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Users Acceptance of E-Government System in Sintok, Malaysia: Applying the UTAUT Model

Abstract

E-government services have become a vital tool to provide citizens with more accessible, accurate and high-quality services and information. E-government system provides an efficient dissemination of information to people and eases people to communicate directly with government services. The utilization of ICT through e-government enhancing efficiency and effectiveness of service delivery in the public sector. The system is regarded as one of the vital elements to be a developed country. The application of e-government indicates the readiness and ability of the nation utilizing technology within public administration periscope. Although the Malaysian government has introduced e-government for many years, its acceptance still not very high. Therefore, this paper studies the key factors of Malaysian citizens' in Sintok, Kedah, a semi-rural area on approval on e-government services based on the Unified Theory of Acceptance and the Use of Technology (UTAUT Model). The survey data was collected from 83% respondents to measure people understanding and awareness toward e-government system. The results show that there is an excellent understanding among Malaysian towards e-government system.

Keywords:

e-government; information system; UTAUT Model; public administration

Introduction

In today's complex world, Information and Communication Technology (ICT) has become an essential element in our daily lives as it has affected and changed our lives to some extent. As a result of its rapid growth, the government used e-government service to increase the efficacy of government-to-people communication in delivering public services and information to citizens. Gant (2008) e-government defined as the use of ICTs in Government to provide public services in improving managerial effectiveness and to promote democratic values and mechanism as well as a regulatory framework that facilitates information-intensive

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initiatives and fosters the knowledge society. Most of the countries around the world have adopted e-government in their government system because they realized the benefits of e-government in developing their countries. E-government helps to improve the information flows and processes within government, increase accountability and transparency, less corruption, and greater convenience increased citizen involvement, greater efficiency, and cost reduction for government and user (Noor, Kasimin, Aman, & Sahari, 2011).

However, the success of e-government system not solely depends on government support, but also the willingness of citizens to accept, use and adopt e-government services (DeLone & Mclean, 2003). Many researched has been conducted to study the adoption and success of e-government services around the world, and the results show many governments still suffering from low-level citizen adoption of e-government services (Bélanger & Carter, 2008; Gupta, Dasgupta, & Gupta, 2008; Kumar, Mukerji, Butt, & Persaud, 2007; Reddick, 2005; Thomas & Streib, 2003). Due to this concern, the government must take proactive actions in hopes to cater to the low usage of e-government services among the citizens as the government has spent much money to develop and implement e-government system. This research has been conducted to investigate and assess the factors that contribute to citizens' acceptance in using e-government services in Sintok, Malaysia.

Literature Review
E-Government

E-government has been defined in many different ways from various studies, for example, (Brown & Brudney, 2001) define e-government as the use of technology to increase access to and expeditiously deliver government information and services. They categorize e-government efforts into three broad types of Government-to-Government (G2G), Government-to-Citizen (G2C) and Government-to-Business (G2B). Muir & Oppenheim (2002) define e-government as one of the government initiatives in transmitting information via the internet or digital methods. Kumar et al. (2007) also define e-government as a medium for better service delivery to citizens, businesses, and community members through a change in the way the government manages the information. The fully utilized e-government will contribute many benefits to government management and can bridge the interaction gap between government and citizens, for example, it will indirectly involve citizens in making a decision or policy (Othman, Yasin, & Samelan, 2012). E-government targets to simplify bureaucratic procedures, increasing efficiency and transparency, improving information, and increasing the level of citizen empowerment. Due to the advantages gained through the

application of the e-government, the UN and the World Bank embraced e-government as a strategic instrument (Cloete, 2007).

As far as Malaysia is concerned, the implementation of e-government was initiated through the introduction of the Multimedia Super Corridor (MSC) in 1996. The establishment of the MSC program was crucial to accelerate the objectives of Vision 2020 and to transform Malaysia into a modern state by the year 2020, with the adoption of a knowledge-based society framework (Jeong, 2007). To speed up MSC's evolution, the Malaysian government has set up seven flagship applications which are the building blocks for creating technologically advanced implementations and e-government is one of the seven flagship applications introduced in MSC. In 1997, the Malaysian government had launched the e-government initiative to reinvent itself to lead the country into the Information Age. The implementation of e-government in Malaysia heralds the beginning of a journey of reinventing the government by transforming the way it operates, modernizing and enhancing its service delivery. E-government attempts to enhance the convenience, accessibility and quality of interactions with the public and businesses at large. Simultaneously, it will improve information flow and processes within the government, improve the speed and quality of policy development, and improve coordination and enforcement (Suki & Ramayah, 2010)"type":"article-journal","volume":"5"},"uris":["http://www.mendeley.com/documents/?uuid=b52bfeda-fd56-4b93-9ff4-da3f0c919ac6","http://www.mendeley.com/documents/?uuid=09fc1147-cc36-4428-97b6-f888fc06f651"]}],"mendeley":{"formattedCitation":"(Suki & Ramayah, 2010. E-government aims to allow governments, businesses and citizens to work together to support Malaysia and all its people. It aims to deliver services to the people of Malaysia and become more responsive to the needs of its citizens. It also helps to enhance the relationship and quality of interaction between the Government of Malaysia and its citizens.

