

Drivers of eParticipation: Case of Saudi Arabia

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This study provides insights regarding the intentions of users participating in eGovernment activities in Saudi Arabia. A user-centric model of eParticipation is advanced, based on a review of the literature and empirical tests. We conducted an online survey of 200 citizens and residents of Saudi Arabia. The results of this study indicate that four variables positively influence eParticipation intentions: trust of the government, attitude towards eParticipation, use of social media, and social influence and identity. Interestingly, perceived benefits of eGovernment were statistically significant, but they were negatively related to eParticipation intention. Only two demographic variables, age and gender, are significantly related to the level of eParticipation; age is positively related, and gender is negatively related. This suggests that as people become more mature, they are more willing to participate in the country's governance via online channels; it also appears that women are less likely than men to participate through online media. It seems that eParticipation rates could increase if people could be assured of anonymity, if information would not be used against participants, and if the impact or result of their eParticipation on policy and decision-making processes could be observed and verified. Participants do exhibit favorable attitudes towards government's attempts to encourage eParticipation in Saudi Arabia. Finally, while participants recognize the benefits of interacting with the government through social media—and recognize the likelihood of social media playing a more prominent role in future—currently, they are uncomfortable with the concept and practice of eParticipation.

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JEL Classification: I28, I18, G38, D78, P21

I. Introduction

Generally, eGovernment refers to the use of information and communication technologies to deliver government information and services online and to interact and transact with citizens, businesses, and governments (Burn and Robins, 2003). eGovernment involves digital channels, including websites, mobile-based services, and public access points such as kiosks, databases, networking, discussion support, multimedia, automation, tracking and tracing, and personal identification technologies (Jaeger, 2003). eParticipation refers to the use of digital technologies

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to encourage and support “top-down” engagement, or to foster “ground-up” efforts to empower citizens to gain their support (Macintosh and Whyte, 2008).

According to Jaeger and Thompson (2003), eGovernment can provide significant benefits for citizens, businesses, and governments around the world. eGovernment is viewed as a key to shrinking communications and information costs, maximizing speed, broadening reach, and eradicating distance (Norris, 2001). Similarly, eParticipation, which may be government- or citizen-initiated (Thomas and Streib, 2003; Zuckerman and West, 1985), is considered to be an enabling mechanism for creating democratic values (Moynihan, 2003; Nabatchi, 2012). However, citizen acceptance and participation are crucial for realizing the potential benefits of eGovernment (Persaud and Persaud, 2013).

Over the last decade, considerable academic research on eGovernment and eParticipation has focused on developed nations, while research on less-developed countries has been less extensive (Al-Ghaith *et al.*, 2010; Alshehri *et al.*, 2012) and has tended to study more of the technologies of eGovernment rather than understanding users’ needs (Alharbi and Kang, 2014; Persaud and Persaud, 2013). In particular, the research on Saudi Arabia has tended to focus primarily on eGovernment design, delivery, services, technologies, and adoption (e.g., Al-Ghaith *et al.* 2010; Alshehri *et al.* 2012; Dwivedi and Weerakkody, 2007), with little or no emphasis on eParticipation. The focus of eParticipation is on citizens’ engagement in the political-, policy- and decision-making processes of their country as well as citizen-to-citizen and citizen-to-government interactions via online channels (Macintosh and Whyte, 2008). This study contributes to eGovernment research in the Kingdom of Saudi Arabia by focusing on eParticipation.

Our study examines various factors that influence Saudi users’ eParticipation in government policy and decision making. A deeper understanding of these factors could inform policy and programs aimed at increasing eParticipation in Saudi Arabia as well as contribute to the growing empirical and theoretical literature on eParticipation. The Saudi government has, over the last decade, invested heavily in numerous sophisticated web-based technologies and tools aimed at promoting eParticipation (Al-Ghaith *et al.* 2010; Alshehri *et al.* 2012). However, citizen eParticipation engagement remains elusive. Why do eParticipation rates remain low? Is it because of weaknesses in eGovernment design and delivery? Or it is perhaps due to problems associated with eGovernment strategy and implementation? It may well be that citizens implicitly refuse to eParticipate due to a variety of concerns such as privacy and the misuse of information. It also seems plausible that there may be a mismatch between the expectations of government and the citizens of this Kingdom nation.

In order to provide a context for this study, a brief description of Saudi Arabia will be useful. Saudi Arabia has the largest economy in the Arab world and holds the world’s second-largest proven oil reserves. It has a population of approximately 30 million people, of which just under one-third or 10 million are foreign residents (Central Department of Statistics and Information, 2010). Many jobs in Saudi Arabia are filled by foreign workers, while significant unemployment persists among Saudi citizens (Gause *et al.*, 2012; Lippman, 2012; Ramady, 2010).

Saudi Arabia’s culture is rooted in conservative Islam (Havenaar, 1990). The family is one of the important institutions in Saudi society and is typically “extended” to include parents, siblings, grandparents, aunts, uncles, and cousins. In such a family-centered milieu, grandparents hold a high position and tend to play a key role in most aspects of family decision making (Georgas *et al.*, 2006). Generally, husbands are responsible for handling the family’s financial matters—even if their wives are working or are independently wealthy (Georgas *et al.*, 2006). Even though

there are different tribes and a variety of belief systems, respect for family, elders, authority, and tradition remains central to Saudi culture.

