Discovering Malaysian State e-Government Maturity Stage: Implementation Process and Progress

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Abstract This paper is aimed to discover the current Malaysian state e-government maturity stage. The method used in this study was content analyses of 16 state government portals and websites based on the criteria given by MAMPU for the years 2007- 2013. These findings were then compared to the UN-ASPA e-Government Maturity Model to determine the current state e-government level to ensure continuous improvement is carried out in the interest of the citizens. The findings suggested that Pahang state e-government is progressing where the state government portals and websites have improved to seamless or integrated maturity level. However, the result also indicated a fluctuation in maintaining the performance of the state e-government websites.

Keywords e-government; implementation; maturity stage; progress; website; website content analysis.

1   Introduction

The Malaysian Government has taken many steps in ensuring the e-government movement through its Portal and Websites Assessment (MGPWA) report. One of the steps taken is the assessment and evaluation of all government portals/websites in their adherence to the international portal and websites requirements. As a result, the Malaysian Administrative Management Planning Unit (MAMPU) has come up with the required elements to be equipped in all government portals and websites at both the federal and state levels. Based on these elements, MAMPU conducted a yearly assessment and evaluation of all the government portals and websites and ranked them based on their adherence to the required guidelines as stated.

The other government agencies involved in the assessment are the Multimedia Development Corporation (MDeC), Ministry of Science and Technology (MOSTI) Public Service Department (PSD/JPA) and Economic Planning Unit (EPU). This yearly assessment is carried out on all the federal and state government departments' portals and websites and this does not only apply to government administrative machinery but to the universities as well.

Pahang was chosen in this study as it was predicted to receive foreign direct investment (FDI) worth RM6 billion via Tanjong Agas Oil and Gas and Maritime Industrial Park launched on 18 Feb 2009 (Star Online, 2009). With the ongoing East Cost Economic Region (ECER) project which started in 2008 for the agricultural based development, it requires a good public service delivery system to ensure smooth information exchange among investors and the state government. Since the Malaysian government has introduced the No Wrong Door Policy, Pahang e-government should be able to adhere to the stipulated policy by enhancing and improving its services for the benefit of its investors and citizens.

Thus, this study is aimed to discover the state e-government maturity stage, implementation process and the progress made to improve its state e-government in an effort to uphold one of the pillars of the new Transformation Policy introduced in 2010 that is to improve the public service.

2   Literature Review

The maturity stage studies are crucial to determine the levels of e-government each country has achieved. Some of the latest studies on e-government maturity stage were conducted in Egypt (Dolan, 2014a), Portugal (Dias & Gomez, 2014), Djibouti, Finland, India, Kenya, Namibia and Peru (Dolan, 2014b). As there is a gap in the literature pertaining to Malaysia maturity stage, therefore, MGPWA report is taken as a step to look at the level of maturity Malaysia is in currently.

2.1   MGPWA Report

In Malaysia, the MGPWA report is an annual assessment report on the government portals and websites performance in adhering to the world class standard portal/websites (MDEC, 2012). The assessment is carried out to assist the government agencies in making their information and services available to their users through the portals and websites, apart from other existing channels.

The sites are categorized as portals or websites depending on how their homepages describe them. They will be categorized under portals if their homepages use phrases such as Official Portal, Official Web Portal, Portal Rasmi, Laman Rasmi or Web Portal Rasmi. The number of portals and websites assessed yearly would depend on how many of the federal or state government agencies follow the guidelines stated by MAMPU. Hence, the number of portals and websites assessed each year would change accordingly depending on their adherence to MAMPU's guidelines.

The first MGPWA was carried out in 2005 with approximately 900 portals and websites involved. As time progresses and the maturity level of the government portals and websites increases, there has been an increase in the number of portals and websites qualified for the assessment. Based on the 2013 MGPWA report, a number of 1,285 government portals and websites were assessed (MDEC, 2013)

2.2   Pahang State Government

Pahang is one of the 14 states of Malaysia. Thus, Pahang is not excluded from this exercise which is crucial in pushing the state public service image to another level. Effective and efficient public service delivery system will help to ensure smooth information flow process between investors and the state government (Mas Anom, 2011).

