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Examining User Acceptance of E-Syariah Portal Among Syariah Users in Malaysia

Mornizan Yahya[a*], Feridah Nadzar[a], and Baharom Abdul Rahman[a]

[a]Faculty of Business Management, Universiti Teknologi MARA, Puncak Alam, Malaysia

Abstract

Electronic government will improve both on the internal government operations and its delivery services to the Malaysian people. E-government plays an essential role in catalyzing the development of the MSC as well as furthering the political and economic development goals in Vision 2020. The implementation of E-Syariah Portal as one of the e-government initiatives has opened up a new book in the government administration throughout the country. E-Syariah Portal is the main element to reform government operations in adopting a customer-focused approach via online service. The purpose of this paper is to determine the factors that influence the intention to use and actual usage of e-Syariah Portal by Syariah users in Malaysia. The research uses an extension of Unified Theory of Acceptance and Use of Technology (UTAUT) model by including information quality and system quality. A questionnaire was designed and responses from 35 users of a pilot test were collected and analyzed. Instruments developed by Venkatesh, Morris & Davis (2003) and Ahn, Ryu & Han (2004) were used to measure the intention to use E-Syariah Portal. The findings of the study indicate that performance expectance, effort expectancy, social influence, information quality and system quality are strongly linked to intention to use E-Syariah Portal. This study can help ICT decision makers of the Department of Syariah Judiciary Malaysia to recognize the critical factors that are responsible for the success of E-Syariah Portal.

Keyword: E-Syariah Portal, Unified Theory of Acceptance and Use of Technology (UTAUT), Intention to Use, User Acceptance

* Corresponding author. *E-mail address*: mornizan@salam.uitm.edu.my.

1. Introduction

E-government systems are becoming a part of modern public administration systems (Halaris, Magoustas, & Mentzas, 2007) and many governments have made huge investments in electronic government services to link government networks to improve efficiency and productivity (Hung, Chang & Yu, 2006). E-government will improve information flow and processes within the government; improve the speed and quality of policy development; and improve coordination and enforcement which would enable the government to be more responsive to the needs of its citizens (Multimedia Development Corporation, 2007). In Malaysia, the implementation of electronic government started in 1997 with the initiation of Multimedia Super Corridor (MSC) in 1996. 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 (National Archives Act, 2003). One of the government agencies, Malaysia Administrative Modernization and Management Planning Unit (MAMPU) has been entrusted to plan, implement and monitor the country's e-Government initiatives (MAMPU, 2004). There are seven main projects under e-Government flagships: Electronic Procurement (e-P), Project Monitoring System (PMS), Electronic Services Delivery (e-Services), Human Resource Management Information System (HRMIS), Generic Office Environment (GOE), E-Syariah and Electronic Labour Exchange (ELX). Each project is lead by a particular agency as below:

Table 1. Malaysia e-Government projects and implementation agencies

E-GOVERNMENT PROJECTS	AGENCIES
PMS	Implementation Coordination Unit at the Prime Minister's Office
HRMIS	Public Service Department
GOE	Prime Minister's Office
ELX	Ministry of Human Resources
e-Services	Road Transport Department
e-Procurement	Ministry of Finance
e-Syariah	Islamic Justice Department at the Prime Minister's Office

2. The Implementation Of E-Syariah Portal

E-Syariah project, as the seventh E-government initiative (MSC), has been allocated RM39 millions by the Malaysian Government to reform the Syariah administration to upgrade the quality of services in Syariah Courts in Malaysia. The E-Syariah project, launched in April 2002, has been implemented at all 110 Syariah Courts in Malaysia in April 2007 (MDC, 2007). The main objective of implementing e-Syariah is to improve the quality of service in Syariah courts. Through better monitoring and co-ordination of its agencies, e-Syariah will eventually enhance the Islamic Affairs Department's effectiveness and thus improve the management of its Syariah courts. The e-Syariah application consists of Syariah Court Case Management System, Office Automation System, ESyariah Portal, Syarie Lawyers Registration System and Library Management System (Official Website of Syariah Judiciary Department).

