

E-participation Service in Saudi Arabian E- government Websites: The Influencing Factors from Citizens' Perspective

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Abstract

In keeping pace with the rapid developments in information and communication technology, the Saudi government has invested heavily, in recent years, in the development of e-participation services in e-government websites with the aim of enhancing citizens' interaction with the government and thereby making the latter more responsive and accountable to citizens' needs. However, despite its significant efforts, a low level of use of the online opportunities by the citizens for interacting with the government is an endemic problem faced by the Saudi government. In contrast, many countries stand in very good positions compared to Saudi Arabia in terms of citizens' rate of adoption of e-participation services. This suggests that there are influencing factors that have a significant impact on citizens' intention to use e-participation services in e-government websites in Saudi Arabia. Therefore, this research aims to explore the factors, from a citizen perspective, that affects individuals' intention to use e-participation services in Saudi Arabian e-government websites. In addressing its objective, this research commenced with a literature investigation which revealed that there are very few previous studies that have specifically examined the antecedents of citizens' intention to use e-participation services. Much of the existing literature on citizens' intention to use e-government services have focused predominantly on the transactional services. Additionally, most of these studies have concentrated more on validating popular behavioural models in the context of citizens' use of e-services rather than looking at contextual factors that could impact individual's decision to use such services. Therefore, by reviewing different theories and empirical findings, a conceptual framework has been proposed in this study for understanding Saudi citizens' intention to use e-participation. The framework consists of five constructs, including, intention to use e-participation, attitude, trust, website design, and culture. The relationship between these constructs form the basis for the research hypotheses which will be tested using a quantitative research approach. Specifically, a survey will be used for gathering data from a sample of Saudi citizens and statistical methods will be used for analysing the quantitative data generated from the primary research. The findings of this research can assist the Saudi government and governments of other culturally similar countries in developing more effective citizen-centric e-participation services, thus implying that this study has significant practical implications as well.

Keywords: *E-government; E-Participation; Saudi Arabia; intention to use; culture*

1. Introduction

The rapid diffusion of the internet has been a major catalyst for change in the delivery channels used by businesses for offering services to their customers. More precisely, technological progress has driven the rise of new concepts such as e-commerce and e-business within business sectors. In the past decade, governments across the globe have also recognised the potential of the internet for building a powerful platform for citizens to

interact with the government, thus giving rise to the concept of e-participation. Although researchers agree that e-participation can provide a wide range of distinct benefits to citizens and governments alike, research shows that it is often difficult for government e-services to achieve the desired benefits owing to low levels of user acceptance of these services (Hung, Chang & Yu 2006). Literature suggests that providing access to world-class e-services and creating favourable conditions for its use do not guarantee user acceptance of government e-services (Hung, Chang & Yu 2006), thus clearly implying that there are individual-level factors that have a significant impact on citizens' intention to use e-participation. The purpose of this research is to identify these factors.

2. Literature review

2.1 E-Government

E-government refers to the use of information and communication technologies for delivering better and more efficient government transactional services to citizens as well as for facilitating the collaboration of citizens with the government in decision and policy making in order to achieve the benefits of improved citizen participation in politics and enhanced government accountability and transparency (Bannister 2005; Hung, Chang & Yu 2006). According to this definition, the main purposes of e-government are information provision (e.g. voter information, road maps and geographical information), delivery of transactional services (e.g. paying bills and violations online, obtaining birth and death certificates, applying for licenses and permits, tax filing and registering for social security), and provision of necessary conditions for an appropriate environment where citizens can participate in the government's decision making process (Bannister 2005; Hung, Chang & Yu 2006). Literature shows that e-government can be classified into several broad categories based on whom the government is providing services and benefits to, which ranges from citizens, businesses, employees and non-profit organisations (Al Nagi & Hamdan 2009). Examples of popular e-government categories are: Government-to-Citizen (G2C), Citizen-to-Government (C2G), Government-to-Business (G2B), Business -to-Government (B2G), Government-to-Employee (G2E) and Government to-Government (G2G) (Al Nagi & Hamdan 2009). E-participation, which is the focus of this research, is a subset of the G2C category (Macintosh & Whyte 2008). Proponents of e-government highlight numerous benefits of e-government (AlAwadhi & Morris 2009; Harfouche & Robbin 2012). The benefits in particular that have been realised by some countries include, increased economies of scale in providing government services to citizens; 24/7 availability; better accessibility of public services; added convenience; improved citizen participation in government decision making; enhanced government accountability, responsiveness and transparency; minimising government bureaucracy; improving public trust in government; improved customer service; and huge cost savings for government, businesses and citizens alike (Al Nagi & Hamdan 2009; Alomari, Woods & Sandhu 2012).

