



**AN ASSESSMENT ON STATES OFFICIAL WEBSITES
IN MALAYSIA**

BY

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the degree of Master of Human Sciences in Political Science**

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ABSTRACT

E-government has been an essential tool for serving the publics. Since its initiation in 1995, many resources have been allocated for its implementation across states in Malaysia. Literature reveals that while many studies concentrating on federal governments websites in general, not many studies have been conducted to evaluate the condition of government websites at the state level at present. This is even made crucial as different states in Malaysia reflect variations in terms of social, economic, political and technological aspects. In this study, the progress of e-government implementation across different states in Malaysia is assessed. The assessment is done by developing an e-government index, which is based on three levels of public administration paradigm, namely old public administration, new public administration and new public service, and comparing it with online presence and services offered to the publics in the websites. This study employed a qualitative study where content analysis method is used by taking all the thirteen states' government websites as a unit of analysis. This study found that different state websites performed with different scores over one another based on each level. In this study, Negeri Sembilan scored the highest and Perlis with the lowest scores. In general, this study found that most of the state websites are currently in the second phase known as New Public Administration.

Keywords: *E-government, State government websites, Index, public service delivery*

ملخص البحث

تعد الحكومة الإلكترونية أداة أساسية لخدمة الجمهور. ومنذ ابتدائها في عام 1995م، خصصت موارد كثيرة لتنفيذها في جميع الولايات في ماليزيا. واكتشفت أن عديدا من الدراسات السابقة تركز على مواقع الحكومة الفيدرالية بشكل عام، لم يتم إجراء عديد من الدراسات لتقويم حالة المواقع الحكومية على مستوى الولايات. إن هذا الأمر بالغ الأهمية؛ لأن الولايات المختلفة في ماليزيا تعكس الاختلافات في الجوانب الاجتماعية، والاقتصادية، والسياسية، والتكنولوجية. في هذه الدراسة، يتم تقويم التقدم في تنفيذ الحكومة الإلكترونية للولايات المختلفة في ماليزيا. ويتم التقويم من خلال تطوير مؤشر الحكومة الإلكترونية الذي يقوم على ثلاثة مستويات من أنموذج الإدارة العامة؛ وهي الإدارة العامة القديمة، والإدارة العامة الجديدة، والخدمة العامة الجديدة، ثم مقارنتها بوجودها على الإنترنت والخدمات المقدمة إلى الجمهور في المواقع الإلكترونية. استخدمت هذه الدراسة البحث النوعي حيث تم استخدام طريقة تحليل المحتوى على جميع مواقع حكومات الولايات الثلاث عشرة بوصفها وحدة للتحليل. وهذه الدراسة مهمة لأنها تطلع على تقدم حكومات الولايات في موقعها على شبكة الإنترنت، وحقيقة أن تنفيذه غير كافٍ. ويلزم إجراء التقويم المستمر على النحو الذي تقدمه هذه الدراسة لتحسين تقديم الخدمات من خلال الحكومة الإلكترونية. وبشكل خصوصي، تقدم هذه الدراسة إطاراً موحداً لمواقع إلكترونية تتسم بالكفاءة والفعالية التي ينبغي أن تكون للحكومة تملكها.

APPROVAL PAGE

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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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To my greatest teachers

AMI & BAPA

Who taught me nothing is impossible

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LIST OF ABBREVIATIONS

BLESS	Business Licensing Electronic Support System
DAU	Development Administrative Unit
E-Government	Electronic government
ELX	Electronic Labour Exchange
EP	Electronic Procurement
EPU	Economic Planning Unit
E-Services	Electronic Services
GITIC	Government IT and Internet Committee
GOE	Generic Office Environment
HRMIS	Human Resource Management Information System
ICDAU	Implementation Coordination Development Administrative Unit
ICT	Information and Communication Technology
ICU	Implementation Coordinating Unit
INTAN	National Institute of public Administration
MAMPU	Malaysian Administrative Modernization & Management Planning Unit
McMc	Malaysian Communications & Multimedia Commission
MDEC	Multimedia Development Corporation
MSC	Multimedia Super Corridor
NTT	Nippon Telegraph and Telephone Corporation
PMS	Project Monitoring System
POWER	Pensions Online Workflow Environment
ProBe	Provider-Based Evaluation
QR Code	Quick Response Code
R&D	Research and Development
RSS	Really Simple Syndication
UN	United Nations

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The search for effective service delivery has occupied government agenda in most countries. In Malaysia for example, the government has made a lot of effort towards becoming more efficient operationally and up to date in order to meet the people's demands through the adoption of e-government. It could be seen that initiatives have been taken since 1960 but it became more significant from 1996 onwards with the establishment of the Multimedia Super Corridor (MSC). MSC serves as an integrated part which is in line with Malaysian Vision 2020 in order for Malaysia to become a more developed country. In 1996, during Tun Dr. Mahathir's time, the Malaysian government identified several initiatives to implement the modernization of the public sector especially in its e-government system which started with the implementation of Information and Communication Technology (ICT) first.

