The Study of Electronic Government Initiatives in Malaysia

by

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the requirements for the

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CERTIFICATION OF APPROVAL

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Information Technology Programme

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Approved by,
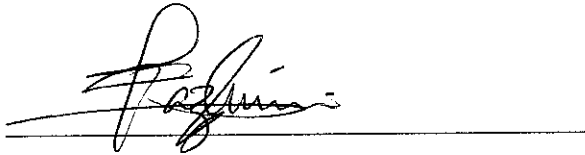
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(Khairul Shafee Kalid)

UNIVERSITI TEKNOLOGI PETRONAS

TRONOH, PERAK

January 2005

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the

original work is my own except as specified in the references and

acknowledgements, and that the original work contained herein have not been

undertaken or done by unspecified sources or persons.

FAZLINA BINTI MOHAMED FAROUK

ABSTRACT

Malaysian government has embarked a new paradigm to the citizens by introducing government services through the Internet, known as electronic government (e-government). The following study on e-government initiatives in Malaysia use questionnaires to obtain input from respondents and interviews on the reasons of low e-government usage among Malaysian citizens. At the end of this study, their answers will be analyzed to determine the reasons of low e-government usage and therefore recommend ways on improving the e-government usage based on these reasons. This project also includes prototype development of a prototype, based on the findings of the survey conducted. Six phases were involved for the prototype development which includes analysis of results, planning, design, development, conformation of requirements and testing phase. Analysis of results involves analyzing results of the survey to determine the best prototype to be developed for this project. Planning includes determining the tasks in developing the prototype and distribution of time in completing each of the tasks planned. Designing storyboard and contents is part of planning phase. After that, development of the prototype began to take place. As for the research, the questionnaires are analysed to obtain the results and it shows that the main reasons of low e-government usage in Malaysia is because of lack in promotion by the government to introduce and announce it to the citizens In order to curb this problem, a few steps could be taken by the government to improve this situation and the most important step will be doing massive campaign or road show throughout the country to promote their services and as well use the opportunity to educate people about e-government and its services.

ACKNOWLEDGEMENT

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

1.1.1 About Electronic Government (E-Government)

A gust of wind of change is passing through the Malaysian government structure that will eventually result in a new paradigm of the government operations. It will not only change the traditional ways of government service to the citizens, but also increase efficiency of its operations to a higher standard. The use of technology in government can enhance the access to and the delivery of public services, thus improving the overall efficiency of government. This refers to the initiative of electronic government (e-government), which uses computers and Internet to deliver government information and services to the citizens.

In essence, e-government is the extensive use of Information and Communication Technology (ICT) in the operations of government machinery, so that the citizens of the country will be served better and more efficiently, at a much lower cost of operating those services and at a higher level of productivity (Strover and Straubhaar, 2000). E-government is launched to reinvent the operations of the government, both internally and in terms of the delivery of services to the people. It is merely about delivering services to citizens and businesses that meet their needs, rather than according to the services of the agencies delivering them.

The vision of e-government also focuses on an effective and efficient system that delivers services to the citizens in a way that the government becomes more responsive to the changing needs of citizens. In context of serving the people better, e-government sets a new benchmark in the levels of co-operation between the government, businesses and the citizens who shall work together for the greater benefit of the country and all Malaysians. Citizens, consumers and businesses expect efficient service from the private sector and they are increasingly demanding more of the same from the public sector. When 24-hour availability of information, convenience, fast delivery and personalization becomes the norm of the public sector, it would not only make life easier, it would fundamentally change the way people view the government itself.

1.1.2 E-Government in Malaysia

To accelerate the objectives of Vision 2020, a path has already been defined through seven innovative Flagship Applications. These applications are engineered to start the Multimedia Super Corridor (MSC) initiative and create a multimedia heaven for innovative producers and users of multimedia technology. Both local and foreign companies work with various government agencies to enhance the socio-economic development of Malaysia. The Multimedia Super Corridor offers a Malaysian initiative for the Information Age. The Flagship Applications are:

1. Electronic Government
2. Multipurpose Card
3. Smart School
4. Telehealth
5. R&D Clusters
6. E-Business
7. Technopreneur Development

The Electronic Government initiative was launched to lead the country into the Information Age. It will improve how the government operates internally, as well as how it delivers services to the people of Malaysia. It seeks to improve the convenience, accessibility and quality of interactions with citizens and businesses. At the same time, it will improve information flows and processes within government to improve the speed and quality of policy development, coordination and enforcement.

A journey of a thousand miles begins with a single step. True to this old Chinese adage, Malaysia has certainly taken the first bold steps towards making e-government a reality. The vision of Electronic Government is a vision for government, businesses and citizenry working together for the benefit of Malaysia and all of its citizens. The vision focuses on effectively and efficiently delivering services from the government to the people of Malaysia, enabling the government to become more responsive to the needs of its citizens. The 7 pilot projects of the Electronic Government Flagship Application are as follows;

- Project Monitoring System (SPP II)
- Human Resource Management Information System (HRMIS)
- Generic Office Environment (GOE)
- Electronic Procurement (EP)
- Electronic Services (E-Services)
- Electronic Labour Exchange (ELX)
- E-Syariah

Figure 1.1 shows Malaysian e-government model from a presentation done by Macauley Atasie, Managing Director/Chief Executive Officer of HEIRS Alliance Berhad in 2004 , titled 'E-Government Case Study : The Malaysian Experience.'

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| Government-to-
Business (G2B)

✓ E-Procurement | Government-to-
Citizen (G2C)

✓ e-Services
✓ e- Shariah | ■ Designed using various business models to create value.

■ Designed to move from informational to transactional; and ultimately to transformational modes. |
| Government-to-
Government (G2G)

✓ HRIMS
✓ PMS
✓ ELE | Government-to-
Employee (G2E)

✓ GOE | ■ Chosen on basis of ability to provide quick wins and high impact. |

Figure 1.1 : Malaysian E-Government Model

Malaysia has succeeded in delivering most of the pilot e-Government applications such as e-Services, e-Procurement, Electronic Labour Exchange, Generic Office Environment, and the Project Monitoring System II. These achievements do provide a sound base upon which to further progress with the implementation of the Electronic Government strategy. However, a lot more needs to be done. To successfully realize the vision for e-government means fundamentally changing how government operates and implies a new set of responsibilities for civil servants, businesses and citizens.

1.2 Problem Statement

The electronic government (e-government) information system and services initiated by Malaysian government is growing healthily from the government side, but the usage of e-government among the citizens is still very low. As stated in The Star Online newspaper 31 December 2004 edition, Malaysians are a trusting lot when it comes to electronic Government, but they're not using much of e-Government services. In a survey conducted by Taylor Nelson Sofres (TNS) in year 2003, TNS said the findings placed Malaysia as one of the lower-ranked users of government on-line services, ranking 26th among the 31 countries and territories surveyed in the study. This is a very low indication of their response towards e-Government initiatives.

But the public can hardly be made to bear the entire blame for such lethargic use of e-Government services. According to another global e-Government study, the "usability" of local e-Government services could also be questioned. There is more than just providing services to the citizens; the services provided should meet the needs and requirements of citizens as they are the people who will be utilizing the services.

1.3   Objectives and Scope of Study

This study about delivery of government services and information via the Internet or widely known as electronic government (e-government) is initiated based on several objectives as listed below:

1.3.1   The main purpose of this study, which builds on the previous reports on e-government initiatives in Malaysia, is to determine the main reasons of why e-government in Malaysia is not fully utilized by the citizens.

1.3.2   The second objective which is to recommend several approaches for the government to improve Malaysian's citizens' awareness towards e-government initiatives, thus encouraging then to increase the usage on e-government information system and services available online.

1.3.3   To develop a prototype of an end product based from findings of the survey, that will improve the awareness and understandings of e-government services among Malaysian citizens.

In general, this study will expand the knowledge on e-government initiatives in Malaysia as well as understanding the needs of Internet usage to deliver information and government services to citizens.

1.4   Hypotheses Development

On the basis of existing literature review and several discussions with supervisor, a hypothesis has been developed for this study. From the results, we want to see the relationship between the use of Internet and the citizens' understanding and awareness of e-government. A diagram showing the relationship between the variables are shown in Figure 1. 2.

| Frequency of Internet usage | ⟶ | Awareness and understanding of e-government |

Independent variable   *Dependent variable*
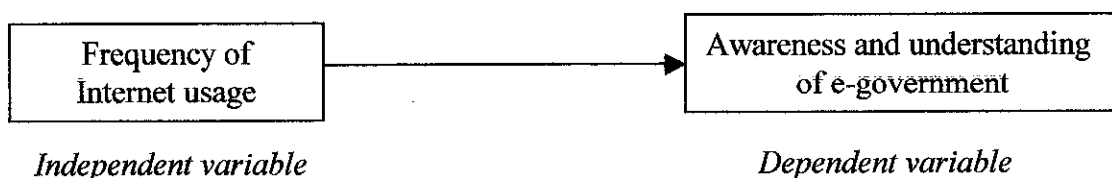
Figure 1.2 : Relationship between dependent and independent variables

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Based on the variables shown above, an alternate hypothesis made is that there is a relationship between frequency of Internet usage with the awareness and understanding of e-government. The null hypotheses, however states that there is no relationship between these two variables. The results will be shown after analysis has been done.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction to e-government

Cohen and Zeitzer (2004) define electronic government, or e-government as the transformation of internal and external business processes toward customer-centricity based upon service delivery opportunities offered by new communication technologies (such as web-based technologies) to better fulfill the purposes of government to provide efficiency and effectiveness as well as fairness and equitability. Some scholars define it in a very simple way, which is the application of e-business technologies and strategies to government organizations. Many countries such as The United States, Brazil, Egypt, Korea, New Zealand, and Singapore has embarked e-government services as more advanced facilities to their citizens and Malaysia is becoming one of them (M.West, 2004). Malaysia's e-government initiative, similar to that of many other governments around the world, is designed to create a paperless public sector, while also strengthening relationships with citizens and businesses through greater transparency and information flows. The Malaysian Administrative Modernization and Management Planning Unit (MAMPU) seeks to enhance the use of ICTs and has mandated that each government agency create an IT strategy plan to help facilitate greater communication between agencies and the public.

2.2 E-government initiatives in other countries

The Republic of Korea's growing Internet population is an important step towards the country's e-government efforts. Perhaps the most remarkable aspect of the Korean experience has been the Government's proactive stance; not only does it provide the necessary regulatory framework and supportive environment, but in an effort to be one step ahead, it also encourages investment by companies and usage by consumers (International Telecommunication Union Online, 2003).

In Spain, the Spanish government has been supporting several initiatives oriented to develop the Information Society in Spain during the last years. In a paper review of current e-government initiatives in Spain, three different phases are identified at the current state of the most outstanding in the e-government area in Spain (Sabucedo and Anido, 2004). The first step should be to provide a suitable legal framework, secondly the needed technical infrastructure has to be provided for both official institutions and citizens, and lastly proper services built upon the previous infrastructure and compliant with the defined legal framework have to be identified. This framework must be able to provide a solid sandbox whereby e-government may become a real option for citizens in dealing with government.

