

Evaluating and Measuring Governmental Smart and online Service in Terms of the Quality - The Case Study of UAE

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ABSTRACT

The aim of this study was to analyze the various factors that determine the intention to use e-services. In present time, e-governance has taken the place of more conventional modes of governance. Due to the worldwide emphasis on ICT technologies for the accomplishment of governmental duties and responsibilities, this examination is essential in terms of the knowledge it adds to the present literature body. As United Arab Emirates (UAE) is becoming the hub for global businesses and has been the center of attention for the modern world, it is imperative that UAE steps up and proves itself in implementation of e-government services as well. This study has undertaken a quantitative research in the determination of the intention to use e-services in association with the independent variables of quality of use and ease of use. As a result, the investigation has revealed a weak, however significant relationship between the three main variables. Hence, the components of quality and ease of use should be considered in the development of e-government initiatives.

Keywords: Quality; Smart Government; Services

1.0 INTRODUCTION

The evaluation of quality of service related to e-services or online administration is an important step forward in the assessment of services provided by channel based on technology [3]. Over the time, the services provided online have start replacing the conventional modes of provision of service. In accordance with Ancarani (2005) however individuals that previously sought a specific service had to go to either physically or try any other mode of communication to an agency, office or an organization, to put forth a service request, they now can easily get the services while sitting in their homes and ordering online. Getting in connection with the service providers has become easier by the wide use of internet via smartphones, gadgets and other similar technology [6, 1]. The contemporary provision of e-service could be in many forms. It could an online retailing business, e-services provided by the government like healthcare, security or procedure guidance or any other services provided particularly by businesses. To better comprehend the context of e-services, the table below delivers a brief view of the particular kinds of services along with their corresponding categories:

Table 1: Types of e-services and their categories

Broad Category	Specific Service
Business-to-Consumer (B2C)	E-tailers (specific goods and services)
Consumer-to-Consumer (C2C)	Customer support services
Business-to-Business (B2B)	Network providers, maintenance services
Government-to-Business	Information Providers

(G2B)	
Government-to-Consumer (G2C)	Application Service Providers

Alanezi et al. (2011) contends that the majority of the limitations in the initiatives of e-services driven by government agencies lie in the quality and inadequacy of the summation of demand evaluations [1]. The varied collections of indicators like environmental setting and preparedness indicators, usage/intensity, impacts/influences, inputs, impacts/consequences and other indicators related to output/deliverables can be employed in order to successfully evaluate and measure the effectiveness of government e-services. The indicator of usage evaluations are the absolute usage of these services by the citizens of the country. Furthermore, the indicators of input are employed to assess the efficiency of the e-government initiatives in terms of percentiles of governmental associations providing electronic administration and the use of websites to acquire these services by the citizens.

1.1 BACKGROUND

At the national level, for UAE, the e-Government is depended upon for the expansion, growth, execution and management of the various program of e-governance in the whole of Emirates. The mission of this e-Governance is to accomplish an optimal setting in the ICT sector of UAE in order to install e-Government as a new, unique and innovative approach of provision of service to its citizens as well as businesses. This mission is tied to the declared mission of 2021 of the UAE government which aims to develop a strong and safe association that can portray UAE as a prominent and resilient economy. To promulgate and administrate the high standards of lifestyle which currently exists in the UAE, its government intends to make this lifestyle a sustainable one by moving ahead in the field of e-Governance and provision of smart services.

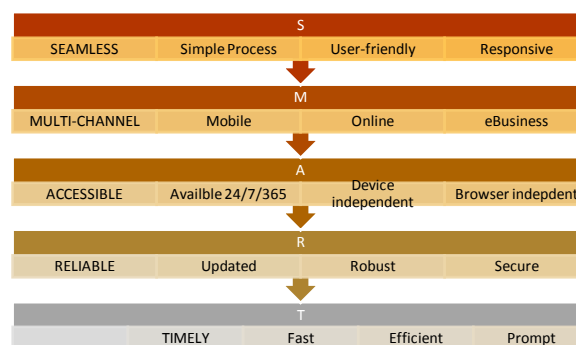


Figure 1:Smart governance features and definition.