The e-government initiative was later on launched by Tun Dr. Mahathir himself in 1997 after the establishment of ICT. E-government is one of the seven flagship of the Multimedia Super Corridor (MSC) initiative (Muhd Rosydi, 2013; Sidek, 2012) and it plays a role in improving the internal management of the government administration and communications (Azmizam et al., 2010). Jeong & Nor Fadzlina (2007) stated that these initiatives were to ensure that the public sectors could take the lead in transforming government services process that affected everything including societal structure in Malaysia. Generally, e-government is considered to be a public administration reform aimed at enhancing information flows and transparency (Bolivar et. al 2006), promoting the active participation of citizens in

the decision-making process (Cooper & Yoder, 2002; Gilman & Lewis, 1996), and their engagement in public policy-making (OECD, 2003). This makes the implementation of e-government as an important tool to promote the efficiency and effectiveness of public service delivery to the people and later on improve the system of administrations covering all tiers of governance (Muhd Rosydi, 2013; Yildiz, 2007). In the Malaysian context, an effort made by Tun Dr. Mahathir after the establishment of ICT was the emergence of states government websites where each state has its own website to deliver information and services to the people.

There are many major initiatives being done by the Malaysian government which are related to e-government. These focus more on services namely e-syariah, e-land, Iserve JPA4U (Utusan Online, 2016) which enable the government to become more efficient via online. Therefore, the implementation of state government websites could help improve services provided online to the public. Recent surveys also show that there is an increase in the usage of Internet among users in Malaysia especially in e-government system. For instance, in one of the surveys done by the Malaysian Communications & Multimedia Commission on Internet users in 2016, it was found that 77.6% used the internet. In addition, 59.0% of the users used e-government services and showed positive feedback and of the services provided. (Malaysian Communications & Multimedia Commission, 2016). In one of the preliminary reports based on the Provider-Based Evaluation (ProBe, 2014), an assessment was made on Malaysian Government Portals and Websites. The assessment was based on their quality performance and ratings were expressed with the 'Star Rating' system. From the report, it could be seen that 293 websites and portals managed to obtain a five-star ranking displaying their excellent performance in portal administration. The results showed progress from the previous years with a 3% improvement.

Furthermore, out of thirteen states, three states government obtained three-star and above namely Penang, Negeri Sembilan and Johor state governments. This showed that some websites performed better than other websites.

All these improvements made in e-government system are none other but to leapfrog Malaysia into a new informative era with new technologies that can increase the quality of service delivery to the people. Therefore, this study will analyze the progress of state governments by accessing the contents of the states' official websites in order to know the level of progress.

1.2 STATEMENT OF THE PROBLEM

Various terms are used to illustrate the use of the Internet by the government. One of them is e- government.

With the adaptation of e-government, state level governments are expected to provide efficient services and become more responsive in attending to the public's desires and need. That would mean an overhaul in their services internally and externally for example developing websites that could accommodate large palatable amount of content for the public. However, according to Janet (2016), most of the states websites are still stagnant in the second paradigm of public administration known as new public management. The reality is that, they are still lacking in New Public Service criteria of embracing a two-ways government-to-public communication. Based on the e-government model proposed, this study intends to respond to the predicament in answering the research question of how contents of websites reflect different levels of progress.

In the practice of old public administration, information is already available on the websites, however, due to lack of interactive features, users cannot experience seamless interaction between departments as they still need to go separately to relevant departments to settle their work or lodge an inquiry seeking assistance (S.S. Philippidou et al (2004). The absence of inter-departmental interaction has led to cumbersome procedures that thwarts the public's trust on e-government deeming it not effective (Norshita et al 2010). Thus, features based on paradigms of public administration are mentioned in this study intended to benefit state governments to improve the implementation of e-government especially in having 24-hours accessibility and inter-departmental linkages.

This study found out that there are no standardised features listed by MAMPU; each website is offering features distinct to each other. This void is feared to reduce the level of interest of users in making use of state websites. Assessing how contents of state websites reflect their level of progress against the e-government model is crucial.

Besides the setbacks, in improving state websites, there are a handful of challenges that still needs to be addressed. Based on the preliminary study conducted by the researcher, it was found that most of the state websites failed to frequently update their websites. Janet (2016) stressed that it is important for a website to gradually provide fresh content in making sure the privacy and security of websites are well-protected whilst people can enjoy latest information on time. Therefore, this problem statement will assist this study in finding out challenges faced by state governments and suggest practical solutions for improvements.