In the 2005 and 2006 MDEC reports, none of the Pahang State government portals or websites was assessed due to their non-compliance performance to MAMPU guidelines. The websites were only included in the 2007 report as they had improved and adhered to the given guidelines. However, in 2009 it was reported that Pahang state e-government performance went down in the ranking from number 152 to 433 (Mas Anom, 2011). Only one website received a 5-star rating while most of the websites fell under the 2-star category despite the huge injection of budget by the state government to upgrade the e-government initiative in meeting its ICT mission to become a world-class organization in service delivery in 2020 (ICT Mission Statement, 2012)

2.3   Malaysian Information Communication Technology (ICT) Policy – "No Wrong Door Policy"

Malaysia has also introduced a new policy in regards to e-government public service delivery known as the "No Wrong Door Policy". Its main objective is to institutionalise quality services in the Malaysian public sector into one service, one delivery (MAMPU, 2011). This policy aims to ensure the government agencies are viewed as an integrated entity, well-coordinated, well informed and customer-friendly and secondly, customers can deal with government agencies in a fast, simple and transparent manner using various service channels. The third aim is to give customer satisfaction through speedy action by government personnel and agencies (The Malaysian Public Sector ICT Strategic Planning, 2011).

This clearly aims to enhance the government's public service delivery via online services with "People First, Performance Now" motto to uphold the second pillar of the New Economic Model (NEM). This policy has to be given serious thoughts when designing and maintaining online public service delivery at all levels of e-

government namely; federal, state and municipal. The objective of "people first" will be achieved if the government focuses on the people's needs when designing the website. When designing the website all the services should be integrated under a single interface which acts as the gateway thus, making it easy for the people to access the services and in the end increases the level of satisfaction towards the services provided.

2.4   e-Government Maturity Model as a Determinant to the Road Ahead

The e-government Maturity Model has been introduced by United Nations-DEPA (2002) in their effort to determine the level of e-government implementation and adoption in countries all over the world. This model will guide researchers to gain control of the processes for developing and maintaining e-government services and how to evolve towards a culture of excellence in providing and managing e-government. In its simplest form, a maturity model is an enumeration of attributes for a sequence of maturity levels. Even though there is no well-developed maturity model for e-government thus far; the best available models are simple, but still useful for understanding some key facts about e-government (Windley, 2002). However as part of the enthusiasm on information technology adoption in governments, best practices and maturity models are being developed and applied to monitor government as to ensure they are on the right track in their implementation.

The term maturity signals the state of growth as a continuous increase from lower to higher government development based on the content and services delivery available via official websites (United Nations-DEPA, 2002). In addition, the technological and organizational complexities increases as e-government grows from lower to higher level (Layne & Lee, 2001; Di Maio et al., 2000). This suggests the fact that even though higher stages of e-government are desirable still they are not easy to attain. On the contrary, there is no agreement as yet in the literature in regard to the number of phases in which e-government should go through from its lower level to higher level maturity (Irani et al., 2006).

2.5   UN's Five-Stage Model

The United Nations and American Society for Public Administration (United Nations-DEPA, 2002) suggested an e-government model which consists of five stages (efficient web-based public service):

i).   **Emerging presence -** a single or a few independent government web sites provide formal but limited and static information;

ii)   **Enhanced presence -** government web sites provide dynamic, specialized, and regularly updated information;

iii)   **Interactive presence** - government web sites act as a portal to connect users and service providers, and the interaction takes place at a more sophisticated level;

iv)   **Transactional presence -** users have the capability to conduct complete and secure transactions, such as renewing visas, obtaining passports, and updating birth and death records through a single government web site; and

v)   **Seamless or fully integrated presence -** governments utilize a single and universal website to provide a one-stop portal in which users can immediately and conveniently access all kinds of available services.

3   Methodology

The methods used for data collection were website content and document analyses of the current stage of Pahang state e-government implementation based on United Nations -DEPA (2002) maturity model. This method is also adapted by Dolan (2014b) in his study on the Egypt, Djibouti, Finland, India, Kenya, Namibia and Peru; while Dias and Gomez (2014) in their study on Portugal's municipalities. This is evident that this method is widely used to measure a country's e-government maturity stage.

