RESEARCH ARTICLE

ACCEPTANCE OF E-GOVERNMENT SERVICES AMONG JORDANIAN CITIZEN

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ARTICLE INFO	ABSTRACT
	This study presents the importance of studying E-Government services in Jordan. This study attempts to examine the acceptance possibility of E-Government and the major factors impacting the application of E-Government in the context of Jordan citizens. A quantitative approach survey of 266 citizens was used in this study. The modified acceptance framework grounded on the Unified Theory of Acceptance and Use of Technology (UTAUT) model is employed for ascertaining the factors affecting the citizens' intent to employ E-Government. The statistical analysis outcomes indicate the citizens' high acceptance level towards E-Government.

INTRODUCTION

In Jordan, as a national program, the initiative of E-government was introduced by His Majesty King Abdullah II in 2000. Then, the portal of e-government was in effect in the final quarter of 2006. E-government in Jordan aims to make better the delivery of government service, service efficiency and accuracy while decreasing the amount of time and cost in completing a transaction. The portal of e-government in Jordan was established by the Ministry of Information and Communications Technology (MOICT). As reported al-shaka'a (Al-Shaka'a, 2011), the portal includes nearly 49 services. These include income, sales tax, issuance of vocational license and non-criminal record certificate, and digitizing national library. However, in terms of securing the rights to the portal, the Jordan government is still working on it. The-government plays a significant role in administering their functions and being the service providers to citizens and the institutions of civil society. This can be seen from their projects that are convenient an efficient. The technologies of information and communication (ICTs) are now better. This has increased the amount of people in both the private and public sectors. They could definitely benefit from online services. Similarly, e-Government is now a valuable instrument in serving the beneficiaries. Thus, e-Government is now an area of interest among researchers of IS. Governments worldwide understand the many benefits of using e-government. As such, efforts have been made by these governments to reach a fully functional e-government to assure maximization of embedded benefits.

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However, Trainor and Subbio (2014) found no substantial difference in the benefits of e-government in both the developed and developing nations. As suggested by the findings, with the use of e-government, businesses, government servants as well as citizens could access the government portal on daily basis. Thus, it can be said that e-government could benefit both governments and people. The long-term goal and the benefits of implementing the strategy of e-government are highlighted next.

Literature Review

Organization's achievements are highly impacted by the advancements of information technology. Employing IT innovations, public administration established its e-government applications with the purpose of assisting the citizens to complete their official transactions online. Among the advantages of e-government applications are: 24 hour services, faster procedures, reduced administrative work loads and free from distance, time and bureaucracy issue. Further, better transparency and monitoring level, e-government challenged long time governmental corruptions through. As indicated in the available literature, studies on the adoption of e-government within the Arab nation is still uncommon in comparison to those done in the context of Western and Far Eastern countries Rouibah *et al*. (2011). In fact, studies on e-government in the Arab nations are still too few in comparison to those done in the Western and Far East counterparts, and that theories on acceptance are also new to these nations Rouibah *et al*. (2011). Also, studies that look into the factors that impacting citizen's adoption of e-government services in the emerging nations particularly the Arab domain are still lacking AlAwadhi and Morris (2009).

There are many theories developed to elucidate the acceptance of technologies in numerous domains and environment Ajzen and Fishbein (1975) introduced a model called theory of reasoned action (TRA). Additionally, Innovation Diffusion Theory (IDT) Moore and Benbasat (1991); Tornatzky and Klein (18). Technology Acceptance Model (TAM) Davis (1989) with its extensions Venkatesh and Davis (2000); Venkatesh *et al*. (2003), Theory of Flow (TOF) Csikszentmihalyi, (1990), and combined theories Kim and Garrison, (2009) and the Unified Theory of Acceptance and Use of Technology (UTAUT) Venkatesh *et al*. (2003) are among other theories that address numerous technology acceptance types based on different views. These theories were established to discover and describe the intent of user to employ systems of information. UTAUT brings forth constructs that are dissimilar to factors in the TAM model. In UTAUT, there are four fundamental determinants namely, performance expectancy, effort expectancy, social influence, and facilitating conditions. At different levels of service maturity, the functional characteristics and the factors of adoption of e-government could differ Shareef *et al*. (2014). In examining the influential factors of the adoption and usage of e-government services in Pakistan from the perspective of citizen, the model of UTAUT was used by Ahmad *et al*. (2013). The authors attempted to find the factors that enable the e-government services adoption among citizens and the study showed that in Pakistan, performance expectancy, effort expectancy, facilitating conditions and social influence affect user's adoption of e-government services.