1.3 JUSTIFICATIONS AND SIGNIFICANCE OF THE STUDY

In Malaysia, each of the 13 states has its own official website in order to carry out their administration and to interact with people by providing various types of news and information as well as services. However, in the context of Malaysia, no such study has been carried out by accessing all the states websites based on the online presence. Hence, this study could aid state governments know their level of progress and be aware that implementation alone is insufficient.

At present, state website assessment is done by the Multimedia Development Corporation (MDEC) known as the Provider-Based Evaluation (ProBe). However, the assessment only provides scores in the forms of “self-assessment star rating” which is limited to certain features as listed by MDEC to serve as guidelines to the websites and it is not based on level of paradigms in public administration. Besides, Probe does not inform of the progress and has suggests ways for state governments to improve their websites. Thus, this study is crucial as it will be able to identify and assess the level of progress of state websites based on the features in the coding sheets prepared by the researcher which is based on the level of paradigms of public administration. However, the level of progress of each state website might differ. Thus, a study on this area is undoubtedly important to ascertain the level of progress achieved by each state website.

This study is significant as not many studies have focused on state government websites. Most of the existing literature in Malaysia, for instance, have been more interested in accessing people’s satisfaction and acceptance towards e-government (Norshita et.al, 2010, Norazah & Ramayah, 2010). A research by Ooh, K. L (2008) concentrated on the factors influencing people to use e-government in Malaysia. Challenges and potential of e-government in Malaysia also have been discussed in

some of the articles. (Nur Afiqah and Noreen Izza, 2016; Roslind Kaur, 2006; Wan Abdullah et al (2013). There also a study which highlighted the factors that contributed to the failure of e-government among rural communities in Malaysia (Nur Afiqah and Noreen Izza, 2016).

Progress and changes towards the betterment of the system is highly needed. In addition, it would also motivate the website administrators to produce a standardized structure of an efficient and effective website which could be adhered to systematically. This is important as efficiency in the management of online services will in turn enhance the public sector in terms of accessibility and competency in public service delivery (Azizan and Fazli, 2010). From the study, the state governments will be able to know their position in terms of the effectiveness and efficiency of their state website contents.

1.4 RESEARCH OBJECTIVES

This study aims to:

1. Study the evolution and progress of e-government implementation in Malaysia in various states based on different phases until the present.
2. Examine state websites contents based on the proposed model of e-government. The proposed model will serve as a guideline to analyze the contents and to observe whether the e-government has transformed its public service delivery.
3. Analyze the obstacles faced by the government websites and propose solutions to overcome those obstacles strategically and effectively based on their online presence and visible services.

1.5 RESEARCH QUESTIONS

This study therefore aims to answer the following questions:

1. How is the implementation of e-government policy carried out in various states in Malaysia?
2. How do the contents of the state websites reflect different levels of progress in an e-government model?
3. What are the barriers to states' official websites?

1.6 LITERATURE REVIEW

There is a great amount of literatures that discusses e-government from various aspects. This includes the importance of e-government and the obstacles in its implementation. For example, Nur Afiqah and Noreen Izza (2016), Ariwiati et al. (2016), Rose et al. (2015), Kettani & Moulin (2014), McGuigan (2010) and Kaliannan and Halimah (2010) suggested that e-government could bring progress to the development of the public sector and improve its service delivery with high efficacy via the usage of IT. Besides that, according to Teerling and Pieterse (2011), e-government promotes a two-ways communication between the government and the public to enhance effective interactions. Wan Abdullah et al. (2013) stated that e-government provides many services to the people where payment could be made online for certain purposes whereas Asa'd M. et al. (2016), T. Almarabeh and A. Abu Ali (2010) noted that e-government is able to promote service integration by providing all the services in one single website. According to Asa'd M. et al (2016), two factors contribute to the successful implementation of e-government namely availability and accessibility where 24 hours services are given to the people and no discriminations in

the usage of the services either by the urbanites or rural dwellers in getting the services.

On the contrary, some scholars are of the view that e-government failed to be implemented successfully due to a few limitations. For example, F. M. Al-Balushi et al. (2016) stated that government failure to integrate all its functions rendered the system unable to be successfully implemented. According to her, a single access point should be made available in order to gather all the government information and services as noted by Shan et al. (2011) and B. Hermana and W. Silfianti (2011) who stressed that the integration of government services is very crucial to make the system more efficient and effective. This is achievable when information and services could be gained from a single source. In addition, according to M. Kurfah et al. (2016), Voutinioti (2013), Belanger and Carter (2008) and Kaliannan et al. (2007), failure to get public trust is one of the factors that hinders the successful implementation of e-government. L. Alzahrani et al. (2016), Al- Hujran et al. (2015), Mahmood et al. (2014), Khasawnah and Abu Shanab (2013), Wang & Lo (2013), Alshestri et al. (2012) and Colesca (2009) also mentioned that public rejection towards e-government services could jeopardize the implementation of e-government in that particular country. Thus, public trust in the usage of e-government needs to be tackled by recognizing factors that hinder the public from its usage.