Since there were 16 state government portals and websites, hence all 16 websites were being scrutinized as to determine their level of implementation. The websites involved in this study were(1) State Secretariat Office; (2) Finance and Treasury Department.; (3) Public Service Commission; (4) Pahang Public Works (JKR); (5) Forestry Department; (6) Veterinary Service Department; (7) Agriculture Department; (8) Land and Mines Department; (9) Town and Rural Planning Department; (10) Islamic Religious Affairs; (11)

Social Welfare Department; (12) Water Works Department (Pahang Water Management; (13) KDYMM Sultan Office; (14) Shariah Judiciary Department; (15) Irrigation and Drainage Department and (16) Mufti Office.

Table 1: MAMPU Website Criteria Requirements

Website Criteria	Website Criteria
"Laman Web Rasmi" statement	Use of my.gov domain
State Government crest	Copyright statement
Official Logo	Additional Criteria:
Statements about the agency	Video clip/audio clip
Agency's policy	Support link
Client charter	"cookies" support
List of Services	WWW Consortium (W3C) facilities
Contact Information tel. no. fax, email add	Additional functions:
FAQ	Community service
Disclaimer	Convention video art
Privacy Statement	Links to newspaper
Security policy	General info (ie health, state, investment, tourism, etc)
Feedback facilities for users	Additional links to other services
Expiry function	Service quality poll
Downloads	Visitors counter
Bilingual	Announcement
Links	TV
MSC Logo	FIcker, Twitter, Facebook
Site Map	One-Stop Crisis Centre

4   Findings

Based on the MGPWA reports for the years 2010 - 2013, it was found that the rank fluctuated accordingly with a downward trend from 2007 to 2009 before an upward trend was recorded then it went

down again from 2012 to 2013 (MDEC, 2010-2013). The downward trend indicated improvement in the rank as the smaller the number is the higher it is in the ranking order. Unlike the score which showed a gradual increase from 2007 to 2012 before it went down in 2013. This is shown in table 2.

Table 2: Rank and Score for Pahang State's Website and Portal based on MGPWA from the year 2007 to 2013

Year	2007	2008	2009	2010	2011	2012	2013
Rank	12	-	6	8	9	5	11
Score	9	-	45	72	80	88	73

4.1   Pahang State e-Government Analysis

Apart from that, assessment and observation on the current web-content of the 16 portals and websites under the auspicious of the Pahang state government were carried out and then analyzed to determine their adherence to MAMPU criteria (Othman, et al. (2012); Mas Anom, 2011). The outcome was then compared to the Selangor State Secretariat Office as it was the top ranking portal of e-government in Malaysia with a 5-star assessment. The outcome of the analysis was again compared to the UN-ASPA (2002) for the purpose of determining the maturity level. It was found that in 2009, the maturity level stood at the third level which was the interactive level as 13 out of 16 websites were rated at superficial level of interaction which is more sophisticated compared to the conventional service delivery (UN-ASPA, 2002). This explains the higher ranking (6) for that particular year compared to the first assessment. Even though it was ranked 6 still only minimal online transactions could take place. Most of the icons displayed on the portal were not functional.

Table 3a: Pahang State Government Websites Content Analysis Findings Comparison between 2009 to 2013

WEBSITE	STAGE 1 EMERGING		STAGE 2: ENHANCED		STAGE 3: INTERACTIVE		STAGE 4: TRANSAC'NAL		STAGE 5: SEAMLESS/ FULLY INTEGRATED	
YEAR	2009	2013	2009	2013	2009	2013	2009	2013	2009	2013
State Secretariat	1	1	1	1	1	1	-	1	1	1
Finance	1	1	1	1	1	1	-	1	-	1
Irrigation &Dr	1	1	-	1	1	1	-	1	-	1
Public Commission	1	1	-	1	1	1	-	1	-	1
Public Work	1	1	1	1	1	1	-	1	-	1
Land & Mines	1	1	1	1	1	1	1	1	-	1
Rural & Urban Dev	1	1	-	1	1	1	-	1	-	1

Table 3b: Pahang State Government Websites Content Analysis Findings Comparison between 2009 to 2013