Under the e-government flagship, there are seven pilot projects identified to be the core of the e-government applications. The e-government projects are Electronic Procurement (EP), Project Monitoring System (PMS), Electronic Services (e-Services), Human Resource Management Information System (HRMIS), Generic Office Environment (GOE), E-Syariah and Electronic Labour Exchange (ELX). Besides these seven pilot projects under e-government flagships, several government agencies have taken initiatives to introduced online services for the public projects, aims to increase the ease and efficiency of public service to the people. Among others were Public Services Portal (myGovernment), e-Tanah, e-Consent, e-Filing, e-Local government (e-PBT), e-Kehakiman, Custom Information System (SMK), Pensions Online Workflow Environment (POWER), and Training Information System (eSILA).

Unified Theory of Acceptance and Use of Technology (UTAUT Model)

Information technology acceptance and adoption research has developed several competing and complementary models, each with a different set of acceptance determinants. These models developed over the years and came as a result of ongoing attempts to validate and expand the models. Most notable amongst these models are the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980) , Theory of Planned Behavior (TPB) (Ajzen, 1985)Heider, 1958 ; Lewin, 1951, Technology Acceptance Model (TAM) (Davis, 1989), Extension of the Technology Acceptance Model (TAM2) (Venkatesh & Davis, 2000), Diffusion of Innovation Model (DOI) (Rogers, 2003), and Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003).

UTAUT is one of the most popular frameworks in the field of general technology

acceptance models (Alraja, 2015)Like earlier acceptance and adoption models, it aims to explain user intentions to use an Information System (IS) and further the usage behaviour. Venkatesh et al. (2003) created this synthesized model to present a complete picture of the acceptance process than any previous individual models had been able to do. Eight models previously used in the IS literature were merged in an integrated model, all of which had their origins in psychology, sociology and communications. These models are the TRA, TPB, TAM, TAM2, the Motivational Model of Computer Usage (MM) (Igbaria, Parasuraman, & Baroudi, 1996), the Model of PC Utilization (MPCU) (Thompson, Higgins, & Howell, 1991), DOI and Social Cognitive Theory (SCT) (Compeau, Higgins, & Huff, 1999). Each model attempts to predict and explain user behaviour using a variety of independent variables. The UTAUT model was created based on the conceptual and empirical similarities across these eight models. Comparing UTAUT and previous models, UTAUT was able to explain 70% of technology acceptance behaviour, a considerable improvement on previous models, which routinely explain only over 40% of acceptance (Venkatesh et al., 2003). Therefore, UTAUT is considered an enhanced model with parsimonious and robust characteristics that could better explain the factors influencing an individual's intention and usage of IT. In detail, UTAUT contains four core determinants, namely performance expectancy, effort expectancy, social influence and facilitating conditions. The variable gender, age, experience and voluntariness of use moderate the critical relationships in the model (Venkatesh et al., 2003). However, concerning this research, these four intermediate variables will be not used and tested. Alawadhi & Morri (2008) investigated the adoption of e-government services using UTAUT, and the survey was carried out on 880 students revealed that performance expectancy, effort expectancy and peer influence determine students' behavioural intention. Similarly facilitating conditions and behavioural purposes determine students' use of e-government services.

Conceptual Framework and Hypotheses
Performance Expectancy (PE)

Performance expectancy is user beliefs that by using the system will assist him or she improve in job performance (Venkatesh et al., 2003). Another definition is performance expectancy can be regarded as a belief that the use of a particular technology will be advantageous or performance-enhancing to the individual (Muhammad Abubakar & Hartini, 2013). Wu, Yu, & Weng (2012) define performance expectancy as in which individual perceives that an information system is helpful for the job. From the definitions given, it can be seen that performance expectancy is a concern with making an individual task or job more effective and efficient. In the case of this research, it means that citizens feel and believe that by using e-government services will help them to gain more benefit and achieve a reasonable job expectation.

Performance expectancy in the UTAUT model is derived from a combination of five constructs from previous models, consisting of perceived usefulness, external motivation, job fit, relative's advantages and outcome expectations (Davis, Bagozzi, & Warshaw, 1989; Venkatesh & Davis, 2000; Venkatesh et al., 2003). First, a construct is perceived usefulness, (Davis et al., 1989) where a person believes that using the system in his job will allow him to accomplish tasks faster. It also enhances his job performance, increases his productivity, increases efficiency at work and makes it easier to perform the job and find the system useful in the job. The second construct is the extrinsic motivation (Davis et al., 1989) a perceptions that users will want to perform an activity because it is perceived to be instrumental in achieving valued outcomes that are distinct from the activity itself, such as improved job performance, pay, or promotions.

The third construct is job-fit, (Thompson et al., 1991) explains how the capabilities of a system enhance an individual's job performance, for example, using the system can decrease the time needed to complete the job and using the system can significantly increase the quality of output on the job. The fourth construct is a relative advantage, (Moore & Benbasat, 1991) a degree in which the use of innovation is considered to be better than in its predecessor, for instance, the use of the system increases job efficiency, makes the work more relaxed and makes the work more effective. The last construct is outcome expectations (Compeau et al., 1999) where the users expect that by using the system it will increase the effectiveness of the job, improve the quality of output of my career and increase the chance of getting a raise.

Overall, performance expectancy variable is the most consistent and most potent predictors of behavioural intention and acceptance where the more individuals expect the technology would improve performance, the more likely the technology introduced been adopted (Venkatesh et al., 2003). Hence, the same pattern and effect of performance expectancy could be expected in the use of e-government services. The adoption of e-government services in the daily life of public citizens in public services would enable the performance of citizens to become more quickly and efficiently. Thus, it is predicted that there is a positive relationship between performance expectancy and citizens' acceptance of the implementation of e-government services.