UK Online is a centralized initiative that attempts to structure the nature of government-citizen interaction, part of which is to expand notions of "citizens' involvement" in United Kingdom. The UK Online initiative lies within a general process of "modernization" that is driven by the UK Government's White Paper *Modernizing Government1* (Leith and Morison, 2004). Shown in Figure 2.1 is the framework of e-government gateway in the UK. From within this theoretical framework, UK government is following governmentality approach by Michael Foucault who states that government must modernize the business of government itself, achieving joined up working between different parts of government and providing new, efficient and convenient ways for citizens and businesses to communicate with government and receive services (Focault, 2000).

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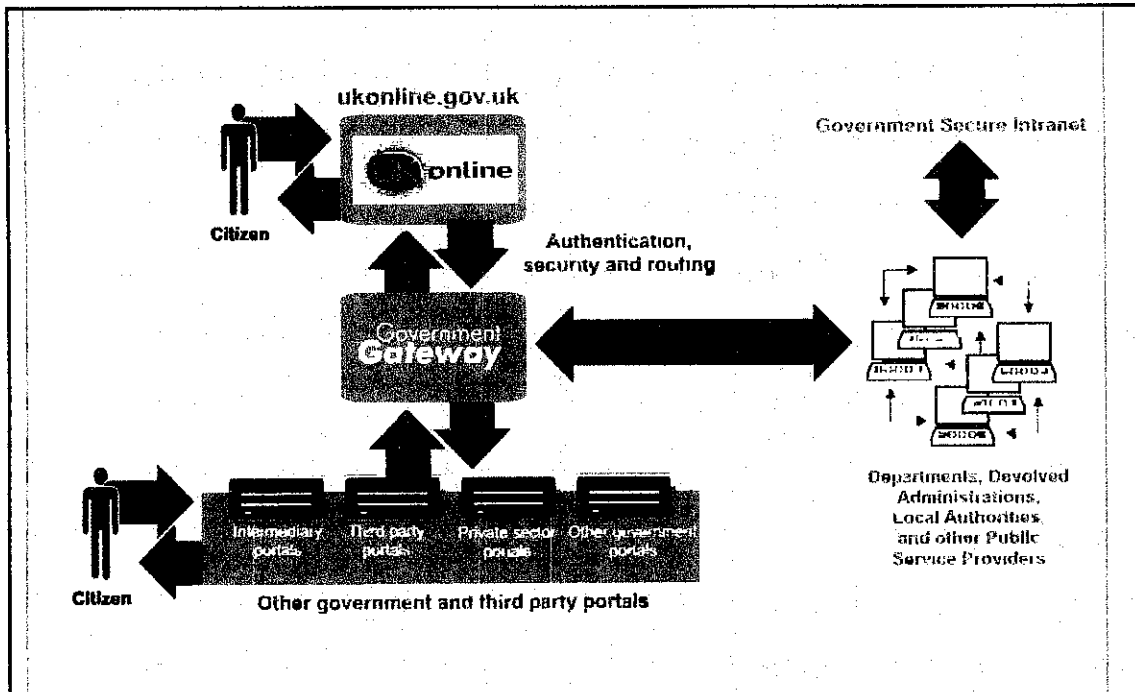
Figure 2.1 : The government gateway of UK e-government

In Singapore, e-Citizen which was launched in 1999 has become one of Singapore's most important and successful e-government initiatives. E-Citizen is an Internet portal created to provide Singaporeans with a single, organized access point to all government services. E-Citizen is organized according to "life events" rather than by Ministry or Department, covering such areas as family planning, education and recreation. Beyond providing citizens with a central window to government agencies, e-Citizen has also helped facilitate improved coordination between disparate government agencies (International Telecommunication Union Online,2003). While striving to put almost all public services online, the Singapore government realized the importance of encouraging citizens to use them. Citizens lacking access to Internet at home were provided access to e-government services through community self-service terminals. According to a journal presenting the success factors of e-government in Singapore, three factors have been identified (Weiling Ke and K.W. Kwok, 2004). Firstly, strong leadership with vision is crucial for e-government success. Secondly, the government must pursue e-government through the development of an information infrastructure and by bridging the digital divide. Thirdly, the strong political will to provide integrated services to the citizens should be matched

with coordinating measures. The integration of E-citizen front-end applications with back-end agency systems is seamless, and users need not worry about the detailed technical procedures by which security and electronic payments are executed by the agencies. Such user-friendliness has made it possible to deploy e-services expediently.

2.3   E-Government initiatives in Malaysia

Malaysia's e-government initiative, similar to that of many other governments around the world, is designed to create a paperless public sector, while also strengthening relationships with citizens and businesses through greater transparency and information flows.   The Malaysian Administrative Modernization and Management Planning Unit (MAMPU) seeks to enhance the use of ICTs and has mandated that each government agency create an IT strategy plan to help facilitate greater communication between agencies and the public.

The Multimedia Super Corridor has not only been successful in attracting investors but has also allowed the Government to provide more efficient service to the people. An online newspaper article wrote that Malaysian Prime Minister, Datuk Seri Abdullah Ahmad Badawi is very pleased with the MSC's rapid progress and added that many world class companies have been set up within the MSC together with local ones. There are now more than 760 companies in the MSC, of which 66 per cent are Malaysian. (NSTP E-media, 2003). It is indeed vital for the MSC to be always on the cutting edge of global information, communication and technology (ICT), e-commerce and e-government developments in order for Malaysia to remain competitive.

The progress of MSC's effort is proved by the launch and success of e-government as one of the 7 Flagship Applications intiated. Pilot projects under e-government flagship include Electronic Services (eServices), Electronic Procurement (eProcurement), Generic Office Environment (GOE), Human Resource Management Information System (HRMIS), Project Monitoring System (PMS II), Electronic Labour Exchange (ELX) and eSyariah Court. According to MAMPU, several E-Syariah components have been fully

implemented in Perlis, Penang, Selangor, Negeri Sembilan and the Federal Territory, while the remaining states would be covered by the middle of 2003 (R. Shariff, 2003). E-Syariah will be implemented across 106 Syariah courts in 102 locations nationwide, with installation spread out over several stages, to be completed by 2005. The entire eSyariah application system comprises six components: Syariah Court management, office automation, lawyer registration, library management, portal, and an inter-agency network.

Based on an online newspaper article, it is reported that transactions through ePerolehan, the electronic procurement system for Government-to-Business exchanges, is expected to reach RM1 billion this year, in 2005. The value of transactions through the system has risen from RM1.9 million in 2002, to RM70 million in 2003, and to RM313 million in 2004. Some 81,000 suppliers are registered under ePerolehan of which 17,000 are fully utilising the system. 639 government agencies are ePerolehan enabled of which 466 are in the Klang Valley. (The Star, 2005)

In a paperwork of APEC High-Level Symposium on e-government, Malaysian delegates presented six principles for e-Government to be successful based on the experience of Malaysia (Y.S Lee, 2002). The principles he introduced are as follows:

i) E-Government should be around the needs of the people not the administration, therefore, needs of the people should be properly assessed.

ii) The simpler the access, the better.

iii) Least developed areas must not be forgotten. If not, most of the objectives of e-Government are not achieved.

iv) Information must be provided simply, responsibly and transparently.

v) It must come at low cost.

vi) Must not forget the people, the human resource management aspects. Besides the technology to be introduced, training of human resource management is necessary.

2.5 Use of e-government services by the public

It is indeed true that the concept of e-government is introducing a simpler way of interaction between the government and citizens, but it may probe the question of "are the people actually aware that using it will simplify their tasks, thus encouraging them to use e-government services?" and "how many people are actually using it?". E-government offers the potential to bring citizens closer to their governments. Regardless of the political system that a country has, the public benefits from interactive features that facilitate communication between citizens and government (M.West, 2004). Being one of the lower-ranked users of government on-line services, understanding why people do not use the e-government services may indicate what resources would be required to educate the citizens about the advantages of e-government services in order to catalyze equitable use by all citizens (Strauver and Straubhar,2000). According to an online article of Malaysian Prime Minister speech during the opening of Malaysian e-government 2002 conference, Malaysia is facing several challenges in advancing e-government service delivery in Malaysia which relate to the facilitation and expansion of ICT infrastructure, the integration of service delivery across multiple tiers of government, the adherence to the imperatives of security and privacy, and the development of a skilled and competent workforce to affect e-government service delivery (Badawi,2002)

While the above challenges are faced to the government, there are also challenges faced by the citizens in being a part of the initiative such as lack of IT skill, computer literacy, consciousness of information safety and unawareness of services offered under e-government initiatives. It is hoped that this study will be able to determine what are the contributing factors causing low-e-government usage among Malaysian citizens of the factors stated previously, or there could be other factors involved.

CHAPTER 3

METHODOLOGY

3.1   Questionnaire

3.1.1   Participants

For data collection, this study used a set of questionnaires which was distributed to 600 possible respondents from various backgrounds. The questionnaire consists of three segments, namely Section A, B and C. There are six questions in Section A which address respondents' background, five questions in Section B which address their computer and Internet usage and lastly thirteen questions in Section C, which address the usage of electronic government (e-government) among the respondents. The questionnaires were distributed all around Malaysia to obtain responses from respondents all over the country. Targeted respondents can be any Malaysian citizens aged above 15 and there is no age limit. Therefore these questionnaires were distributed in a university for the students, lecturers and staffs, public primary school and secondary school teachers, public sector employees, shopkeepers, hawkers, businessmen, retirees and government employees as well. The participants varied from different background in terms of age, race, education level, knowledge about computer, Internet, and e-government.

3.1.2   Procedure

To reach Malaysian citizens throughout the country, several approaches other than personal distribution were used for this purpose. Out of 600 questionnaires distributed to respondents, 400 were sent online through electronic mails (e-mails) and through the

chartrooms in local university network as well as chat rooms in the Internet. These are among the simple, yet efficient ways to reach respondents from all over the country. For questionnaires which were personally distributed to respondents, some of them were monitored while answering based on their request to provide clarification in helping them answer the questions smoothly. To ensure the reliability and validity of the responses, the response from the questionnaire will be revised to make sure that respondents answer all of the questions and explanation will be given to them should they face any difficulties in understanding the questions.

3.2   Prototype Development

Six phases were involved in prototype development for this project. The first phase is the analysis of results, followed by planning, designing, development, conformation of requirements and finally testing phase. The phases involved are depicted Figure 3.1. The first phase involves analyzing questionnaire results, because the product to be developed for this project is very much dependent on the results of respondents' feedback. Therefore, their answers are analyzed and the main feedback is in section C, regarding respondent's usage of e-government, particularly the question addressing the reason of low e-government usage and Malaysian citizens.