E-Syariah has received increasingly more attention from users and this has resulted in E-Syariah Portal. E-syariah Portal, one of the E-modules, serves as a gateway for the public, Government Agencies and the Syariah Courts to access relevant information and utilized E-Syariah services anytime and anywhere. In this Internet age, the portal improves communication and reduces the gap between the Syariah Courts and the public (Department of Syariah Judiciary, 2005).

E-Syariah Portal links all syariah courts of the country and acts as a one-stop counter for virtually all matters related to Islamic judiciary (Siddiquee, 2007). Among the services provided in the e- Syariah portal are Online Case Mal Pre-Registration, Online Case Status Checking, SJDM (JKSM) Official Website, Syarie Criminal Case Registration System, Library Management System, E-Form, Online Faraid Calculation, Court Procedures and Processes, Court Schedule Cases, Court Directory, Archive (Reference Materials, Journals and Case Types) and Syarie Lawyer Registration System (ESyariah Portal Official Website).

3. Unified Theory Of Acceptance And Use Of Technology (UTAUT) Model

Researchers have developed and used various models to understand acceptance of users of Information System. Among these models, UTAUT has become the latest and most powerful model accepted among the information system researchers (Venkatesh & Davis, 2000; Wang & Liao, 2008; Gefen, Karahanna & Straub, 2003) to predict and explain an information systems usage intention (Venkatesh et al., 2003). The UTAUT model has been found to provide as much as 70 percent of the variance in intention to use technology, which is more effective than any known models from the past. UTAUT has integrated eight different models: Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), C-TAMTPB, Model of PC utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). The UTAUT model by Venkatesh et al. (2003) postulates six constructs: performance expectancy, effort expectancy, social influence, self efficacy, anxiety, and attitude toward using technology which determine the behavioural intention. Another two constructs: behavioural intention and facilitating conditions influence the usage behaviour of the technology. Four moderating variables: gender, age, experience and voluntariness were also examined and found to have varying influence on the primary constructs. An overview of this model is shown in Figure 1.
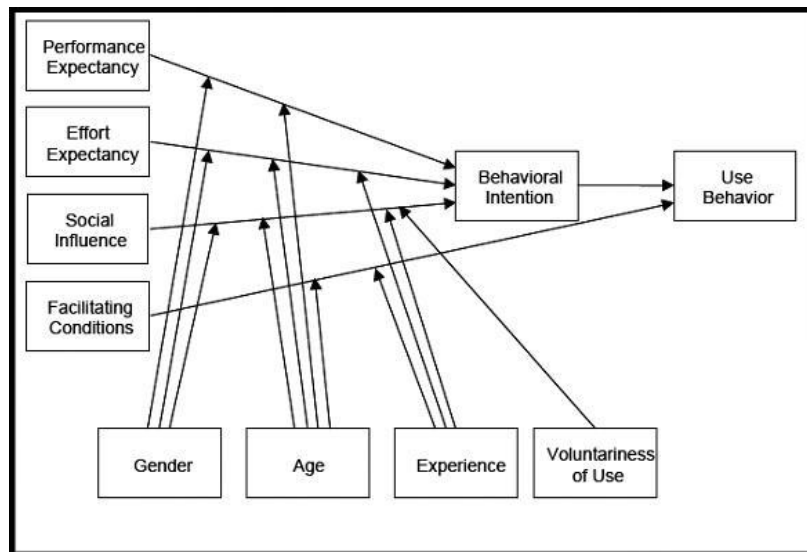
Fig. 1. Unified Theory of Acceptance and Use of Technology Model

4. Research Model And Hypotheses Development

UTAUT model was chosen in this study to determine the factors that would influence the user acceptance of e-Syariah Portal among the Syariah users in Malaysia. This study aims to evaluate the independent variables of UTAUT; performance expectancy, effort expectancy, social influence which significantly influence the dependent variables; the intention to use. Two extending variables: information quality and system quality were also included in the model. These factors were chosen due to their significant relationships with intention to use of information systems (Delone & Mc Lean, 1992; 2003). Though there are other potential antecedent factors that could be included into the model, only five specific factors are chosen because of their strong support from previous studies and their applicability in the context of e-Syariah Portal. The framework for this research is given in Figure 2.