WEBSITE	STAGE 1 EMERGING		STAGE 2: ENHANCED		STAGE 3: INTERACTIVE		STAGE 4: TRANSAC'NAL		STAGE 5: SEAMLESS/ FULLY INTEGRATED	
YEAR	2009	2013	2009	2013	2009	2013	2009	2013	2009	2013
Religious Dept	1	1	1	1	1	1	-	1	-	1
Water Work	1	1	1	1	1	1	-	1	-	1
Welfare	1	1	1	1	1	1	1	1	-	1
Veterinary	1	1	1	1	-	1	-	1	-	1
Agriculture	1	1	1	1	-	1	-	1	-	1
Judiciary & Syariah	1	1	1	1	1	1	-	1	-	1

Table 3b: Pahang State Government Websites Content Analysis Findings Comparison between 2009 to 2013 (continued)

WEBSITE	STAGE 1 EMERGING		STAGE 2: ENHANCED		STAGE 3: INTERACTIVE		STAGE 4: TRANSAC'NAL			STAGE 5: SEAMLESS/ FULLY INTEGRATED
YEAR	2009	2013	2009	2013	2009	2013	2009	2013	2009	2013
DYMM Sultan	1	-	-	-	1	-	-	-	-	-
MUFTI	1	-	-	-	1	-	-	-	-	-
Total of (1)	16	14	11	14	13	14	2	14	1	14
%	(100.0)	(100.0)	(68.8)	(100)	(81.3)	(100)	(12.5)	(100)	(6.3)	(100)

Legend: (1) - fulfilled the stage requirement   (-) Failed to fulfill the stage requirement

Based on Tables 3a and 3b, there has been a huge change in the state government website and portal's performance. All the portals and websites except 2 reached the seamless stage where they acted as one single and universal portal where users can immediately and conveniently access all kinds of available services (United Nations-DEPA, 2002). From the analysis carried out in 2013, 2 agencies namely the Sultan's Office and Mufti Office respectively were downgraded to links instead of websites as shown in the 2013 analysis. No documented details were found to further discuss the 2007 and 2008 performance as the MGWPA report was only published starting in 2009.

During the 2010 analysis, these two agencies failed to comply to MAMPU's portals and websites requirements as they contained just the basic requirements only and lacked functionality (Mas Anom, 2011). Due to these reasons, both agencies were downgraded to only links by the State Secretariat office. If these two websites were to be maintained as websites, this would probably give a negative impact in the MGPWA report on the state e-government performance and will definitely bring the ranking down. It was also found out that the website for the Sultan's Office did not exist anymore.

It was downgraded to only a link under the state secretariat office and it provided just the general information on the sultanate. Further attempts on assessing the Mufti's office were also fruitless as it was not even listed under the Pahang State Secretariat Office. One possible explanation for this was that the two websites might have been closed down due to their incompliance to MAMPU's requirements. This was done as an attempt to secure the ranking of the state overall ranking.

4.1   Further Analysis

In an effort to further scrutinize the performance of the state e-government, the analysis also determined the existence of the website criteria released by MAMPU. The criteria were divided into three (3) main categories. They were the main criteria, additional criteria and additional functions.

In comparison to the Maturity Model used as reference MAMPU's main criteria will place any website which complies with

the list under the first three (3) stages of the Maturity Model. They are Stage 1 - the emerging; Stage 2 - enhanced; Stage 3-interactive. On the other hand, the existence of the elements under the additional criteria and additional function will further push any website to the top of the maturity model. This can be either transactional (stage 4) or seamless or fully integrated (Stage 5).The criteria that existed on the 16 portals and websites under Pahang State Government are shown in the table below.

Table 4: Findings from the new website and portal's content analysis in

A.	MAIN CRITERIA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	"LAMAN WEB RASMI" statement	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2	State Government Crest	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
3	Official logo	√	-	√	√	√	√	√	√	-	-	√	-	-	-	√	√
4	Statements about the agency	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
5	Agency's policy	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
6	Client Charter	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	√
7	List of Services	√	-	-	-	-	-	-	-	-	-	-	√	-	√	-	-
8	Contact Information i.e. tel. no, fax, email add.	√	-	√	√	√	√	√	√	√	√	√	√	√	√	√	√
9	FAQ	√	-	-	√	-	-	√	√	√	-	√	√	-	-	√	√
10	Disclaimer	√	√	√	√	√	√	√	√	√	√	-	√	-	√	-	√
11	Privacy statement	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	√
12	Security policy	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	√
13	Feedback facilities for users	√	-	-	-	√	-	-	-	-	√	√	-	-	-	√	-
14	Expiry function	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Downloads	√	√	√	√	√	√	√	√	√	√	-	√	-	√	-	√
16	Bilingual	2	√	√	√	-	-	√	√	-			2		2	-	2