Based on the feedback, most citizens do not know how to use the online services provided by the government because they are not aware of the existence and thus discouraging them from using online services. In one of the questions asked in the questionnaire, feedback has shown that the most important criteria in a government website important to the respondents is the complete instructions on using online transactions offered by the government. In planning phase, a website was initiated with the objective to overcome this situation. This prototype provides a clear guidance on how to use most of the e-government services available on the Internet by building up similar pages that resembles the exact page of transactions process available in the government website. The difference is that in this portal, users will see the flow on how to perform the respective transactions by having full guidance on each page on completing the

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transactions. By having this website, users will know how does it actually look like when performing an online transactions such as bill payment, online registration and other services.
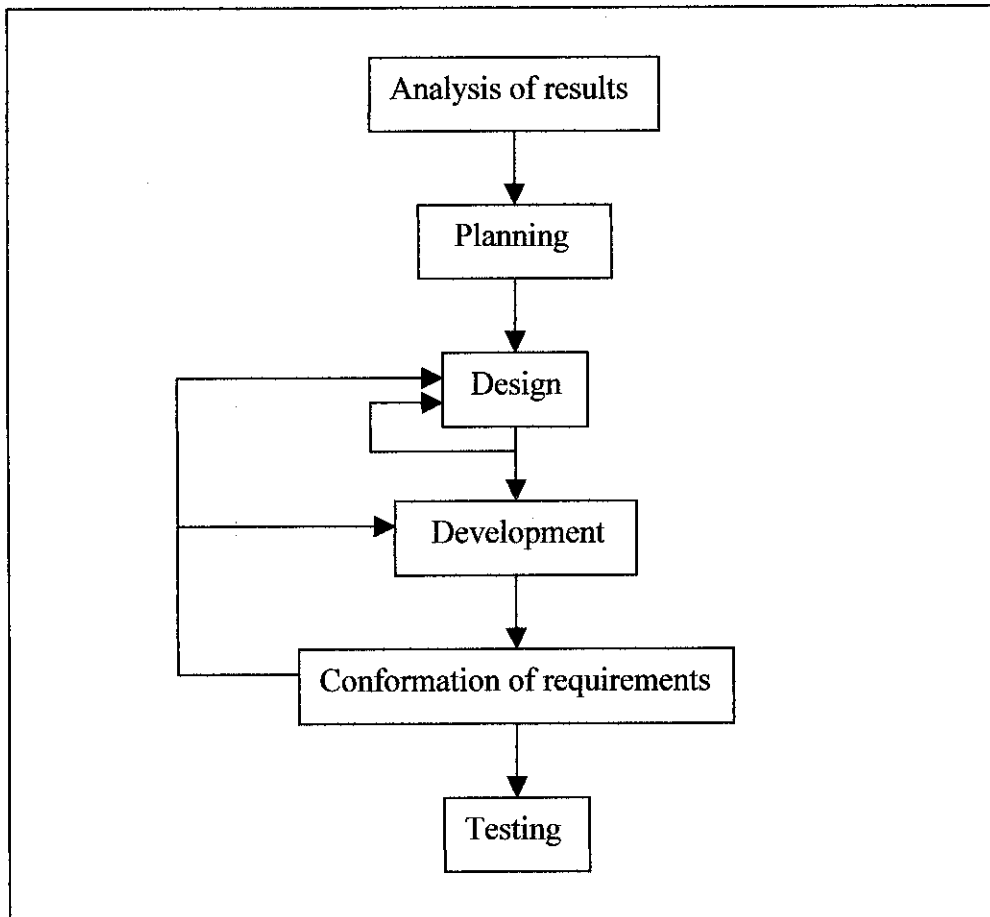
Figure 3.1 : Phases involved in prototype development

Design phase involves preparing design and contents for the portal. This stage is crucial as it will determine how the portal looks like. Each page of the portal is designed and the designs are to be approved before moving on to the next level. There is iteration within this phase because some of the designs needed to be redone. Figure 3.2 shows the storyboard of the first page of the website, while figure 3.3 shows the template for all the other pages. Storyboard in Figure 3.3 is applied to all the pages in the website except for the first page that applies storyboard shown in Figure 3.2.
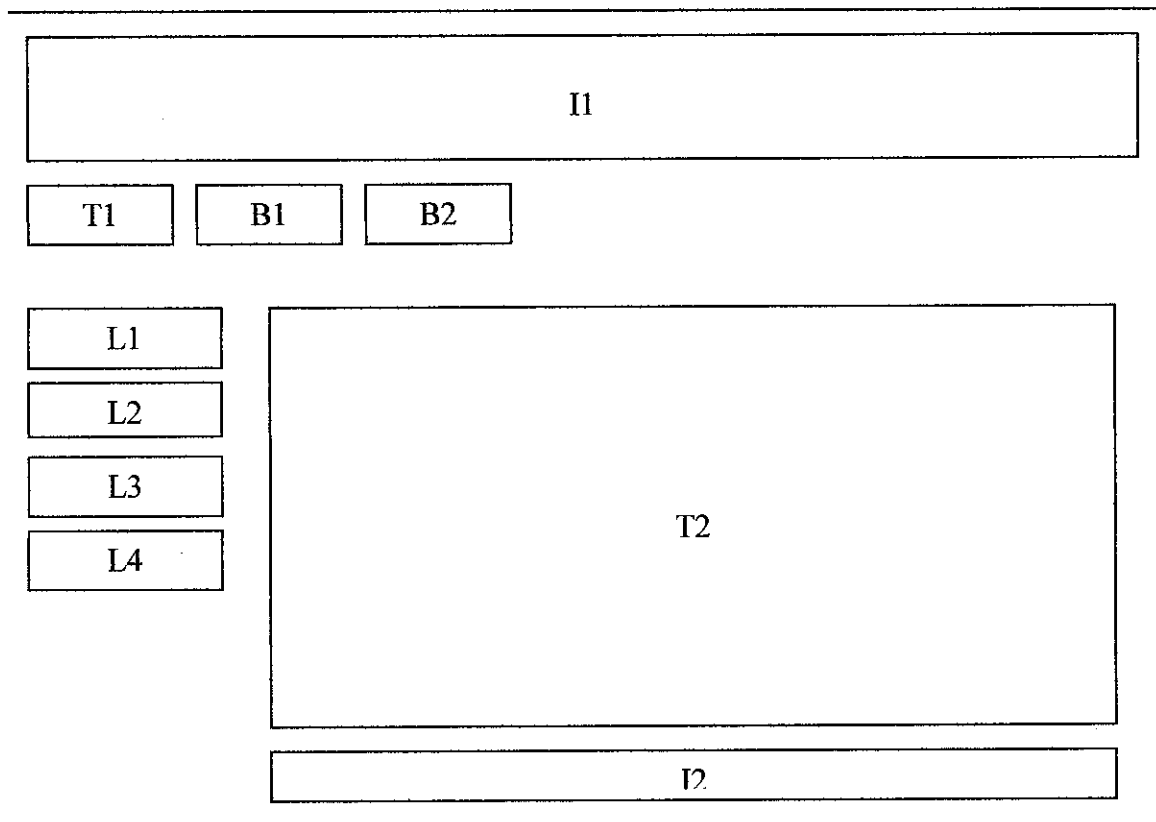
Figure 3.2 : Storyboard for first page of portal

I1 : Banner of the website titled "Selamat Datang ke Laman Web Kerajaan Malaysia"

I2 : Copyright banner

B1 : Button for Bahasa Melayu

B2 : Button for English

T1 : Text informing that two language can be chosen to view the website, written as "Pilihan Bahasa"

T2 : Short explanation on e-government initiatives in Malaysia

L1 : Link to guide for e-government service : Online Summon Payment for JPJ

L2 : Link to guide for e-government service : SPA Application

L3 : Link to guide for e-government service : Online Bill Payment for TELEKOM
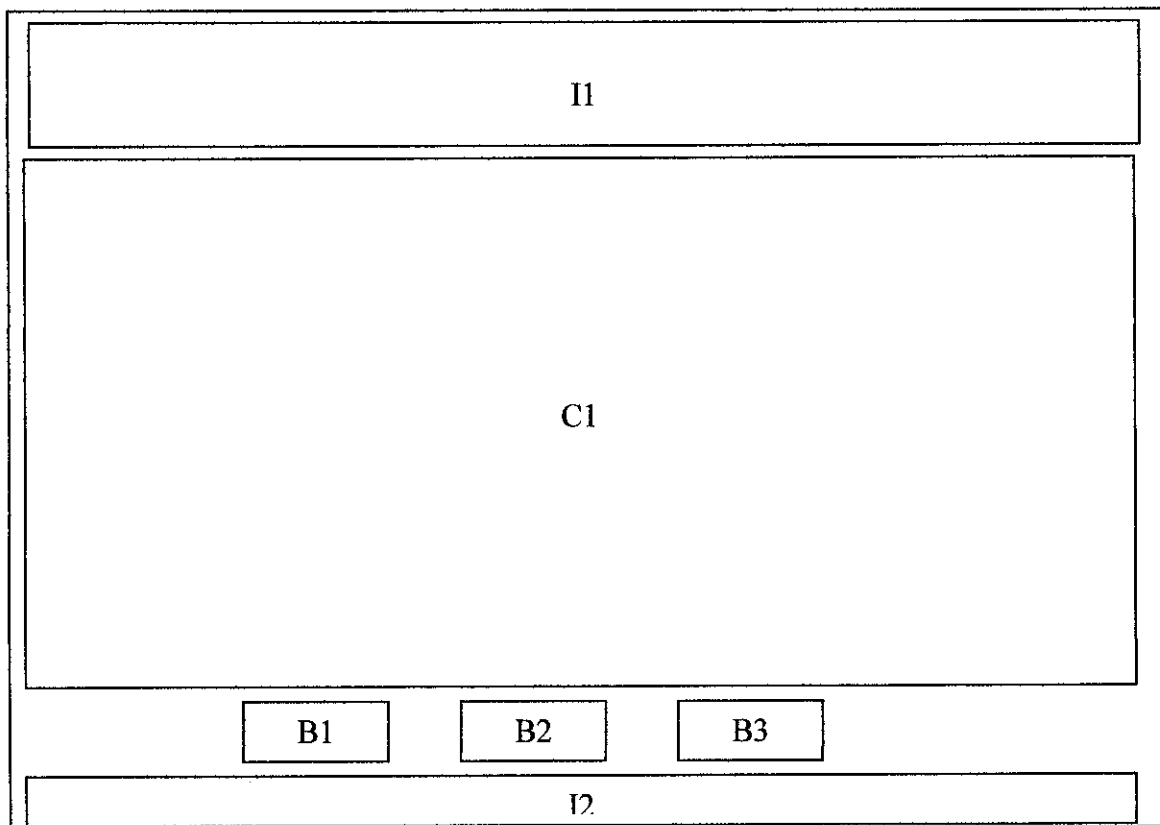
Figure 3.3 : Template storyboard of the portal

I1 : Banner of the website titled "Selamat Datang ke Laman Web Kerajaan Malaysia"

I2 : Copyright banner

C1 : Content of the guide after each link in Figure 4 (L1, L2, L3, or L4) is clicked

B1 : Back button

B2 : Home button

B3 : Next button

After all the designs were approved, this project moved on to development phase. This is the longest phase in this project as it took about two months to complete the website. The interface is designed using Macromedia Dreamweaver authoring tool and it is made web-based using PHP scripting.

