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E-GOVERNMENT SUCCESS IN MALAYSIA THROUGH GOVERNMENT PORTAL AND WEBSITE ASSESSMENT

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Abstract

E-Government (EG) is an initiative to provide electronic means of government service delivery to the users namely the public. It is for the convenience of the users but importantly for effective, efficient government. The assessment conducted on government portals and websites was to guide Malaysian government agencies in providing a consistent look and feel of their respective portals and website, adhering to a certain set of criteria. A star rating as quality check was introduced in this assessment. It was undertaken yearly to ensure that websites adhere to certain set of criteria or guidelines published. The assessment result was to motivate the Government agencies to improve further their portals and websites since the rating was published for public viewing. The improvements resulted in an enhanced electronic government and provided easy access to the public and subsequently more online services offered through these websites. It was a contributing factor in ensuring success and use of E-Government in Malaysia.

Keywords

Government agencies, portals, websites, criteria, ranking, star-rating, online services

1. INTRODUCTION

The Malaysian E-Government (EG) initiative encompassed the entire spectrum of government operations [7]. Many projects were undertaken that included G-G (Government to Government), G-B (Government to Business) and G-C (Government to Citizen). All these projects were initiated to benefit their respective users and public at large [2].

G-G meant that government machineries to improve, provide transparency and efficiency in their internal processes. G-B brings convenience to the business community in dealing with the Government. The G-C delights the public at large in their interactions with the Government. All these have a common interface that was the services rendered by the Government via the portals and websites, intranet or internet-based applications [3].

As many countries evolved in their deliberation towards providing efficient service to the public, Government agencies had follow-suit. Services rendered to the public were made easy access, transparent and seamless [1]. This was inline with the current trend that the public knows best and they were key stakeholders to the Government. Satisfying the public will be a must and most Government agencies were gearing using technology or ICT (Information, Communication and

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Technology) related mechanism to achieve this.

One of the mechanism was that each Government agency to have a good, interactive website. The websites post as a convenient and appealing location to reach the public. Thereby portal and website assessment had become a major exercise of the E-Government effort to improve the Government service delivery by having most of services to be online, posted on these portals and websites. So the more online services offered, the more successful will be the E-Government.

1.1   Overview

The Malaysia Government Portals and Websites Assessment (MGPWA) by Multimedia Development Corporation (MDeC) started in year 2005. The Assessment served as one of the guides to improve Malaysia Government service delivery through portals and website. The various portals and websites of the various government agencies were evaluated against preset criteria with defined guidelines and ranked accordingly from 1 to 5-star ranking. One of the criteria in the defined criteria was to provide at least one online service or fully transactional activity on the web.

From the assessment, the agencies having known their respective ranks, they could strategise and target to improve the ranking for the following year of assessment. Indirectly by attaining a better star ranking, the agencies will ultimately improve their service delivery through EG.

A total of more than 1,100 Government portals and websites nationwide were assessed annually. From these sites, a total of about 50 online applications, mostly forms were able to be downloadable. New criteria were added or replaced to further enhance the existing set of criteria. This was based on consensus of a committee set on current

trends of online usage such as use of mobile, social network, etc.

1.2   Methodology

The MGPWA methodology was an action research where the hypothesis was that yearly websites and portal assessment should be undertaken to qualify success of EG.

The assessment incorporated the following actions:

i.   Assessment on all portals and websites listed on Government Machinery of myGovernment (myGov) that was on the www.malaysia.gov website.

ii. The assessment was based on preset criteria which include online transaction which was key to EG transactions.

iii. The criteria were grouped by pillars and scored with allocated marks.

The selection of criteria followed some international approach of assessment. Internationally, there were several bodies that assessed E-Government globally and ranked them according to their preset criteria. Some of these were:

i.   Brookings Institute (BI) [10] in 2008 and Brown University (BU) [9] before 2008 on Improving Technology Utilization in electronic government around the World, accessed websites and looks at online information, electronic services, privacy and security, disability access, foreign language access, fees and public outreach. Other criteria include publications, databases, audio and video clips. They also gauged any fees imposed on using the facilities. New media such as mobile and use of interactive email, various forums were also key differentiator in providing the electronic services.

