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# FACTORS INFLUENCING THE CITIZEN TRUST TO ADOPT E-GOVERNMENT SERVICES IN SAUDI ARABIA

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### ABSTRACT

With the rise of secure websites and mobile applications, the phrase "take a number or wait in line" has become redundant in public services. The worldwide evolution of e-government services has simplified lives as more citizens avail of e-solutions. However, citizens' adoption of e-government services rely on multiple factors, including user awareness and trust. Therefore, to understand the factors that influence trust in e-government services in Saudi citizens' perceptions and investigates the means through which this trust influences the intention to use e-government services. The study analyzes a sample of 310 completed surveys that focus on trust-related metrics, such as trust in government, trust in technology, information quality, and privacy and security assurance. It also includes two constructs of the TAM model (perceived usefulness and perceived ease-of-use) to predict the intention to use e-government services. The study's outcomes support the proposed research model, whereby all proposed variables significantly predicted trust in e-government services. Furthermore, all proposed variables significantly predicted trust in e-government except the privacy and security assurance construct.

**Keywords**: *E*-government, Trust Antecedents Model, TAM, Intention To Use, Saudi Arabia, Empirical Study.

### **1. INTRODUCTION**

E-government is a new area of interest in the field of e-business, where it employs Information and Communication Technology (ICT) to improve the access and delivery of government services and information to businesses, citizens, and other agencies. E-government services utilize web-based, mobile application and internet technologies to deliver public services online with the aim of acquiring business benefits [1]. With more governments valuing this development, it is important to grasp advances in ICT to build eservices. By applying these technologies, countries stand to reduce cost for citizens and businesses with ease-of-access, enhance quality of services delivery, and increase government efficiency. Hence, all governments have begun incorporating e-services in the public sectors, including developing economies like Saudi Arabia [2].

Many developing economies are in their initial stages of digitalization. Noting the

substantial role e-services could play in governance, Saudi Arabia began the process of designing and implementing YESSER ("make easy" in Arabic [3])— "an umbrella and government controller of all the procedures, activities, legislation and all other issues and acts related to its implementation."

governments, especially Many in developing countries, face low adoption of egovernment services by citizens [4], which requires attention. Numerous technology adoption theories have suggested constructs, like trust [5], [6], [7], that have a significant effect on the intention to use (ITU) technology. Furthermore, studies have shown that trust is crucial to adoption [8], [7]. Based on previous studies, understanding the technology adoption process and if specific trust construct is critical. Therefore, this research will focus on the antecedents of trust, and discover the factors affecting citizens' trust in e-government, influencing their ITU. In particular, it examines the antecedents of trust in e-government services from 15<sup>th</sup> August 2018. Vol.96. No 15 © 2005 – ongoing JATIT & LLS



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Saudi Arabian citizens' perceptions and investigates the means through which this trust influences the intention to use e-government services.

Based on that, the remainder of the paper is organized as follows: section 2 presents a brief literature on related works; section 3 describes the research model, proposed question and hypotheses, and section 4 research methodology of the study; section 5 analyzes the results of the study; section 6 formulates a final discussion; and section 7 concludes the study with the author's final remarks.

## 2. LITERATURE REVIEW

## 2.1 E-Government

E-government services are a complicated task that evolved from a service provision channel using existing information and communication technology [9], [10], into a place for public participation, democratic, and e-voting [11]. The necessity of e-government services does not only stem from the necessity of technology in our lives. It touches many parts of citizen's relationship with their governments [12]. Until now, research had determined that without change and substantial transformation of services, e-government services implementation would lack the required efficiency improvements [13].

There are many definitions of the egovernment concept in literature [10], [1], [14]. Egovernment is an approach in making government services easier to access and use by improving the process of delivery services and creating tools to effectively connect users with their government. Therefore, citizens can avail of better, cheaper, and faster services. In addition, when defining egovernment, it is important to make sure that we recognize and sufficiently understand its stakeholders. Consequently, we can further understand their requirements and expectations to enhance e-services plans provided to them [15].