Research Model and Hypotheses

The model chosen in this research is based on its global and integrative approach. This means that in elucidating technology acceptance and use, this research puts in a vast amount of explanatory variables obtained from the major theoretical models San Martín and Herrero (2012). The UTAUT) presents four key drivers of information systems' adoption. These drivers are performance expectancy, effort expectancy, social influence, and facilitating conditions.

Performance expectancy

Performance expectancy is about the extent to which an individual is confident that the system use will assist him (or her) in getting gains in job performance Venkatesh *et al*. (2003). It has been found in the past studies on acceptance that performance expectancy strongly predicts of intention to utilize information technology Venkatesh *et al*. (2003), Davis (1989). The evaluation of performance expectancy is via the perceptions of e-government services usage, with respect to benefits which include saving effort, time and money, improving the quality of government services, easing communication with government, and allowing citizens equality in dealing with the government AlAwadhi and Morris (2009). As such the hypothesis below is proposed:

H1: Performance expectancy will have a positive effect on the intention to use E-government services.

Effort Expectancy

Effort Expectancy (EE) is the extent of easiness linked with the way people utilize the system.

The concept of EE comes from three constructs from the already available models - perceived ease of use is from TAM/TAM2, complexity is from MPCU, and ease of use is from IDT – and the past studies have also pointed out the substantial similarities among the measurement scales and the definitions of the constructs. Studies in the past have mentioned the similarities among these constructs Davis (1989), Thompson *et al*. (1991). Effort expectancy appears to impart a strong impact on intention to use behaviour Davis (1989), Al-Gahtani *et al*. (2007). The evaluation of EE in this study is by the perceptions of ease of use of e-government services, and also by ease of learning how to use these services. As such the hypothesis below is proposed:

H2: Effort Expectancy will have a positive effect on the intention to use E-government services.

Social Influence

Social influence is about the extent to which an individual views the belief of others about the system to be certain if he or she should employ the new system Chiu & Wang (2008). Authors including Al-Sobhi *et al*. (2011) and Venkatesh *et al*. (2011) opine that social influences are crucial determinant of behaviour. The presumption is that if users of e-government are impacted by their social networks, they would be more inclined to have a strong behavioural intention to utilize the services of e-government. As such the hypothesis below is proposed:

H3: Social influence will have a positive effect on the intention to use E-government services.

Facilitating Conditions

Facilitating conditions are about the extent to which an individual is confident that an organizational and technical infrastructure is available to support system use Venkatesh *et al*. (2003). As reported by numerous scholars in the technology domain Venkatesh *et al*. (2003); Taylor and Todd (1995) the construct of facilitating conditions positively affects innovation use. This construct is also found to be a significant predictor of the technology use aside from being directly linked to usage behaviour Venkatesh *et al*. (2003). In the context of Kuwait, the factor of facilitating conditions were also found to substantially linked to behavioral intention to use mobile phones, 3G mobile telecommunication as well as e-government services . In the context of this study, this factor (facilitating conditions) is evaluated by the perception of being able to access required resources, and also the ability to get knowledge and support necessitated to employ e-government services. As such the hypothesis below is proposed:

H4: Facilitating conditions will have a positive effect on the intention to use e- government.

METHODOLOGY

This study aims to establish an integrated framework that could measure the readiness of citizens in interacting with government. In investigating their readiness, the factors of performance expectancy, effort expectancy, social influence, facilitating conditions and Intention to use, must be validated.
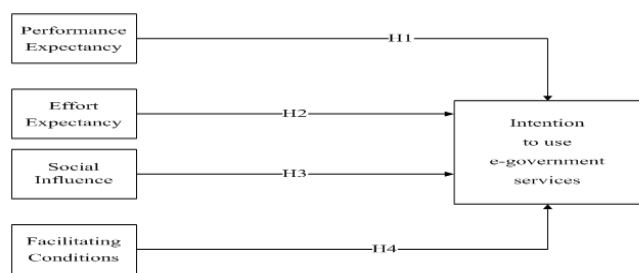
Figure 1. Research Framework

A survey was conducted among citizens aged 18 and above in Irbid National University in Jordan, to measure the aforesaid factors. A total of 300 questionnaires were distributed, of which, 266 were appropriate for analyses. From the results, almost all respondents (90%) utilize internet at least 5 times weekly. A rather small percentage of respondents (35%) knew that they could use internet to interact with government. However, less than 2% of these respondents engaged in such action. Further, majority of respondents had no usage knowledge of e-government applications.