In the study on e-government in Malaysia, both the importance and limitations of e-government have been discussed in a number of literature. According to Nurulain et al. (2013), e-government is able to improve and minimize the time spent on accessing information and accurate data provided by government to government and government to citizens. Norshita et al. (2010), Maniam, K. and Halimah (2008) expressed that internal administration of the government could be improved through

the implementation of e-government which will create a more flexible management that is able to deliver services and enhance public participation in the system. Furthermore, Siddique (2007, 2008) noted that the Malaysian government has increased internet access in both urban and rural areas in order to facilitate the usage of e-government more effectively without any discriminations. Other than that, according to Nur Afifah and Noreen Izza (2016), e-government is important in serving as one-stop gateway for the people to enjoy the services provided at anytime from anywhere. However, Nur Afifah and Noreen Izza (2016) claimed that information accessibility in the rural areas is still unknown due to a lack of information received compared to urban areas. Imamoglu and M. Rehan (2011) also pointed out that research in Malaysia is still lacking in terms of the focus on rural areas. Wan Abdullah et al. (2013) stressed that the innovation of ICT in Malaysia is one of the challenges that needs to be addressed by the government. According to him, problems in addressing digital divide and limited access to the internet especially to rural area population still exist and need to be solved. Siddique (2007, 2008) added that public governance in Malaysia is still lacking in terms of ICT infrastructures that can jeopardize the implementation of e-government in Malaysia. Even though the applications of e-government have been broadly used by the Malaysian government and since its implementation, many challenges and barriers have seen much improvement. Razlini (2012) argued that further improvement on the Malaysian e-government system is highly needed in areas such as the government's transparency, lawmaking framework, technological infrastructure and others. For example, in terms of technological infrastructure, there should be investments to improve it by providing training to public officers.

Based on the importance and barriers discussed in the literatures above in the context of Malaysia, all those can be seen as reflecting progress in e-government implementation. It captures and evaluates the progress of the e-government development. There are many models which has been developed by the scholars to measure e-government systematically and indicates different stages of progress. This is supported by A. Fath-ALLAH et al. (2016) statement that the maturity model help the government in improving their portal's maturity and make the government able to identify the missing part in each of the stage maturity if there is any.

One of the model proposed to evaluate the progress of e-government implementation is Gartner Group's model. This model was proposed by Baum and Maio (2000) by classifying e-government services offered online into four evolutionary phases namely (1) publishing (web presence), (2) interacting, (3) transacting and (4) transforming. Publishing is the initial stage where information about the agency mission, services, contact numbers and agency address are provided for further communication and inquiry. Next, interacting moves a step further by enhancing the site's traits with search capabilities and intentions-based programs. The third stage, transacting represents online services that enable users to access and complete entire tasks via online. The final stage in this model is known as transforming. Transforming is considered to be the long-term goal of almost all e-government services. In this stage all information systems are integrated and services can be obtained at one virtual center that will succeed in producing a citizen-centric and responsive government. This will automatically increase public trust in government.

Another model by Layne and Lee (2001) was developed with a four-stage maturity model of e-government. The model was developed based on observations on

e-government initiatives in the US. The maturity model begins with the first stage known as “catalogue” stage. At this stage, public authority is presented and made available on the web. The second stage is “transaction” where the citizens can make their transactions with the government. The third stage is “vertical integration” where there is integration with higher level systems within the same jurisdictions. The fourth stage is called “horizontal integration”. Systems at this stage are integrated across various government functions for an effective communications.

Hiller and Bélanger’s (2001) model suggests a slightly different progression than the other models. It can be seen that stages one and two are similar to those in most models where information is followed by two-way communication (interactivity). However, Hiller and Bélanger predicted that the third stage would be the integration of data and information within and among governments. Integration is followed by a transactional stage, and Hiller and Bélanger suggested that at the end, e-government will be able to produce e-participation. In this model, e-government is clearly expected to evolve to a higher rank at which citizens have moved beyond accessing information and services, interacting with governmental officials, and transacting business with government as well as electronically participation.

There is another model known as Accenture Maturity Model. Accenture model is a five stage maturity model of e-government. The model was used to rank the following countries in e-government namely Canada, Singapore, United States, Denmark, Australia, Finland, Hong Kong, United Kingdom, Belgium, Germany, Ireland, France, The Netherlands, Spain, Japan, Norway, Italy, Malaysia, Mexico, Portugal, Brazil, and South Africa. In this model, the first stage maturity model is known as “online presence” where information is published and available via online. The second stage is “basic capability” where security and certification are created.