This study starts by realizing the research problem and the accompanying issues that are important in this context. These concerns consist of the ones that are currently being faced by the government of UAE in the implementation of its e-government infrastructure. These issues include the providence of a new mode of service provision and smart administration [3,4,9]. This paper offers the complete information that could result in the solution of the research problem along with the analysis of the various factors selected as being important to the deliverables of this study.

Assessing and evaluating smart and online services provided by the government has turned into an essential instrument and practice for governmental decision making of service provision in the UAE [17,55]. The purpose for this exercise is imperative to the UAE governance as it has been constantly been criticized to claim the efficiency of its initiatives. The government additionally requires to prove its plan for the facilitation for the development of their internal effectiveness by demonstrating the advantages if information technologies and communications in their government management and offices [7,15]. As a reaction to these initiatives, a pyramid of measurement and evaluation instruments have been created and utilized by various countries all around the world which includes UAE. These instruments have been utilized to achieve the expectations of businesses, evaluation of impacts, justify the investments in e-government and achieve the expectation of is citizens [31,34].The advancement in Information and Communications Technology (ICT) and the internet has acted as the groundwork for the advancement of e-business applications and e-commerce [42, 5, 51, 52]. The UAE governments' entities have found it necessary to satisfy the needs of their citizens who at the same time acts as their clients through the use of web technologies and services by modernizing their administrative process [17, 51, 52]. The public sector is also experiencing much pressure to brace itself with the e-services due to the high rise of the commercial sector developments. Besides the partial e-service developments having been installed in

the past by the UAE governments, they have also in the recent years been approving and adopting a variety of e-government applications [28,22]. These applications range from transaction-oriented application sites offering information at one end, to static sites that offer simple information on the other end, amid other applications that allow interactions with citizens [15,16,18]. The additional applications also have the capability of executing and automating administrative processes. The UAE's governments find it helpful and easy in delivering and implementing more efficient public services to its citizens due to their successful adoption of new technologies. The followings List of major e-service provided by the UAE e Government.

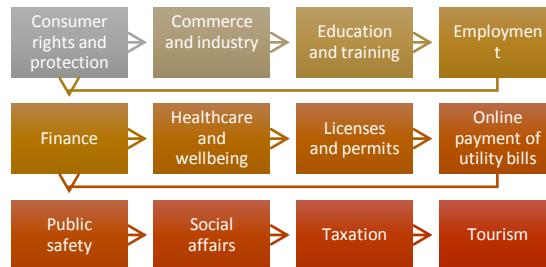


Figure 2: List of UAE e-services, obtained from the official portal of the UAE government (UAE Government, 2015).

In addition to facilitating mutual knowledge and ensuring knowledge sharing, the UAE governments should also nurture and practice co-operation with other countries at both technical and policy levels. The Middle-East North Africa (MENA) region comprises of Arab countries that visualize result oriented, accountable and competent public administration. These goals can always be achieved by the e-government facilities and services, communications, and technological services. Albeit local initiatives in the UAE began before the elected Smart government project began in 2001 [44]. One of the early eServices offered at an elected level was the electronic card known as the eDirham in 2001, which was issued to gather government services fees. Today, the UAE is considered to have a standout amongst the most progressive and world-class information and communication technology frameworks [26,27].



Figure 3: Development methodology for Smart government in the UAE, adapted from (Al-Khour, 2012).

The UAE has recently announced an amended Smart government Transformation Strategic Framework. This system embodies various key activities at an elected level to change all government supported organizations and make them accessible electronically through different channels [30]. The United Arab Emirates has built up an elected Smart government Strategic Framework for 2012-2014 that diagrams the activities and approaches the administration plans to assume control over a time of three years. The structure is planned to add to:

1. UAE Vision 2021: which drives the UAE to be one of the best countries in the world, and
2. UAE Government Strategy 2011-2013: that goes for putting nationals first and adding to a responsible and imaginative government.