In terms of Hofstede's (2001) cultural dimensions, Saudi Arabia ranks very high on power distance, collectivism, masculinity, and uncertainty avoidance. This suggests that the country is characterized by high levels of inequality, substantial gender differences, and citizens who are very uncomfortable with unstructured situations; that is, they prefer stability and clarity rather than ambiguity. In terms of gender differences, men are expected to be forceful, strong, and concerned with material success, while women are expected to be more quiet, caring, and concerned with quality of life.

The Internet was introduced into Saudi Arabia in 1999. In 2005, eGovernment emerged in a major way with the government's "Yesser" strategy. Presently, almost all government ministries have their own websites even though they vary in terms of services delivered, functionality, features, and support level (Al-Nuaim, 2011). According to the *The Economist* (2014), about 60% of Saudis use the Internet, and some 25% (8 million) use Facebook. The penetration rates for various social media platforms are not high: 29% for WhatsApp and about 20% for Twitter, for example. On average, 1 in 3 Saudis uses social media regularly (Statista, 2014). However, the bulk of these users are young people between 26 and 34 years old, and the overwhelming majority are men (*Economist*, 2014). While steady progress is being made with Internet and computer technologies, computer literacy rates and poor information technology skills remain among the biggest challenges in the Arab world (Al-Fakhri *et al.*, 2009).

Section II presents a brief review of the relevant literature. Section III discusses the framework and hypotheses for the present study. Section IV describes the research methodology. Section V presents the results. Section VI discusses their practical and theoretical implications; and Section VII presents the conclusion.

II. Literature Review

As stated earlier, eGovernment generally refers to the use of information and communication technologies (ICT) to provide easy and convenient access to government information and services to citizens, businesses, and governmental units (Carter and Bélanger, 2005). From this perspective, eGovernment is seen as a powerful tool for enhancing service delivery, efficiency, and transparency of government (Kumar *et al.*, 2007; Persaud and Persaud, 2013). eParticipation, on the other hand, is often viewed as a special type of eGovernment service because it takes place on government websites or as part of eGovernment services run by government agencies (Lee and Kim, 2014; Macintosh and Whyte, 2008). Still, others regard eParticipation as field of research in its own right, given its close links to eDemocracy (Susha and Grönlund, 2012).

Classification aside, eParticipation aims to engage citizens in government decision making, planning and governance through the use of ICTs (Grönlund, 2001; Millard *et al.*, 2009). The goal of eParticipation is to create ongoing dialogue between the government and citizens and among citizens on issues of public policy and governance through the use of ICT (White, 2007). The availability of tools and technologies to promote engagement and dialogue between government and citizens and among citizens is essential for eParticipation success (Ergazakis *et al.*, 2011; Kamal, 2009; Themistocleous *et al.*, 2012). Recent studies have shown that social media technologies can play an important role in promoting eParticipation since they facilitate social interactions (Bertot *et al.*, 2012; Chun and Cho, 2012; Lee and Kim, 2014), relationship building

(Shah and Lim, 2011), user-generated content, and social networking (Magro, 2012), all of which foster dialogue, engagement, and trust.

Because eParticipation can result in greater engagement and dialogue between government and citizens and among citizens, citizens are empowered to play a greater role in public policy. Citizens could become more than just consumers of government information and services; rather they could become active partners in the creation of public policy since they have the ability to suggest policies and provide input and feedback on existing or proposed policies. Along this line, Macintosh and Whyte (2008) suggest that eParticipation involves “top-down” (government-initiated) and “ground-up” (citizen-initiated) engagement, both of which are designed to empower citizens and foster greater participation in government decision making (Thomas and Streib, 2003; Zuckerman and West, 1985). Thus, e-Participation is important for both governments and citizens because it provides the opportunity for citizens to be heard by their governments and to participate in the decision making, and it allows governments to engage citizens in policy formulation and democratic processes (Ergazakis *et al.*, 2011). Thus, eParticipation can be viewed as a building block in democratic decision making (Michels and De Graaf, 2010; Sæbø *et al.*, 2008).

Two recent and separate syntheses (Medaglia, 2012; Susha and Grönlund, 2012) of the extant eParticipation literature pointed to two dominant themes: the role of citizens in eParticipation processes and the influence of technologies in shaping eParticipation. Citizen-focused studies examine how citizens engage with government in terms of mechanisms, processes, and drivers (e.g., Edelman *et al.*, 2009; Ferber *et al.*, 2006; Maier-Rabler and Neumayer, 2009; Scherer *et al.*, 2009). Some studies have also investigated the changing interactions between citizens and government (Freschi *et al.*, 2009) and what governments can do to eliminate constraints to full-fledged citizen eParticipation (Susha and Grönlund, 2012). A major finding from this stream of research is that citizens’ values are among the most important factors influencing online participation (Medaglia, 2012). For instance, Lee and Kim (2014) found that citizens’ trust in government facilitates active citizen-initiated eParticipation, and Medaglia (2012) found that citizens’ technological competence influences their online participation.

In terms of technology-focused studies, one key finding relates to frameworks and principles for designing and managing digital platforms for eParticipation (Geldermann and Ludwig, 2007; Insua *et al.*, 2008; Kim, 2005; Phang and Kankanhalli, 2008; Williams, 2010). This stream of research has evolved around two perspectives: government-initiated applications (e.g., eInformation, eService, and eVoting) and citizen-initiated processes (social networking and social media). Studies on government-initiated applications focus on the design and management of effective eParticipation systems, while studies on citizen-initiated processes focus on citizens’ motivation and the subsequent effects of such participation (Susha and Grönlund, 2012). In this context, Cruickshank and Smith (2009) identified personal and social motivators that influence citizens’ eParticipation, while Susha and Grönlund (2012) propose targeting citizens’ personal attitudes, self-perception, and everyday-life concerns.