The objective of this research is to evaluate Syariah users' intention to use e-Syariah Portal as a mean to forecast, explain, and improve usage pattern. The research also examined the applicability of UTAUT to the e-Syariah Portal as a government initiative in improving the government service delivery towards users.

4.1. Performance Expectancy

Performance expectancy (PE) refers to the extent to which a user perceives e-Syariah Portal will help to be more useful in accomplishing Syariah services online rather than using the traditional Syariah services. The constructs in the other models that pertain to performance expectancy of this model are: perceived usefulness (TAM, and combined TAM-TPB), extrinsic motivation (MM), job-fit (MPCU), relative advantage (DOI), and outcome expectancy (SCT). Performance expectancy is the strongest determinant in both voluntary and mandatory settings (Venkatesh et al., 2003). Thus this research proposes the following hypothesis:

H1: Performance expectancy will have a positive effect on intention to use e-Syariah Portal.

4.2. Effort Expectancy

Effort expectancy (EE) represents the degree of ease that a user associates with using the e-Syariah Portal. User perception about the clarity, understandability, flexibility, and ease of using the system are taken into consideration (Venkatesh et al., 2003). Therefore, it is hypothesized that:

> H2: Effort expectancy will have a positive effect on intention to use e-Syariah Portal.

4.3. Social Influence

Social influence is defined as the degree to which an individual perceives that important others believe he/she should use the new e-Syariah Portal system. Social influence of UTAUT is similar to the constructs presented in TRA, TAM2, TPB/DTPB, and combined TAM-TPB: subject norm; DOI: image and MPCU: factors. These constructs are similar in behaviour. They are found to be insignificant in voluntary contexts but become significant when the use of the system is mandatory. The literature explained that in mandatory contexts the effect is attributed to compliance and appears to be important only in the early stages of individual experience and when rewards or punishment are applicable. In contrast, social influence operates by influencing perceptions about the technology in voluntary contexts which is known as the internalization and identification (Venkatesh et al., 2003). Based on the findings by previous researchers, we posit that:

> H3: Social influence will have a positive effect on intention to use e-Syariah Portal.

4.4. Information Quality

Information Quality represents a user's reaction to the characteristics of e-Syariah Portal output information versus the user's information requirements. The content of e-Syariah Portal includes content variety, complete and detail information, accurate information, timely information, reliable information and appropriate format (Ahn et al., 2004; Wang et al., 2007; DeLone & McLean, 2003; Lin, 2007). Most previous researches used content and content quality frequently and stressed the importance of information quality (Aladwani & Palvia, 2002; Palmer, 2002; Ahn et al., 2002).

According to DeLone & Mc Lean (2002; 2003), information quality has the potential to directly affect both behavioural intention and perceived usefulness of information system. Information quality determines the success of a website design and perceived information quality positively affect PEOU, PU, attitude, and user acceptance of e-shopping (Shih, 2003). Perkowitz & Etzioni (1999) argued that information is useful only if the user considers the information on the web site to be accurate, informative and up-to-date. These results suggest the following hypothesis:

> H4: Information quality will have a positive effect on intention to use e-Syariah Portal.

4.5. System Quality

System quality in the Internet-based information system is defined as the measure of the e-Syariah Portal and focuses on the outcome of the interaction between the user and the portal. Design, navigation, response time, systems security, systems availability and functionality are examples of qualities valued by the e-Syariah Portal users for this study (Ahn et al., 2004). System quality is related to the quality of system that produces information output, which reliability, accessibility, integration, and response time can be measured (Nelson, Todd & Wixom, 2005).

Upon literature, e-commerce researchers recognized that a web site's usability can significantly influence users' search strategies and performance (Lieu & Arnett, 2001). According to Yoo, Suh & Lee (2002), system quality is more important in the context of virtual communities as many community members are reluctant to use the web site when they have difficulties: experience lack of access, difficulty in navigating the web site, frequent delays in response, and frequent disconnection. Based on the previous researches above, it is hypothesized that:

H5: System quality will have a positive effect on intention to use e-Syariah Portal.