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	Links	√	-	√	√	√	-	√	√	√	√	√	√	-	√	√	√
18	MSC Logo	√	-	√	√	√	-	√	√	√	√	√	√	-	√	√	√
19	Site Map	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	√
20	Use of my.Gov domain	√	√	-	-	√	√	-	-	-	√	√	√	√	√	√	-
21	Copyright statement	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
B	**ADDITIONAL CRITERIA**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Video clip	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Audio clip	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Support link	-	-	-	-	-	-	-	-	-	-	-	-	-	√	-	-
4	'Cookies' support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	WWW Consortium (W3C) facilities	√	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	**ADDITIONAL FUNCTIONS**																
1	'Darjah Kebesaran' website	-	-	-	-	√	-	-	-	-	-	-	-	-	-	-	-
2	Community Service	-	-	-	-	√	-	-	-	-	-	-	-	-	-	-	-
3	Convention Video Arch.	-	-	-	-	√	-	-	-	-	-	-	-	-	-	-	-
	Additional Functions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

#	Criteria																
4	Links to newspapers	-	-	-	-	√	-	-	-	-	-	-	√	-	√	-	-
5	General Info (e.g. Health, state, investment,tourism,etc)	-	-	-	-	√	-	-	-	-	-	-	-	-	-	-	-
6	Additional Links to other services	22	-	6	9	8	5	7	4	-	10	-	16	6	1	1	12
7	Service Quality poll	√	-	√	-	-	-	√	√	-	√	-	-	-	-	-	-
8	Visitors counter	√	-	√	√	√	√	√	√	-	√	-	√	-	-	-	√
9	Anouncement	√	√	-	√	√	√	-	√	-	√	√	-	-	√	√	√
10	TV	-	-	-	-	√	-	-	-	-	-	-	-	-	√	-	-
11	Flickr,Twitter, Facebook	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	One-Stop Crisis Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

The new analysis carried out has found that there has been much progress made by the state government agencies by upgrading their online service delivery especially for the additional criteria and additional functions. The new findings are shown in Tables 5.

Table 5: Findings from the new website and portal's content analysis in 2013

A.	MAIN CRITERIA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	"LAMAN WEB RASMI" statement	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
2	State Government Crest	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
3	Official logo	√	√	√	√	√	√	√	√	-	-	√	-	-	-	√	-
4	Statements about the agency	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
5	Agency's policy	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
6	Client Charter	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
7	List of Services	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
8	Contact Information i.e. tel. no, fax, email add.	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
9	FAQ	√	√	√	√	√	√	√	√	√	-	√	√	-	√	√	-
10	Disclaimer	√	√	√	√	√	√	√	√	√	√	√	√	-	√	-	-
11	Privacy statement	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
12	Security policy	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
13	Feedback facilities for users	√	√	√	√	√	√	√	√	√	√	√	√	-	-	√	-

14	Expiry function	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Downloads	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
16	Bilingual	7	1	2	1	2	2	4	2	8	2	2	1	-	-	2	-
17	Links	√	-	√	√	√	√	√	√	√	√	√	√	-	√	√	-
18	MSC Logo	√	-	√	√	√	√	√	√	√	√	√	√	-	√	√	-
19	Site Map	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
20	Use of my.Gov domain	√	√	√	√	√	√	√	√	√	√	√		-	√	√	-
21	Copyright statement	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
B	**ADDITIONAL CRITERIA**																
1	Video clip	√	√	√	√	√	√	√	√	√	√	-	-	-	√	-	-
	Audio clip	√	√	√	-	√	√	√	√	√	√	-	-	-	-	-	-
3	Support link	√	-	-	√	-	-	-	-	-	-	-	-	-	√	√	-
4	'Cookies' support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	WWW Consortium (W3C) facilities	√	-	-	-	-	-	-	-	√	-	-	-	-	√	-	-
C	**ADDITIONAL FUNCTIONS**																
1	'DarjahKebesaran' website	-	-	-	-	√	-	-	-	-	-	-	-	-	-	-	-