Another set of technology-centered research (e.g., Boichichio and Longo, 2010; Ergazakis *et al.*, 2011; Kamal, 2009; Themistocleous *et al.*, 2012) explores the challenges and opportunities of a wide range of eParticipatory technologies (e.g., location-based services, webcasting, wikis, social networking services, social media, eVoting, etc). These technologies have the potential not only to enable citizen eParticipation in the policy-making process (Charalabidis *et al.*, 2010) but also to transform government-citizen interactions (Medaglia, 2012) since they make it easier for citizens to coordinate, communicate, produce, and share political power relative to traditional government institutions (Sæbø *et al.*, 2009). These technologies make citizens the principal actors

in eGovernment and eDemocracy (Medaglia, 2012). However, research on Web 2.0 platforms and tools is only now emerging (Effing *et al.*, 2011). Susha and Grönlund (2012), for example, found research on how social media shape eParticipation to be lacking.

Another key finding from technology-focused research indicates that usable and well-structured websites do encourage citizen engagement (Coleman *et al.*, 2008) but this is not always the case. Macintosh and Whyte (2008) and Trechsel (2007) reported that usable and accessible tools, technology and government websites, are not enough to ensure enhanced participation or actual inclusion in the political system. Similarly, Magro (2012) found that simply employing technology for its own sake will not result in greater citizen participation. Trust, responsiveness, competence, engagement, commitment, security, and accessibility matter; the relevance and legitimacy of the tools, content, and processes also influence eParticipation (Macintosh and Whyte, 2008; Magro, 2012). Furthermore, citizens' satisfaction with participatory platforms tends to depend on factors such as existing and anticipated government reforms, regulatory structure, and perceived managerial capabilities (Chen *et al.*, 2006).

Since eParticipation is technology mediated, researchers have investigated how the tools and technologies provided by governments facilitate dialogue between government policy makers and citizens and among citizens (Themistocleous *et al.*, 2012). Research by Ergazakis *et al.* (2011) identifies a wide range of tools and technologies available for eParticipation, including chat rooms, blogs, online fora, ePetition, ePanels, eCommunities, eVoting, ePolls, eConsultation tools, decision-making tools, webcasting tools, and social media tools and platforms for interaction, collaboration, and sharing (Mislove *et al.*, 2007; Waters *et al.*, 2009). This facet of the literature review suggests that governments could facilitate eParticipation by using tools and technologies that are routinely used by citizens (Tambouris *et al.*, 2007). For example, since most people currently use mobile phones and social media regularly, governments should use these technologies to engage with citizens. While this assertion *sounds* reasonable, there is little empirical evidence to support it—especially in the context of developing and Arab countries. Indeed, current evidence suggests that these technologies do not automatically promote eParticipation (Betancourt, 2005) since other non-technical factors may influence such decisions (Chun and Cho, 2012).

Our literature search on eGovernment and eParticipation in Saudi Arabia turned up only a handful of studies. The themes covered by the studies are eGovernment adoption drivers, obstacles and challenges (Alateyah *et al.*, 2013; Alshehri *et al.*, 2012), information technology usage (Abanumy and Mayhew, 2005), number, types, and benefits of eGovernment services offered (Al-Fakhri *et al.*, 2009), evaluation of eGovernment services (Al-Nuaim, 2011), and managing eGovernment implementation projects (Hamner and Al-Qahtani, 2009). It is noted that none of the studies examined eParticipation. Nevertheless, they are included in this review in order to provide a clearer portrayal of the eGovernment context in Saudi Arabia.

The studies on Saudi Arabia noted that eGovernment was driven by a desire for the government to improve services, reduce expenditures, meet public expectations, improve relationships with citizens, and assist with economic development (Al-Fakhri *et al.*, 2009; Al-Nuaim, 2011, Alshehri *et al.*, 2012). For instance, the government-initiated “Yesser” program was designed to achieve continuous eGovernment growth and development within the country (Al-Fakhri *et al.*, 2009; Alshehri *et al.*, 2012). Today, most government agencies have their own websites, but implementation and adoption of eGovernment services are still in the early stages. Furthermore, there are substantial variations in the level of functionality, services, and features offered by the different ministries (Al-Nuaim, 2011). It appears that non-technical factors, such as

human resources, administrative skills, and economic considerations, are the principal barriers to eGovernment implementation. According to the United Nations (2010), in spite of the existence of national policies and strategies to foster the growth of ICT in Saudi Arabia, there is resistance to the Internet among some community leaders; this tends to impede progress.

In terms of the factors that influence eGovernment adoption by citizens, Alateyah *et al.* (2013) identified several factors, including awareness, quality of service, computer and information literacy, technical infrastructure, website design, security, and culture. According to Alshehri *et al.* (2012), the most important barriers were lack of awareness of eGovernment services, lack of trust in using eGovernment services, resistance of government employees to use eGovernment, lack of technical support from government website support teams, weak ICT infrastructure, and the availability and reliability of Internet connection. Based on these studies, it seems that three factors drive the adoption of eGovernment by Saudi citizens: attitudinal (e.g., trust, awareness, culture, security, and employee resistance), technical (e.g., ICT infrastructure, website design and management), and structural considerations (e.g., computer availability and information literacy). These studies also pointed to the relevance of two important demographic variables, namely, age and gender, not only for eGovernment services (Alateyah *et al.*, 2013; Alshehri *et al.*, 2012) but for online services as well (Al-Ghaith *et al.*, 2010).