2.2 E-Participation

E-participation refers to the use of ICT for enhancing citizens' political participation by enabling them to connect with one another and their elected representatives (Macintosh & Whyte 2008). E-participation satisfies all the conditions of an open sphere, in that it is open to all citizens irrespective of demographic differences or geographic distances; provides all citizens with an equal voice about state matters; and fosters full inclusion where existing institutional arrangements such as established norms and power structures, or personal

characteristics such as age and illness would normally limit an individual's civic engagement (McGrath et al. 2012).

The United Nations e-participation framework presents three levels of e-participation, namely, e-information, e-consultation and e-decision making (United Nations 2012). E-information is the first level of e-participation. This is an active level but is a one-way initiative. In this level, the government presents information related to policy making and the like on the website and this is accessed passively by citizens for obtaining information. E-consultation is the second level and involves active participation as well as a two-way relationship. More precisely, in this level the government sets questions through online chat rooms, surveys, focus groups etc. and citizens are encouraged to engage in contributing their views on the issue in hand. In the third and most active e-participation level, namely, e-decision making, citizens are empowered to participate in the policy making process of the government, actively and independently.

The main reported benefits of e-participation are that it improves the effectiveness of political decision making by increasing opportunities for citizens to participate in the formulation of political decisions / public policy, it minimises distortions in the government's understanding of the needs and preferences of its citizens as well as brings legitimacy to the decisions made by the government and it improves citizens' trust in the government as they perceive the government to be more transparent and responsive (Tolbert & Mossberger 2006).

2.3 E-Participation in Saudi Arabia

Improving e-participation is one of the key strategic objectives under Saudi Arabia's second e-government action plan (Yesser 2012). Specifically, using new and improved ICT tools for supporting citizen participation in government processes including administration, decision making, service delivery and policy making is an important objective under Saudi Arabia's new e-government action plan (Yesser 2012). In addition, under the new action plan, efforts will also be made to gather public feedback on e-participation by using ICT tools such as blogs and moderated forums (Yesser 2012). This is beneficial for making more appropriate changes to the e-participation services offered by the Saudi government.

According to the United Nations 2012 Survey, although Saudi Arabia does not feature in the United Nations list of top 20 world leaders in e-government development, Saudi Arabia ranks 21 in the United Nations list of emerging e-government developers (United Nations 2012). The e-government program was launched in Saudi Arabia in 2005 and the main aim of the e-government program was to modernise and transform the government's service delivery (Yesser 2012). Although e-participation is a subset of Saudi Arabia's e-government, it has received much less focus compared to the provision of its transaction services. The ICT tools currently used by the Saudi government for facilitating e-participation are surveys, public consultations and blogs. More precisely, according to the United Nations 2012 Survey, Saudi Arabia provides only 51% of all the e-participation services assessed in the survey (United Nations 2012). Nevertheless, Saudi Arabia ranked 9th in the United Nations list of global leaders in e-participation development (United Nations 2012). This has resulted in relatively low e-participation benefits being realised by the Saudi government (United Nations 2012).