The system additionally makes reference to a percentage of the current elected methodologies to guarantee arrangement with government vital expectations and arrangements.

1. Strengthening the government structure and government instruments for Smart government in the nation [33]. This is identified with the lawful and administrative environment overseeing securing and utilization of information frameworks in government offices, Smart government administrations, and an abnormal state arrangement for the general advancement of people in general division in the nation [4,16]. Regulations and laws are viewed as essential empowering agents to bolster Smart government and guarantee security, dependability and information protection[38]. As being what is indicated, this territory likewise incorporates the advancement of solid administration structure to encourage correspondence between the diverse partners and endeavors to catch their needs and transform them into electronic administration frameworks[49].
2. Infrastructure backing of data frameworks in the United Arab Emirates. This subject manages making a strong base for data frameworks to empower the conveyance of world-class Smart government administrations. It likewise concentrates on perspectives, for example, assistance of trade and sharing of information between government offices [2,40,51,52].
3. Launching and giving Smart government applications and administrations. This topic spotlights on an arrangement of uses and administrations to be given to government organizations to bolster them in giving Smart government benefits successfully and productively [11].
4. Development of compelling instruments for execution administration. This subject spotlights on enhancing general viability and real levels of execution of bureaus of data innovation inside of government organizations. It likewise manages creating mechanized apparatuses and reports to screen execution pointers and general execution administration [18].

1.2 AIMS

To review the available models of quality measurement of e-services in order to devise a model of service quality measurement that is applicable to the context of the UAE and UAE Smart Government services.

1.3 OBJECTIVES

1. To explore and identify the key elements of service quality in the online and smart services context by critiquing literature about service quality for online and smart services.
2. To offer guidelines to enhance service quality performance of government online services and to raise questions and point out directions for future research.
3. To examine the present quality measurement literature into academic research that will aid the discovery of a model that is applicable to the UAE.
4. To investigate the specific characteristics of the UAE in order to determine the form, nature, and quality of e-services in the country.

1.4 RESEARCH QUESTION

The aims and objectives of this study are aligned with the following research question developed for this study:

RQ 1: What is the nature and quality of smart government services and e-services in the UAE?

RQ 2: What are the current quality check mechanisms implemented in the UAE that regulate the provision of smart services or e-services?

RQ 3: What are the determinants of service quality in online services?

1.5 ORIGINALITY OF THE STUDY

Previous research regarding smart government services or e-services have mostly concentrated on the aspect of e-government, contrasting different types of smart governments such as e-government vs. m-government, and risks associated with e-government and how they can be overcome. Even though service quality measurement scales have been discussed, the present research does not tackle the question of service quality measurement of smart government e-services in the UAE. As a result, the originality of this study stems from its unique focus on the UAE and its analysis of UAE-based smart government services.

1.6 SIGNIFICANCE OF THE STUDY

The use of information technology by governments in the UAE to deliver electronic services online services in the entire departmental levels is on the increase [5]. These services are also in tandem with the brisk growth of information

technology on the global scale. The determinant goal is to satisfy their citizens by delivering and increasing efficient and quality services within their operations. Despite all these endeavors, Al-Nasser et al. (2013) noted with serious concerns that not enough effort is being applied to evaluate and measure the ability and performance quality of government websites [3]. This issue arises precisely in terms of their service provision for efficient e-service delivery and interactions with their clients.

1.7 RESEARCH HYPOTHESIS

Based upon the research objectives and the research questions, the following research hypotheses are formed.