III. Conceptual Framework and Hypotheses

The question of what drives eParticipation has been addressed from various theoretical perspectives, including technological, social, individual (demographic and socio-economic), and psychological (Lee and Kim, 2014). For instance, as discussed above, since eParticipation is based on ICTs, researchers have explored the link between the availability of tools and technologies and eParticipation. Similarly, since many researchers view eParticipation as a new technology the adoption of which depends on an individual's assessment of its perceived usefulness and ease of use, its relative advantage and compatibility, they have used various combinations and extensions of technology adoption models such as the Technology Adoption Model, Diffusion of Innovations Model, and the Unified Theory of Acceptance and Use of Technology (UTAUT).

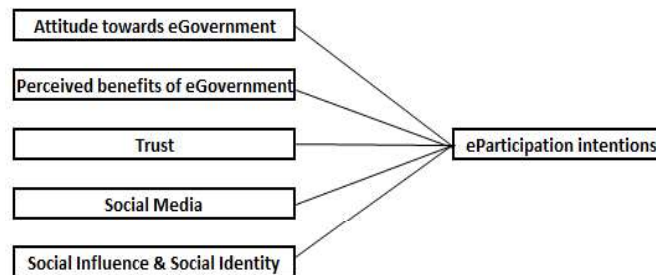
Another stream of research examines how citizens' demographic and socio-economic characteristics, such as race, gender, age, income, and education, influence their eParticipation (Lee and Kim, 2014; Thomas and Melkers, 1999; van Dijk *et al.*, 2008). Yet another line of research focuses on citizens' individual psychological characteristics (Thomas and Streib, 2003), such as self-efficacy (e.g., political efficacy, Internet efficacy, and technological efficacy) and personality (Edelmann and Cruickshank, 2012; Lee and Kim, 2014). Further, since eParticipation involves social interactions in order to promote dialogue and engagement among citizens and governments, researchers have used various social constructs in their analyses, including social norms, social identity, social influence, and social capital (Sæbø *et al.*, 2009).

In terms of theoretical models applied to the study of eParticipation, Susha and Grönlund (2012) identified more than two dozen theories drawn from political science, communications, sociology, public administration, information systems, and eGovernment. They observed that theories developed specifically within the eParticipation field and not borrowed from any specific discipline are lacking and needed. Macintosh and Whyte (2008) and Funilkul and Chutimaskul (2009) represent early attempts at developing eParticipation frameworks that combine elements from the three key dimensions of the eParticipation field: stakeholders, the environment, and technologies.

The model proposed for this study was developed based on insights gleaned from the preceding literature review. Cruickshank and Smith (2009) and Susha and Grönlund (2012) posit that personal attitudes and social motivators influence citizens' eParticipation. Similarly, the literature extensively discussed the potential of social media and other collaborative platforms to shape eParticipation, but there is little empirical evidence of this relationship. In addition, several researchers cautioned that the availability of participatory tools and platforms does not automatically result in enhanced eParticipation unless there is also trust. Consequently, factors considered in this study were chosen to reflect personal and social motivators (attitudes, perceived benefits, trust, and social influence) and the technological aspect (social media) that could transform eParticipation between governments and citizens and among citizens. Moreover, these factors have received little empirical testing, particularly with respect to developing and Arab countries.

Figure 1 depicts the conceptual model employed in the present study, suggesting that users' eParticipation intentions are influenced by their attitudes towards eGovernment, the perceived benefits of eGovernment participation, their level of trust of the government, the extent to which social media is used for eParticipation, and social influence and identity. The relationship between each of these variables in the model and eParticipation intentions is described below.

Figure 1: Conceptual Model of this Study



A. Attitude Towards eGovernment

Attitude has been shown to have a positive influence on adoption intentions in both the technology acceptance and eGovernment literatures (Davis *et al.*, 1989; Persaud and Persaud, 2013). An attitude is a person's enduring evaluation of his or her feelings about and behavioural tendencies toward an object or idea. Attitudes are learned and long lasting, and they might develop over a long period of time, though they can also abruptly change (Grewal *et al.*, 2012). In terms of eParticipation, users' attitudes may be shaped by their beliefs regarding the necessity to participate in eGovernment, the extent to which they feel comfortable participating via online channels, and whether they believe that eGovernment is increasingly becoming the preferred way to communicate, interact, and transact with the government. Furthermore, the level of eGovernment transparency may also influence participation rates (Relly and Sabharwal, 2009). The perceived ease and usefulness of eGovernment may also engender greater eParticipation. Generally, more positive attitudes toward eGovernment will likely lead to greater eParticipation. Thus, we propose the following hypothesis:

Hypothesis 1: Positive attitudes toward eGovernment will enhance eParticipation.

B. Perceived Benefits of eGovernment

Several recent studies have shown that the perceived benefits of eGovernment are positively associated with eGovernment adoption (Carter and Weerakkody, 2008; Jaeger and Bertot, 2010; Persaud and Persaud, 2013). Benefits of eGovernment participation could occur at both the individual and social levels. Users may decide to use eGovernment based on whether or not they believe their input has any influence on government policy and decision making, whether there are tangible benefits to them personally or to the wider society, and whether there are drawbacks from participating via online channels. In the case of eGovernment adoption, the literature indicates that perceived personal and social benefits influence adoption rates positively (Persaud and Persaud, 2013). A similar relationship might exist in the case of eParticipation. Thus, the following hypothesis is proposed:

Hypothesis 2: Perceived benefits will be positively related to eParticipation.

