E-GOVERNMENT

The main aim of e-government policy in Malaysia is to increase efficiency and effectiveness of government administrative machinery using information and communication technology and to propel the country into the information age. This is to enhance quality of services by reinvigorating relationship with citizens and businesses as well as making the government more responsive to citizens' needs [8]. This aim is coherent with its own definition of e-government. According to Annuar Maarof [9];

“Electronic Government is a multimedia networked paperless administration, linking government agencies within Putrajaya with government centres around the country. This is to facilitate a collaborative government environment that is capable of providing the best services to business and citizens. Thus, the focus of e-Government is to improve its services to the highest level for the benefit of the public at large”

The vision for Malaysia's e-government is to transform service delivery and administrative process through the use of Information technology (IT) and multimedia. Ultimately, the goal is to leapfrog Malaysia into the Information Age. It envisions that all spheres of government, citizens and businesses can communicate and transact their operations in an effective and efficient manner. Standards, security and legislation are the three core elements in the implementation process. Therefore, the landscape of e-government applications is as follows;

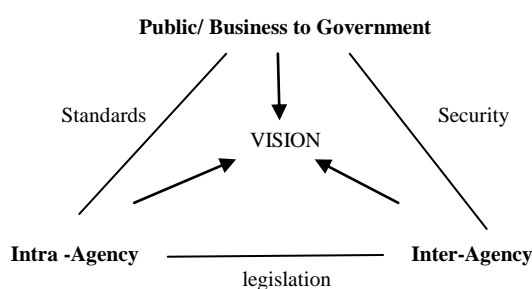


Fig. 1. The landscape of e-government Applications

In general, the landscape of e-government applications encompasses the entire gamut of government operations, redefining the relationship between citizen-government (C2G), business-government (B2G) and government-government (G2G) transactions.

Realising the growth and the capabilities of information and communication technologies to improve service delivery, the Malaysian government has conceived e-government as one of its prime agendas. Therefore, the objectives of the

implementation of this policy are many, and are intended to especially address the following areas:

- 1) To offer efficient, high-quality administrative online services to citizens and businesses.
- 2) Streamline government's internal process to improve quality of service, reduce costs and increase productivity.
- 3) Strengthen data security and protect privacy.
- 4) To increase citizen participation in government.
- 5) To create transparency through good documentation and effective communication.

IV. IMPLEMENTATION STATUS OF MALAYSIAN E-GOVERNMENT PROJECTS

This paper considers three e-government projects in Malaysia, namely e-syariah, e-land and pemudah (e-business), which facilitate relations with Government to Government (G2G), Government to Citizen (G2C) and Government to Business (G2B) respectively. The detailed and status of the project implementation is discussed as below:

• E-Syariah

In the past, the Syariah court, which has jurisdiction only over matters involving Muslims, the majority population in Malaysia, has tended to be seen as an outdated institution, with inefficiencies, and providing an incompetent service to the public. Problems with the previous system were the slow pace of proceedings, from the registration to the management process, and also the delay in the disposition of the Syariah court cases which contributed to the number of redundant cases every year. Therefore, to uphold the splendours of the Syariah court, e-syariah has been seen as a solution to enhance the quality and efficiency of public service delivery through the use of ICT. The project comprises various modules, including the Syariah Court Case Management System, Syariah Lawyers Registration System, e-Portal, Library Management System and Office Automation System [10]. The current challenge that the Syariah Judiciary Department Malaysia (JKSM) is facing now is online payment, with the need to deal with third parties, notably banks, regarding management charges.

Overall, it may be noted that e-syariah has had remarkable success in its implementation, albeit there were some difficulties in the early phase of its operation. As far as the system is concerned, the efficacy of e-syariah as an e-government application is hinged on several aspects, for instance leadership and environment factors. Having a strong and determined leader has assisted the Malaysian government's mission in reforming and revamping the syariah court administration and management in order to enhance the quality of public service delivery. Besides this, the idea of technology advancement was booming globally with governments adopting and embracing the idea of e-government.