4.6. Intention to use E-Syariah Portal

In this study, intention to use is referred to the intention to use e-Syariah Portal as a result of their prior experience in using the e-Syariah Portal. Ajzen (1991) argued that behavior intention represents the subjective odds that an individual will engage in a certain behavior. However, according to Venkatesh et al. (2003), performance expectancy, effort expectancy, social influence and facilitating conditions constructs of UTAUT have positive influence on behavioural intention to use. Hence, the next hypothesis states as the following:

H6: Users' intention to use e-Syariah Portal will have a significant positive influence on the usage of e-Syariah Portal.
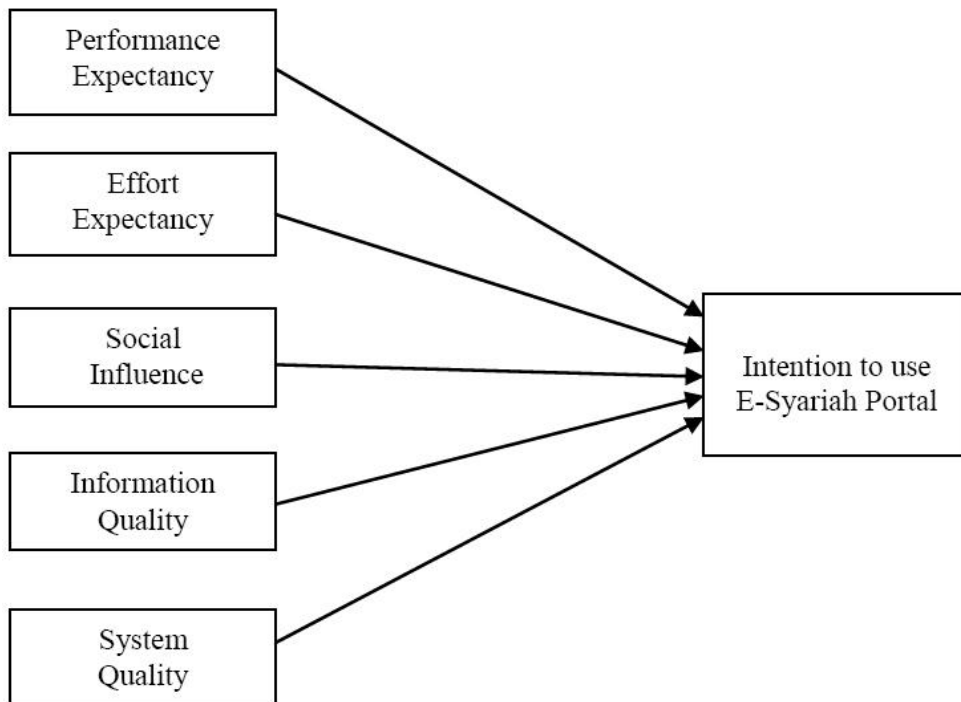

Fig. 2. Research Model

5. Methodology

5.1. Survey Instrument

The instrument that will be used for this survey was online questionnaire which was presented in the Bahasa Malaysia (Malay language) for easy understanding of the questions asked and since most of the respondents are Malays. However, English questionnaire was also developed for the purpose of the study. Multi-item scales were used in the questionnaire to measure the constructs. The respondents were asked to determine on a five-point Likert scale how much they agreed (1 = strongly disagree, and 5 = strongly agree) with each statement describing an issue.

The organization of content of the questionnaire succeeding with a cover letter consists of three sections including demographic. Section One is the classified demographic section which will focus on items such as age, gender, marital status and age; highest level of education, type of employment, level of occupation, and length of working experience; the internet knowledge, experience, and hours of using internet; and e-Syariah Portal experience and hours spent on the portal. Section Two consists of the constructs: performance expectancy, effort expectancy, social influence, information quality, system quality, and intention to use that will measure the relationship of the factors (independent factors) with the dependent factor within the research framework of the study. Finally, Section Three of the study will focus on the items that relate to the intention to use e-Syariah Portal.