C. Trust

Trust in government is broadly defined as the extent to which citizens believe that government works in their best interest (Cleary and Stokes, 2006). When citizens do not trust in government, they are likely to perceive government policies as harmful, to distance themselves from government, to resist government policies and programs, and to lower their expectations of how government will treat them in the future (Kim, 2005). Such cynicism toward government tends to decrease citizens' interests in participation in public administration (Berman, 1997; Kim, 2005). Citizens' distrust in government often occurs during their conversation and consultation with government officials.

On the other hand, citizens' trust in government signals that government will respond to their needs and care for their best interests. Also, trust in government reflects citizens' willingness to comply, cooperate, adopt, and support government policies and innovative programs (Bélanger and Carter, 2008; Cooper *et al.*, 2008). For example, research found that citizens' trust in government increases the possibility of adopting innovative eGovernment services (Bélanger and Carter, 2008). Moreover, when citizens trust government, they are likely to show greater interest in government. Thus, given the fact that citizen-initiated eParticipation often requires citizens' commitment to participation in public affairs, their willingness and interest can be expressed as a form of active participation in policy decision-making processes (Bélanger and Carter, 2008; Cooper *et al.*, 2008). Therefore, we expect that greater trust of government will positively affect eParticipation. Therefore, the following hypothesis is proposed:

Hypothesis 3: Trust will be positively impact eParticipation.

D. Social Media

Social media facilitates the sharing and exchange of user-generated content (Kaplan and Haenlein, 2010) and promotes collaboration, participation, and engagement among users. Users have the ability to connect with each other and to form communities to socialize, share information, or achieve common goals or interests (Magro, 2012). Social media can be empowering to its users

as it gives them a platform to speak. It allows anyone with access to the Internet the ability to publish or broadcast information inexpensively in near-real time, effectively democratizing media (Magro, 2012).

Government use of social media is often highlighted as a good example of open government, which builds on principles of citizen centricity and information transparency (UN, 2012). According to the United Nations (UN, 2012), government agencies are currently using social media for improving public services, reducing costs, and increasing transparency. Through these media, they can inform citizens, promote their services, seek public views and feedback, and monitor satisfaction with the services they offer so as to enhance their quality. Furthermore, social media allows two-way communication in real time; government agencies can quickly engage citizens as co-producers of services, not just as passive recipients (UN, 2012). In expectation of a positive relationship between social media and eParticipation, we propose the following hypothesis for testing:

Hypothesis 4: Social media use will enhance eParticipation.

E. Social Influence and Social Identity

Social influence and identity theories posit that people are susceptible to social influences, which, in turn, positively affect their behavioural intentions (Tajfel and Turner, 1986). Mael and Ashforth (1992) argue that people often define themselves in terms of certain group memberships, and when they strongly identify with a group, they have positive attitudes towards the group and may even promulgate a positive group image (Bhattacharya *et al.*, 1995). Therefore, the most important groups are those with a high level of self-relevance, since they form an individual's social identity. Social identity refers to "the individual's knowledge that he [or she] belongs to certain social groups together with some emotional and value significance to him [or her] of this group membership" (Tajfel 1978, p. 31). Thus, social identity is a valid concept for explaining the relationship between an individual and his/her social environment (Tajfel, 1978). These social identities are common in various aspects of life—people see themselves as being part of a country, political movement, elite group, or progressive organization. Moreover, individuals may see some benefits from adhering to social norms and behavioral expectations associated with a social group (Andorfer and Liebe, 2013; Bartels and Hoogendam, 2011). From this perspective, individuals who share the belief that participating in eGovernment is "the way of the future," may want to identify with people whom they view as early adopters of this innovation. Simonson and Nowlis (2000) contend that the adoption of innovation is a socially accepted way of making a unique impression.

Another important determinant of an individual's behaviour is the influence of others (Bearden *et al.*, 1989). Langley *et al.* (2012) show that social contagion—the process by which individuals influence each other to adopt innovations—plays an important role in their adoption decisions. The social influences of family, friends, co-workers, peer groups, and influential bodies can convey information and activate emotional reactions through social persuasion (Bandura, 1986). Furthermore, people often make choices because they want to impress others or raise their social status (Foxall *et al.*, 1998), which may lead to social rewards and social differentiation, both of which stimulate innovation adoption (Fisher and Price, 1992). Noting that eGovernment and eParticipation are major innovations in the design and delivery of government services and for engaging citizens in the political and democratic processes of governance, we expect social

influences and social identity to positively influence eParticipation intention. Therefore, the following hypothesis is advanced:

Hypothesis 5: Social identification and influence will positively impact eParticipation.

IV. Research Methodology

This study is based on an online survey conducted in June 2014 of 200 hundred Saudi citizens and residents. An email list comprising 900 potential participants was created from various public sources as well as from the researchers' professional and social contacts. Participants were sent an email inviting them to participate in the study. The survey link was also posted on social media sites in Saudi Arabia (e.g., Facebook, LinkedIn, and Twitter). A total of 200 completed responses were received within two weeks of launching the survey, and these responses are analyzed and reported in the present study.