• E-Land

E-Land is one of e-government's flagship projects which was initiated by the Ministry of Natural Resources and Environment [10]. It aims to develop an integrated, comprehensive and user-friendly land management and

administration system to enhance the speed and quality of public service delivery. Until a few years ago, land dealings were still conducted in a conventional manner, which caused many repeated complaints and dissatisfaction from citizens such as red tape, corruption, rigid procedures and too much bureaucracy [11]. For example, there were still about RM 1.73 million of outstanding land charges, including registration and strata titles, in Peninsular Malaysia, and also RM 1.2 billion on unsettled revenue until 15 March 2008. In this case, the maladministration of land management and administration has tarnished the government's reputation amongst foreign investors, businesses communities and the public. Thus, in order to eradicate these problems, the government has moved forward to apply ICT to land administration, hence *e-land* was introduced in 2005. As digital technology has been recognised by the law through the introduction of the Sixteen Schedule of the National Land Code 1965, the Electronic Land Management System, *e-land* is believed to be able to enhance the transparency of land administration, whilst modernising the administration and management of land offices throughout Peninsular Malaysia [12].

Overall, the implementation of *e-land* in Penang has had a huge impact on the quality of public service delivery [13]. An impact research was carried out in 2010 amongst the public, users (public officials) and land administration in Penang to evaluate the effectiveness of the *e-land* project. The public realise that by dealing through the *e-land* system, the service is much better and more efficient. Thus, although public officials were very reluctant to adopt the system, they admit that it can enhance the transparency and integrity of land administration in Penang. Meanwhile, as for the land administration and organisation, it modernises land management through a new technological infrastructure, and facilities in the office, and provides appropriate training to government servants regarding ICT skills. On the other hand, there is a need for an ICT and land law expert to enable the project to succeed.

- Pemudah

PEMUDAH is a short form for the Special Task Force to Facilitate Business, set up on 17 February 2007. It comprises representatives from both public and private sectors, with the aim of supporting Malaysia's transition towards a knowledge driven economy [14]. PEMUDAH was given the task of addressing areas related to the business environment, and also to provide a catalyst for change towards placing Malaysia in the top 10 of the World Bank Ease of Doing Business (EoDB) [15], [16]. By addressing each area highlighted in the EoDB Report, respective ministries/agencies/departments were challenged to improve processes and procedures. Faster, Easier and Cheaper was the mantra for all related agencies to further enhance their Standing Operating Procedures. Among the initiatives undertaken in the area of online services developed under PEMUDAH are Business Licensing Electronic Support System (BLESS), Malaysia Corporate Identity Number (MyCoID), One Stop Centre (OSC) Online for Building Plans and e-Payment facilities [14]- [17].

In the early stage of its implementation, there were some major challenges and issues faced by PEMUDAH such as limited integration. Most online systems were developed in silos, thus creating a problem in integrating them with existing systems in other agencies. Besides this, differing working practices and SOP by different agencies and authorities, on account of state regulations, further hampered the successful implementation of the system. Indeed, practising different sets of procedures resulted in complications in the implementation of the projects. The challenge that PEMUDAH will face, now and in the future, is to maintain the improvements made and to start to explore new areas in ensuring business can be done easier, faster and cheaper.

V. HYBRID APPROACHES TO E-GOVERNMENT PLANNING

As e-government brings many benefits to the government administration and operations, it has become an indispensable mechanism for the Malaysian government to improve the quality of public services to make them more efficient and effective. It has now been almost thirteen years that the notion of e-government has been embedded in the operation of the Malaysian civil service. Notwithstanding improvements in public service delivery including rapid-online services, it still lags behind other Asian countries such as Singapore, South Korea and Japan. This has been proven through evidence from several reports and studies which were conducted by well-known institutions and organisations [18]-[19]. Furthermore, based on the implementation of the aforementioned of the three government projects above, there are some barriers that impede the effectiveness of the Malaysian e-government, for instance lack of expertise, financial constraints, lack of a quality of technical infrastructure and lack of integration across governments.

Therefore, an appropriate approach to e-government management is of vital importance in overcoming these barriers. By using Heek's model, it seems that the hybrid approach is one of the strategic methods that can be beneficially adopted by implementers in developing countries, because it is able to bring a balance between tensions that are inherent in e-government planning [20]. In the hybrid approach, factors like the environment, organisation, work processes in the sector and also the role of information systems, as illustrated in Figure 2, will be of importance.