H₁: *There is a positive relationship between performance expectancy and citizens' acceptance of the e-government services.*

Effort Expectancy (EE)

Effort expectancy can be defined as the degree of ease associated with the use of the system. According to (Davis et al., 1989; Venkatesh & Davis, 2000; Venkatesh et al., 2003) effort

expectancy is the extent of convenience perceived for using the system. Based on this research, it means that citizen feels using e-government services is much more comfortable and easy to access. Similar constructs in other previous models and theories from semantic viewpoints are perceived ease of use, complexity and ease of use (IDT). First, Perceived ease of use determines where users assume that it will be free of effort to use the system. For example, it was easy to learn to operate the system and users find it easy to manipulate the system to do what they want and the interaction with the system is simple, understandable and easy to use. The second construct is complexity (Thompson et al., 1991) where the system is perceived as relatively difficult to understand and use, for example, using the system takes too much time, working with the system is so complicated. It takes too long to learn how to use the system. The last construct in effort expectancy is the ease of use (Moore & Benbasat, 1991) the degree to which using innovation is perceived as being easy to use.

Overall, effort expectancy variable is also considered as the vital determinant in the UTAUT model because an individual expects the technology introduced should be free of effort. Therefore, when technology is perceived to require less effort to use, then the tendency to accept and use the technology would be increase. It is due to the perception that the lesser effort it takes to use the system technology the more useful the technology (Davis et al., 1989; Venkatesh & Davis, 2000). Such same effect is predicted to be on the e-government where free of effort would improve as well as attract the citizens to use the e-government services. Hence, it is proposed that effort expectancy could have resulted in a positive relationship with citizens' acceptance of the implementation of e-government services.

H₂: *There is a positive relationship between effort expectancy and citizens' acceptance of the e-government services.*

Social Influence (SI)

Social influence is the degree to which an individual perceives that significant others believe he or she should use the new system. Curtis & Payne (2008) define social influences include consideration of an individual's perceptions of others of the subjective culture of his or her reference community, and of the degree to which the use of the invention is used to promote an image or status in the social system. Based on this research, it means that citizen tends to accept and use e-government services by getting influence from other people that closed to them.

Similar constructs in other previous models and theories are the subjective norm, social factors and image. According to the (Ajzen, 1991; Davis et al., 1989) subjective norms, where the individual perceives that most people vital to them, will affect their behaviour to act. For instance, people who control their actions believe they should use the system or people who are important to them think they should apply the system. The second construct is social factors (Thompson et al., 1991) where people use the system because of other friends or co-workers also use the structure, and the organization has supported the use of the system. The last construct in this variable is the image (Moore & Benbasat, 1991) the degree to which use of the system is perceived to enhance one's appearance or status in one's social network. For example, people in the organization or community who use the system have more prestige than those who do not, people in the organization or community who use the system have a high profile and having the system is a status symbol in my organization or community.

Overall, social influence is the degree to which the users perceived that important people for them believe that he should use the new system. The scholars found that social impact depicts a low positive relationship in the UTAUT model, and social influence constructs are not significant. Under a mandatory condition, this element of social influence seems to be substantial only on early-stage and turn to be non-significant as experience increased. Meaning that as individual become familiar with the technology, impact from others does not affect behavioural intention. However, in e-government services among the citizen, there would be or expected to have a relationship between social influence and citizens' acceptance of the implementation of e-government services. Even though in Malaysia, e-government is voluntary, the social impact could indirectly influence the intention to use. Therefore, it is envisaged that there is a positive relationship between social influence and citizens' acceptance of the implementation of e-government services.

H_3: *There is a positive relationship between social influence and citizens' acceptance of e-government services.*

Facilitating Conditions (FC)

Facilitating conditions is the degree to which an individual believes that an organizational and technical infrastructure exists to support the use of the system. According (Davis et al., 1989; Venkatesh & Davis, 2000; Venkatesh et al., 2003) facilitating conditions refers to the extent to which an individual perceives that technical and organizational infrastructure required to use the intended system is available. This definition covers constructs of perceived behavioural control, facilitating conditions and adaptability. First, the construct is perceived behavioural control (Ajzen, 1991; Taylor & Todd, 1995) where it reflects perceptions of internal and external constraints on behaviour and encompasses self-efficacy, resources facilitating conditions, and technology enabling conditions. For example, users have the necessary resources to use the system and have the required knowledge to use the system. Second is facilitating conditions (Thompson et al., 1991) where the guidance was available for users in the selection of the system, specialized instruction concerning the course was open to

users, and a specific person or group is available for assistance with the system difficulties. The last construct is compatibility, (Moore & Benbasat, 1991) the degree to which the system is perceived as being consistent with existing values, needs, and experience of users. For example, using the system is compatible with all aspects of users' work and using the design fits well with the way users like to work.

Overall, based on this research, it means that citizen tends to accept and use e-government services if there is support from external factors like technical and organizational. Hence, it is proposed that facilitating conditions could have resulted in a positive relationship on citizens' acceptance of the implementation of e-government services.

H_4: `There is a positive relationship between facilitating conditions and citizens' acceptance of the implementation of e-government services.

Dependent Variable – Individual Acceptance

Individual acceptance is referring to how the users react with the services provided. It shows the overall satisfaction that users have before and after using the services provided. One of the most important things that indicate the acceptance of the people is the sustainability of service provider (Faezipoura & Ferreiraa, 2013). Sustainability is the time frame that service providers manage to survive in the industry. The time frame is measured as it will show that the people are accepting the service provider. One of them is the acknowledgement of the future needs of the people (Dey, Hariharan, & Brookes, 2006). As people's needs continue to evolve, technologies are required that can cope with the various changes in the demand of the people.