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ii.   Waseda University World e-Government Ranking [8] evaluated on 7 key criteria or also known as indicators. They were the management optimisation, interface-functioning applications, national portal, promotional activities, availability of CIO (Chief Information Officer), network readiness and e-participation.

iii.   UNPAN's United Nations E-Government Survey 2010 [12] was segregated into 2 parts whereby Part 1 focuses on ways that e-Government can be leveraged to mitigate the effect of financial and economic crisis on development while Part 2 focuses on the state of e-Government around the world. Part 2 was where the E-Government Survey derived by looking at components such as service, telecommunication infrastructure and human capital. It was thereby not specific to website's info but contents of it will be reflected in the 2 parts.

iv.   World Economic Forum's Global Information Technology Report 2009-2010 [11] looked at 3 components which are Environment, Readiness and Usage where:.

    a. Environment Component addressed market environment, political and regulatory environment and infrastructure environment

    b. Readiness Component analysed individual readiness, business readiness and Government readiness

    c. Usage Component analysing individual, business and Government usage.

MGPWA adapted about 80% of BU/BI set criteria. The focus was on assessing Malaysia Government portals and websites and ranks them according to the local trend and capability.

1.3   Rationale

The assessment was carried out to aid the government agencies in enhancing their websites that will benefit everyone, particularly the public at large. It was also an effort as a contributing factor in ensuring delivery and success of E-Government.

Thereby through a good website, government can further enhance their service delivery by offering online services on these websites. Many Government agencies provided information and at least one online service in the form of enquiry feedback form to serve the public.

The website assessment involved providing preset criteria or guidelines and the agencies' websites were scored accordingly out of 100 points. They were then ranked accordingly from 1-star to 5-star. A good rated portal and website indicated that there was updated information and online services with minimum enquiry/comment feedback offered by the respective government agency. With the set of criteria that was almost comparable to Brookings Institution studies, an international institution, it was also hoped that these portals and websites will eventually helped to boost and indirectly increase the Malaysia ranking internationally.

2.   OBJECTIVE

The objective of the assessment was to evaluate the Malaysia Government agencies' portals and websites as a process to assist the Government of Malaysia to identify key features of good, interactive portals and websites for providing more online services.

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3.   THE ASSESSMENT

The portals and websites accessed were derived from the list on Government Machinery of myGovernment (myGov) that is on the www.malaysia.gov.my which is a gateway to other links of the Government websites. There were over 1,000 plus Government portals and websites listed.

To ensure integrity, an independent body, MDeC was appointed to access these portals and websites. Criteria were deliberated on best practices or used by the International bodies and also to follow-suit the National guidelines set by the central agency, MAMPU (Malaysian Administrative Modernisation and Management Planning Unit). These guidelines are published on the gateway mentioned [4].

The criteria for the website assessment included information and online activities to facilitate and boost use of the websites such as client's charter, e-payment channels and information on number of transaction for online services. Phone numbers listed on the websites were called to validate correctness. Agencies must also display timelines taken to respond to users and to provide auto-notification in their feedback forms.

3.1   The Assessment Rating

The Government websites were assessed and marked. The total scores were rated from 1-star to 5-star. The scores and rates are as Table 1 below:-

Table 1. Star Rating

SCORE	SCORE RATING
5-star	80-100
4-star	60-79
3-star	40-59
2-star	20-39
1-star	0-19

Websites that were not assessed due to missing links to myGov portal will be automatically classified as N/A (Not Available). They carried no score.

The preset criteria were scored according to pillars. These criteria and pillars could differ from year to year to emphasis the kind of desired portals and websites stipulated by the Government. It began with four (4) in 2005 and grew into five (5) pillars. The fifth pillar Content Management was identified as crucial to encourage management and updated content posted.

These pillars were grouped according to their respective relevance of subject matter and marks were apportioned accordingly.

Ranks of 3, 4 and 5-star were sought upon as they have acquired the critical need to have updated and knowledge of a good website. But 4 and 5 will then have demonstrated a website with interactive features like able to give feedback, enquiry service, etc.

3.2   Scores and Pillars

Since 2007 assessment, the five pillars used were Citizen Interaction, Citizen Insight Generation, Citizen Services, Citizen Support and Content Management. Year 2008 was missing due to management issues. The total marks were based on the emphasis during the year as seen in the increase scores for Citizen Services. The allocation of marks as Table 2 below:-

Table 2. Scores/marks Allocation According to Pillars

Pillars/Years	2007-2011	2006	2005
Citizen Interaction	25	25	25
Citizen Insight Generation	20	20	25
Citizen Services	40	45	40
Citizen Support	10	5	10
Content Management	5	5	-
Total	100		

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4. THE RESULT

The result was very encouraging. The progress of websites achieving 5-stars and 4-stars kept increasing as illustrated by the Table 3 below.