There are several partners in e-government services that can be classified into external and internal partners, where both have an advantageous relationship with e-government services. These partners are: Government to Citizens (G2C), Government to Government to Europart to Business (G2B), and Government to Employees (G2E) [16].

### 2.2. Citizen Adoption

The e-government services development process and its adoption are still in its initial stages-and often unsatisfactory-in most developing countries. They face numerous problems of utilization, adoption, and implementation. Governments, especially in the Gulf, have heavily invested in e-government services. However, obstacles often delay adoption, reduce utilization, and impact success [17]. Alshehri, et al. [10] aimed to discover the main challenges of citizens' adoption of e-government services in Saudi Arabia by conducting an empirical study based on survey data of 460 Saudi citizens. The results indicated that a lack of awareness, trust, privacy, security issues, culture, and resistance to change were the main challenges to adoption. A study conducted by Colesca [19], focused on the citizen adoption of e-government services, addressed that security, transparency, and trust were key issues of concern.

E-government services success is determined by more than one factor. The first is the developments of ICT utilization within government services operations, and another is the economic and financial aspects of the investment itself. Finally, it is also dependent on citizens' adoption, a significant factor that defines the use of their behavior.

# 2.3. Trust In E-Government

Trust is a significant factor affecting the success of e-government services. Before governments try to open such e-channels with their citizens, they should first build trustworthy relationships with them [20], [5]. Correspondingly, governments should build trust inside agencies, among agencies, across governments and non-governmental organizations, and with businesses [21].

Trust refers to a willingness to be vulnerable to others and anticipate positive intentions towards one's gain-advantage [7]. Many studies rated trust as the sixth significant construct in technology acceptance research associated with e-government after ITU, perceived ease-of-use (PEOU), perceived usefulness (PU), social influence (SI), and perceived behavioral control (PBC) [22].

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Previous studies attempted to focus on predicting e-government adoption through discovering factors impacting the decision-making. There are several classical theories of technology acceptance. One of the most famous models in this field is the Technology Acceptance model (TAM), suggested by Davis [23]. This model is determined by two specific belief constructs: perceived usefulness and perceived ease-of-use, which are used in predicting ITU. TAM model is an adaptation of the Theory of Reasoned Action (TRA) from psychology, which is exactly tailored to model user acceptance of IT [24]. This model was subsequently modified and presented as TAM2 [25], TAM3 [26], and unified theory of acceptance and use of technology (UTAUT) [27].

Diffusion of Innovation (DOI) is another theory of technology adoption, which is applied to describe user adoption of new technologies. The main four factors that impact the diffusion of an innovation model are: relative advantage. compatibility, complexity, and observability [28]. Carter and Belanger [29] had observed that DOI and TAM models had overlapping factors. For instance, the perceived ease-of-use in the TAM model is like the complexity factor in the DOI model. Furthermore, the relative advantage in DOI is akin to perceived usefulness in the TAM model. These technology adoption theories have been successfully used by many researchers. However, those theories are not enriched with some critical variables, such as culture and trust [30], [31].

Trust was discovered as an antecedent of ITU in various studies [7], [32], as well as an antecedent of another construct, such as an antecedent of perceived risk [33]. Voutinioti [34] showed the importance of adding a trust construct to e-government adoption theories, too. The study altered the UTAUT model with the addition of the trust construct, stating that trust would significantly impact ITU. Horst et al. [35] used a sample of 238 individuals in a questionnaire related to ITU. The questionnaire included factors that measured perceived usefulness of e-services, worry, risk perception, subjective norm, perceived behavioral control, trust, and experience with e-services. The outcomes of the study noted that trust in government agencies impacted trust in egovernment, trust in e-government impacted the concern for e-government, and trust in egovernment impacted perceived usefulness.

Trust in e-government (TiEG) services was defined as a process by which citizens can build trust in governments and their transactions after that information is released through an egovernment website, which further promotes ITU [36]. Trust in the Internet would also impact attitude towards e-government services, leading to ITU [37].