2.4 Factors Affecting Citizens' Intention to Use E-Participation Service

Previous researches have tested the efficacy of several behavioural motivational theories in explaining citizens' intention to use e-government services, notable among which are Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), Theory of Planned Behaviour (TPB) and Diffusion of Innovation (DOI). Although no existing model has been deemed highly valid for predicting individuals' intention to use e-government services, a common construct in all these models, namely, attitude; has been found to have a significant influence on citizens' intention to use e-government services in numerous earlier researches. Besides attitude, two factors that were not included in any previous models but have been found to have a significant impact on citizens' intention to use e-government services are trust and website design. In addition to these, a fourth construct, namely, national culture, is also included in this research as culture plays a significant role in influencing individuals' involvement in political matters and hence is considered relevant in the study of citizens' acceptance of e-participation services. These four factors and their relevance in the context of e-participation are discussed in the following sections.

2.4.1 Attitude

Attitude reflects the estimation of positive or negative feelings that an individual has towards certain behaviour (Wu & Chen 2005). In the specific context of e-participation, this means that the more favourable evaluations that individuals have of e-participation services, the more favourable will be their attitude towards e-participation and vice versa. The impact of attitude on intention in the context of e-government services has been examined by numerous previous researchers, such as (Shin 2012; Wu & Chen 2005). In all these studies, attitude emerged as the most significant predictor of both adopters and non-adopters intention to use e-government services. With respect to use of e-participation services, it can then be postulated that individuals with more positive attitudes towards e-participation are likely to have greater intentions to use e-participation than individuals with negative attitudes towards e-participation.

Attitude in turn is determined by individuals' evaluations of the benefits of performing the behaviour (Wu & Chen 2005). In the context of e-government services, researchers have theorised antecedents of attitude to include benefit perceptions, such as, perceived usefulness, perceived ease of use, perceived quality of website, and perceptions of confidentiality, compatibility, security and trust (Shin 2012; Wu & Chen 2005). However, majority of empirical evidence has shown that perceived usefulness and compatibility have the most significant influence on citizens' attitude towards e-government services and hence will be used in this study as measures of attitude.

Perceived usefulness refers to the extent to which individuals believe that an innovation is better than its precursor in improving their performance (Shin 2012). In the context of e-participation use, this means that an individual is likely to perceive e-participation as useful if they believe that it is better than the traditional routes of citizen participation in improving their engagement in government policy making and the like. With regard to the impact of perceived usefulness on intention in the context of e-government services, majority of previous researchers have found perceived usefulness to have an indirect impact on intention through its influence on attitude (Shin 2012; Wu & Chen 2005). These researchers assert that citizens will only develop favourable attitudes towards using e-government services if they perceive a benefit in the government services delivered via the online medium over the traditional routes. Based on these research findings, it can thus be postulated that perceived

usefulness will have a significant indirect impact on an individual's intention to use e-participation through its impact on attitude.

The second factor, compatibility, means that an individual is likely to perceive e-participation as compatible if it is consistent with his / her lifestyle, need for engagement in political activities and past experiences of using online services (Shin 2012; Wang & Lo 2013) [10]. Empirical researches in the context of e-government services have shown compatibility to have an indirect impact on citizens' intention to use e-government services (Hussein et al. 2010; Sahari et al. 2012; Wang & Lo 2013). More precisely, these researchers have shown that compatibility has an insignificant direct impact on intention to use e-government services, however, individuals' attitude towards e-government services usage becomes more positive and favourable as the compatibility of it increased. Based on previous research findings, it is hence postulated that perceived compatibility will have a significant indirect impact on an individual's intention to use e-participation services through its impact on attitude.

2.4.2 Trust

Trust refers to “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer, Davis & Schoorman 1995). In the context of e-participation, this factor can be understood as the willingness of citizens to engage in e-participation services offered by the government based on their beliefs about the integrity, benevolence and competence of the government and not as a result of any kind of pressure from the government.

Trust has been shown by several previous researchers to be an important determinant in the acceptance of e-government services where a high level of trust will positively and significantly influence a user's intention to use a website (Bélanger & Carter 2008; Papadoloulou, Nikoladou & Martakos 2010). Trust can be expected to be important to e-participation success.