H1o: Quality of use has a significant impact on the Intention to Use e-services

H2o: Ease of Use and its Quality has a significant impact on the Intention to Use e-services

1.8 CONTRIBUTION TO KNOWLEDGE

The contribution to knowledge of this study stems from two primary factors as illustrated in the figure above. Through contextualizing this study to the UAE, this study will contribute to knowledge enhancement to the academia of service quality measurement. It will bring in the unique focus on the UAE and will provide the means for the UAE to place its e-services and smart services in the context of contemporary research on e-service quality measurement models and frameworks. Secondly, the discussion of e-service quality measurement models will incorporate models such as the SERVQUAL model in order to bring to light the current practices in quality measurement in order to see where the services provided by the UAE e-Government rank. As a result, this study fills in the knowledge gap which is introduced by the lack of research specific to the UAE.



Figure 4: Primary contribution to knowledge.

1.9 CONTRIBUTION TO PRACTICE

This study, as a result of discussing the measurement of online services in the UAE will contribute to the practice of eGovernance and Smart governance that has become the culture in the UAE, specifically Dubai [3]. It will aid the government in its quest for becoming a model government that relies on ICT to provide services to its citizens. Moreover, this also provides the means of responding to the challenge provided by private sector organizations, which pride in being more efficient when it comes to service delivery [22]. Government-owned organizations will be provisioned with the means to check if their services are in line with the requirements and expectations of the citizens. As a result, this study will contribute to the practice of service quality measurement.

1.10 KNOWLEDGE GAP

Stiglingh (2014) points out the lack of research conducted in the Middle East with respect to the measurement of e-services and government smart services [49]. The aforementioned researchers have labeled this to be surprising since governments in the UAE, such as the Dubai government, are swiftly moving towards models of e-governance and m-governance which provide online services. As a result, according to Kim-Soon et al. (2014) it becomes important to devise methods of measuring service quality in order to determine whether the levels of satisfaction among the customers are adequate [32]. However, given that researchers have localized their focus towards analyzing European e-services and other web-based services such as online retailing. Service quality of specific government services have not been discussed so far, leaving an immense knowledge gap that demands fulfillment through researching e-service quality models and subsequently contextualizing these models to the UAE [22].

2.0 LITERATURE REVIEW

2.1 SMART GOVERNMENT

Information and Communications Technologies (ICT) have influenced the ways in which individuals, governments and organizations associate with one another. The quick upheaval of the Internet, development of versatile telecommunications systems and broadband systems show how pervasive this innovation has become. Today, ICT is

considered one of the crucial building blocks of contemporary societies and economies [22,30,40]. Yet, the progressive pace in nations worldwide is subordinate to certain social and political elements which cannot be completely isolated or ignored [16,24,26,51,52]. New innovations have uncovered their capability to undermine existing power structures and financial interdependencies [1, 17, 19, 29, 34, 37]. The various uses of ICT in the course of recent decades have demonstrated its transformative potential and its use as a vital apparatus for sorting out political difference in nations around the world [1, 8, 17, 19, 30, 36, 39, 40, 44, 54]. From the viewpoint of a government, Smart government is turning into an inevitable development. Smart government is primarily concerned with supporting the functioning of an existing government by distributing government services and information to the wider society. A definitive objective of Smart government is to have the capacity to offer an expanded distribution of public services to citizens in an efficient and productive manner.. Foreseen advantages of Smart government incorporate effectiveness, enhanced services, better availability of public services, and more straightforwardness and responsibility [5, 22]; where Einasto in 2014 stated the the main drivers of smart government as per the figure below:



Figure 5: Drivers of Smart Government

2.2 SERVICE QUALITY FARMWEORKS

Service quality has been characterized diversely by different researchers and there is no agreement as to what the real definition seems to be. This study embraces the definition by Sousa et al., (2012), which characterizes service quality as the disparity between a customers' expectation of a service and the customers' impression of the service advertising.

2.3 THE DETERMINANTS OF SERVICE QUALITY IN ONLINE SERVICES

Service quality has been discussed in previous researches and studies in order to discover the service quality dimensions of online services Service Quality research studies cover a varied combination of businesses once it comes to service quality including such as, telecommunications and Information Technology, library services, catering, health care, retail, financial services, hotels, hospitality and leisure services, travel and tourism, higher education, channel partners, accounting firms, architectural services, recreational services, airline catering, apparel retailing and local government [50, 54, 25,46]. The Dimensions of perceived service quality also discussed and shown the figure [6] as discussed by [37]

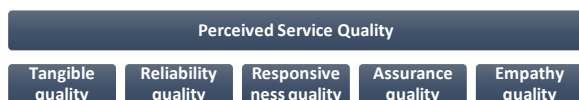


Figure 6: Dimensions of perceived service quality.