Table 3: The marks and rating over the 6 years of Assessment

| Year	STAR	5-Star	4-Star	3-Star	2-Star	1-Star	Total
2011	sites	285	331	330	138	7	1091
	%	26.12	30.3	30.2	12.6	0.6	100
2010	sites	101	220	328	374	31	1054
	%	9.58	20.87	31.12	35.74	2.94	100
2009	sites	7	173	372	495	51	1078
	%	0.65	16.05	32.65	45.92	4.73	100
2007	sites	3	85	387	412	165	1052
	%	0.29	8.08	36.79	39.16	15.68	100
2006	sites	0	16	124	434	251	825
	%	0	1.90	15	52.60	30.40	100
2005	sites	0		61	440	343	853
	%	0	1.00	6.80	48.90	38.10	100
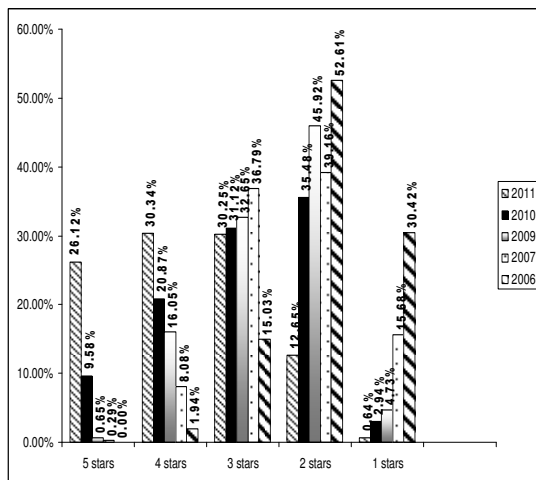
Figure 1. Star Rating Comparison from 2005 to 2011

Translating Table 3 into Figure 1 graph above, it was observed that the number of 5-stars has been growing since MGPWA 2007, from 0% to 0.29% and 3 years later to 9.58%

in 2010. The significant improvement was observed in 2011 where there were 26.12% achievers. With the increase number of both 5-star and 4-star, naturally the number of the remaining star rating had decreased. The number of 1-star obtained had reduced to 7 in 2011and this was an encouraging result.

The 4-star rating also depicted growth, as early as MGPWA 2006. The percentage had increased by 27.17%. As for 3-star rating, the percentage has reached a plateau towards decreasing since 2009.

The 2-star rating showed a mixed pattern initially but progressively being reduced too.

1-star rating, on the other hand, had consistently reduced within these 6 years, starting with a percentage of 38.1%, to 0.6% in 2011.

This simply meant that the Malaysia Government agencies' websites were gradually improving in terms of offering good and interactive features as stipulated by the criteria developed and adhered by the government agencies. It is in line with the objective of the assessment.

4.1 Analysis by Pillars

A further analysis on the pillars enabled agencies to identify which group of criteria needs improvement. This was a more holistic approach to check on the criteria and tackling any issues. An example, for the content management pillar, updated information and resources related to its management can be identified.

4.2 Analysis by Inaccessible (N/A)

Other analysis such as on inaccessible websites can also be undertaken. This was also a crucial part of the assessment as there was a need to abolish the number of N/As on the gateway. The existence of N/As were confusing to the public as these websites are listed on the myGov portal but various messages of inaccessibility were prompted such as page cannot be displayed, under

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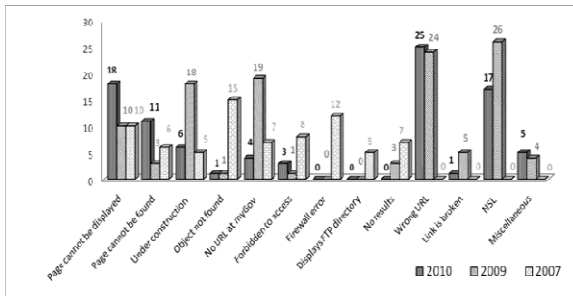construction, object not found and many more. The comparison findings as Figure 2 below.