Besides, people's acceptance is also calculated from the service quality perspectives produced by service providers. Service quality has many definitions. Crosby (1979) stated that

service quality is conformance to requirement. It means that a stated service is said as having quality when all of the dimensions of the services adhered to specifications set. Services are not something that can be seen. It is something that must be experienced. Because of that, the quality of services is difficult to be measured. The nature of services which is intangible lead to the measurement of the quality through customers' satisfaction as one of the indicators to show the service quality (Falk, Berkman, Mann, Harrison, & Lieberman, 2010). Customer satisfaction is met when service firms manage to achieve both customer needs and expectations. The service is born due to the demand from the customers. When the demand is satisfied with the fulfilment of the customers' expectation, it will lead to customers' satisfaction.

Quality service is essential to ensure customer satisfaction. Customer satisfaction will indicate the acceptance of the services whereby it can only be shown by the loyalty of the customers (Zeithaml, Berry, & Parasuraman, 1996). For example, the implementation of e-services to meet consumer needs is intended to satisfy customers. Also, e-services ensure better knowledge transfer and flexibility transaction process that can be done at anytime and anywhere. Collier & Bienstock (2006) whereby they stated that e-services are one of the ways to ease the transaction process and affects customers' satisfaction in using the services provided. They further explain that the purpose of the e-services development is also to ensure customers loyalty and retention.

The proposed conceptual framework for this study is presented in Figure 2. The variables are mostly derived from the UTAUT model. First, performance expectancy, it is the degree to which the individuals expect that using the system will help them improve in their job performance (Venkatesh et al., 2003). Furthermore, the anticipated performance may also be considered as the expectation that the use

Figure 1.
Conceptual Framework
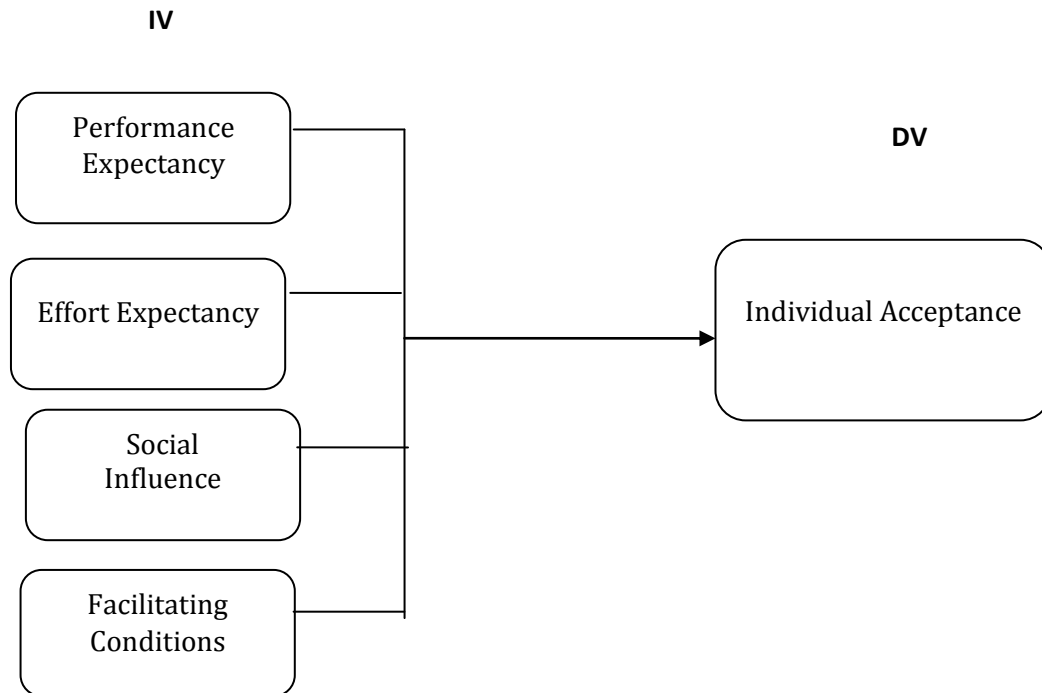
Source: Adopted from The UTAU Model framework (Venkatesh et al., 2003) with some modification

of a specific technology would be beneficial or enhance individual performance. In this research, performance expectancy will be measured by the perceptions of using e-government services in terms of accomplishments, such as saving time, money and effort, facilitating communication with government, improving the quality of government services, and by providing citizens with an equal basis on which to carry out their business with the government. Second, effort expectancy is the extent of convenience perceived for using the system (Davis et al., 1989; Venkatesh & Davis, 2000; Venkatesh et al., 2003). In other words, it is associated with the ease of use when using the system. In this research, effort expectancy will be measured by the perceptions easiness and convenience, such as learning and using the e-government services is straightforward, easy to become skilful at using the services, and able to get government services quickly. Third, social influence is the degree to which peers influence the behaviour of individuals, whether to use the

system or not. According to (Curtis & Payne, 2008) social influence includes consideration of the person's perception of the opinion of others. Individuals expect that any person that important or closed to them think that they should use the e-government services. In this research, this variable will be measured by the perceptions of how peers affect citizens' use of e-government services and the encouragement from the government to use the services.