Evidence suggests that citizens' trust in the e-government context, especially during initial encounters, is related to two factors, namely, trust in government and trust in the internet (Bélanger & Carter 2008; Hussein et al. 2010). These two antecedents of trust are therefore used in this study to measure the trust variable. Trust in government refers to an individual's perceptions about the integrity and ability of the provider of a service and is based on the individual's previous experience of dealing with the provider (Bélanger & Carter 2008). Citizen confidence in the ability of the government to provide online services reliably can be assumed to be imperative for building the former's trust beliefs in e-participation services considering that trust beliefs are based on expectations that the service provider can deliver. For example, a citizen who has had negative previous experiences with the government such as unfulfilled promises, dishonesty, low offline collaboration with citizens in government policy making, is likely to have low levels of trust in e-participation services offered by the government as they might believe that the e-participation services are being provided by the latter for selfish motives such as enhancing their reputation or for monitoring society, and less for benefiting society.

Trust in the internet, on the other hand is identified as institution-based trust which is the individual's perception that the institutional environment (in this case internet), in which the

service is provided, feels safe (Alzahrani 2011). In the specific context of e-participation, Trust in the internet can be expected to be an important determinant of citizens' trust beliefs about the e-participation services considering that privacy, security and fraud are risks associated with using the internet to share information.

2.4.3 Web Design

Previous researchers have theorised that a good website design can make users feel more engaged and would increase their intention to use e-government services, while badly designed websites can frustrate users and cause them to leave as they cannot find what they want (Aladwani 2013; Segovia, Jennex & Beatty 2009).

Three website design factors, namely, content, presentation and navigation style have been selected in this study. The choice of website design factors for this study was based on existing empirical evidence in the context of e-government services which reveal that users from dissimilar cultures view the importance of diverse website design elements differently (Aladwani 2013; Qutaishat 2013). In previous studies that have tried to understand the website design factors valued by users for an e-government gateway within the context of countries which are culturally similar to Saudi Arabia, content, presentation and navigation style have emerged as the most important factors (Aladwani 2013). Hence, the decision to use these factors in this study to measure the website design variable.

Aladwani (2013) defines quality of the content of the website as the suitability of the information for the user's purposes. In the context of e-participation, users' perception of content can be understood as the degree to which the e-participation services offered via the e-government website are accurate, precise, current, timely, reliable, complete, concise and relevant. Presentation, on the contrast, refers to the appearance of the website (Aladwani 2013). Applying it to the context of e-participation, it can be understood as the extent to which users perceive the website interface providing the e-participation services as pleasing, neat and functional in assisting the user in engaging in e-participation. The third website design factor, namely, website navigability refers to "the degree to which a visitor can follow a website's hyperlink structure to successfully find information with efficiency and ease" (Aladwani 2013; Qutaishat 2013). In the context of e-participation, navigation can be understood as the relative ease with which users can browse through e-government websites to find information on e-participation services. Many previous researcher have found these three factors to have a significant impact on how users perceive the quality of e-government websites and consequently indirectly impacts site visitors' intention to use the services offered by the website (Alshehri et al. 2012).

2.4.4 Culture

In the context of e-government, only a few studies have examined the impact of national culture on e-government adoption (Al-Hujran, Al-dalahmeh & Aloudat 2011; Zhang et al. 2009). These researches hypothesised that cultural dimensions of collectivism, high power distance, low uncertainty avoidance, short term orientation and femininity indirectly impact users' intention to use e-government services through its negative impact on the predictors of intention. However among these hypotheses, only high power distance and low uncertainty avoidance have consistently emerged as having a significant, negative impact on predictors of intention and consequently indirectly impacting intention to use e-government services. The importance of the power distance and uncertainty avoidance dimensions has also been widely

recognised in literature on the success of new technology adoption (Leidner & Kayworth 2006). These two cultural dimensions are therefore chosen in this study.