After the prototype is developed based on the design, it is confirmed by revising the requirements with the actual website to see if it meets the requirements. If there is anything lacking, the design and development phase is revised to amend the particular part so it meets requirements as gathered from the analysis in the first phase. Finally, when the website confirms to requirements, it is tested to examine the functionality of the prototype.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Respondents' Background

The questionnaires were distributed to 600 people all over Malaysia through various ways such as through personal distribution, local university network and electronic mails (e-mails). This study received 412 copies of returned feedback in a form of hardcopy as well as electronically. Table 4.1 below summarizes the results of section A in the questionnaire which addresses respondents' backgrounds.

Table 4.1 : Results on reponses from Section A (Respondent's Background)

Category	No. of respondents (#)	Percentage %
Age range :		
15-20 years	62	15.0
21-25 years	82	19.9
26-30 years	135	32.8
31-35 years	44	10.7
36-40 years	29	7.0
41-45 years	33	8.0
46-50 years	12	2.9
51-55 years	10	2.4
56-60 years	5	1.2
above 60 years	0	0.0
Race :		
Malay	201	48.8
Chinese	148	35.9
Indian	61	14.8
Siamese	2	0.5
Others	0	0.0
Gender :		
Male	197	47.8
Female	215	52.2

Table 1.1 (cont'd)

Category	No. of respondents (#)	Percentage %
Employment category :		
Banking or finance	28	6.8
Administration	36	8.7
Education sector	105	25.5
Executive	20	4.9
Business	43	10.4
Student	133	32.3
Trainee	8	1.9
Self employed	2	0.5
Retiree	6	1.5
Unemployed	2	0.5
Others	29	7.0
State :		
Perlis	26	6.3
Kedah	54	13.1
Pulau Pinang	22	5.3
Perak	83	20.1
Wilayah Persekutuan	41	10.0
Selangor	37	9.0
Negeri Sembilan	25	6.1
Melaka	19	4.6
Johor	21	5.1
Pahang	13	3.2
Terengganu	12	2.9
Kelantan	18	4.4
Sabah	22	5.3
Sarawak	19	4.6

From the results, it shows that most of the respondents of this study range from 21-30 years of age with a percentage of 43% compared to the other age range. Gender wise, it shows quite a balance between male and female respondents. However, in terms of race, there are only 61 Indian respondents (14.8%), with 201 Malay respondents (48.8%) and 148 Chinese respondents (35.9%). Most of the respondents are students (33.3%) and the second highest percentage (25.5%) comes from education sector, which consists of lecturers, head of departments, librarians, lab technicians, executives and administration staffs. 7.0% of respondents categorized as others come from public companies such as engineers, IT specialists, system analysts and secretaries. Respondents from the state of Perak, Kedah and Wilayah Persekutuan record as the three highest states with returned feedback with percentages of 20.1%, 13.1% and 10.0% respectively.

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4.2   Computer and Internet Usage

The result for Section B, which addresses the usage of computers, and Internet among respondents is described in Table 4.2. A total of 45 respondents (10.9%) do not own computers at home and out of 412 respondents (89.1%) who do have a computer at home, (73.1%) of the computers are equipped with Internet connection. When asked about their frequency of using the Internet, 345 respondents (83.8%) out of 412 rate 4 and 5 of scale from 1 (never) to 5 (very frequent). 12 respondents (2.9%) had never used the Internet.

Table 4.2 : Results on responses from Section B : Computer and Internet Usage

Category	No. of respondents (#)	Percentage %
Presence of computer at home :		
Yes	367	89.1
No	45	10.9
Computer at home with Internet connection :		
Yes	301	73.1
No	111	26.9
Frequency of Internet usage :		
[1] Never	12	2.9
[2]	14	3.4
[3] Moderate	41	10.0
[4]	201	48.8
[5] Very frequent	144	35.0
* Reasons for using Internet :		
Education	245	45.3
Occupation	126	23.3
Leisure	48	8.9
Entertainment	69	12.8
Others	53	9.8
* Use Internet from :		
Home	127	24.2
Work place	169	32.3
Schools	26	5.0
University	133	25.4
Cyber Café	58	11.1
Public library	11	2.1

* Respondents could tick all that apply

The main reason for using the Internet as rated by respondents is for educational purposes (45.3%) as the main respondents are students, followed by for occupational purposes (23.3%). Other than for leisure and entertainment, respondents stated that they use the Internet for information gathering for their projects as well as to check the daily updates online, namely reading the online newspapers daily. The respondents usually access the Internet mainly from workplace (32.3%), followed by university (25.4%), home (24.2%) and cyber café (11.1%)

4.3   Use of Electronic Government Services on The Internet (E-Government Services)

The last section, Section C, address the usage of e-government services among respondents. The result is described in Table 4.3, whereby it states 36.4% of respondents prefer to deal with government –related matters by personally meeting the officers face to face while 21.7% prefers to do it over the phone, 17.8 % through letters and around 13.5% by e-mail. 10.6% of the respondents prefer to contact the government via Internet. Out of 412 respondents, 146 (35.4%) respondents are not aware of the

Table 4.3 : Results on responses from Section C : Use of Electronic Government (E-Government)

Category	No. of respondents (#)	Percentage %
* Usual way of contacting government offices :		
Telephone	105	21.7
In person	176	36.4
Letter	86	17.8
E-mail	65	13.5
Website / Internet	51	10.6
Others	0	0.0
Awareness of the existence of e-government intiatives :		
Yes	266	64.6
No	146	35.4

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Table 4.3 (cont'd)

Category	No. of respondents (#)	Percentage %
* First to know about e-government through :		
Television	83	31.2
Radio	55	20.7
Magazines	30	11.3
Colleagues	36	13.5
Internet	45	16.9
Others	17	6.4
Experience in using e-government :		
Yes	166	62.4
No	100	37.6
Level of understanding about e-govt :		
[1] Don't understand at all	8	3.3
[2]	38	15.8
[3] Moderate	92	38.2
[4]	46	19.1
[5] Really understand	57	23.7
Managed to find the desired information / complete the transaction :		
Yes	97	58.4
No	69	41.6
Face difficulties when using e-government services :		
Yes	86	51.8
No	80	48.2

* Respondents could tick all that apply

existence of e-government initiatives in Malaysia and the other 266 respondents (64.6%) knew about e-government mainly through the television, followed by radio, Internet , colleagues, magazines and other source which is the newspapers. When asked whether they have any experience in using e-government services or not, 166 respondents (62.4%) stated that they do. As obtained from the survey, these are the e-government services used by the respondents :

- *Suruhanjaya Perkhidmatan Awam (SPA)*

  Respondents use this website for job application within the government agencies.

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- *MARA*

  Respondents used this website to find information regarding sponsorship offers as well as to check the status of sponsorship application.

- *Jabatan Perkhidmatan Awam (JPA)*

  Respondents visit this website to download application forms as well as to seek information regarding sponsorship offerings , application status, as well as checking on their education loan online.

- *Jabatan Pengangkutan Jalan (JPJ)*

  The main purpose of respondents using this website is to check on their traffic summons as well as to pay their summons online.

- *Dewan Bandaraya Kuala Lumpur (DBKL)*

  Respondents visit this website for the same purpose as JPJ, which is to check their summons as well as paying them online.

- *Program Latihan Khidmat Negara (PLKN)*

  Respondents visit PLKN website to check their status for PLKN service and one respondent used this for research purposes for their projects.

- *Kumpulan Wang Simpanan Pekerja (KWSP)*

  Respondents use this website to check their KWSP balance and status.

- *Public universities (IPTA) websites*

  Respondents visit IPTA websites to find information on the courses offered and for online registration.

However, not all of them managed to find what they were looking for; only 58.4% managed to do so. For those who did not manage to find the desired information, reasons given include the page has expired, the server is not responding (where as other commercial pages surfed at the same time are available), the pages loaded very slowly, and when they tried to download certain forms, nothing actually came out because the page is not frequently updated and the information are not organized efficiently. For the respondents who are aware of e-government services but do not have any experience in suing them, the reasons stated are because there is no need for them to use the services, they are comfortable using telephones to contact government officers, o Internet connection at home, and also because of the restricted online services offered by government agencies which do not serve their purpose of using it. Besides, one of the respondents mentioned that he has no intention of using government services after using them a few times and found that the information provided is not clear that he didn't manage to find what he was looking for the he was not confident with the online services, especially when it involves making payment online.

Table 4.4 : Results on relationship between frequency of Internet usage and understanding of e-government

		FREQUENC	CONCEPT
FREQUENC	Pearson Correlation	1.000	.429
	Sig. (2-tailed)	.	.018
	N	412	412
CONCEPT	Pearson Correlation	.429	1.000
	Sig. (2-tailed)	.018	.
	N	412	412

* Correlation is significant at the 0.05 level (2-tailed).

Pearson correlation is used to test the hypothesis made in one of the earlier section. Based on analysis obtained from SPSS, the correlation between the variables is significant at 0.05 level. Based on the results, the significant value is 0.018, which is less than 0.05; therefore the alternate hypothesis is accepted. There is a relationship between the frequency of Internet usage by the citizens with their awareness and understanding of e-government concept.

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There are five questions in Section C asking or respondents' opinion on the benefits of e-government services to the citizens. All five questions use five-point scale starting from 1 (strongly disagree) until 5 (strongly agree) and respondents are asked to state their opinion within this range of scale. In the first question, the respondents were asked about their opinion on whether government website makes it easier to find information and their answers fall from scale 3 to 5 with none of scale 1 and 2. The second question asked whether e-government will benefit the citizens by making their services available on the Internet and one respondent ticked on scale 1, meaning that they do not agree at all while the others other ticked from scale 3 to 5. When asked whether e-government will bring people close to government 18 of the respondents ticked on scale 2 while others ticked on scale 3 to 5. The last two questions show an interesting result whereby some respondents strongly disagree with the statements. The question asked whether e-government services will benefit the people by increasing the quality of services through the Internet. 43 respondents strongly disagree on the ground that the quality government services has not increased through Internet and in fact it can burden the users because as mentioned earlier they have to wait for the page to load as it loads very slowly and at then end they failed to find what they were looking for. The last question asked whether e-government services will make it easier for the people to communicate their views and 19 respondents strongly disagree as they said it will only widen the gap between people and government through lack of face-to-face meeting with government officers. The result of all the five questions using five point scales is described in Table 4.5:

Table 4.5 : Respondents' view on the benefits of e-government services to Malaysian citizen

Government services on the Internet will benefit the citizens by :	Strongly disagree 1	2	Moderate 3	4	Strongly agree 5
Making it easier to find information	0	0	62	225	125
Making government services available on the Internet	1	0	41	253	117
Bringing people close to government through the easiness of information searching	0	18	68	205	121
Increasing the quality of services through the Internet	43	66	179	81	43
Making it easier for people to communicate their views to government	19	36	247	61	49

In other question, respondents were asked to choose the criteria which they consider important when they are surfing a government website regardless of their experience in using any government websites. The questionnaire listed nine criteria and respondents are allowed to choose more than one criterion. Based on the graphs in Figure 4.1, it shows that the most important thing to be in a website is instructions on how to use the transactions provided (if any), with a percentage of 26% being ticked by respondents. The next important thing is the information regarding the services offered by that government agency and complete instructions on how to use the transactions provided (25.9%), followed by the information regarding relevant contact person for a particular government agency (16.9%) and a space for visitors to put their comments or critics (12.2%) These four criteria are most important, while others are not as significant. The full result of this question is described in Figure 4.1.