Facilitating conditions is the degree to which an individual believes that an organizational and technical infrastructure exists to assist the use of the system (Venkatesh et al., 2003). In other words, this variable associated with the availability of resources to support individuals in using the system. In this research, facilitating conditions will be measured by the perceptions of being able to access required resources, as well as to obtain knowledge and the necessary support to use e-government services. Citizens' acceptance is referring to how the citizens react with the services

provided. Some considerations are considered in determining the level of acceptance of people in the usage of e-government services. One of them is the regularity of the citizens in getting the services. If the citizens frequently use e-government services, it shows that they are willing to accept the system. Besides, the acceptance is also based on the overall satisfaction felt by the citizens from the services they get. Citizens' desire to get services again in the future is another measure showing the extent of acceptance. When they accept to use the e-government services, they voluntarily want to use that service to perform any government requests.

Methods

The primary data collection method is adopted in this research. It used the original data collected through survey questionnaires. The purpose of this research is to assess the factors that influence individual acceptance towards e-government services. This convenience sampling technique is selected based on easy accessibility to obtain data. The target population is public citizens in Sintok, Malaysia. The people were available for the scope of study around 430 people. According to (Krejcie & Morgan, 1970) in determining size population, if the sample size is 420, the sample size is around 201. For this study, systematic sampling is selected as the technique of the sampling. Systematic sampling is samples that are chosen systematically or regularly. The questionnaire will be used as a medium for data collection. This study will be cross-sectional

by using a survey questionnaire to study the relationship between the independent variable and dependent variable at a given period.

The items of the questionnaire were adapted from the UTAUT model by (Venkatesh et al., 2003) . Collected data will be tested using SPSS Version 22. Descriptive analysis will be conducted to assess the general background of respondents, and Pearson Correlation will be run to measure the strength of a linear association between two variables. Lastly, the normality test has been conducted for all variables, and it was accepted. The result of the reliability test has been presented, and all variables are valid and accepted.

Results
Descriptive Analysis

Descriptive analysis study has been carried to investigate the background of participants and their level of knowledge in an internet application.

From the table above, it shows that the total respondents participate in this study around 166 respondents. For the first item, which is gender, the data shows that most of the respondents were female, with the percentage 63.9% compared to men who are only 36.1%. Majority of respondents are degree holder of 60.2% followed by diploma 28.9%, and surprisingly there are no data on PhD holder. Furthermore, a majority of respondents are from young adults 21-30 with 53% and middle adulthood 41-50 with 18.7%. It can be said that a large number of respondents has good computer knowledge of 49.4% and good internet knowledge 53.6%. Furthermore, due to spread technology

Table 1.
Reliability Test

Construct Variable	Number of Items	Cronbach Alpha	Reliability
Performance Expectancy (IV)	4	0.802	YES
Effort Expectancy (IV)	4	0.880	YES
Social Influence (IV)	4	0.631	YES
Facilitating Conditions (IV)	4	0.741	YES
Individual Acceptance (DV)	4	0.855	YES

Source: Data processed from the SPSS software

Table 2.
Demographic Table of Respondents

Items	Category	Frequency (Respondent)	Per cent (100%)
Gender	Male	60	36.1
	Female	106	63.9
Age	21-30	88	53
	31-40	18	10.8
	41-50	31	18.7
	Above 50	29	17.5
Education	SPM	11	6.6
	Diploma	28	16.9
	Degree	100	60.2
	Master	27	16.3
	PhD	0	0
Computer Knowledge	Poor	5	3
	Moderate	48	28.9
	Good	82	49.4
	Very Good	31	18.7
Internet Knowledge	Poor	3	1.8
	Moderate	43	25.9
	Good	89	53.6
	Very Good	31	18.7
Using the Internet	Less than one year	4	2.4
	1-3 years	20	12
	More than three years	142	85.6
Internet per day	Less than 1 hours	12	7.2
	1-2 hours	23	13.9
	2-3 hours	30	18.1
	More than 3 hours	101	60.8
Type of E-Government use	e-Service	29	17.5
	e-Procurement	4	2.4
	e-Syariah	9	5.4
	e-Courts	6	3.6
	e-Land	6	3.6
	e-Filing	59	35.5
	e-local government (e-PBT)	4	2.4
	eSila	16	9.6
	MyEG	33	19.9

Source: Data processed from the SPSS software

and globalization era, only 3% and 1.8% of respondents do have poor computer knowledge and internet knowledge accordingly.

Least of them use the internet for less than one year and less than 1 hour, which are around 2.4% and 7.2% accordingly. However, almost all respondents stated that they are using the internet for more than three years, 85.6% and more than 3 hours, 60.8%. Finally, from the data above, the majority of respondents used e-government for e-filling 35.5%, MyEG 19.9% and e-service 17.5%.

Factors Influencing the Acceptance of E-Government Services among Citizens

The first objective of the study is to examine factors influencing the acceptance of e-government services among citizens. To examine factors, the researcher will use the Pearson Correlation to examine relationship one or more variables between independent variables and dependent variables. The range value for the correlation coefficient is between -1 and 1. The value can see the linear relationship of the

correlation coefficient. The smaller the value will lead to a poor linear relationship, while, the greater the value will lead to a strong linear relationship. Zero (0) can be seen as the weakest linear relationship. The positive and negative correlations show two different meaning where the positive number correlation if the number becomes more significant, the other variable tend to get a bigger result. Meanwhile, the negative number correlation will make the other variables tend to get smaller.