In addition, this approach emphasizes a set of competencies that entail three elements, namely knowledge, skills and attitudes. The element of knowledge means that public servants is up-to-date of IT, the role of information, IT and information systems in the public sector and also very knowledgeable on organizational context, policies and strategies. The second elements of skills stresses about skill to identify opportunities for new information systems, install of hardware and software system and redesign of existing processes. While the elements of skills relates to problem-solving matter, the third element of attitudes demands positive mindset amongst stakeholders to embrace the idea of e-government as a means to reform public sector.

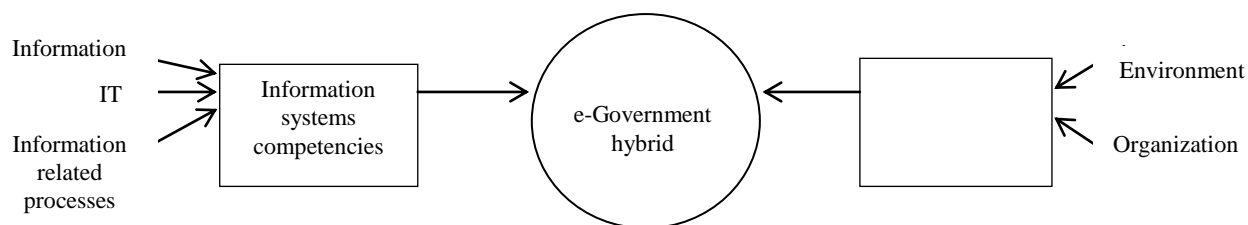


Fig. 2. Hybrid Approach

This also means the creation of hybrid public servants that do not have expertise in IT ('e') but have a better understanding of public sector values and work ('government'). Indeed, Harper, Ibrahim & Ithnin [21] have mentioned that people, processes and systems are the three main factors that are likely to guide the implementation of e-government. While Schwester [22] highlights political support and adequate financial, technical and human resources will also unlock the potential of e-government, other factors such as leadership and e-government efficacy are also responsible for the success of e-government implementation [23].

Taking the hybrid approach will reduce the risks of e-government failure, as it will close the gap between design and reality, and in turn lead to an improvement in the performance of the systems. This approach basically gives the idea to the government on how to plan skills and knowledge development for current and future staff [20]. Therefore, it tries to reduce the gap between mainstream staff and IT professionals by hybridizing their own competencies profiles [20]. However, there is something lacking in this model which ignores the importance of having a technical infrastructure as a main component in e-government management. The absence of having a quality infrastructure will make the services limited, accessible only to urban populations. As a result, the issue of the digital divide between rural and urban areas emerges, and this will bring about serious repercussions for the system. Hence, e-government visions are impossible to attain. Above all, a quality technical infrastructure should be included in the 'wheel of competencies' along with the hybridization of skills as it will bring successful in implementing e-government. In order to do that, a strong e-government leadership is a prerequisite for the success of the notion of e-government.

VI. IMPLICATION AND CONCLUSION

Most governments in the world believe that e-government will improve their image as a better government through technological deployment. E-government will lead to a quality of public service which becomes the foremost driver in digital government. Malaysian e-government has faced many challenges while implementing the notion, for instance lack of expertise, low-quality of technical infrastructure, financial constraints, public servants' resistance and so forth. Therefore, the hybrid approach which unites the 'e' and the 'government' of e-government appears to be a suitable idea to permit the Malaysian government to have a better understanding of e-government competencies. Yet it is nonetheless important to include other factors, mainly

technical infrastructure, in e-government planning. Although the hybrid approach might sound impressive, there is no guarantee that the approach will always succeed. Having said this, it may help to reduce the risks of e-government failure that arise in the gap between the design and reality while implementing the notion of e-government.

ACKNOWLEDGMENTS

Thanks are due to the Malaysian Administrative Modernization and Management Planning Unit (MAMPU), and the lead agency for the Malaysian e-government initiatives for their cooperation in providing information and feedback for this study. Special thanks also go to my supervisor, Dr Patrick Bishop a Senior Lecturer in Lancaster University, United Kingdom who always give me his valuable support and thoughts for getting this research improve and complete.