Furthermore, in various cultural service quality dimensions of implemented including, as an example United State, China, Australia, Cyprus, Hong Kong, Korea, South Africa, the Netherlands, the United Arab Emirates and the United Kingdom [20, 29,35,37,38].

Several of efforts been in academic research to discuss and discover the significant attributes and dimensions used by consumers in the process of assessing service quality [39,40,48]. Rosen and Sousa (2012) stated that edifice a group of attributes in order to be used is the first action for service quality measurement to evaluate the quality of the actual service. Where also Sousa et al. (2012) outlined number of dimensions of service quality as per the following diagram:



Figure 7: Service Quality Dimensions

Consequently, Sousa et al. (2012) also refined the ten dimensions of service quality by cutting them to five dimensions as per the diagram [36, 48]:

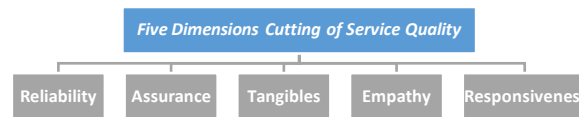


Figure 8: Five Dimensions Cutting of Service Quality

The refined dimension of service quality; now are considered as the standard of the dimensions of service quality. The following sub-sections provide brief explanations of these variables[48].

3.0 THEORETICAL FRAMEWORK

The following is the theoretical framework for this study developed on the basis of the literature review:

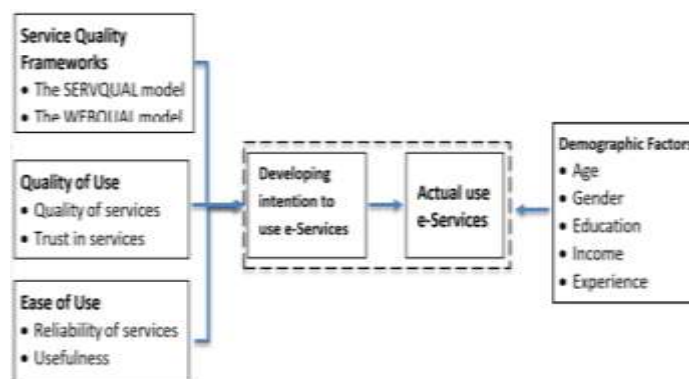


Figure 9: Theoretical framework for this study

As the above figure demonstrates, the behavioral intention to utilize the eServices is controlled by a variety of factors which are expressed through the frameworks by which services I provided along with the demographic factors, quality of use and the trust factor. The demographic factors are significant in the respect that age, income and education may be fundamental components which participate in the intent to utilize e-services [41]. While younger people may be more attuned to using online services through the internet, elders may not be as acquainted with different forms of technology that enable eServices. As a result, it becomes important to look at the age of the customers as well[45]. The income bracket is also an important determinant since a person's income may determine whether they have access to the required forms of technology needed to access eService.

4.0 RESEARCH METHODOLOGY

4.1 RESEARCH DESIGN

This study utilizes a mixed methods approach which integrates and brings together both the quantitative and qualitative data in order to obtain a comprehensive analysis of the research problems which are inherent in the field of e-services. The strategy used makes way for the qualitative methods to be plugged into a quantitative design. As a result of this, the research method which is used is more accurate and complete. Moreover, a wider perspective is achieved which makes use of different types of data in the same study. The instruments developed in this study will make use of questionnaires and an interview technique in order to make use of specialists, experts, and experienced personnel who can provide an analysis of what the current situation is regarding satisfaction with respect to e-services. Customers will also be considered with this technique.

