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Overarching Unified Theory of Acceptance and Use of Technology(Utaut) Model on The Factors Effecting Behavioral Intention Towards E-Government Adoption in Malaysia

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ABSTRACT

As one of the strategies to achieve Vision 2020, Multimedia Super Corridor (MSC) had been introduced as an initiative to develop Malaysia towards the new Information Age. The e-Government initiative was introduced in Malaysia by the former Malaysian Prime Minister, Tun Dr Mahathir Mohamad on 24 February 2004. With this e-government implementation, it will unquestionably benefit the citizens to access the various government services conveniently at any place any time. However, relatively little known about the adoption of e-government among citizens specifically at the sub urban area in Malaysia. Thus, this research is intended to explore the key factors that influence the intentional behavior to use e-government applications based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model.

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INTRODUCTION

The public sector in Malaysia is going through period of rapid change. The government's leading role in spearheading the surge forward into the information rich digital age has compelled the public sector to lead the way [32]. The government of Malaysia launched Electronic Government with the aspiration to employ multimedia technologies to reinvent the way the government operates. E-Government will improve both how the government operates internally as well as how it delivers services to the people of Malaysia [33]. The E-Government implementation seeks to improve the convenience, accessibility and quality of interactions with citizens and businesses; simultaneously it will improve information flows and processes within government to improve the speed and quality of policy development, coordination and enforcement [30,38].

The electronic Government (e-Government) in Malaysia is initiated through the Multimedia Super Corridor (MSC). Within the E-Government Flagships Applications, 7 pilot projects are launched. The 7 pilot projects are 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) and E-Syariah. Some of these projects have been implemented such as Electronic Procurement and E-Syariah.

Problem Statements:

The most significant characteristics or indicator of any successful e-government is its quality and accessibility. According to the Government E-Payment Adoption Ranking (GEAR), Malaysia was ranked at 24th out of 43 countries in terms of e-government development. Through this report, it indicated that more study need to be conducted in terms of factors influencing the behavioral intention to use e-government services among citizens. E-government initiatives are growing healthily from the Government side, but the usage of e-Government among the citizens is still very low. As reported by Sharif in The Star online newspaper dated 12th, Malaysians are a trusting lot when it comes to electronic Government, but they're not using much of e-Government services. This is a very low indication of their response towards e-Government initiatives.

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In addition, acceptance and usage are still very limited in most countries. This in a way has a dampening effect to the progressiveness of the e-government implementation [21] which is seen to be one of the best alternative in improving government services [9]. Therefore, the low rates of adoption are the issue and challenges that hinder the effectiveness of e-government services provided.

Research objectives:

The objectives of this study are:

- a) To investigate determinant factor that most influence the intention to use e-government services
- b) To determine whether there is any relationship between the performance expectancy, effort expectancy, social influence and facilitating conditions towards the behavioral intention use e-government services.

Literature review:

In the fast globalizing world economy of today, governments all over the world are recognizing the importance of Information and Communications Technology (ICT) in development. An increasing number of Electronic Government (E-Government) initiatives are being employed to improve the delivery of public services to the people, and to tap the potential synergy from the interaction between new technologies, an educated population and an enabling environment for the attainment of knowledge-based economies [5,18,9,31,22].

Like any other new technology or organizational concept, the introduction of e-government has also resulted in a number of challenges for both citizens and governments of different countries [35,41]. Lack of access to e-Services [23], security concerns and trust [39], individual differences [32] and digital divide [12] are challenges that can impact on participation and thereby obstruct the further take-up of e-government services. Various researchers have identified that many of these challenges have influenced e-government implementation and diffusion in various countries in different ways [3,10,12,1].

However, this research will focus particularly on the influence that technology complexity and e-government services have on the intention to use a new technology. Similarly, it will also examine the influence performance expectancy and effort expectancy has on the intention to use such services. In terms of adoption, several studies have explored e-government acceptance in developed countries such as the United States [10] and the U.K [12].

i) Factors Influencing the Behavioural Intention to use E-government:

Based on the previous studies, the factors influencing the behavioural intention to used e-government are like performance expectancy, effort expectancy, social influence and facilitating conditions. In this study, performance expectancy is measured by the perceptions of using e-government services in terms of benefits, such as save 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 government [3,1]. Performance expectancy was found to be a strong predictor of intention to use IT according to previous acceptance studies [36,13].