Based on the table above, all independent variables (performance expectancy, effort expectancy, social influence and facilitating condition) have significances relationship with the dependent variable (individual acceptance). The '**' in the table above shows the correlation is significant at the 0.01 level. While the '*' indicates, the correlation is significant at 0.05. Apart from that, there are higher degrees of correlation between all independent variables with dependent variables. Based on the analysis, all the Pearson Correlation of five variables are enormously significant and have a positive relationship. For example, dependent variable-individual acceptance has a positive relationship with independent variable-performance expectancy, effort expectancy, social influence and facilitating condition. Then, first independent variable-performance expectancy has a positive relationship with effort expectancy, social influence and facilitating condition. Effort expectancy has a positive relationship with performance expectancy, social influence and facilitating condition. Next, social influence has a positive relationship with performance expectancy, effort expectancy and facilitating conditions. Lastly, facilitating conditions have a positive relationship with performance expectancy, effort expectancy and social influence.

Discussion

The objective of this study is to examine factors influencing the acceptance of e-government. Thus, the researcher will discuss and interpret each hypothesis on performance expectancy, effort expectancy, social influence and facilitating condition.

The first hypotheses: there is a positive and significant relationship between performance expectancy and citizens' acceptance of the

Table 3.
Pearson Correlation Table

Correlations		Expectancy IV	Effort IV	Social IV	Facilitating-IV	Usage - DV
Expectancy IV	**Pearson Correlation**	1	.687**	.271**	.537**	.425**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	166	166	166	166	166
Effort IV	**Pearson Correlation**	.687**	1	.285**	.595**	.484**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	166	166	166	166	166
Social IV	**Pearson Correlation**	.271**	.285**	1	.300**	.333**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	166	166	166	166	166
Facilitating IV	**Pearson Correlation**	.537**	.595**	.300**	1	.693**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	166	166	166	166	166
Individual Dv	**Pearson Correlation**	.425**	.484**	.333**	.693**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	166	166	166	166	166

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Data processed from the SPSS software

Table 4.
Summary of Hypotheses

No.	Hypotheses	Results
1.	The performance expectancy influence usage behaviour	Positive and Significant
2.	The effort expectancy influence usage behaviour	Positive and Significant
3.	Social pressure influence usage behaviour	Positive and Significant
4.	Facilitating condition influence usage behaviour	Positive and Significant

Source: Processed by Author

e-government services. Performance expectancy relatively links with technology that will facilitate and ease public, thus encourage them using e-government. It indicates the likeness of people will adopt information technology. At the same time, people expected that the technology would save their time and reduce the cost to deal with government agency directly over the counter. Hence, the finding value .425** (2-tail significant) is in line with (Alraja, 2015; Venkatesh et al., 2003) that people expect that technology would improve their performance in dealing with the government agency. Furthermore, according to (Davis et al., 1989) people hoped that technology would enable them to accomplish assigned task more quickly, improving job performance, increasing productivity, enhance the effectiveness on the job and more comfortable to perform the job. From researcher opinion, the findings show that the public is attracted to use e-government because the system facilitates them and ease their task. Thus, efficiency and effectiveness of e-government will increase public performance, hence increase public acceptance in using the e-government. This study also shows that performance expectations are not only mirrored in the efficiency of the system but have a substantial positive influence on the intent towards technological implementation. This result also shows that the government has made vigorous attempts to simplify the system and to make it publicly more useful in communicating with government agencies.

Second hypotheses: there is a positive relationship between effort expectancy and citizens' acceptance of the e-government service. According to (Davis et al., 1989; Venkatesh & Davis, 2000; Venkatesh et al., 2003) it is human perception that if the lesser effort taken to use particular technology or system, the more useful such technology or system. In researcher opinion, it is a human altruistic to seek something that will not cause them to use great effort. Human beings like to spend less time and effort to complete any task. The Pearson correlation value .484** (2-tail significant) shows that there is a substantial and positive relationship between effort expectancy and individual acceptance on the e-government service. The results illustrate that whenever lesser time takes to complete one task, it will encourage the public to use such a service. These findings in line (Mansour, Samir, Samia, & Billal, 2016; Moore & Benbasat, 1991) that the degree to which using innovation is perceived as being easy to use will increase the tendency for the public to use such innovation. The significant point also verified that public perceive and believe that there is no need for much effort to use e-government services (Mensah, 2019) and have favourable views on the application of e-government by Malaysia government.

Third hypotheses: there is a positive relationship between social influence and citizens' acceptance of the e-government services. Thus, it explains that social pressure either from office colleagues, neighbour, friends or relative may influence individual behaviour to experience using such "thing" either technology, foods and beverages or fashion. Curtis & Payne (2008) social influence involves considering the personal experience or view of others, particularly from the subjective culture of the reference community and specific interpersonal agreements with others. And the degree to which an invention is considered to improve one's reputation or status in one's social structure. The Pearson correlation

value .333** (2-tail significant) shows that there is a positive and meaningful relationship between social influence and usage behaviour on e-government system. The findings similar with (Thompson et al., 1991) where he stated that people use the particular system because of their friends or co-workers also use the system, and the organization also supported the use of the system. It can be interpreted that people tend to use a particular system if the system is permitted in the social environment. It is human altruistic to have a sense of belongingness, thus using system promoted by their friend or colleague will put his/her into the same sphere with them. In other words, the results indicate that e-government adopters are socially motivated in Malaysia, and consistent with findings (Muhammad, Jouni, & Markku, 2013; Tony & Mohammad, 2015) the belief that social power is a crucial factor for technological acceptance and adoption.