REFERENCES

- [1] M. R. A. Karim and N. M. Khalid, *E-Government in Malaysia: Improving Responsiveness and Capacity to Serve*, 2003, Kuala Lumpur: Pelanduk Publications.
- [2] R Silcock, "What is e-Government?," *Parliamentary Affairs*, vol. 54, no. 1, pp. 88-101, 2001.
- [3] Deloitte Research, *At the Dawn of E-government: The Citizen as Customer*, Deloitte Consulting and Deloitte & Touche, New York, 2000, pp.21-24.
- [4] C. G. Reddick and H. A. Frank, "E-government and its Influence on Managerial Effectiveness: A Survey of Florida and Texas City Managers," *Financial Accountability & Management*, vol. 23, no.1, pp. 1-26, 2007.
- [5] OECD, *The e-Government Imperative: Main Findings, Policy Brief*, Organisation for Economic Co-operation and Development, 2003.
- [6] V. Bekkers and V. Homburg, "The Myths of E-government: Looking Beyond the Assumptions of a New and Better Government," *The Information Society*, vol. 23, no. 5, pp. 373-382, 2007.
- [7] V. Homburg, *Understanding E-government: Information Systems in Public Administration*, Routledge, USA, 2008.
- [8] A. R. Ambali and R. Hashim, "E-government in Malaysia: Trends, Policy, Issues and Initiatives," in *Proc. 1st International Conference on Theory and Practice of Electronic Governance*, vol. 232, ACM International Conference Proceedings Series, Macau, China, December, 2007, pp. 10-13.
- [9] M. Annuar, *E-Government: Towards A Creative Public Service*. MAMPU, Prime Minister's Department, Malaysia, 1997.
- [10] MAMPU, *E-government: Transforming Lifestyle*, Malaysian Administrative Modernisation and Management Planning Unit, Prime Minister's Department, Government of Malaysia, Kuala Lumpur, 2009.
- [11] The Star, *E-tanah System Let Many Down*, 2007.
- [12] MAMPU, *Buku EG Tahunan*, Malaysian Administrative Modernisation and Management Planning Unit, Prime Minister's Department, Government of Malaysia, Malaysia, 2011.
- [13] B. Harian, *Penambahbaikan Pentadbiran Tanah*, 2009.
- [14] PEMUDAH, *Annual Report: Public-Private Sector Collaboration Towards a Globally Competitive Malaysia*, Pemudah Secretariat, Kuala Lumpur, 2008.

- [15] PEMUDAH, *Annual Report: Public-Private Sector Collaboration Towards a Globally Competitive Malaysia*, Pemudah Secretariat, Kuala Lumpur, 2010.
- [16] New Straits Times. (2008). PM: Pemudah Can Help Put Malaysia in Top 10. [Online]. Available: <http://www.pemudah.gov.my/web/guest/b4>
- [17] PEMUDAH, *Annual Report: Public-Private Sector Collaboration Towards a Globally Competitive Malaysia*, Pemudah Secretariat, Kuala Lumpur, 2009.
- [18] United Nations, "UN e-Government Survey 2008: From e-Government to Connected Governance UN Global e-Government Survey 2003," Department of Economic and Social Affairs, Division for Public Administration and Development Management, New York, 2008.
- [19] D. M. West. (2002). Global e-Government Full Report, Brown University. [Online]. Available: <http://www.insidepolitics.org/egovt02int.html>
- [20] R. Heeks, *Implementing and Managing e-Government*, Sage Publications Ltd, London, 2006.
- [21] T. W. Harper, O. Ibrahim, and N. Ithnin, "An Interconnected Success Factor Approach for Service Functional in Malaysian Electronic Government," ICEC'04, Sixth International Conference on Electronic Commerce, Janssen, M, Sol, H, G & Wagenaar, R, W (eds), in *Proc. of the 6th international conference on Electronic commerce*, vol. 60, ACM International Conference Proceeding Series, Delft, The Netherlands, October 25-27, 2004.
- [22] R. Schweser, "Examining the Barriers to e-Government Adoption," *Electronic Journal of e-Government*, vol.7, no.1, pp.113-122, 2009.
- [23] H. S. Abdullah and M. Kaliannan, Development of E-government in Malaysia: The Role of Leadership and Organisational Efficacy in *E-government Macro Issue*, Mitra R, K Ed. New Delhi, Global Institute of Flexible Systems Management, 2006, pp.189-202.