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No.of respondents

Criteria:
1 : Information regarding relevant contact person of a government agency
2 : Information regarding the services offered by that government agency
3 : The address and map of a particular government agency
4 : Complete instructions on how to use the transactions provided (if any)
5 : All government agencies should be using the same template
6 : List of politicians / complete organizational structures for a particular agency
7 : There's a space for visitors to put their comments or critics regarding that website
8 : Use of suitable font size and type, as well as attractive colours
9 : Interesting graphics related to the government agency

Figure 4.1 : Respondents' view of important criteria when surfing government websites

In a question asking respondents' opinion on the reasons for low e-government usage in Malaysia, almost all respondents agree on one common reason that is little or no promotion by the government to introduce e-government to the people. The second highest reason is due to the little exposure and awareness on e-government initiatives in Malaysia. The third highest reason is because of limited physical access to information and communication technology, such as poor telephone lines and Internet connection in the rural areas. This has created a barrier for the people to take opportunity of the services offered and furthermore their computer illiteracy level is lower compared to people in urban areas. This is why some citizens prefer to stick with their old ways of contacting the government that is by phone or going to the offices. Even if their methods are haphazard, they are comfortable with what they are doing. In other words, what worked

for them in the past will guide future search behaviour. The participants tended to be unfamiliar with the government websites and are comfortable with their use of the phone book and the phone. One of the contributing factors is computer illiteracy problems among Malaysian citizens. Some were still learning to use computers and suspected that their skills would improve over time. Others had limited search skills. It cannot be determined that if they do indeed improve their search skills, they will automatically use, or increase their use of, government web sites. The full statistics for this question is depicted in Figure 4.2.

Criteria :
1 : Computer illiteracy problem
2 : Little exposure and awareness on e-government initiatives in Malaysia
3 : Little or no promotion to introduce e-government services to Malaysian citizens
4 : Malaysian's attitude towards accepting changes in the country
5 : Concerns regarding the privacy of personal information while using e-government services on the Internet
6 : Limited physical access to information and communication technology, such as poor telephone lines and Internet connection in the rural areas
7 : Malaysians do not have any interest in dealing with government by using Internet
8 : Other reasons

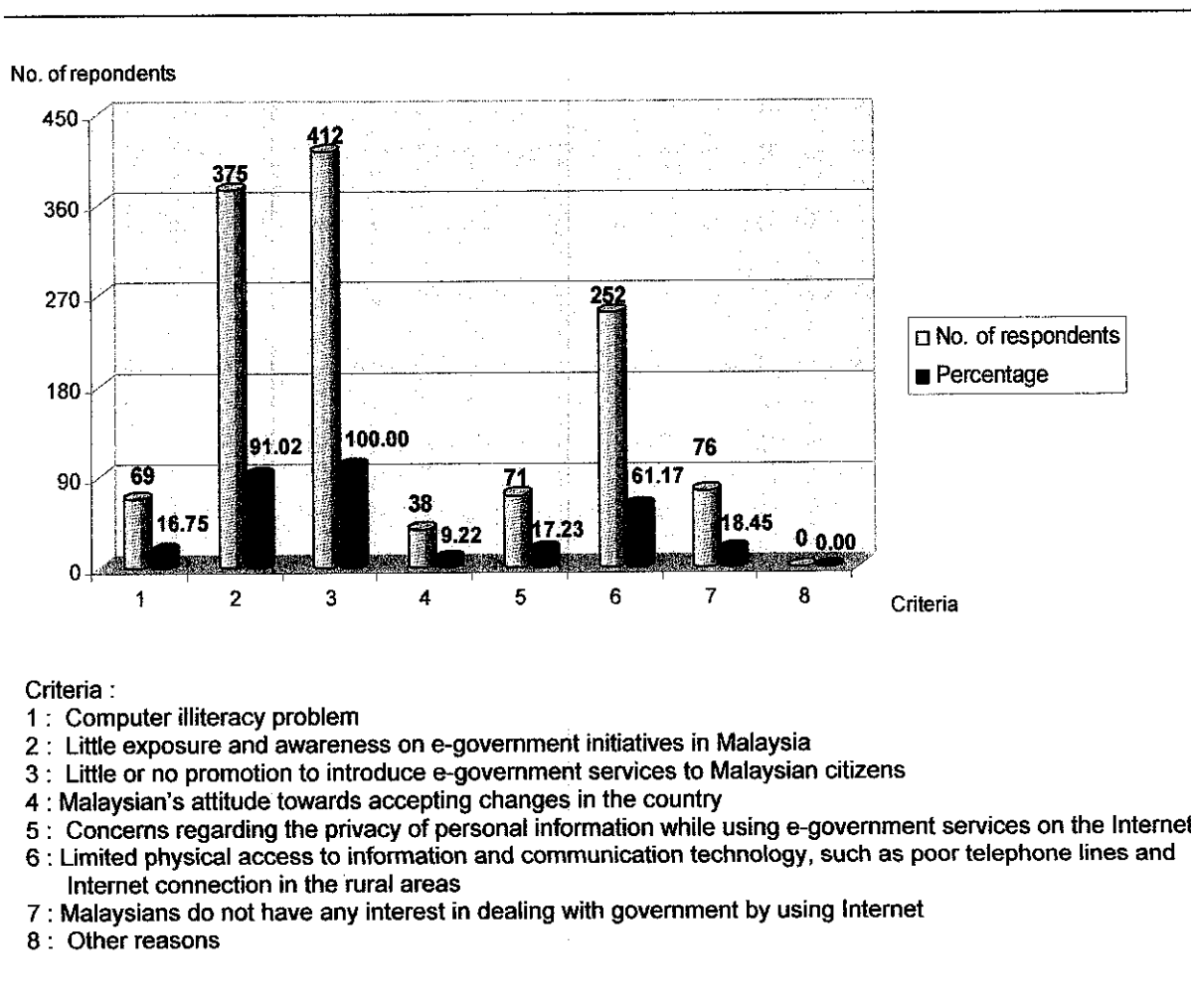Figure 4.2 : Respondents' view of the causes of low e-government usage in Malaysia

4.4   Prototype Development

The prototype has been developed based on the survey results that stated there is very little promotion by the government to educate Malaysian citizens. The purpose of this prototype is to provide guidance and educate the users on e-government services available in the Internet. It is important to know that this prototype is not an addition to other websites available to perform online transactions. Rather, it is a website to educate and guide the citizens on the services available by building a page that resembles the same interface as if they are using a particular government website to perform transaction (e.g : JPJ website to pay summon online). This is to give them a 'feel' on how it feels like when they are actually performing the transactions. The information will not be stored in any database nor being kept by any agencies.

The first page of the website gives some introduction and explanation to the citizens about e-government to stimulate some awareness to the citizens who is still not aware of the initiatives by the government. The citizens can choose to use the portal in Bahasa Melayu or in English depending on their preferences. The screenshot for the first page is shown in Figure 4.3. On the left corner the users can choose the link that they want to see for each of the government services available. By clicking on one of the link, it will bring the user to another page. The new page will resembles the exact page as in the actual website of that certain agency. For example, if a user click on DBKL – Check Summon, it will bring to new page as shown in Figure 4.4 and Figure 4.5. The page resembles the exact page is if they are browsing DBKL website to check their summons but in this portal they can see how they can actually use the services, without actually using it. This is to give them exposure on the services available, how the interfaces look like, how they are performed and what are the corresponding outputs.

Laman E-Kerajaan Malaysia - Microsoft Internet Explorer

File   Edit   View   Favorites   Tools   Help

Back ▾   × ⫯   Search   Favorites   Media   ⫯ ▾ ⫯ ⫯ ⫯ ⫯

http://localhost/ytws/egovt/firstpage.php   ▾ Go   Links »

icq ▾   ▾ Search ▾ Now On ICQ ▾   Block PopUps (0 blocked) ⫯ ⫯ ⫯

Google ▾   ▾ Search Web ▾ ⫯ 28 blocked   Options

SELAMAT DATANG KE LAMAN
WEB E-KERAJAAN MALAY...

Pilihan Bahasa : Bahasa Melayu   English

Introduction to E-Government in Malaysia

E-government is the extensive use of Information and Communication Technology (ICT) in the operations of government machinery, so that the citizens of the country will be served better and more efficiently, at a much lower cost of operating those services and at a higher level of productivity. E-government is launched to reinvent the operations of the government, both internally and in terms of the delivery of services to the people.

The vision of e-government also focuses on an effective and efficient system that delivers services to the citizens in a way that the government becomes more responsive to the changing needs of citizens. In context of serving the people better, e-government sets a new benchmark in the levels of co-operation between the government, businesses and the citizens who shall work together for the greater benefit of the country and all Malaysians