The survey instrument consisted of a series of 5-point Likert scale questions for each of the constructs in the model. We also employed a set of demographic questions that delved into respondents' computer and social media efficacy. The items for each construct were drawn from various published scales but were modified to suit the context of this study. For instance, the eParticipation intention construct consisted of items that sought respondents' intentions with regards to use of government websites to receive and share information, to communicate with the government, to participate in public policy discussions, and to indicate their preference for face-to-face interactions with the government sources. In terms of social media, respondents were asked to indicate their degree of awareness of various tools that promote dialogue with the government, their level of comfort interacting with the government through social media, and whether they see the need to interact with the government through social media. With regards to social influence and social identity, we employed a series of statements seeking their opinions on whether eParticipation might be influenced by family, friends, and coworkers and whether participation results in a sense of belonging to a forward-thinking group. In terms of the trust construct, respondents were asked to express their views on whether the government could be trusted to keep information confidential and whether such concerns might discourage their own eParticipation. Attitudinal items sought their views on the present role of government in encouraging eParticipation and ways in which government could improve their functionality. Finally, the construct of perceived benefits of eGovernment focuses on savings in terms of time, money, and effort as well as improvements in service quality, reductions in bureaucracy, and increases in eParticipation.

Two versions of the survey (English and Arabic) were made available to participants. To ensure equivalency of the two versions, the procedure went as follows. The survey instrument was first created in English and then translated into Arabic by three native Arabic graduate students who are fluent in both English and Arabic. Discrepancies between the three translations were discussed with the researchers and translators and a final Arabic version was determined. The Arabic version was then given to two other students to translate back into English. The translated English version was compared to the original English version, and only a few minor editorial changes were identified.

Table 1 presents a profile of the respondents. As can be seen, the sample consists of more women than men, the majority being fairly young (under 35 years) and almost equal proportion of employed individuals and students (about 36%). Homemakers make up 22% of the sample. From a technological perspective, it is noted that the overwhelming majority of respondents indicated

that they own a computer and a smartphone, and do have Internet access. The majority also uses social media (Facebook, Twitter, YouTube, Instagram) on a regular basis. Based on these statistics, our sample of respondents can be characterized as being primarily a young and tech-savvy group.

Table 1: Demographic Profile of Respondents (n=200)

Characteristics	Items	%
Age	18–24	32.0
	25–34	50.0
	35–44	11.5
	45–54	6.5
Gender	Male	23.0
	Female	77.0
Employment Status	Student	36.5
	Employed	35.0
	Unemployed	6.5
	Homemaker	22.0
Education	High School/College	31.0
	Bachelor's Degree	50.0
	Graduate Degree and Professional	18.5
Annual Income (Saudi Riyals)	Less than 25,000	47.5
	25000–49999	19.0
	50000–99,999	14.0
	Over 100,000	19.5
Own a computer and Smartphone	Yes	96.5
Knowledge of Internet	Very knowledgeable	43.0
	Knowledgeable	20.0
	Enough to get by	27.5
	Very little knowledge	9.5
Social Networks	Twitter, Facebook, YouTube, LinkedIn	90.5
	Others	9.5
Social Media Use/Hours per week	Less than 5 hours	40.0
	5 to 10 hours	40.0
	More than 10 hours	22.5

V. Results

The data were analyzed using factor, correlation, and multiple regression analyses. Factor analysis was used to determine the dimensionality of each construct. The reliability and validity of the constructs resulting from the factor analysis were evaluated before they were used in the regression analysis. Reliability was assessed using Cronbach's alpha, where the threshold for acceptable reliability is 0.70 (Nunnally, 1978). As shown in Table 2, the reliabilities for our constructs exceeded this threshold, ranging from 0.72 to 0.88. The high inter-correlations in Table

2 provide evidence that the items converge around their respective constructs, which indicates convergent validity (Campbell and Fiske, 1959). Discriminant validity was assessed by examining the extent to which the scales of the constructs overlap, based on the widely used method proposed by Campbell and Fiske (1959). As shown in Table 2, the values range from 0.04 to 0.64, which is well below the commonly used threshold of 0.85 (Campbell and Fiske, 1959). Thus, it is concluded that there is adequate discriminant validity, and the constructs are theoretically different.

Table 2: Correlation, Reliability, and Validity

	Trust	SI	SM	AeG	PBeG
Trust	1				
SI	.500** (.59)	1			
ePSM	.416** (.49)	.468** (.50)	1		
AeP	.545** (.64)	.602** (.64)	.457** (.49)	1	
PBeG	.227** (.27)	.048 (.05)	.245** (.26)	.030 (.04)	1
Reliab.	.73	.87	.88	.72	.79
Validity, $V = r_{xy} / \sqrt{r_{xx} * r_{yy}}$. Values are shown in parenthesis; all are below .80, the recommended threshold.					

SI = social identity; ePSM = eParticipation via social media; AeP = attitude towards eParticipation; PBeG = perceived benefits of eGovernment.

Once the reliability and validity of the constructs were established, multiple regression analysis was undertaken to determine the relationship between the dependent variable (eParticipation intention) and the seven independent variables (trust of the government, attitude towards eParticipation, eParticipation through the use of social media, social influence and identity, and perceived benefits of eGovernment and two demographic variables—age and gender). The other demographic variables—education, income, and employment status were not statistically significant, and, therefore, they were removed from the final model. It is noted that the lack of significance of these variables does not necessarily imply that they are not important or relevant; it may simply indicate that they do not provide additional explanation to that provided by the statistically significant variables (Stevens, 2009). The results of the regression analysis are shown in Table 3. The results indicate that trust, social media, social influence and identity, and attitude towards eParticipation are all statistically significant and that they positively influence eParticipation intentions as hypothesized. However, it was surprising that *perceived benefits* of eParticipation were negatively related to eParticipation intentions. This may be because the benefits of eParticipation are more apparent at a social level rather than at the individual level.