4.2 RESEARCH APPROACH

There are research approaching that can go with an exploratory research but for this study a quantitative approach has been opted. Muijs (2010) explains that a quantitative approach aims at amplification and clarification of the research question through the use of numerical data that can be manipulated and analyzed through mathematical and statistical models [36].

The approach would be selected due to the deductive nature of the study where the study would narrow down the perceptions of users regarding the nature and quality of e-services.

4.3 RESEARCH INSTRUMENT

Research instrument is the device or the means that a researcher uses for the sake of data collection and information gathering that can pave way for the resolution of the research questions. Considering the nature and approach of this study a Likert scale based questionnaire was selected to be the research instrument. Likert scales are helpful in the studies where the perceptions, opinions or attitudes towards a phenomena are being investigated [36,19]. The research instrument for the study was divided into four categories. The first section inquired about the demographic variables, the second section inquired about the Perceived ease of use, the third section extracted information about the quality of e-services and finally the last section was dedicated towards the trust and security dimension of e-services.

4.4 RESEARCH SAMPLE

The aim of the study was to explore the nature and quality of smart government services being offered by UAE Smart Government. There are a thousands of users of Dubai smart services hence it was intended to have a large sample size to be able to portray a true estimation of the total population. Babbie (2010) defines a research sample to be part of the total research population that would be tested to draw generalizations for the entire population [8]. The number of e-services of Dubai Smart government vary with period of time hence it is difficult to estimate the accurate number of population size. In 2014 DSG launched a new service and 11,200 people registered for this service [21, 12]. Keeping this statistic as a benchmark, a sample of 40 was selected using the simple random sampling technique.

4.5 DATA COLLECTION AND ANALYSIS

The main research instrument is a survey based questionnaire that employs Likert Scales for extraction of opinion from the users. Boone and Boone (2012) state that Likert scales are ordinal in nature hence descriptive statistic work best with Likert Scales[4,5,6], accepting this assumption the study uses descriptive statistics but to answer the research questions inferential statistics are also used. The techniques used for analysis include the test for reliability and validity, the descriptive analysis, the demographic analysis and regression [10].

5.0 DATA ANALYSIS AND DISCUSSION

5.1 DEMOGRAPHIC ANALYSIS

A demographic analysis is the method of studying the dimensions and dynamics of the population of a model. The demographic analysis of the sample reveals the key characteristics of the sample that was used for the sake of the study. The outcomes from a demographic analysis serve as important, if further exploration of the acquired results is needed or for examining external factors and finding compounded probabilities.

Variable	Details	Frequency	Percentage
Gender	Male	31	73.8%
	Female	9	21.4%
Age	21-25	17	40.5%
	26-30	9	21.4%
	31-35	7	16.7%
	36-45	5	11.9%
	>55	2	4.8%
Education Level	Higher School	6	14.3%
	Bachelors	17	40.5%
	Masters	14	33.3%
	PhD	3	7.1%
Experience	<5 years	19	45.2%
	5-10 years	15	35.7%
	10-15 years	4	9.5%

	>15 years	2	4.8%
Monthly Income (AED)	< 12,000	7	16.7%
	15000 - 20000	16	38.1%
	20000-45000	14	33.3%
	>45000	3	7.1%

The demographic analysis reveal that majority of the participants of the study were male, only 21.4% were female users of the e-services. About 75% of the respondents belonged to the age group of 21 to 35, though a significant number of more older and even younger samples were part of the study making is balanced in terms age aspect. Again in terms of qualification, the majority or about 30% had Master's degrees and as per experience, the dominating groups were those with 5 to 10 years of experience and 10 to 15 years of experience. The majority of respondents fell in the income group that was earning a monthly income that equaled or was less than AED 20,000 per month.