Hernandez et al. [38] considered the process of trust in two different phases: pre-use trust and post-use trust. Pre-use trust involves resistance as citizens are unfamiliar with the probable risks of e-government services. Post-use trust is associated with experienced users, where any user can assess the technology and build their trust more organically. Rehman et al. [39] suggested that trust in the government and the Internet, along with several other variables, are determining factors of ITU. All of two constructs were significant in predicting ITU, besides information quality. perceived ease-of-use. transaction security, and service quality.

## 2.4. Antecedents of Trust

TiEG services are affected by several factors, where previous studies yielded significant outcomes from two sides: trust affecting egovernment adoption and factors affecting trust in e-government. A previous study found that TiEG was primarily affected by two main factors: trust in government and trust in technology/Internet [32], [7], [40], [41]. The study conducted by Abu-Shanab used a sample of 759 individuals, in Jordan, who completed a survey on trust antecedents. The purpose of the research was to understand the trust construct with respect to ITU. The author divided trust into two main components: trust in government and trust in technology (the Internet). The first level of predicting variables (trust in epredicting government) included trust in government itself, Internet familiarity, trust in the technology, information quality, and privacy and security concerns. All second components predictors were important in predicting trust in efamiliarity. excluding Internet government, Moreover, the second components predicting variables were perceived ease-of-use, perceived usefulness, trust in e-government, and social influence. All variables were important in predicting the ITU [7].

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Ranaweera proposed five major antecedents of trust: trust in government and internet, perceived security, perceived privacy, perceived risk, and information quality [32]. The study incorporated the TAM model with these trust variables. Colesca et al. [19] suggested 12 factors influencing trust, with the following significant factors-trust in technology, propensity to trust, perceived quality, privacy concerns, perceived organizational trustworthiness, years of experience, and age. However, this study failed to support the impact of risk perception, education, gender, and income. Studies have also shown that trust construct is gateways to technology adoption. Here, other factors-included in famous theories in acceptance-were technology utilized as antecedents to trust. Alsaghier, et al. [40] proposed a number of factors that could impact trust in egovernment-familiarity, perceived web site quality, institution-based trust, PEOU, and PU. The study also included fear of paying for e-service, lack of security, and the lack of confidentiality as determinant factors of trust [41].

Based on previous studies, the main factors impacting ITU in e-government services are PU, PEOU, and trust. Trust plays a major factor in influencing citizens' tendency to adopt egovernment services. Therefore, it raises research concerns with respect to discovering the antecedents of trust. Finally, the main factors affecting TiEG in the literature are trust in government, trust in technology, information quality, privacy and security concern, system quality, and other demographic factors.

However, based on the researcher knowledge, there has been a few studies in factors that affect citizens' adoption of e-government services in Saudi Arabia. This research will explore the antecedents of trust, and discover the factors influencing citizens' trust in e-government services, affecting their intention to use. In particular, this research will show the significant factors that are required to be considered when the aim is to increase e-government services adoption in developing countries.

# **3. DESIGN AND METHODOLOGY**

Based on previous studies, TiEG is presented as a significant predictor of e-government services adoption. Therefore, this study attempts to answer the following questions: **RQ1.** What are the factors influencing trust in egovernment services?

# **RQ2.** What are the factors influencing the intention to use e-government services?

In order to answer these research questions, it is important to investigate various factors presented in the models that were discussed in previous researches. As each model has its strength and weaknesses, a combined framework of several models can be useful to investigate factors that influence trust and ITU.

## 3.1. Conceptual Model

This study is based on the TAM construct (perceived usefulness and perceived ease-of-use) combined with trust in e-government services to predict ITU. Additionally, this study proposed a set of factors that influence trust, which were calculated from previous studies. These factors are:

- a) Trust in government (TiG);
- b) Trust in technology (TiT);
- c) Information Quality (IQ); and
- d) Privacy and Security Assurance (P&SA).

The proposed research model and relationships are show in figure1, and a set of definitions of the eight variables is described in table1.