2	Community Service	√	√	√	√	√	-	√	√	√	√	√	-	-	-	-	-
3	Convention Video Arch.	√	√	√	√	√	√	√	√	√	√	√	-	-	√	√	-
4	Links to newspapers	-	-	-	-	√	-	-	-	-	-	-	√	-	√	-	-
5	General Info (e.g. Health, state, investment, tourism, etc)	√	√	√	-	√	-	√	√	√	√	-	-	-	-	√	-
6	Additional Links to other services	22	13	15	14	36	16	14	34	22	22	10	22	-	18	15	-
7	Service Quality poll	√	-	√	-	-	√	√	√	-	√	-	-	-	-	-	-
8	Visitors counter	√	√	√	√	√	√	√	√	-	√	-	√	-	-	-	-
9	Announcement	√	√	-	√	√	√	√	√	√	√	√	√	-	√	√	-
10	TV	-	-	-	-	√	-	-	-	-	-	-	-	-	√	-	-
11	Flickr, Twitter, Facebook	√	√	√	√	√	√	√	√	√	√	√	√	-	√	√	-
12	One-Stop Crisis Centre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 6: Legend for Tables 4 and 5

Department	No.	Department	No.
Pahang State Secretariat	1	Pahang Rural and Urban	9
Office	2	Development Office	10
Pahang Treasury and Finance	3	Pahang State Religious Dep	11
Pahang State Public Service	4	Pahang Welfare Dept	12
Pahang State Public Works	5	Pahang Water	13
Pahang Forestry Department	6	Management	14
Pahang Veterinary Department	7	Pahang Sultan's Office	15
Pahang Agriculture	8	Pahang Judiciary and	16
Department	-	Syariah Department	
Pahang Land and Mine Office		Mufti Office	-
Pahang Drainage& Irrig Dept			

Tables 5 show a drastic change compared to Table 4. All the 14 portals/websites had adhered to most of the criteria required by MAMPU. There was an exception for no. 12 as it was still using the dot my (.my) extension for its portal address instead of .gov.my. The reason for this is that department no. 12 is actually the State Water Works Department. Now, it has a new website since its privatization last year. It is no longer known as Pahang Water Works Department but as Pahang Water Management instead. However it still adhered to the main criteria by MAMPU and is also at the seamless stage where it acted as a single and universal website providing a one-stop portal (UN-ASPA, 2001).

Table 5 also shows a marked increase for categories B and C criteria for all websites. More interactive features were embedded on the websites in meeting the needs to offer better and efficient service to the public. Based on the websites assessment, all the websites features are interactive in nature where downloading and submission of forms can be made online through the department itself or other departments' websites linked to it.

5   Conclusion

Based on the comparison made on the Pahang state government portals and websites performance to the previous websites and portals' content analyses, it was found that there had been an absolute improvement and progress done since the 2007 assessment (no documented report was published for 2007). This should correspond to the finding shown on Table 5.1. The drop from no. 5 to no. 11 in 2013 does not mean that the portal or websites were lacking the required elements, but rather the other state government portal or websites offered more interactive features especially under the additional functions which might supersede the functions embedded in the Pahang state government portal and websites. On top of that it was also found that more than one state government managed to occupy the same top position in the ranking thus pushing the Pahang state government further down.

        As a conclusion, Pahang state e-government performance is moving steadily in meeting the Malaysian Public Sector ICT target of having 90% of its services online by 2015 (ETP, 2011). However, the Pahang state government should take into consideration all aspects of e-government such as critical success factors, risks, obstacles, reliability and maturity level to work and improve its overall e-government performance (Abhicandani & Horan, 2006) to meet the GTP set forth. It is hoped that through a single access point, citizens can communicate their expectations and needs to the government more effectively and efficiently (Reffat, 2006). Examples of such success are witnessed from the investment made by LYNAS at Gebeng Industrial area which is estimated to be at 2.1 billion in 2012, and the setting up of The Malaysia-China Kuantan Industrial Park (MCKIP) which costs US$806mil to develop. It is projected that it could secure a total investment of US$24bil by 2020 (Penang Monthly, 2013).

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