Lastly, the hypotheses: there is a positive relationship between facilitating conditions and citizens' acceptance of the implementation of e-government services. Facilitating condition refers to an environment which supported them to use such a system. With that support, it will encourage people to use it without a doubt. According to (Davis et al., 1989; Venkatesh & Davis, 2000; Venkatesh et al., 2003) facilitating condition is an extent that individual perceived that technical and organizational infrastructure required to use the intended system is available and fully supported. The Pearson correlation value .693** (2-tail significant) shows that there is a positive and significant relationship between facilitating conditions and usage behaviour or public behaviour towards e-government. The results suggest that the network has sufficient capacity to handle e-services and that the system maintains strong privacy which increases user trust (Muhammad et al., 2013).

Additionally, (Enrique, Achmad, Tulus, & Ulung, 2017) stated that positive point indicate that there is a firm intention to adopt the e-government among the public. According to this study findings, the people are more likely to follow e-government if they can access the necessary resources and develop the required skills and support for using information technology infrastructure. Facilitate condition indicate that usage behaviour tends to change to positive if they possess the right talent and able to access the system without any issues (Voutinioti, 2013). The public expected that they would be provided with necessary access and resources such as internet availability and speed of the internet as the first step to browser e-government website. The next step, e-government service should provide guidelines or measures such as "advisor" or "manual books" on how to use e-government. It was proposed that those steps and procedure should not be in jargon words, too long, and include with a picture to facilitate the public to access the system. For the workers, the organization is expected to give full support, such as providing computer and high-speed internet for their employees to complete a task relating to e-government services.

Conclusion

The findings of this study show that citizens' acceptance of the e-government service is quite good. It indicates that most of the citizens in Sintok are using e-government services. The existence of the e-government, which is mostly accepted by the people shows the success of the Multimedia Super Corridor (MSC) program to create a technologically advanced implementation and lead Malaysia into the Information Age. As people nowadays have very high knowledge and skills in IT, they are said to accept and adopt e-government services in their daily lives. The existence of e-government eventually in line with the trend and demand from people today because by using e-government, it can save time, money, and accomplish tasks effectively and efficiently. All they have to do is just by clicking, and everything is

done. The results from the study show that citizens are become more positive to accept e-government services. The success of the e-government services indicates that the government manages to meet the citizen's needs by providing the services that meet their demand. The success of e-government is a sign that the MSC that was introduced by the Malaysian government is effective and efficient in assisting the government in achieving Vision 2020.

The effectiveness of e-government does not only benefitting the public but also led to the creation of public value, enhance trust and quality perceptions among people. More importantly, facilitate the government to articulate their goals, and sustain public administration performance and make public satisfied with the government via technology approach. Hence, it could be considered as one of a mean or strategy to increase government reputation, and enhance its legitimacy.

Lastly, e-government also could reduce any potential of social cost, the transactional cost for both parties, government agencies and people. The application of e-government allows the social transaction cost remains in check. Government services are encouraged to be made accessible to people electronically by government agencies, and data can be pulled from the prospective public. The transaction process provides a broad opportunity to cut both costs and time by enabling the public to complete transactions such as renewal of visas and payment of bills online securely with specific government agencies. And also, allows the government to gather and analyze the data of the public at low cost without struggling in finding accurate data. The transaction process can also be regarded as the highest stage of sophistication in government agencies for an e-government system.

This study opens a new direction for future research to be undertaken, especially using a qualitative method by using a case study to gains rich insight into the experience of the public in using e-government. By using a case study, perhaps it could assist in advancing the field of e-government and obtains multidimensional reality of this service.

References

Ajzen, I, & Fishbein, M. (1980). *Understanding Attitude and Predicting Social Behavior*. NJ, USA: Prenctice Hall: Engelwoods Cliffs.

Ajzen, Icek. (1985). From Intentions to Actions: A Theory of Planned Behavior. In *Action Control* (pp. 11–39). Springer Berlin Heidelberg.

Ajzen, Icek. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Process*, *50*, 179–211.

Alawadhi, S., & Morri, A. (2008). The Use of the UTAUT Model in the Adoption of E-Government Services in Kuwait. In *41st Hawaii International Conference on Systems Science (HICSS-41 2008)* (pp. 1–11). Waikoloa, Big Island, HI, USA.

Alraja, M. . (2015). User acceptance of information technology: A field study of an e-mail system adoption from the individual students' perspective. *Mediterranean Journal of Social Sciences*, *6*(6), 19–25.

Bélanger, F., & Carter, L. (2008). Trust and risk in e-government adoption. *Journal of Strategic Information Systems, 17*(2), 165–176.

Brown, M. M., & Brudney, J. L. (2001). Achieving advanced electronic government services: An examination of obstacles and implications from an international perspective. In *The National Public Management Research Conference*. Blomington.

Cloete, F. (2007). Knowledge Management and Trust in Government : Lessons from South Africa. In *7th Global Forum on Reinventing Government: Building Trust in Government* (pp. 26–29).

Collier, J. E., & Bienstock, C. C. (2006). Measuring Service Quality in E-Retailing. *Journal of Service Research*, *8*(3), 260–275.

Compeau, D., Higgins, C. A., & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *MIS Quarterly: Management Information Systems*, *23*(2), 145–158.

Crosby, P. B. (1979). *Quality Is Free: The Art of Making Quality Certain.* New York: McGraw-Hill.

Curtis, M. B., & Payne, E. A. (2008). An examination of contextual factors and individual characteristics affecting technology implementation decisions in auditing. *International Journal of Accounting Information Systems*, *9*, 104–121.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, *13*(3), 319–340.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, *35*(8), 982–1003.

DeLone, W. H., & Mclean, E. R. (2003). The DeLone and McLean Model of information systems success: A ten-year update. Journal of Management Information Systems 19(4), 9–30. *Journal of Management Information Systems*, *19*(4), 9–30.