Table 1.List of factors used for the conceptual model

Construct	Description	References
Intention to Use (ITU)	The degree to which citizens intend, plan, and expect to use e- government services.	[23],[7]
Perceived Usefulness (PU)	The degree to which the use of e- government services is useful, more productive, and efficient and makes citizen's life easier.	[23]
Perceived Ease of Use (PEOU)	The degree to which the use of e- government services is easy, comprehensible, and easily accessible.	[23]

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Trust in e- government (TiEG)	Trust to provider (e.g. employee, departments, and institution) of a service and trust to the tools through which the service is provided.	[42],[41]
Trust in Government (TiG)	Trust to provider (e.g. employee, departments, and institution) of a service.	[42],[41]
Trust in Technology (TiT)	Trust the technology the government uses to offer its services.	[42], [41]
Information Quality (IQ)	Data and information provided on the website is comprehensive, accurate, recent, original, and relevant to the services provided.	[7],[8]
Privacy and Security assurance (P&SA)	The degree to which e-government websites can protect citizen's information and adheres to privacy requirements.	[7],[8]

# **3.2.** The Research Hypotheses

The hypothesis construct is as follows:

PU and PEOU are similar and strong constructs used in most theories of technology adoption with different names in TAM and TAM 2, with relative advantage and complexity in DOI model [29]. Researches in e-government indicated that PEOU could be challenging for e-government services adoption, especially in developing countries [19]. In the e-government field, numerous studies used PU and PEOU as a predictors of ITU [7]. Based on this, the next hypothesis can be stated:

**H1:** Perceived usefulness will significantly influence citizen's intention to use e-government services.

**H2:** Perceived ease-of-use will significantly influence citizen's intention to use e-government services.

The concentration in this research is trust, where previous researches described in section 2.3 focused on the conceptualization of trust and its antecedents. Research in e-government field indicated that trust plays a significant role on the prediction of ITU e-government services, because if citizens do not trust e-services, ITU is affected. Based on this, the next hypothesis can be stated:

**H3:** Trust in e-government will significantly influence the intention to use e-government service.

Antecedents of trust is defined as the group of factors that impact citizens' intention in adopting and using e-government services [7]. From the literature review, four factors were identified as affecting citizens' trust in e-government, which are: Trust in e-government (TiG), Trust in technology (TiT), Information quality (TQ), and Security and Privacy assurance (P&SA).

Trust in e-government leads to the success of adapting e-government services. The researchers indicated that government-citizen relationship plays a major role in perceiving e-government services trust [19], [8]. Based on this, the next hypothesis can be stated:

**H4:** Trust in government will significantly influence trust in e-government.

Citizens may be hesitant to use internet technology. Correspondingly, they will have concerns about the security and reliability of online transactions, particularly if they have not used egovernment services previously. To overcome these obstacles, citizens may depend on past experiences with e-commerce. Therefore, uncertainty can be lessened if citizens have good experiences with new technology [8]. Trust in technology was found to be a significant predictor of trust in e-government, which significantly predicted ITU. Based on this, the next hypothesis can be stated:

**H5:** Trust in technology will significantly influence trust in e-government.

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However, security and privacy risks are associated with technology. The risks arise when citizens fear that the technology is not safe, lacks control over his/her information, such as ID numbers, passwords, and financial information. Privacy and security issues were important predictors of trust in e-government services [6]. In addition, the information provide in e-government services should be accurate, complete, and up-todate. Information quality is significant to build trust in e-government services in order to adopt such eservices [8]. Based on this, the following hypothesis can be stated:

**H6:** Privacy and security assurance will significantly influence trust in e-government.

**H7:** Information quality will significantly influence trust in e-government.

## 4. METHODOLOGY

To test our conceptual model, an empirical study was designed using a survey instrument that measures the degree of citizens' trust and its influence on ITU.