Both demographic variables (age and gender) are statistically significant, but age is positively related and gender is negatively related to eParticipation intention. This suggests that, as individuals become more mature, they are more likely to engage with the government in public policy via online channels. The negative relationship between gender and eParticipation intentions is somewhat counter-intuitive and inconsistent with Siddiqui (2008) and Al-Ghaith *et al.* (2010), who reported a positive relationship. Based on the reasoning that Saudi Arabia's culture and tradition pertaining to women are more conservative (OpenNet Initiative, 2004), and given the

restrictions on the movement of women unaccompanied by a male relative, Siddiqui (2008) suggested that women would likely prefer to achieve their needs from home through the Internet.

Here, we contend that while the findings and reasoning offered by Siddiqui (2008) and Al-Ghaith *et al.* (2010) may apply to online commerce, they may not be true for eParticipation. Online shopping is geared towards satisfying personal needs for products and services, while eParticipation is perceived as being more involved in the political-, democratic-, and policy-making processes of government. Even though eParticipation is done virtually, women may be less inclined to participate, particularly if they believe that their participation may not remain anonymous and there are risks of a backlash. This line of reasoning is consistent with long-held Saudi Arabian tradition in which matters of politics, governance, democracy, and policy making are seen as being the purview of men. Thus, merely enabling women to participate by providing online channels may be inadequate to obtain their participation. This finding suggests that significantly more needs to be done by the government to change perceptions and to signal that women can participate equally in the political process of their country.

Table 3: Regression Model: Intention to Participate in eGovernment

	β	S.E	t-	Sig. t	VIF
Constant	.93	.43	2.21	.03	
ePSM	.13	.08	2.05	.04	1.34
Trust	.33	.07	5.23	.00	1.84
SI	.27	.03	3.93	.00	1.91
AeP	.16	.07	2.28	.02	1.86
PBeG	-.13	.05	-2.40	.01	2.07
Age	.12	.09	2.18	.03	1.14
Gender	-.22	.21	-3.13	.00	1.19
$R^2 = 53.4$; F-value = 30.93 Sig F = 0.000					

VI. Discussion and Implications

The goal of this study was to identify the drivers of eParticipation among the citizens and residents of Saudi Arabia. Given the paucity of empirical evidence on this issue in the context of Saudi Arabia, and given the lack of adequate theoretical models of user participation, a conceptual model was developed and tested. The findings of this study have both research and policy significance. From a research perspective, this study demonstrates the statistical significance and theoretical importance of factors—social media, social identification and social influence—that have been discussed in the conceptual literature but have not been subject to empirical testing, particularly in the context of Arab countries. From a policy perspective, the results point to several important issues that need to be addressed in order to increase the pace of eParticipation. These are discussed below.

The results show that trust of and confidence in the government are critical factors in influencing Saudi citizens' decision to eParticipate. Also, the extent to which they believe the feedback they provide is kept confidential and is used only for the intended purposes will determine the extent of their participation. Respondents are deeply concerned about the misuse of information by the government and negative consequences that might ensue for them personally. The perceived lack of security of the online channel is also a contributory factor; the more secure

the channel, the higher the likelihood of eParticipation. Essentially, governments need to demonstrate in visible ways that they intend to interact with its citizens in a responsible and transparent manner. In Saudi Arabia, where tradition, tribal relations, religion, and a conservative culture dominate, building trust with citizens is of paramount importance. The finding by Shah and Lim (2011) that citizens' distrust of government often occurs during conversation and consultation with government officials may be instructive. In the context of trust, the finding by Alshehri *et al.* (2012) that resistance from government employees to use eGovernment, lack of technical support from government website support team, weak ICT infrastructure, and the availability and reliability of Internet connection may also be instructive in terms of developing appropriate responses.

From a policy perspective, it is clear that the Saudi government can increase citizens' engagement by demonstrating respect for anonymity and guaranteeing use of information only for intended purposes. This finding also aligns with the recommendation of Shah and Lim (2011) that such demonstration will help enhance citizens' perceptions of government's trustworthiness, a process that is likely to occur through word-of-mouth.

The second important factor is social influence and identity. These factors pertain to the influence of family, friends, colleagues, co-workers, and others in getting people to engage with the online channel. Also, it seems that people believe that eParticipation puts them in a select group of forward-thinking people. This factor has received very little attention so far in the theoretical literature on eGovernment, and the finding observed in this study provides a basis for further testing and inclusion in future studies. The findings regarding social identification and influence in this study are consistent with technology acceptance literature, which shows evidence of a positive relationship between peer pressure, social norms and behavioral intentions.

Social identity and social influence are particularly relevant to the theory of eParticipation in light of its close link to eDemocracy. Recent events in the Middle East (e.g., the Arab Spring) show that social contagion is a major force for change since it tends to galvanize people around common causes. Even people who may not initially be active become so—with powerful and compelling appeals from friends, family, peers, and even strangers. This variable, having received little attention in the eParticipation literature, needs further investigation. From a practical perspective, this finding suggests that the Saudi government should probably initiate programs and promotional activities to boost eParticipation. The government may also want to tap into specific groups of people who are considered to be opinion leaders to get them to become spokespeople for eParticipation programs.