Instrument Development

The items used in this study were derived from validated instruments on e-government Venkatesh *et al.* (2003); AlAwadhi and Morris (2009), Adulwahab, Md Dahalin (2012).The items were constructed to ascertain the awareness of respondents of the online access to the government. Chronbach's alpha was used to determine the items' reliability and the values generated for the items were greater than the proposed cut-off of 0.70.

Table 1. Reliability Analysis

VARIABLES	ITEMS #	RELIABILITY
Performance Expectancy	5	.853
Effort Expectancy	5	.756
Social Influence	5	.709
Facilitating Conditions	5	.789
Intention to use	4	.761

Data Analysis

The model proposed in this study was tested employing the technique of multiple linear regression analysis. The independent variables are performance expectancy, effort expectancy, social influence and facilitating conditions, while the dependent variable is intention to use e- government. As for the objective, it is set the degree to which the performance expectancy, effort expectancy, social influence and facilitating conditions impact the citizen's intention to interact with government employing information technology.

RESULTS

The multiple linear regression analysis outcomes are presented in Table 2. The adjusted R2= 0. The obtained value of 853 indicates that 85% of the variance in intention of respondents to use e-government was described by the model. The entire model shows significance (F= 217.269, P= 0.00). The significance for all variables is tested, and the variables of performance expectancy, effort expectancy, social influence and facilitating conditions in Internet appear to show significance.

Table 2. The multiple linear regression analysis

ADJUSTED R SQUARE	F	SIG.
.853	217.269	0.000

Predictors: (Constant), performance expectancy, effort expectancy, social influence, facilitating conditions Dependent Variable: intention to use.

Table 3 shows the significance of constructs, and supported hypotheses

Table 3. Hypotheses test

Hypotheses	Variable	Beta	T	P.	Supported
H1	Performance Expectancy	.385	2.322	.000	Yes
H2	Effort Expectancy	.232	3.582	.000	Yes
H3	Social Influence	.451	2.883	.000	Yes
H4	Facilitating Conditions	.331	5.499	.000	Yes

DISCUSSION

This study delved into the degree to which the citizens of Jordan possess the readiness to use e-government services. The constructs of performance expectancy, effort expectancy, social influence and facilitating conditions were used and elucidated. It is important that these factors are addressed by government so that e-government usage among citizens could be increased. Data from citizens from many walks of life were collected and analyzed. Using data from a diverse pool, for the context of this study, will make the outcomes more representative of the population. A model that is appropriate to the setting of Jordan is proposed: it incorporates constructs from the Unified Theory of Acceptance and Use of Technology (UTAUT). This model explains 85% of the variance in the intention of respondents to use e-government.

As for the Performance expectancy, effort expectancy, social influence and facilitating conditions' construct, the intent of citizen in employing electronic government will increase providing that they believed that the internet would make them more efficient in collecting information from the government and in interacting with the government, and give them better control over their interaction with the government. It is important that government increases the citizens' awareness about the services that are available online. In other words, government should adopt an awareness initiative for that purpose. The current technology should also be taken into account by government, especially the social media. It is then crucial that government make the effort to switch to modern medium to replace the conventional one. This enables government to make available real time information to citizens. The next research should try to integrate the model proposed in this study with other constructs. These constructs include service quality and computer self-efficacy. Also, the forthcoming study should select sample from other regions in Jordan as this study's sample is only from one region. This study adds to the literature by further validating the constructs of performance expectancy, effort expectancy, social influence and facilitating conditions measures and by demonstrating the way these measures are linked to the construct of e-government. The model and the measures brought forth by this study could provide better comprehension to both practitioners and researchers on e-government with respect to its dimensions, antecedents and consequences.

Conclusion

This study brings forth a framework of e-government services adoption. The variables impacting the intention of citizen to utilize electronic government services were ascertained via the integration of variables derived from the Unified Theory of Acceptance and Use of Technology (UTAUT). Based on the results, performance expectancy, effort expectancy, social influence and facilitating conditions significantly impact respondents' intention to use e-government services.

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