# 4.1The Questionnaire Used

This study adopts a quantitative approach by analyzing questionnaire data as data generation method. The questionnaire was comprised of three sections: the first introduced the study area and objectives, such as an introduction, to randomly selected Saudi respondents. The second section included simple demographic questions on gender, age, and education. The last section covered the "5point Likert scale" measurement, from strongly agree (5) to strongly disagree (1), which included 24 statements determining eight dimensions from previous researches. adopted These dimensions were: ease of e-government services use, usefulness of e-government services, trust in egovernment, trust in technology, trust in government, information quality, privacy and security assurance, and trust in e-government services.

The items, that were applied in the antecedent constructs of ITU, were adopted from previous studies in literature [6], [8]. Such adoption of previous studies supports our assumption of content validity of the instrument and improves its

reliability. While trust is not part of famous classical models mentioned in the literature review, it has been investigated extensively in previous studies. This study extended the TAM model through adding the trust construct. The items that were employed for the rest of the trust antecedents were adopted from previous research [7], [42], [40]. Certain items were adjusted to fit the Saudi context.

To avoid bias results and to target the appropriate audience, the questionnaire was translated into the Arabic language, followed by the English language. The English version of the questionnaire was translated into Arabic by two independent translators. The two versions of questionnaires were compared to resolve any differences. The last version following the modifications was then used for data collection.

### 4.2 Sample and Sampling Process

In this study, the population was defined as "Saudi citizens who use e-government services." Therefore, respondents were questioned on awareness of e-government websites and services, and then requested to fill the survey. The distribution of the questionnaire began on April 1, 2017 through online tools. The sampling process was executed randomly within two weeks. The total number of collected questionnaires was 329 with 310usable surveys. Table 2 shows the demographic characteristics of the survey respondents-52.9% of the participants are female, 49.7% of the respondents have a bachelor's degree, and 43.2% of all respondents are between 17 to 30 years of age. Based on these statistics, most respondents are young with a bachelor's degree. The findings of the questionnaire were statistically analyzed using SPSS program.

Table 2	Demogra	phic	Profile	of Sam	nle
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Variables	Iteam	Percentages
Gender	Male	47.1%
	Female	52.9%
	Total	100.0%
Age	17-30 years	43.2%
	31-45 years	33.9%
	46-60 years	21.0%

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	Above 60 years	1.9%
	Total	100.0%
Qualifications	High school or less	11.6%
	Diploma	5.2%
	Bachelor degree	49.7%
	Post graduate degree	33.5%
	Total	100.0%

# 4.3 Reliability, Validity, and Measurement Items Analyses

Before the study, the questionnaire was tested for data reliability and validity. The validity was examined through the face validity test and the Pearson correlations. The face validity assesses the design quality, acceptable time limit, clarity, precision, and ability to gain reasonable information on factors of interest of each questionitem in the questionnaire. The questionnaire was reviewed by two researchers in this field, and a pilot test was conducted by administering the test to five master's students at King Saudi University. The intent of the pilot test was to evaluate the questionnaire's sensibility in order to remove any potential ambiguities or confusions. All comments regarding lack of clarity with respect to the questionnaire items were addressed accordingly. A second validity test was conducted by calculating Pearson correlations among measurements of each statement. Table 3 shows the value of Pearson correlation coefficient ranging from 0.579 to 0.732, indicating a moderate to very strong relationship, which validated scales.

Table 3.Pearson correlation coefficients between	each
item.	

Dimension	Pearson correlation	P-Value
	coefficient	(Sig)
Trust in government	.601**	.000
Perceived Ease of use	.685**	.000
Perceived Usefulness	.579**	.000
Trust in e-government	.632**	.000
Trust in	.732**	.000

Technology		
Privacy and security assurance	.680**	.000
Information Quality	.781**	.000
Intention to use	.663**	.000

In terms of reliability, Cronbach's alpha was applied, which was used to measure the reliability and internal consistency of scales. The value of Cronbach's alpha is 0.945, which implies a very high degree of reliability and internal consistency. Furthermore, to test the sampling adequacy, we employed the Kaiser-Mayer-Olkin (KMO) measure. The result shows a KMO of 0.926, which is acceptable, since it exceeded the recommended value of 0.6.