5.2 RELIABILITY ANALYSIS

As the questionnaire includes the multi questions so it is necessary to measure the consistency of the questions. In SPSS, value of Cronbach is the most important measure of reliability

Section	Cronbach Alpha Coefficient
Overall Questionnaire	0.800
Quality	0.725
Ease of Use	0.801
Intention to Use	0.73

The value of the Cronbach Alpha Coefficient is more than the required value of 0.70 hence it is deemed that the research instrument is valid and reliable.

5.3 CORRELATION ANALYSIS

The correlation test is a measure of the strength and direction of relationship that subsists between two or more variables in any equation or model. In this model there exist three variables, namely, Perception of Ease of Use, Quality and Trust. The following correlations were obtained when correlation analysis was performed.

Correlations				
		Perceived Ease of Use	Compatibility	Trust & Compatibility
Quality	Quality	Ease of Use	Intention to Use	
	Pearson Correlation	1	.214	.169
	Sig. (2-tailed)		.003	.002
Ease of Use	N	40	40	40
	Pearson Correlation	.214	1	.068
	Sig. (2-tailed)	.003		.000
Intention to Use	N	40	40	40
	Pearson Correlation	.169	.068	1
	Sig. (2-tailed)	.002	.000	

The Pearson correlation “r” between the perception of ease of use and quality was calculated to be 0.214, which a weak but positive association. The positive sign or the absence of a negative indicator that there is a positive relation between the two variables and the level of significance was calculated to be 0.000 which is less than the p-value hence the relationship can be considered statistically significant.

The Pearson correlation “r” between the perception of ease use and intention to use was calculated to be 0.068, which a weak but positive association. The positive sign or the absence of a negative indicator that there is a positive relation between the two variables and the level of significance was calculated to be 0.000 which is less than the p-value hence the relationship can be considered statistically significant.

The Pearson correlation “r” between the quality of use and intention to use was calculated to be 0.169, which a weak but positive association. The positive sign or the absence of a negative indicator that there is a positive relation between the two variables and the level of significance was calculated to be 0.002 which is less than the p-value hence the relationship can be considered statistically significant.

4.4 REGRESSION ANALYSIS

Regression analysis is a popular statistical test that is used to study the relationship and impact of one variable over other in a study. Mostly the variables are clustered as either dependent variable (or outcome variable) or independent variables. The model is known as regression model.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.311	1.117		3.859	.000
	Quality	.261	.223	.193	-1.168	.002
	Ease of Use	.155	.234	.109	.664	.000
a. Dependent Variable: ITU						

The regression model consisted of one dependent variable that is the perceived ease of use is this case and two independent variables which are quality (diffusion of innovation) and trust and quality (Technology Acceptance Model). Both the independent variables have a p-value statistic of less than 0.005 hence they are considered significant. The standard regression equation is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2$$

Where:

- Y = Perceived Ease of Use
- A = Constant
- β = Per unit change in variable
- X₁ = quality (diffusion of innovation)
- X₂ = Ease of Use (Reliability and Usefulness)

When values of the variables are substituted in the regression equation, the following equation is derived.
Y = 4.311 + 0.261 (Quality) + 0.155 (Ease of Use)

4.5 PRINCIPAL FACTOR ANALYSIS\ COMMUNALITIES ANALYSIS

Communalities indicate the amount of variance in each variable that is accounted for. When the principal component analysis for the total questionnaire (excluding the demographic variables) was performed the results indicate that all 24 variables out of 25 have an extraction percentage of more than 40% hence they indicate that all questions are valid and important. These 24 variables must remain intact but one variable P3 which has an extraction rate of 0.131 must be removed.