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Done   Local intranet
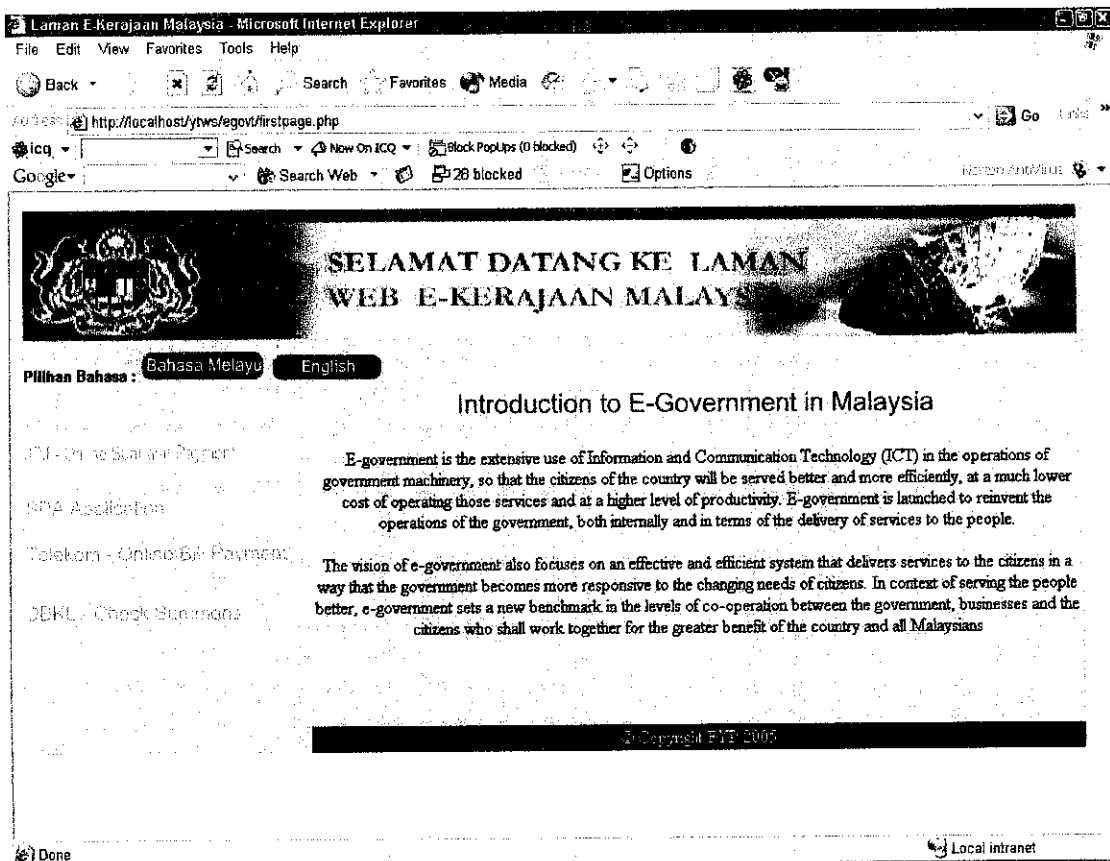
Figure 4.3 : Screenshot of first page in the portal
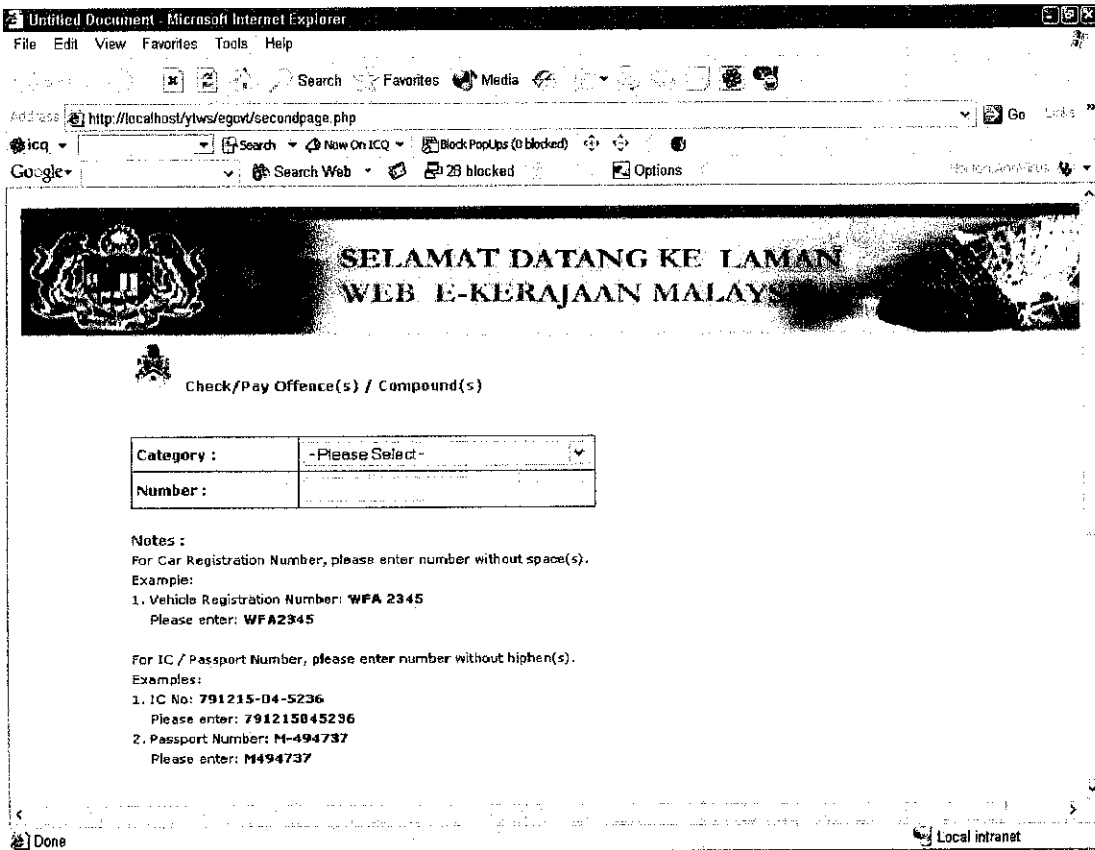
Figure 4.4 : Screenshot of page for DBKL – Check Summon guide
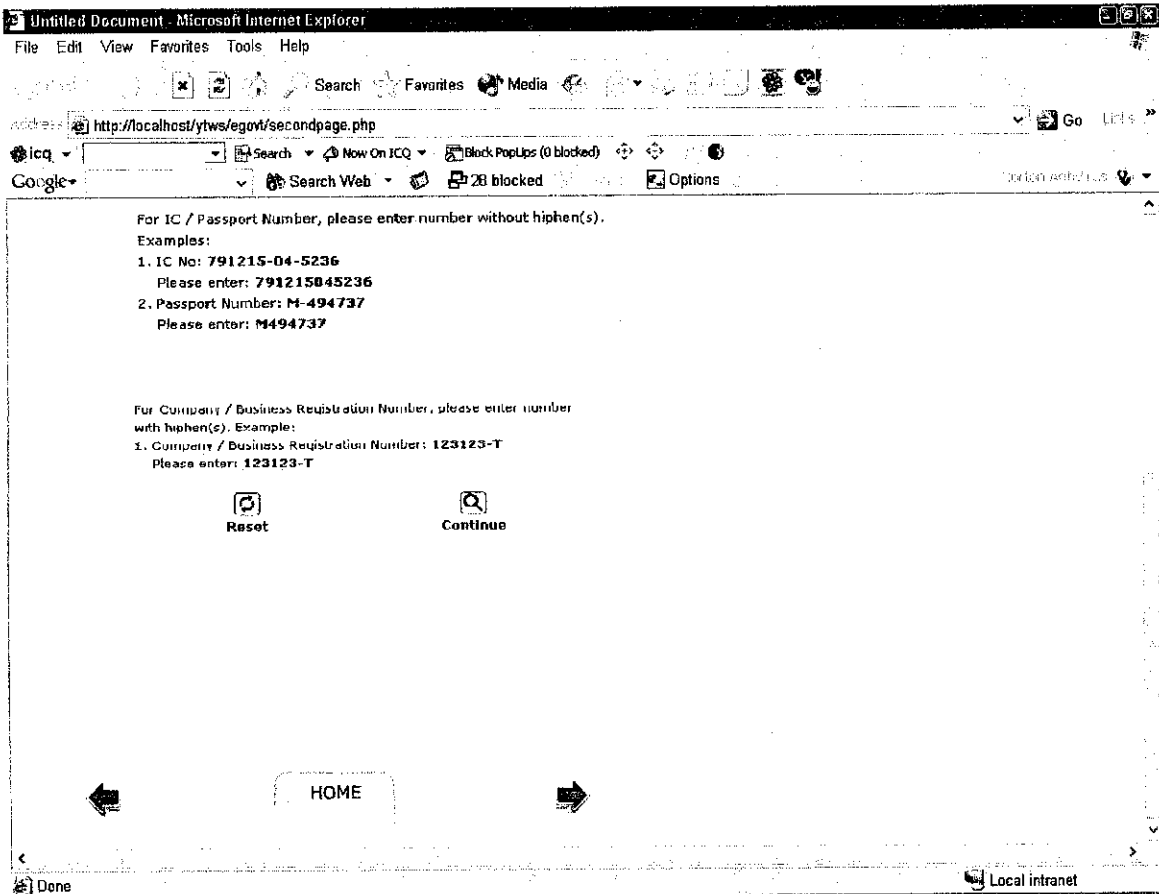
Figure 4.5 : Screenshot of page for DBKL – Check Summon guide

As stated earlier, the development of this website is intended to expose and promote e-government services to Malaysian citizens. If this website is published on the Internet and made available to the citizens, it will help them to understand more about e-government and be aware of the services that they can utilize by taking advantage of the online services provided by the government.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The primary objective of the study was to identify key factors and relationships that are likely to influence the acceptance and usage of e-government services among Malaysian citizens. The study has fulfilled the objectives of the research. Several general and important references can be made. A general inference that arises from this study is that electronic government is still in its very first step of being accepted by Malaysian citizens. Although Internet is very frequently used, Malaysian citizens are not aware of government services on the Internet. This is drawn by several factors. These factors are significant findings for this study.

Based on the results of study, it shows that the top reason is because of lack in promotion by the government to introduce and announce it to the citizens. This can be overcome by launching a nationwide campaign to promote e-government in all states and in all places, especially concentrating on the rural areas so they also have the opportunity to understand what the government is doing for the citizens. that they are offering electronic services to the people in order to reduce the hassle of having to see the government officers for every matter, be it small or important matters. The second highest reason is due to the limited physical access to information technology in certain places, such as poor telephone lines and Internet connection in rural areas while the third highest reason is because of the citizens' low level of awareness and exposure towards the e-government initiatives. These are the main reasons contributing to the low e-government usage among Malaysian citizens.

5.2   Recommendations

Based on the findings from previous section, it shows that electronic government is still in its very first step of being accepted by Malaysian citizens. Initiatives must be done to improve this condition and there are a lot of approaches to do it. From the information provided by respondents from the survey results, a number of recommendations to help remove barriers and encourage greater use by citizens of government web sites for information and services, emerge. The recommendations should be viewed within the context of past accomplishments and opportunities for future improvements. A worthy challenge is to level the playing field as much as possible, creating the opportunity for e-government to become more vital to the public in coming years. Below are the recommendations :

- Promote the concept of e-government, explaining its components and how different sectors of the public might use them. This can be done through nationwide campaigns, road shows, seminars and workshops. Ensure that web addresses are included in both the blue and white pages of the telephone book. Any promotion must show the value of government on the Internet, seeking to alter information-gathering behaviours.

- Standardise web sites, and create 'seamless searching' across government, with links, if necessary, between sites, if relevant information is held on another site. Web sites should be attractive, well laid out, and quick and easy to navigate, and provide easy-to-read content. In essence, a web site that meets such criteria encourages use, and draws people to the site.

- Provide more information on content, and annotate headings and links so that the public can quickly determine relevance to their information need.

- Ensure that all government web sites include official contact information (names, phone numbers, and e-mail addresses) of relevant personnel.

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- Ensure that web pages provide the date of revision and that the date is current.