## 5. RESULT

It may be important to check the correlation matrix, which describes the bivariate associations among each two variables before answering the two research questions. This test is significant to show how the predictors (independent variables) correlate with the dependent variable, and how they correlate to each other. The matrix is presented in Table 4.Correlation Matrix using person correlation. The outcomes show that all correlations are significant at the 0.01 level, which supports our proposal model of these variables. Moreover, another measure required confirmation, which is the presence of high correlations among predictors (divergent validity), where all correlations were from 0.28 to 0.63. The highest correlation among ITU and all predictors is the one associated with perceived usefulness, with 0.67, and the lowest is the one with trust in government and privacy and security assurance, with 0.38.

To answer the two research questions, regression model analysis was used. Table5 and table 6 are the coefficient tables of the multiple regression test results, where intention to use e-government services (ITU) and trust in e-government (TiEG) were respectively used in the analyses as dependent variables.

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Table 5 shows that 39% of the variance in trust in e-government is explained by independent variables (trust in technology, trust in government, and information quality), which is a considerable level of prediction in social sciences [44]. Table 5 indicates the non-significant effect of privacy and security assurance on trust. Thus, there is no a statistically significant effect at the level of significance, which is 0.05 or less. However, the other independent variables-trust in technology, trust in government, and information quality-have a statistically significant effect on the trust in egovernment services. Furthermore, table 5 shows the coefficient of the regression were trust in technology was the strongest predictor of trust in egovernment, with beta = 0.30. As mentioned above, privacy and security assurance failed to predict trust in e-government as beta was too small, with beta = -0.05.

Table 6 indicates a statistically significant effect at the level of significance, which is 0.05, by all independent variables—perceived ease-of-use, perceived usefulness, and trust in e-government on the dependent variable of ITU.

It also shows the coefficient of regression where perceived usefulness was the strongest predictor of ITU, with beta = 0.44. The total variance explanation of ITU e-government services was 55%.

# 6. DISCUSSION

With respect to factors that influence trust, and consequently ITU, the proposed model includes eight variables that are common in technology acceptance domain. The first variable, ITU, is a well-explored dimension used as a stand-in for technology use. ITU was predicted through three major constructs with a differing degree of significance, as shown in table 7. Perceived easeof-use, perceived usefulness, and trust were all significant predictors of ITU. The most influencing construct was perceived usefulness, with beta = 0.44, followed by perceived ease-of-use, with beta = 0.29. This finding is also consistent with previous studies [19], [32], [35]. Therefore, if citizens find that e-government services will benefit and enhance their interaction with government institution, they are more likely to continue using this e-service. developers Hence. should consider user requirements during design and development stages. Trust in e-government has a significant influence on ITU, with beta = 0.12. This finding is also supported by pervious researches on the role of trust [7], [8],[41].

Four variables were chosen as predictors of trust, which significantly influenced trust, except privacy and security assurance constructs, as shown in table 7. The results show that trust in government and trust in technology have the strongest influence on trust, with beta = 0.29 and beta = 0.30, respectively, which is consistent with previous studies [32], [7], [40], [41]. This implies that, to increase trust, governments—especially of developing economies—must work on their image and technology.

Furthermore, information quality also significantly influences trust, with beta = 0.21, that is, the type of information provided by e-government services impacts users' trust in the services. Therefore, it is important to make information more accurate, comprehensive, up-to-date, and original. However, privacy and security assurance does not significantly influence trust, which contradicts previous studies [7], [32], where both factors were major predictors of trust.

# 7. CONCLUSION

Successful development of e-government services, in developing countries, requires addressing issues like low technology adoption due to low trust. Therefore, this study proposed a conceptual model to assist as a base model to assess the impact of trust on ITU and recognize factors that influence trust.