5.2. Participants

A pilot study was conducted to test the validity of the questionnaire. The population of the study consisted of users who have used the e-Syariah Portal. 40 questionnaires were distributed to the Syariah users of the Syariah High Court of Kuala Lumpur personally. Respondents were required to evaluate agreement to statements that used a five-point Likert scale. A five-point represents „strongly agree' while a one-point represents „strongly disagree'. Out of 40 questionnaires, 5 were found to be incomplete. 35 respondents responded and the feedback was incorporated accordingly. The number of usable response was 35, yielding a usable response rate of 87.5%. The data collected was analyzed using techniques available on the Statistical Packages for Social Sciences (SPSS) version 17.0.

6. Findings

6.1. Demographic Profile of the Respondents

The demographic profile of the surveyed respondents is summarized in Table 2. In this study, only selected profiles such as gender, age, education, type of employment, and level of occupation were reported by the researchers. The total sample for the survey consists of 35 respondents. The gender distribution of the survey respondents are 51.4% (18) male while 48.6% (17) are female respondents. The respondents age range from 21-25 are 3 (8.6%); from 26-30 are 5 (14.3%); from 31-35 are 8 (22.9%); from 36-40 are 3 (8.6%); from 41-45 are 5 (14.3%); from 46-50 are 7 (20%); and from 51-55 are 4 (11.4%). All of the respondents are working professionals: top management level – 3 (8.6%); middle management and professional level – 19 (54.3%); support and technical level – 7 (20%); and 6 (17.1%) are not applicable. The respondents have been educated to secondary school – 7 (20%) and college or higher education: diploma – 6 (17.1%); bachelor degree – 12 (34.3%); master degree – 8 (22.9%); and doctorate – 2 (5.7%). Most of the respondents work in the public sector – 19 (54.3%) and about 10 (28.6%) work in the private sector whereas 4 (11.4%) of the respondents are selfemployed and 2 (5.7%) respondents are not employed.

6.2. Reliability Analysis of Measures

Reliability analysis was performed for all the measures as shown in Table 3. Reliability refers to the accuracy of a measuring instrument (Kerlinger, 1986). Cronbach's alpha technique was adopted to all variables to measure the reliability of the instrument used for the pilot study. Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another (Cronbach, 1951). The Cronbach's alpha for reliability was calculated and revealed coefficients that exceed a generally accepted standard for reliability. All of the measures included in the questionnaire show adequate levels of internal consistency and reliability. The reliability for the measures ranges between 0.735 for intention to use and 0.948 for the measure of performance expectancy.

Cronbach's Alpha value scores 0.7 and above, suggesting that the measures are highly reliable. These reliability coefficients infer that the instrument has an internal consistency (Cronbach, 1951). The results showed high value of Cronbach alpha in Table 3 indicating that all the constructs are accurate and hence suggests the instrument is reliable and is suitable to measure the concepts employed in the study.

Table 2. Demographic Profiles on Gender, Age, Education, Type of Employment and Level of Occupation

Scale	Frequency	Percentage (%)
Gender		
Male	18	51.4
Female	17	48.6
Total	35	100
Age		
21 - 25 year old	3	8.6
26 – 30 years old	5	14.3
31 – 35 years old	8	22.9
36 – 40 year old	3	8.6
41 – 45 years old	5	14.3
46 – 50 years old	7	20
51 – 55 years old	4	11.4
Total	35	100
Education		
Secondary School	7	20.0
Diploma	6	17.1
Bachelor Degree	12	34.3
Master Degree	8	22.9
Doctoral Degree	2	5.7
Total	35	100
Type of Employment		
Public	19	54.3
Private	10	28.6
Self-employed	4	11.4
Not employed	2	5.7
Total	35	100
Level of Occupation		
Top management	3	8.6
Middle management and professional	19	54.3
Support and technical	7	20
Not applicable	6	17.1
Total	35	100

6.3. Correlation Analysis

The association between the six dimensions employed in the study: performance expectancy, effort expectancy, social influence, information quality, system quality and intention to use are presented in Table 4. Correlation analysis was conducted by using the Pearson's product-moment correlation to determine the strength of the relationship between the measures. The interpretation of strength of relationships followed the guidelines by Cohen (1988): small: $r = .10$ to .29; medium: $r = .30$ to .49; large: $r = .50$ to 1.0.