Attitude towards eParticipation is another key factor that motivates people to engage with the government via online channels (Persaud and Sehgal, 2005). Generally, participants in the study had a positive attitude towards eParticipation and have given the government a good rating for its efforts to encourage eParticipation. They also believed that eParticipation can have substantial impacts on improved governance and policy as well as the process of decision making. The positive impact of attitudes on intention aligns with the TAM model, which posits that attitudes affect intentions (Davis *et al.*, 1989). Although several eParticipation studies have found that citizens' attitudes influence their decision to engage with the government via online channels, there is a dearth of empirical studies outside of the technology acceptance literature that investigate how these attitudes are formed. Generally, technology acceptance models postulate that two key features of a technology—perceived usefulness and perceived ease of use—are primary drivers of attitudes toward a technology. However, given that most eParticipation technologies require fairly limited technological knowledge and skills to use, it is important to explore other personal and

social motivators of attitudes. From a practical perspective, the findings regarding attitudes towards eParticipation lend support to the notion that the government is doing a relatively good job and that these efforts should be continued.

Our respondents recognize that significant benefits can be derived if the government uses social media to communicate and interact with them. These benefits include more efficient policy and decision-making processes and outcomes and greater engagement of citizens in government initiatives and priorities. This perception is in accord with the pervasive thinking in the literature regarding the transformative potential of social media platforms. Unfortunately, participants do not see the need to interact or perhaps do not feel comfortable interacting with the government through social media. The lack of interest or discomfort in engaging with government via social media has profound implications for eParticipation development in Saudi Arabia. The finding suggests that regardless of the level of government investment in social media, uptake may remain low. That is, the availability, design, access, or usefulness of social media matter little when trust in government is lacking. This is in stark contrast to the findings and arguments advanced in the literature that emanates from the developed world, which has very different institutions and political systems.

Uncovering the root causes for such negative attitudes towards a potentially empowering technology need further investigation and attention from policymakers. One possible explanation for this result may be that participation through social media is not entirely anonymous, and this may dissuade people from participating for fear of negative consequences. It may also be related to the conservative nature of Saudi Arabia's culture and to the so-called "middleman paradox" (Persson and Lindh, 2012), where the same people who are responsible for new forms of eParticipation explicitly or implicitly oppose these reforms. Resistance to the Internet from some community leaders (Al-Soma, 2011), combined with resistance from government employees to use eGovernment, and inadequate technical support from government websites (Alshehri *et al.*, 2012) could reinforce perceptions of the "middleman paradox." Engaging citizens in public policy decisions through eParticipation technologies and initiatives are not without risks, particularly without concomitant changes in the way government operates. Poor understanding of the risks and inadequate training could trigger responses such as the middleman paradox. From a policy perspective, the government of Saudi Arabia needs to assess the breadth of changes required and the associated risks and develop strategies for managing these without major disruptions to government operations.

Clearly, social media has the potential to change the nature of government policy making, governance, and institutions in unpredictable ways despite the best efforts at anticipating and planning. The evidence suggests that using social media technology with mobile technology, which is quickly becoming the norm in most developing countries, requires that government structures, institutions, and decision making be modified to accommodate citizens' heightened need for responsiveness, transparency, and engagement.

From a theoretical perspective, this study is among a handful that has examined the influence of social media on eParticipation rates from an Arab culture, the socio-cultural norms of which are vastly different from those of Western cultures. From a practical perspective, the findings concerning the attitudes of people towards the use of social media to foster eParticipation imply that the government ought to devote more efforts to get more people to feel comfortable using social media for eParticipation. In addition, the negative relationship between gender and eParticipation intentions, although seemingly incongruent with prior research, provides an alternative formulation that is specific to eParticipation. However, further testing of this

relationship is warranted, for example, by comparing with other developing countries in which the long-standing tradition is for women to participate in the political, democratic, and governance processes of the country.

VII. Summary and Conclusions

This study advanced a model of eParticipation and tested it using data collected from an online survey of 200 participants from a developing country, Saudi Arabia. This country was chosen because it has made significant investments and progress in eGovernment over the last decade and is viewed as a leader in the Arab world. In addition, the socio-cultural context of Saudi Arabia is vastly different from that of the Western, developed world, on which most of the empirical extant literature on eParticipation is based. Further, research on eParticipation in Saudi Arabia is virtually nonexistent, particularly research relating to users as opposed to the technological aspects of fostering eParticipation.

The results of this study indicate that four variables positively influence eParticipation intentions: trust of the government, attitude towards eParticipation, eParticipation through the use of social media, and social influence and social identity. Perceived benefits of eGovernment were statistically significant but negatively related to eParticipation intention. Moreover, both age and gender influence the level of eParticipation—age positively and gender negatively. These findings suggest that as people become more mature, they are more willing to participate in the governance of the country via online channels. Also, it appears that women are not likely to eparticipate more because of traditional practices of the role of women in political, governance, and democratic processes than because of the opportunity to participate or ease of use of the technology. Such participation could be increased if people feel they can participate anonymously, if the information they provide will not be used against them but only for the stated purpose, and if they can observe the influence of their eParticipation on policy- and decision-making processes. Moreover, participants have a favorable attitude towards the progress and efforts made by the government to encourage greater eParticipation. Finally, while participants recognize the benefits of interacting with the government through social media and that social media is likely to play a major role in future efforts, they currently do not see the need to use social media or are not comfortable using social media to engage with the government.

From a theoretical perspective, this study adds to the emerging literature on eParticipation focusing on developing countries, and, more specifically, Arab countries. The study has also proposed and empirically tested a model of eParticipation that provides fertile grounds for further testing in other contexts and socio-political environments. From a practical perspective, the findings reported here could help shape the strategies and tactics the government could use to increase the rate of eParticipation in Saudi Arabia.

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