This study proposed a framework based on reviews of numerous theories and models of technology acceptance. To test the proposed framework, a quantitative approach was conducted targeting Saudi citizens. It was found that, except privacy and security assurance, factors like trust in government, trust in technology, and information quality significantly influenced trust in egovernment. Furthermore, trust in e-government, perceived usefulness, and perceived ease-of-use significantly influenced ITU e-government services.

# 8. LIMITATIONS AND FUTURE WORK

There are, however, limitations to this study. First, it is a cross-sectional study that focuses

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on a slice of time but does not show the influence of the trust factor over a period of time, which would require a longitudinal study. Furthermore, Saudi Arabia has numerous, diverse e-government services, so the study's results cannot be generalized, which would require further studies.

The insignificance of privacy and security factors requires more research to decipher. Furthermore, new research must also assess factor relations to support this study's results. Nevertheless, the study's outcomes are beneficial for all stakeholders, providing an opportunity to understand and rectify existing problems related to e-government initiatives and their implementation.

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### Figure 1. The trust antecedent model

		Trust in governme nt	Perceived ease of use	Perceived Usefulness	Trust in e- governme nt	Trust in Technolog y	Privacy and security assurance	Informatio n Quality	Intentio n to use
Trust in	Correlation	1.00							
government	P-value								
Perceived ease	Correlation	0.41**	1.00						
of use	P-value	0.00							
Perceived	Correlation	0.38**	0.56**	1.00					
Usefulness	P-value	0.00	0.00						
Trust in e-	Correlation	0.45**	0.51**	0.63**	1.00				
government	P-value	0.00	0.00	0.00					
Trust in	Correlation	0.40**	0.47**	0.34**	0.47**	1.00			
Technology	P-value	0.00	0.00	0.00	0.00				
Privacy and	Correlation	0.51**	0.40**	0.28**	0.40**	0.62**	1.00		
security assurance	P-value	0.00	0.00	0.00	0.00	0.00			
Information	Correlation	0.47**	0.58**	0.44**	0.49**	0.60**	0.57**	1.00	
Quality	P-value	0.00	0.00	0.00	0.00	0.00	0.00		
Intention to use	Correlation	0.38**	0.59**	0.67**	0.56**	0.43**	0.38**	0.55**	1.00
Intention to use	P-value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
T	There are statistically significant relationship at the level of significance (0.01) or less								

### Table 4. Correlation Matrix using person correlation



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# Table 5.Results for multiple regression for (Trust in e-government)

Dependent Variable	Trust in e-government					
	Unstandard	Unstandardized Coefficients Standa		Т	Sig.	
			Coefficients			
Independent Variable	В	Std. Error	Beta			
(Constant)	1.53	0.19		**8.16	0.00	
Trust in government	0.25	0.05	0.29	5.23**	0.00	
Trust in Technology	0.27	0.06	0.30	4.34**	0.00	
Privacy and security assurance	0.04	0.05	-0.05	-0.72	0.47	
Information Quality	0.19	0.06	0.21	3.23**	0.00	
		R				
		R Square	0.39			
		Adjusted R Square				
	F-Value			47.97**		
		P-Value	0.00			
(**) There is a	statistically sign	nificant effect at the l	evel of significance (0.	05) or less		
(*) There is a s	statistically sign	nificant effect at the le	evel of significance (0.	01) or less		

Table 6.Results for multiple regression for (Intention to use)

Dependent Variable	Intention to use					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
Independent Variable	В	Std. Error	Beta			
(Constant)	0.82	0.19		4.37**	0.00	
Perceived Ease of use	0.27	0.05	0.29	5.64**	0.00	
Perceived Usefulness	0.45	0.06	0.44	8.16**	0.00	
Trust in e-government	0.11	0.05	0.12	2.27*	0.02	
	D			0.74		
	К					
	R Square			0.55		
	Adjusted R Square			0.54		
	F-Value			122.22**		
		P-	0.00			
(**) There is a statistically significant effect at the level of significance (0.05) or less						
(*) There is a statistically significant effect at the level of significance (0.01) or less						