Secondly, many scholars [13,22] found that effort expectancy has a significant influence on intention to use behavior. In contrast, Chau and Hu, argue that effort expectancy does not have significant influence to intention to use behavior. In this research, effort expectancy is measured by the perceptions of ease of use of e-government services as well as ease of learning how to use these services

Third factor is social influence where it is defined as “the degree to which peers influence use of a system”. Whether this is positive or negative; it is a very important factor in many aspects of the lives of citizens and is likely to be influential [36]. Relevant references, such as citizen’s family, colleagues and friends may have an influence on citizen’s decisions. The findings of many scholars like Rogers [34], Taylor and Todd, Lu *et al.*, and Pavlou and Fygenson suggest that social influences are an important determinant of behaviour. This research assumes that if e-government adopters are influenced with positive messages by their social networks, they are more likely to have a strong behavioral intention to adopt the e-government system.

The last factor influencing the behavioural intention to used e-government is facilitating conditions. It is the degree to which an individual believes that an organizational and technical infrastructure exists to support the system [46]. Facilitating conditions in the UTAUT comprises of perceived behavioral control, facilitating conditions, and compatibility from the TPB, TAM, MPCU, and IDT models [4,36]. Researchers in the field of technology studies [36] found that the facilitating conditions construct has a positive effect on innovation use. Within this study, facilitating conditions was measured by the perception of being able to access required resources, as well as to obtain knowledge and the necessary support needed to use e-government services. It is also influenced by the perception of the technology fitting into the lifestyle of the user.

ii) E-government adoption and behavioral intention:

According to Carter and Belanger [8], the success of e-government depends upon the citizen's willingness to adopt this innovation. Governments across the world need to investigate and understand the factors that influence or could encourage citizens to use e-government services instead of traditional communication. Researchers [25,8,27,22,42] have shown that many governments still face the problem of a low-level of adoption of e-government services by their citizens. Reddick observed that most e-government research focuses on the supply side (e.g., government infrastructures and policies), not on the demand side (the citizen's perspective)

Belanger and Carter [8] found that even though governments are increasing e-services, citizens are still more likely to use traditional methods. Moreover, Kumar [28] emphasized this dilemma, finding that the rate of adoption of e-government has fallen below expectations around the world, although some countries are doing better than others. Hence, low rates of adoption and usage are serious, continuing problem for governments.

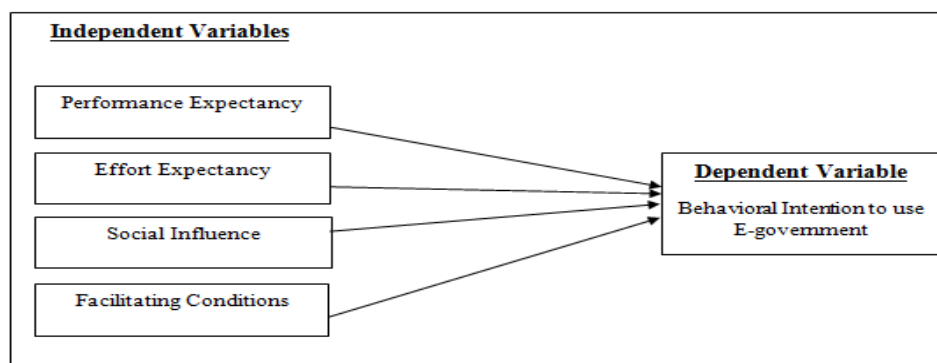
Governments had invested huge amounts of money in these facilities so there is a need for research that investigates the challenges and barriers to citizens when they adopt e-government services. This study explores the factors that influence the adoption of e-government services by citizens, which is an unexplored area in the demand side of e-government (i.e., the citizen's perspective). In order to accomplish the aim of this research, a survey-based quantitative research strategy is adopted, using the amended unified theory of acceptance and use of technology (UTAUT) model. Using UTAUT, the study explores the factors that influence the adoption of e-government services. Understanding these factors will help decision makers to ensure the satisfaction of citizens.

Methodology:

This study will employ the quantitative method for the primary data collection and processed analytically using the Statistical Package for Social Science (SPSS) version 16. The cross sectional study design was used and data for analysis of this study will be collected through a self administered questionnaire.

A set of questionnaire are adopted and adapted from Unified Theory of Acceptance and Use of Technology (UTAUT). The items that are presented in the Unified Theory of Acceptance and Use of Technology (UTAUT) are Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Behavioral Intention

Conclusion:



Based on the factors identified in the conceptual framework and previous studies, it shows that performance expectancy, effort expectancy, social influence and facilitating conditions are the factors influencing the intention to use the e-government among citizens. People tend to use and adopt the e-government services if they found that it can save their time, money and effort, easy to use, socially influence and facilitate condition. The e-government study can help the policy maker to know the information on factors that influence and affect citizens' intention to use e-Government services in Malaysia. This would also help the government to identify which critical area that needs to be enhanced. Ultimately, the most critical outcome that can be expected out of intentional behavior of e-government is to find ways on how to increase the confidence of citizens to use e-Government in future. Thus, factors effecting behavioral intention to use e-government should crucially be identified further for necessary action needed to ensure the acceptance and also effectiveness of e-government system

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