Dey, P. K., Hariharan, S., & Brookes, N. (2006). Managing healthcare quality using logical framework analysis. *Managing Service Quality*, *16*(2), 203–222.

Enrique, B., Achmad, N., Tulus, W., & Ulung, P. (2017). Are government employees adopting local e-government transformation? The need for having the right attitude, facilitating conditions and performance expectations. *Transforming Government: People, Process and Policy*, *11*(4), 612–638.

Faezipoura, M., & Ferreiraa, S. (2013). A system dynamics perspective of patient satisfaction in healthcare. *Procedia Computer Science*, *16*, 145–156.

Falk, E. B., Berkman, E. T., Mann, T., Harrison, B., & Lieberman, M. D. (2010). Predicting persuasion-induced behavior change from the brain. *Journal of Neuroscience*, *30*(25), 8421–8424.

Gant, J. P. (2008). *Electronic government for developing countries.* Geneva, Switzerland. Retrieved from https://www.itu.int/ITU-D/cyb/app/docs/e-gov_for_dev_countries-report.pdf

Gupta, B., Dasgupta, S., & Gupta, A. (2008). Adoption of ICT in a government organization in a developing country: An empirical study. *Journal of Strategic Information Systems*, *17*(2), 140–154.

Igbaria, M., Parasuraman, S., & Baroudi, J. (1996). A motivational model of microcomputer usage. *Journal of Management Information Systems*, *13*(1), 127–143.

Jeong, C. H. @Ibrahim. (2007). *Fundamental of development administration.* Selangor: Scholar Press.

Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, *30*(3), 607–610. https://doi.org/10.1177/001316447003000308

Kumar, V., Mukerji, B., Butt, I., & Persaud, A. (2007). Factors for successful e-government adoption: A conceptual framework. *Electronic Journal of E-Government*, *5*(1), 63–76.

Mansour, N. A., Samir, H., Samia, F., & Billal, C. (2016). The Influence of Effort and Performance Expectancy on Employees to Adopt E-Government: Evidence from Oman. *International Review of Management and Marketing*, *6*(4), 930–934.

Mensah, I. K. (2019). Factors Influencing the Intention of University Students to Adopt and Use E-Government Services: An Empirical Evidence in China. *SAGE Open*, 1–19.

Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perception

of adopting an information technology innovation. *Information Systems Research*, *2*(3), 192–222.

Muhammad Abubakar, F., & Hartini, A. (2013). The Moderating Effect of Technology Awareness on the Relationship between UTAUT Constructs and Behavioural Intention to Use Technology: A Conceptual Paper. *Australian Journal of Business and Management Research*, *3*(2), 14–23.

Muhammad, O. A., Jouni, M., & Markku, O. (2013). Factors affecting e-government adoption in Pakistan: a citizen's perspective. *Transforming Government: People, Process and Policy*, *7*(2), 225–239.

Muir, A., & Oppenheim, C. (2002). National information policy developments worldwide in electronic government. *Journal of Information Science*, *28*(3), 173–186.

Noor, Z. M., Kasimin, H., Aman, A., & Sahari, N. (2011). An adoption model of electronic government services in Malaysia: Electronic labor exchange (ELX). *Jurnal Pengurusan (UKM Journal of Management)*, (33), 87–97.

Othman, M. K., Yasin, N. M., & Samelan, N. A. (2012). Factors Influencing the Adoption of E-Services in Malaysia. In *The 4th International Seminar on Scientific Issues and Trend (ISSIT BSI 2002): Model, Strategy, and Innovation on a Tech-Enterpreneurship for Development Acceleration In Global Era*. East Jakarta, Indonesia.

Reddick, C. G. (2005). Citizen interaction with e-government: From the streets to servers? *Government Information Quarterly*, *22*(1), 38–57.

Suki, N. M., & Ramayah, T. (2010). User acceptance of the e-government services in Malaysia : Structural equation modelling approach. *Interdisciplinary Journal of Information, Knowledge, and Management*, *5*, 395–412.

Taylor, S., & Todd, P. A. (1995). Understanding information technology usage: A test of competing models. *Information Systems Research*, *6*(2), 144–176.

Thomas, J. C., & Streib, G. (2003). The new face of Government: Citizen-initiated contacts in the era of e-government. *Journal of Public Administration Research and Theory*, *13*(1), 83–102.

Thompson, R., Higgins, C., & Howell, J. (1991). Personal computing: toward a conceptual model of utilization. *MIS Quarterly: Management Information Systems*, *15*(1), 124–143.

Tony, D. S., & Mohammad, A. (2015). Individual Acceptance of e-Government Services in a Developing Country: Dimensions of Perceived Usefulness and Perceived Ease of Use and the Importance of Trust and Social Influence. *Procedia Computer Science*, (72), 622–629.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science,. *Management Science*, *46*(2), 186–204.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly: Management Information Systems*, *27*(3), 425–478.

Venkatesh, Viswanath, Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, *27*(3), 425–478.

Voutinioti, A. (2013). Determinants of User Adoption of e-Government Services in Greece and the role of Citizen Service Centres. *Procedia Technology*, (8), 238–244.

Wu, M., Yu, P., & Weng, Y. (2012). A Study on user Behavior for I pass by UTAUT : Using Taiwan's MRT as an example. *Asian Pacific Management Review*, *17*(1).

Zeithaml, V., Berry, L., & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *Journal of Marketing*, *60*(2), 31–46.