Uncertainty avoidance refers to the extent to which people feel threatened by uncertain situations (Hofstede, Hofstede & Minkov 1991). Members of a high uncertainty avoidance society tend to cope with the anxiety related to uncertain situations by minimising uncertainty such as by avoiding the uncertain situation completely. Considering that e-participation services are relatively new and that Saudi Arabia is a high uncertainty avoidance nation, presumably, citizens of Saudi Arabia may tend to maintain the traditional way of involving in government policy making rather than using e-participation services. It could therefore be argued that a country with a strong uncertainty avoidance culture such as Saudi Arabia would have a negative attitude towards using e-participation. Similarly, the high uncertainty avoidance dimension can also be expected to have a negative impact on Saudi citizen's trust feelings towards e-participation considering that members of strong uncertainty avoidance cultures tend to perceive uncertain, new situations as more risky and hence are more likely to avoid it.

The cultural dimension of power distance, on the other hand, refers to the extent to which people in a society accept and expect power to be unequally distributed (Hofstede, Hofstede & Minkov 1991). Individuals in power distance culture tend to believe that a powerful service provider is likely to engage in unethical behaviour and hence they would have low level of trust towards such a provider. Applying this logic in the context of e-participation services in Saudi Arabia which is a high power distance nation, it can be assumed that citizens are likely to have low levels of trust towards e-participation services as it is provided by the government which is a superior body and hence have low intention to use these services. Besides trust, the high power distance cultural trait can also negatively impact users' attitude towards e-participation. It can therefore be argued that a country such as Saudi Arabia, with a large power distance, would have a negative attitude towards using e-participation.

3. Research Aim and Objectives

This research aims to address the following question:

❖ What are the key factors that influence on citizens' intention to use E-participation service in E-government websites in Saudi Arabia?

The main focus of this study is to find out how to improve the relationship between government and its citizens through using e-participation service by investigating factors that influence citizens' intention to use E-participation in e-government websites in Saudi Arabia. Therefore, the objectives of this study are:

- ✓ To identify the key factors that influence on citizens' intention to use E-participation service in E-government websites in Saudi Arabia.
- ✓ To propose conceptual framework for e-participation service.
- ✓ To propose guidelines to assist government agencies in improving E-participation services in Saudi Arabia.

4. Research Framework

Based on the literature, this paper thus suggests the following framework on the predictors of intention to use e-participation in Saudi Arabia.