As shown in Table 4, the value of Pearson correlation matrix ranges from $r = 0.464$ to $r = .796$. The highest correlation value was between Performance expectancy and Effort expectancy: $r = .796$ with p-value = .000. Other variables have high positive linear correlations and this shows that they are highly significant related to each other. They are Performance expectancy and Social influence: $r = .660$ with p-value = .000; Performance expectancy and Information quality: $r = .747$ with p-value = .000; Performance expectancy and System quality: $r = .772$ with p-value = .000; Performance expectancy with Intention to use: $r = .634$ with p-value = 0.000; and. Effort expectancy and Social influence: $r = .571$ with p-value = 0.000; Effort expectancy and Information quality: $r = .775$ with pvalue = .000; Effort expectancy and System quality: $r = .716$ with p-value = .000; Effort expectancy with Intention to use: $r = .591$ with p-value = .000; Social influence with System quality: $r = .601$ with p-value = 0.000; Social influence with Intention to use: $r = .588$ with p-value = 0.000; Information quality with System quality: $r = .689$ with p-value = .000; Information quality with Intention to use: $r = .565$ with p-value = .000; System quality with Intention to use: $r = .581$ with p-value = .000 whereas Social influence with Information quality: $r = .464$ with p-value= 0.005 have medium positive linear correlations which shows that the variables have moderately positive relationships between one and another.

Table 3. Reliability Analysis of Measures

Measures	No. of item	Cronbach's alpha
Performance Expectancy (PE)	4	.948
Effort Expectancy (EE)	4	.918
Social Influence (SI)	5	.851
Information Quality (IQ)	8	.784
System Quality (SQ)	8	.829
Intention to Use (IU)	5	.735

Table 4. Pearson Product-Moment Correlations between Measures

Scale	1	2	3	4	5	6
1. Performance Expectancy	-	.796**	.660**	.747**	.772**	.634**
2. Effort Expectancy		-	.571**	.775**	.716**	.591**
3. Social Influence			-	.464**	.601**	.588**
4. Information Quality				-	.689**	.565**
5. System Quality					-	.581**
6. Intention to Use						-

**p < 0.01 (2-tailed)

7. Conclusion

This study contributes to the understanding of determinants of the user acceptance of e-Syariah Portal. Utilizing UTAUT model as a theoretical framework, three critical variables (performance expectancy, effort expectancy and social influence) and two online quality factors (information quality and system

quality) are proposed as significant contributors to the user acceptance of e-Syariah Portal. Six hypotheses were tested and supported in this study. The results have supported the work of Venkatesh
et al. (2003) and Ahn et al. (2004). Performance expectancy, effort expectancy, social influence, information quality and system quality were all found to be significant predictors and positively related to Intention to use e-Syariah Portal. Performance expectancy and effort expectancy were found to be the most influential predictors for intention to use e-Syariah Portal. Based on the research findings, Syariah users have agreed that performance expectancy, effort expectancy, social influence, information quality and system quality will strongly influence the intention to use e-Syariah Portal. Users perceived that the e-Syariah Portal had online qualities in terms of information and system. Thus, it can be concluded from this study that e-Syariah Portal was successful from the users' perspectives.

This study makes three contributions to user acceptance research. First, UTAUT can be applied in the new web-based information system context that is e-Syariah Portal. Second, the two online quality factors have a significant impact on the user acceptance of e-Syariah Portal. Third, Syariah users consider the e-Syariah Portal not merely as an information system but also as a virtual link that provides registering, receiving information and communicating. Hence, it is suggested that e-Syariah service provider (DSJM) should have integrative approach to evaluate the e-Syariah Portal, and take selective strategy to enhance the user beliefs and increase the user intention to return by understanding reasons or specific issues that relate for variability in users' or service provider's perception.

Acknowledgement

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