Communalities		
	Initial	Extraction
Quality_Quality_Trust 1	1.000	.928

Quality_Quality_Trust 2	1.000	.928
Quality_Quality_Trust 3	1.000	.716
Quality_Quality_Trust 4	1.000	.926
Quality_Quality_Trust 5	1.000	.892
Quality_Quality_Trust 6	1.000	.928
Quality_Quality_Trust 7	1.000	.821
Quality_Quality_Trust 8	1.000	.731
Quality_Quality_Trust 9	1.000	.131
Ease_Reliability1	1.000	.761
Ease_Reliability2	1.000	.867
Ease_Reliability3	1.000	.921
Ease_Reliability4	1.000	.765
Ease_Reliability5	1.000	.567
Ease_Reliability6	1.000	.914
Ease_Reliability7	1.000	.911
Ease_Reliability8	1.000	.928
Ease_Reliability9	1.000	.928
Ease_Reliability10	1.000	
Intention_to_use_eserv ices1	1.000	.229
Intention_to_use_eserv ices2	1.000	.657
Intention_to_use_eserv ices3	1.000	.917
Intention_to_use_eserv ices4	1.000	.812
Intention_to_use_eserv ices5	1.000	.981
Intention_to_use_eserv ices6	1.000	.761
Extraction Method: Principal Component Analysis.		

4.6 EIGEN VALUES

There were 25 variable taking part in the model, the Principal Component Analysis test reveals that 7 Eigen values with the value of more than 1 are loaded. The first Eigen value is calculated to be 2.96, the second Eigen value is calculated to be 2.619, the third Eigen value is 2.220, the fourth Eigen value is 2.116, the fifth Eigen value is 1.857, the sixth Eigen value is 1.707 and the seventh and smallest Eigen value extracted is 1.493.

Total Variance Explained			
Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	2.916	11.664	11.664
2	2.619	10.475	22.139
3	2.220	8.881	31.020
4	2.116	8.466	39.486

5	1.857	7.429	46.915
6	1.707	6.829	53.744
7	1.493	5.972	59.716
8	1.327	5.309	65.025
9	1.216	4.866	69.891
10	1.071	4.283	74.174
11	.879	3.516	77.690
12	.875	3.500	81.189
13	.797	3.187	84.376
14	.627	2.509	86.885
15	.551	2.202	89.087
16	.520	2.078	91.166
17	.470	1.881	93.046
18	.418	1.671	94.717
19	.328	1.310	96.027
20	.261	1.043	97.070
21	.210	.841	97.911
22	.172	.689	98.600
23	.153	.614	99.214
24	.107	.427	99.641
25	.090	.359	100.000
Extraction Method: Principal Component Analysis.			

4.7 HYPOTHESIS TESTING

The hypotheses are tested using the regression test. When testing the hypothesis we have derived that when all independent variables would become nullified or zero, still the intention to use shall be 4.311.

Regression Model						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	(Constant)	4.311	1.117		3.859
	Compatibility	Quality	.261	.223	.193	1.168
	Trust and Compatibility	Ease of Use	.155	.234	.109	.664
a. Dependent Variable: Intention to Use						

To check and test the hypothesis, it is important to assess the p-value and the level of significant of independent variables.

Hypothesis	Result
H1o: Quality of use has a significant impact on the Intention to Use e-services	p-value 0.000) < 0.05 Hypothesis is accepted
H2o: Ease of Use and its Quality has a significant impact on the Intention to Use e-services	p-value 0.000) < 0.05 Hypothesis is accepted

5.0 CONCLUSION

As a result of looking at the various factors that contribute to the usability of e-services, this study arrives at a theoretical model that provides the aspects of smart government which must be looked at in order to successfully and effectively address the provision of eServices. The framework discussed shows what the relevant factors which contribute to the intention to use eServices are. There are various factors at play such as demographic factors, quality and ease of use which contribute to the intention to use eServices. The analysis of the empirical data indicates that there

exists a positive but weak correlation among the variables but all independent variables are statistically significant and have an impact on the dependent variable.

This study therefore recommends that customers be looked at from a lens that takes into accounts these aspects. In consequence, in the development of e-services, the quality of their use along with perceived ease of use must be considered to forecast the intention to use e-services. The demographic factors, although not significantly related with the independent factor, however, give some idea of the audience that can be targeted for such initiatives. Moreover, this study provides insights regarding the factors of quality of use and ease of use, both of which can be managed by effective ICT approaches. Hence, the government can benefit from his study in the determination of its objectives in the development of e-services.

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