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Table 7. Hypotheses testing results					
Beta	Significant level	Н	Hypothesis statue		
0.21	0.00	H7	Supported		
-0.05	0.47	H6	Not-supported		
0.30	0.00	Н5	Supported		
0.29	0.00	H4	Supported		
0.12	0.02	Н3	Supported		
0.29	0.00	H2	Supported		
0.44	0.00	H1	Supported		
-	-				
	Table         Beta         0.21         -0.05         0.30         0.29         0.12         0.29         0.44	Table 7. Hypotheses testing         Beta       Significant level         0.21       0.00         -0.05       0.47         0.30       0.00         0.29       0.00         0.12       0.02         0.29       0.00         0.44       0.00         -       -	Table 7. Hypotheses testing result         Beta       Significant level       H         0.21       0.00       H7         -0.05       0.47       H6         0.30       0.00       H5         0.29       0.00       H4         0.12       0.02       H3         0.29       0.00       H1         -       -       -		

Appindix

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# <u>Factors Influencing the Citizen's Trust to Adopt E-Government Services in the Kingdom of Saudi</u> <u>Arabia.</u>

Dear Participant,

I invite you to participate in a research study that addresses antecedents of trust in e-government services in Saudi Arabia from your view.

Your participation in this research study is voluntary and appreciated. Your responses will stay confidential. The responses will not be identified individually. All responses will be collectively combined and analyzed as a group. No one other than the researcher will know your individual response to this questionnaire.

Please respond to the following questions on the questionnaire. It will take about 10 minutes to complete.

If you have any questions about this research study, please feel free to contact me through:

436202978@student.ksu.edu.sa

I appreciate your kind assistance.

Sincerely yours,

Hend Al-oud



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Part-A (Personal Information)

#### Please select the appropriate answer

Gender: -

- Male
- Female

Age: -

- o 17-30 years
- o 31-45 years
- 46-60 years
- Above 60 years

#### Qualifications: -

- High school or less
- o Diploma
- Bachelor's degree
- Post graduate degree

### Part-B (factors influencing citizen's trust to government services)

### For the following statements, please tick ONE box only that best describes your view.

Constructs	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Trust in government	1. I trust government employees and departments in providing their services to me.					
	2. I trust that the government acts in citizen's best interest.					
	3. Overall, the government is reliable to meet their obligations towards citizens.					

Part-C (factors influencing citizen's trust to adopt e-government services)

#### For the following statements, please tick ONE box only that best describes your view.

Constructs	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Perceived Ease of use	1. My interaction with e- government services is understandable and clear to me.					
	<ol> <li>It is easy to navigate and find what I need in e-government services.</li> </ol>					
	<ol><li>Using e-government services is easy in my opinion.</li></ol>					
Perceived Usefulness	<ol> <li>Using e-government services helps to finish my requests faster.</li> </ol>					

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Constructs	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
	<ol> <li>Using e-government services is an efficient and effective way to manage my time.</li> </ol>					
	6. I believe e-government services benefit me.					
Trust in e- government	<ol> <li>I trust e-government services, though I lack efficient knowledge about it.</li> </ol>					
	8. In my view, e-government services can be trusted.					
	<ol> <li>The internet has sufficient security to make me feel comfortable.</li> </ol>					
Trust in	10. I feel assured that technological and legal structures sufficiently protect me against risks in using the Internet.					
Technology	11. I trust computer security when I use it for e-services.					
	12. I trust cell phone security when I use it for e-services.					
	13. Overall, today I trust using the internet.					
Privacy and	<ol> <li>E-government services are secured against hacking and altering.</li> </ol>					
assurance	<ol> <li>E-government services protect my personal information and privacy.</li> </ol>					
Information Quality	<ol> <li>E-government services provide sufficient information about its services.</li> </ol>					
	17. E-government services provide up-to-date information.					
	18. E-government services provide accurate information.					
	19. Through e-government services, I get the information I need in time.					
Intention to use	20. I intend to continue using e- government services.					
	21. I would recommend others to use e-government services.					