Figure 2. Comparison of Inaccessible Websites in 2010, 2009 and 2007

5. FINDINGS

Upon having the results and analysed as above, various activities were suggested to improve government services through these portals and websites. These were indicators to reflect EG effectiveness and efficiencies of government machineries. Some improvements that could be undertaken were as follows:

a. Streamlining of agencies in the Government websites. When the assessment started 5 years ago, even Units in a department were sometimes linked to myGov portal. These could be due by the excitement of having a portal and the rush to participate.

With the streamlining done to Government Machinery of myGov portal, all agencies must keep up the updating process to ensure correctness of the listed websites and existence of portals and websites duplications.

b. Offerings to the public such as online services, prompt responses and latest information of the agency can be posted and promoted for fast and easy access of the public. It is a

service 24x7x365 at the comfort of users/citizen.

A strong motivation to get citizens and other stakeholders to transact with the online Government services is to align the related, useful information and online services according to the target audience. For instance, Government agencies must start segregating their online services according to the target audience and its nature - Internet and Intranet.

Agencies must be able to provide such avenues for citizens to voice out their opinions, feedback, enquiries and complaints, whereby they can be deliberated in improving the customer experience when dealing with the Government agencies.

c. For feedback and demonstration of effectiveness to the citizen, agencies can incorporate latest technology which is one of the criteria incorporated in the assessment. Many agencies adopted Web 2.0 tools that allowed the involvement of citizens.

d. Other latest technology as mobile responses was assessed. Information on the website could be minimized further using mobile devices which are more pervasive amongst the public. Feedback responses and quick enquiry were some of the favourite inclusion.

e. Transparencies are also necessary to earn the trust from citizen. Thus, it is important to include the policies, charters and their achievements thus far and number of transactions in the portals/websites.

f. Citizens need to be assured that when they are dealing with Government online, not constraint by any security risk. Therefore, to gain their

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confidence that Government websites are safe and secure, agencies must fulfill the security requirement.

g. User friendly and convenience play a crucial part. Although the technology and information in a portal/website are expanding rapidly, agencies must user's experience during browsing. It must be to their convenience.

h. Other implications that can be derived from the assessment are the ability to gauge availability of ICT resources, skills and leadership approach towards embracing ICT.

6. CONCLUSION

The website assessment was thereby a contributing factor to enhance the delivery of E-Government services. It was a two-way interaction mechanism between the Government and the public.

More focused activities to ensure users return to the websites should be the way to deliver the future services. Security and confidentiality of users, user-friendliness, transparencies and efficiency and continuous promotion of these Government websites are some of the factors that need to be aggressively undertaken by these agencies.

Thereby, it is crucial to gauge citizens' experience through the websites and simultaneously able to achieve and perform well too in the International rankings.

Year	BU/BI	UNPAN
2005	157/198	43/191
2006	36/198	NA
2007	25/198	NA
2008	11/198	34/192
2009	NA	NA
2010	NA	32/192
2011	NA	NA

Figure 3: Malaysia achievement in the International ranking since 2005.

Note: NA (Not Available)

With the Assessment, Malaysia's performance in the international ranking had steadily progressed into the top levels. In the past, there was global E-Government ranking conducted by Brown University (BU) or later Brookings Institution (BI). Malaysia has attained an astounding accelerated rating of 11th position in year 2008, a steady increase since 2005 from the position of 153 from 198 countries.

In the local MGPWA assessment conducted which incorporated about 80% of the criteria undertaken by BU/BI, an obvious increase in 5-star rating is observed amongst the 1,000 over websites nationwide. From zero attaining 5-star ranking since started in 2005, the 2010 assessment saw 101 portals/websites rated 5-star.

It was observed that Government agencies' websites that performed well in the Assessment responded well in providing services to the citizen. As of year 2010, there were over 1,200 online services provided by the government [6].

The MGPWA is an on-going assessment undertaken by the government of Malaysia. Currently various initiatives had evolved from establishing and promoting a good website by each government agency and providing more online services. One of the significant deliberation is the drive of transformation by the Prime Minister towards online usage through the transformation programme under the Government Transformation (GTP) that is to have 90% online services and 90% usage of government online services in year 2015 [5].

Thereby portals and websites assessment is a factor in measuring success of E-Government and proved the hypothesis correct.

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Indirectly too, this is a factor for the success of Malaysia E-Government ranking internationally todate.

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