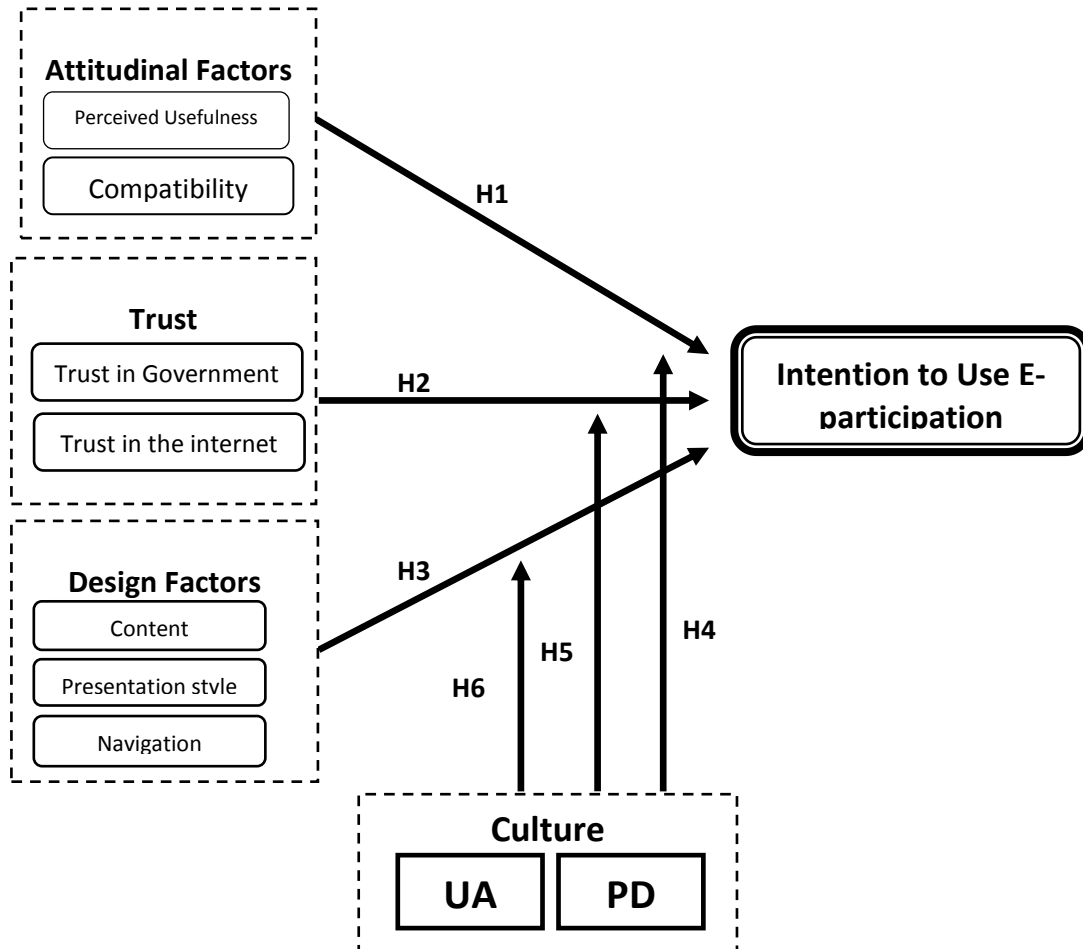


Figure 1: Research Framework

The proposed framework comprises of one dependent variable (intention to use e-participation) and three control variables (attitude, trust and website design) as shown in Figure 2. In addition, the cultural dimensions of power distance and uncertainty avoidance have also been set in the model as having moderating effects on the relationship between each of the predictors and citizens' intention to use e-participation. The six hypotheses constructed based on this model are as follows:

- H1:** Attitude influences Saudi citizens' intention to use e-participation.
- H2:** Trust influences Saudi citizens' intention to use e-participation.
- H3:** Website design influences Saudi citizens' intention to use e-participation.
- H4:** Power distance and Uncertainty avoidance moderates the relationship between attitude and Saudi Citizen's intention to use e-participation
- H5:** Power distance and Uncertainty avoidance moderates the relationship between trust and Saudi Citizen's intention to use e-participation
- H6:** Power distance and Uncertainty avoidance moderates the relationship between website design and Saudi Citizen's intention to use e-participation.

5. Proposed Methodology

The survey questionnaire method will be used for gathering primary data from Saudi citizens. The main reasons for choosing the questionnaire method over other methods are the relatively low cost, effort and time involved in collecting data from a large, geographically dispersed sample using this method compared to others. Additionally, unlike qualitative research where the lack of rigour and subjectivity of the data collection and analysis process can contribute to a degree of bias; in quantitative researches, higher confidence in the results is enabled by the structured approach to data collection and analysis, the use of a large sample and statistical analysis of the data which provides a logical explanation for the results in a form that can be communicated effectively to others. The survey will be administered using the web-based method. More precisely, the survey hosting site, Survey Monkey, will be used for hosting the web survey and social networking sites, such as Twitter will be used for sharing the link to the survey with potential respondents. This method of survey administration has been chosen in the present study considering the high level of social media use in Saudi Arabia; thus enabling access to a relatively large proportion of the target population with relative ease.

6. Conclusion

Investigating the predictors of citizens' intention to use e-participation is important considering that much of the existing literature on the factors influencing citizens' intention to use the e-services offered by governments have focused on transactional services, with none having focused specifically on e-participation services. The comprehensive review of literature and subsequent theoretical framework proposed in this paper contributes significantly to fulfilling a major gap in existing research in the context of e-participation. The main strength of this paper lies in the derivation of predictors of e-participation from previous empirical evidence rather than popular behavioural theories, thus ensuring that the theoretical model proposed in this paper is more reliable, valid and robust in the specific context of e-participation in Saudi Arabia.

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