- Promote a policy of multi-channel communication between citizens and government, recognizing that e-government only comprises one channel, and that there are other channels that are as important (or more important). Channels permitting human interaction remain very important.

- Ensure that online assistance is available to users of government web sites, and find ways to assist the public in gaining the necessary Internet and search skills to maximize their use of government on the Internet.

- Following the example of some departments and agencies, encourage agencies to invite the public to receive e-mail updates and announcements.

- Set standards for response times to e-mail enquiries and submissions. These should be timely and when someone sends government an e-mail message, that message should be promptly acknowledged and responded to in a timely manner.

- Improve online forms, enabling the public to complete and return them electronically without problems.

- Revisit the purpose of the government portal and improve the portal's functionality to enhance searching for government on the Internet. Priorities in how information is presented on the portal, and limits to actual information provided (as opposed to live links to departmental web pages) should be investigated. Links on the portal to government web pages should be effectively annotated (perhaps with pop-up explanations) so that the public can better determine each department's mission, purpose, and relevance to their information need. Given that so many people use the search engine Google to find information, government might explore a relationship with that search engine (and perhaps with others).

- Create ways for the public to tap into government on the Internet without those having computers and Internet connectivity having to pay. Provide acceptable and free access use of some form of Internet numbers.

- Develop kiosk access in supervised public places, to support access to government on the Internet for those without computers and Internet connections, free government access facility accessible from public libraries and cyber cafés.

- Acknowledge and reward government web sites that are outstanding for their quality, ease of use, and service.

- Improve the downloading time to download each page every time a user surfs each particular website. Users don't like to wait. Web users' tolerable waiting time for information retrieval is approximately 2 seconds (Fiona Nah, 2004). Therefore, any period that exceeds 2 seconds for information retrieval will reduce users' satisfaction. This is possible, by using minimum graphical images in government websites and at the same maintaining the attractiveness of web pages by using creative design.

As with all other studies, this one is not free from weaknesses. Several limitations of this study qualify for findings and suggest directions for future research. This study lacks Likert scale in some of the questions that made it difficult to be analyzed. The research design could be further improved by adding more Likert scale questions related to subject of study so it will be easier to perform statistical analysis on the results. This study is the first to address the acceptance and usage of e-government services by the citizens, other than the ones being reflected in this study. Therefore, it is recommended that other study be carried out, based upon more variables, for instance, personality, social and cultural aspects and perceived enjoyment or satisfaction. This will hopefully provide a better insight of the state of e-government initiatives in Malaysia.

5.3 Future recommendations of project

5.3.1 Recommendations on the research

The set of questionnaires used for this research has successfully managed to achieve the objectives of the study. However, in the future, if a research related to e-government issues were to be done, there should be more questions addressing the awareness and usage of e-government services by the citizens, such as how many times have they used e-government services in a particular period, what are the URLs or addresses of the services used, how are they satisfied with the services used. With addition of these questions, it is hoped that more reliable and valid data will be obtained to satisfy the issues of e-government usage among Malaysian citizens.

Apart from that, there should be more on-the-spot follow up questions to the respondents after they have finished answering the questions to resolve any misunderstandings of their inputs when the data is being analysed. For example, when a respondent answer that they do not use e-government services because they are not confident of the services, then it would be good if they were asked to clarify in what area are they not confident with the services, whether it is security issues, reliability issues, or there might be some other issues that they are not confident. Even though it will consume a great deal of time by clarifying with each respondent or most of them, it will be able to resolve any ambiguities arising during analysis of results.

Furthermore, in the future, it is hoped that this research will be able to use a focus groups as one of the data collection methods. By using focus groups, this study is able to gather several respondents in one group and ask them to view certain e-government services and transactions, and their responses can be obtained at once with better physical contacts with the researcher. This will enable them to clearly voice out the responses and opinions.

5.3.2 Recommendations on the prototype

As for the prototype developed for this project, it can be enhanced by adding more services in it so that the users are aware of as much services offered online by the government. This way, the users will be aware of the services offered through e-government initiatives and they will have clear picture on using the services by the instructions provided in the website.

Other than the services, the interface for the website can be improved as well. By applying the concept of Human-Computer Interaction (HCI), the colours can be improved or changed according to HCI concept to maximize user satisfaction when using this website. Placement of buttons, text fonts and size should be revised based on HCI concepts as well to design the best appearance for this prototype for the users.

One important task to be implemented for this prototype is testing it with the several users. Testing it with the users is important because users' feedback is important to determine the usability of this website if it were to be published on the Internet and used widely by Malaysian citizens. By getting user involvement in the testing, their opinions is valuable in determining if there is any issues with the website design and its functionality from users' point of view.

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APPENDICES

APPENDIX A:

PROJECT TIMELINE

Appendix A : PROJECT TIMELINE

ACTIVITIES	WEEK NO/DATE															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
- Research Title Initial Proposal - Preliminary Report	█															
Preparation on Research - Determine Scope of survey - Finalize questionnaires		█														
Research Work - Distribution of questionnaire - Interview			█	█	█	█	█									
Analysis of results							█	█								
Planning								█								
System Design : - Storyboarding - Content									█	█						
System Development										█	█	█	█	█		
Preparation for internal IT/IS Exhibition											█					
Confirmation of requirements														█	█	
Revision of System															█	
Preparation on Final Report/ Dissertation													█		█	█

APPENDIX B :

SAMPLE OF QUESTIONNAIRE
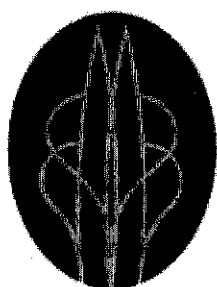
UNIVERSITI
TEKNOLOGI
PETRONAS

PROJEK TAHUN AKHIR   JANUARI 2005
JANUARY 2005 FINAL YEAR PROJECT

SOALAN KAJISELIDIK MENGENAI INISIATIF KERAJAAN MELALUI INTERNET (E-KERAJAAN) DI MALAYSIA

QUESTIONNAIRE ON THE STUDY OF ELECTRONIC GOVERNMENT (E-GOVERNMENT) INITIATIVES IN MALAYSIA

FAZLINA MOHAMED FAROUK
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Pendahuluan / *Preface* :

Kerajaan Malaysia telah melangkah setapak ke hadapan dengan pelancaran 'khidmat kerajaan melalui Internet' ataupun lebih dikenali dengan e-Kerajaan. Melalui e-Kerajaan, informasi mengenai khidmat-khidmat yang ditawarkan oleh kerajaan dapat dilayari dengan mudah melalui Internet, malah transaksi tertentu seperti pembayaran bil,saman atau aduan juga adapt dilakukan melalui Internet. E-Kerajaan dilancarkan untuk memaksimakan penggunaan teknologi maklumat di Malaysia, setaraf dengan negara – negara maju lain di samping memberi kemudahan kepada masyarakat Malaysia yang pada masa kini sememangnya telah selesa dengan penggunaan Internet .

Tujuan kajiselidik ini diadakan ialah untuk mengetahui tahap penerimaan masyarakat Malaysia terhadap inisiatif e-Kerajaan yang diperkenalkan oleh kerajaan Malaysia, serta mengenal pasti punca-punca yang menyebabkan mayarakat kurang menggunakan khidmat e-Kerajaan yang disediakan.
Kajiselidik ini mengandungi tiga seksyen , iaitu sek syen A, seksyen B dan seksyen C. Anda dikehendaki menjawab soalan pada ketiga-tiga seksyen tersebut.

Malaysian government has moved a step forward by introducing 'government services on the Internet', or better known as e-Government. With e-Government, information regarding government agencies and services offered are now available on the Internet and some transactions such as payments of bilsl, summons and complaints can be done via the Internet. E-government is introduced to maximize the usage of information communication technology (ICT) in Malaysia likewise other developing nations besides providing the convenience to Malaysian citizens whom now have been comfortable with using the Internet in their daily activities.

The objective of this survey is to study the acceptance of Malaysian citizens towards the e-Government initiatives as well as determining the factors causing a low usage of e-Government services among the citizens. This survey consists of three sections, namely Section A, section B and Section C. Respondents are required to answer all sections.

SEKSYEN A	**:**	**LATAR BELAKANG RESPONDEN**
SECTION A	**:**	***RESPONDENT'S BACKGROUND***

Arahan / *Instruction* :
Sila **tebalkan ('bold')** jawapan anda ./ *Please **bold** your answers.*

1. Lingkungan umur / *age range*
   - ⌐ 15 – 20 tahun / years
   - ⌐ 21 – 25 tahun / years
   - ⌐ 26 – 30 tahun / years
   - ⌐ 31 – 35 tahun / years
   - ⌐ 36 – 40 tahun / years

   - ⌐ 41 – 45 tahun / years
   - ⌐ 46 – 50 tahun / years
   - ⌐ 51 – 55 tahun / years
   - ⌐ 56 – 60 tahun / years
   - ⌐ > 60 tahun /years

2. Jantina / Gender
   - ⌐ Lelaki / Male
   - ⌐ Perempuan / Female

3. Bangsa / Race
   - ⌐ Melayu / *Malay*
   - ⌐ Cina / *Chinese*
   - ⌐ India / *Indian*
   - ⌐ Siam / *Siamese*
   - ⌐ Bumiputera Sabah atau Sarawak / *Sabahan or Sarawakian bumiputeras*

4. Kategori pekerjaan / *Employment kategori*
   - ⌐ Perbankan atau kewangan / *Banking or finance*
   - ⌐ Pengurusan / *Administration*
   - ⌐ Sektor Pendidikan / Education sector
   - ⌐ Eksekutif / *Executive*
   - ⌐ Perniagaan / Business
   - ⌐ Pelajar / Student
   - ⌐ Pelatih / *Trainee*
   - ⌐ Bekerja sendiri / *Self employed*
   - ⌐ Pesara / *Retiree*
   - ⌐ Ditanggung oleh pasangan / *Supported by partner*
   - ⌐ Lain-lain (sila nyatakan) / *Others (please specifi)* :_____

5 . Dari negeri manakah anda berasal / *Which state is your hometown ?*

_____

6. Di negeri manakah anda sedang bekerja / belajar pada masa ini /
Which state are you currently working / studying in?

_____

SEKSYEN B   :   PENGGUNAAN KOMPUTER DAN INTERNET
SECTION B   :   COMPUTER AND INTERNET USAGE

Arahan / *Instruction* :
Sila **tebalkan ('bold')** jawapan anda ./ *Please **bold** your answers.*

1. Adakah anda mempunyai komputer di rumah ? / *Do you have a computer at home ?*

   í Ya / *Yes,*
   í Tidak / *No*
   (Jika jawapan anda 'Tidak', abaikan soalan 2 dan teruskan ke soalan 3, seterusnya / *If your answer is 'No' , skip question 2 and proceed to question 3, onwards)*

2. Adakah computer anda mempunyai talian Internet? / *Does your computer have an Internet line?*

   í Ya / *Yes,*
   í Tidak / *No*

3. Sekerap manakah anda menggunakan perkhidmatan Internet /
   How frequent do you utilize Internet connection ?

í	í	í	í	í
1	2	3	4	5
Langsung tidak		Sederhana		Sangat kerap
Never		*Moderate*		*Veryfrequent*

4. Apakah tujuan PALING UTAMA anda menggunakan Internet / *What is your MAIN REASON for using the Internet ?*

   í Pelajaran / *Education*
   í Kerja / *Occupation*
   í Mengisi masa lapang / *Leisure*
   í Hiburan / *Entertainment*
   í Lain-lain (sila nyatakan) / *Others (please justify)*   : _____

5. Di manakah anda selalu menggunakan Internet / *Where do you usually access the Internet ?*

   í Rumah / Home   í Kafe Siber / Cyber cafe
   í Tempat kerja / Work place   í Perpustakaan awam / Public library
   í Sekolah / School   í Universiti / University
   í Lain-lain (sila nyatakan) / *Others (please justify)*   : _____

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SEKSYEN C : **PENGGUNAAN KHIDMAT KERAJAAN MELALUI INTERNET (E-KERAJAAN)**
SECTION C : *USE OF ELECTRONIC GOVERNMENT ON THE INTERNET (GOVERNMENT SERVICES)*

<u>Arahan / *Instruction* :</u>
Sila **tebalkan ('bold')** jawapan anda ./ Please **bold** your answers.

<u>Nota / *Note:*</u>
Seksyen ini banyak menggunakan istilah **e-Kerajaan (kerajaan elektronik)**, yang bermaksud **perkhidmataan kerajaan melalui Internet.** Harap maklum.
*In this section, please take note that the term **e-Government (e-Government)** , which means government services via the Internet, is widely used.*

1. Lazimnya, bagaimanakah anda menghubungi pejabat atau pegawai kerajaan / *How do you normally make contacts with government officers or offices ?*
   Ì Telefon / Phone   Ì Emel / E-mail
   Ì Bersemuka / In person   Ì Laman Web / Website
   Ì Surat menyurat / Letter
   Ì Lain-lain (sila nyatakan) / Others (please specify) : _____

2. Adakah anda menyedari bahawa wujudnya perkhidmatan kerajaan melalui Internet (e-kerajaan) di Malaysia /
   Are you aware of the government services through Internet (e-government) initiatives in Malaysia ?
   Ì Ya / Yes
   Ì Tidak / No
   (Jika jawapan anda tidak, sila abaikan soalan 3 hingga soalan 7 dan teruskan ke soalan 8. /
   If your answer is no, skip questions 3 up to question 7 and proceed to question 8)

3. Dari manakah anda pertama kali mengetahui tentang perkhidmatan kerajaan melalui Internet (e-kerajaan)di Malaysia /
   How did you first know about e-government initiatives in Malaysia ?
   Ì Televisyen / Television   Ì Rakan / Colleagues
   Ì Radio / Radio   Ì Internet /Internet
   Ì Majalah / Magazines
   Ì Lain-lain (sila nyatakan) / Others (please justify) : _____

4. Bagaimanakah tahap kefahaman anda mengenai konsep e-kerajaan di Malaysia / *How far is your understandings with regards to e-government concept in Malaysia ?*

Ì	Ì	Ì	Ì	Ì
1	2	3	4	5
Langsung tidak faham		Sederhana		Sangat faham
Don't understand at all		*Moderate*		*Really understand*

5. Pernahkah anda menggunakan khidmat e-kerajaan / *Have you ever used any of e-government services?*
   Ì Ya / Yes *(sila nyatakan perkhidmatan yang digunakan dan sebab / please state which services was used and the reason)*

   _____

   Ì Tidak / No *(sila nyatakan / justify your reasons)*

   _____

   (Jika jawapan anda tidak, sila abaikan soalan 6 dan 7. Teruskan ke soalan 8. /
   If your answer is no, skip questions 6 and 7. Proceed to question 8)

6. Adakah anda berjaya mendapatkan apa yang anda mahukan daripada khidmat e-kerajaan tersebut / *Did you manage to get what you were looking for in the e-government services?*
   ⌐ Ya

   ⌐ Tidak / *No*

7. Pernahkah anda mengalami kesulitan ketika meggunakan perkhidmatan e-kerajaan / *Have you had any negative experience while using e-government services?*
   ⌐ Ya / *Yes (sila nyatakan / please justify)*

   ⌐ Tidak / *No*

Sila jawab soalan-soalan berikut sekalipun anda tidak pernah menggunakan khidmat e-kerajaan melalui Internet. Pendapat anda sangat dihargai.
Answer the following questions regardless of whether you have ever used e-government services on the Internet. Your opinion is very much appreciated.

8. *Laman web kerajaan memudahkan anda mencari informasi / Government web sites make it easier to find what you want?*

⌐	⌐	⌐	⌐	⌐
1	2	3	4	5
Langsung tidak setuju		Sederhana		Sangat setuju
Strongly disagree		*Moderate*		*Strongly agreee*

9. Adakah penting bagi anda bahawa informasi tentang kerajaan dan perkhidmatan yang ditawarkan oleh kerajaan dapat dilakukan melalui Internet / *How important is it to you that government information/services are available on the Internet?*

⌐	⌐	⌐	⌐	⌐
1	2	3	4.	5
Langsung tidak penting		Sederhana		Sangat penting
Not at all important		*Moderate*		*Extremely important*

10. Wujudnya konsep kerajaan virtual, ataupun kerajaan melalui Internet akan mendekatkan lagi rakyat dengan kerajaan melalui kemudahan mencari informasi mengenai kerajaan di Internet / *Government on the Internet brings people closer to government by making it easier to find information.*

⌐	⌐	⌐	⌐	⌐
1	2	3	4	5
Langsung tidak setuju		Sederhana		Sangat setuju
Strongly disagree		*Moderate*		*Strongly agreee*

11. Wujudnya konsep kerajaan virtual, ataupun kerajaan melalui Internet akan mendekatkan lagi   rakyat dengan kerajaan dengan peningkatan kualiti perkhidmatan (yang relevan dan selesa digunakan) melalui Internet / *Government on the Internet brings people closer to government by providing better service (service that is convenient to use and reliable).*

1	2	3	4	5
Langsung tidak setuju		Sederhana		Sangat setuju
Strongly disagree		*Moderate*		*Strongly agree*

12. Konsep kerajaan virtual, ataupun kerajaan melalui Internet akan mendekatkan lagi
rakyat dengan kerajaan dengan memudahkan lagi rakyat menyuarakan pendapat mereka mengenai kerajaan memalui Internet / *Government on the Internet brings people closer to government by making iteasier for people to communicate their views to government.*

1	2	3	4	5
Langsung tidak setuju		Sederhana		Sangat setuju
Strongly disagree		*Moderate*		*Strongly agree*

13. Berdasarkan ciri-ciri yang disenaraikan di bawah, yag manakah penting bagi anda apabila melayari laman web kerajaan atau menggunakan khidmat yang ditawarkan? **(Anda boleh memberikan lebih daripada satu jawapan)**
Based on the criteria listed below, which one is important to you when surfing through a government website? *(You may choose more than one answer)*

Ⓘ Informasi tentang pihak yang patut dihubungi bagi agensi kerajaan tersebut/
   Information regarding relevant contact person of a government agency

Ⓘ Informasi tentang perkhidmatan yang ditawarkan oleh agensi kerajaan tersebut/
   Information regarding the services offered by that government agency

Ⓘ Alamat serta peta kedudukan agensi kerajaan tersebut /
   The address and map of a particular government agency

Ⓘ Arahan yang lengkap bagi menggunakan transaksi yang disediakan (jika ada – contohnya seperti membayar saman melaui Internet)
   Complete instructions on how to use the transactions provided (if any – for example payment of summons via Internet)

Ⓘ Semua laman web kerajaan sepatutnya menggunakan templet laman web yang sama/
   All government agencies should be using the same template.

Ⓘ Senarai nama ahli-ahli politik / struktur organisasi yang lengkap bagi agensi kerajaan tersebut/
   List of politicians / complete orgainsational structures for a particular agency.

Ⓘ Terdapat ruang untuk pelawat memberikan komen atau kritik terhadap lawam web tersebut/
   There's a space for visitors to put their comments or critics regarding that website

Ⓘ Peggunaan saiz dan jenis tulisan serta warna yang menarik /
   Use of suitable font size and type, as well as attractive colours

Ⓘ Terdapat gambar-gambar menarik yang berkaitan dengan agensi kerajaan tersebut/
   Interesting graphics related to the government agency

14. Berpandukan sebab-sebab yang disenaraikan di bawah, pada pendapat anda mengapakah rakyat Malaysia sangat kurang menggunakan khidmat e-kerajaan yang disediakan oleh kerajaan Malaysia (**anda boleh memberikan lebih daripada satu jawapan**)

    *Based on the reasons listed below, what do you think is the cause of a very low e-government usage in Malaysia? (**you may choose more than one answer**)*

    ⌐ Masalah buta komputer / *Computer illiteracy problem*

    ⌐ Kurang pendedahan dan kesedaran mengenai inisiatif e-kerajaan di Malaysia /
    Little exposure and awareness on e-government initiatives in Malaysia

    ⌐ Kurang atau tiada promosi daripada pihak kerajaan untuk memperkenalkan khidmat e-kerajaan kepada warganegara Malaysia /
    Little or no promotion to introduce e-government services to Malaysian citizens

    ⌐ Sifat rakyat Malaysia yang sukar menerima perubahan /
    Malaysian's attitude towards accepting changes in the country

    ⌐ Risau akan keselamatan maklumat peribadi yang diberikan apabila menggunakan e- kerajaan melalui Internet / *Concerns regarding the privacy of personal information while using e-government services on the Internet*

    ⌐ Kesusahan untuk mendapatkan komputer serta talian Internet yang baik, terutamanya di kawasan pedalaman / *Physical access to information and communication technology, such as poor telephone lines and Internet connection in the rural areas.*

    ⌐ Rakyat Malaysia sememangnya tidak berminat untuk berurusan dengan kerajaan melalui Internet / *Malaysians don't have the interest in dealing with the Government by using Internet*

    ⌐ Lain-lain sebab (sila nyatakan) / Other reasons (please justify) :

    _____

15. Jika ada SATU tindakan yang boleh kerajaan lakukan untuk meningkatkan lagi pengunaan e-kerajaan oleh rakyat Malaysia, apakah tindakan tersebut / *If the government could do ONE thing to improve-government usage among Malaysians, what should it be?*

16. Adakah anda mempunyai apa-apa cadangan selain yang dinyatakan di atas untuk meningkatkan penggunaan e-kerajaan oleh rakyat Malaysia / *Besides the one above, do you have other suggestion in increasing e-government usage among Malaysians?*

Soalan kajiselidik tamat. Terima kasih atas kerjasama yang diberikan
End of questionnaire. Thank you very much for your cooperation.

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