A Quantitative Assessment of Relationship between E-Government Services and E-Feedback Methodology

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Abstract Technology is an increasingly important tool for both the collection of inputs from citizens and the delivery of essential government services. Previous research offers various theories on how e-government practices can synthesize the conceptual design of governmental services. This quantitative analysis study examines the relationship between provision of e-government services using various technologies and the effectiveness of their e-feedback collection method. A survey methodology is deployed to random sample size (N=150) in metropolitan and micro-politan statistical areas within the United Arab Emirates (UAE). A simple percentage method, chi-square test, tables, and weighted average is used for picture analysis of e-government services users. The study does not analyze the effectiveness of technology tolls employed for the services, importance of e-feedback, and verification of actual patronage of e-government services in making policy decisions. However, the descriptive results indicate that e-government services were accessible to only 49.1% of citizens in the test sample with expected expansion of greater than 67%. The study uses multiple linear regression to identify significant predictors of present e-government practices to reveal connections between e-feedback collection methods, e-government practices, and their effectiveness. The results support the conclusion that e-feedback methods provide opportunities to increase citizen influence in shaping government services using e-government approaches. This study contributes to social change by providing a framework that guides the implementation of e-government services to citizens.

Keywords: e-government services, e-feedback ratings, e-government practice

Cite This Article: Mohammad Abdallah Alryalat, "A Quantitative Assessment of Relationship between E-Government Services and E-Feedback Methodology." *Journal of Business and Management Sciences*, vol. 5, no. 3 (2017): 77-84. doi: 10.12691/jbms-5-3-2.

1. Introduction

This study analyzes e-government interactive service delivery through a quantitative assessment of the relationship between e-government services and the effectiveness of their e-feedback collection method. The study is structured into five sections including the background and literature review, study purpose, research methodology, data analysis results, and conclusion based on the results discussion.

2. Background and Literature Review

Local governments in the UAE increasingly use information communication and technology (ICT) to deliver public services to its citizenry. Public use of electronic communication means such as computers, mobile devices, and the Internet for sharing information has risen significantly over the past forty years. In proportionate response, most UAE metropolitan and micropolitan areas introduced e-government services to gather and disseminate essential information within the local government public service structures. E-government services provide a digital interaction platform through which the country's arms of government, government agencies, partners, and citizenry can share information and participate in government policy formation.

There are four common categories of digital interactions within the e-government service platforms. First, there is citizenry to government interaction (C2G), which offers platform for communication between the citizens and public service officers/ government. Second, there is government-to-government interaction (G2G), which offers a platform for communication between various government arms and even between various government agencies. Third, there is government and employee digital interaction (G2E), which offers communication channel between government and its employees. Finally, there is government to business partner digital interaction (G2B). Using these four categories of digital interaction in e-government, the current literature will review the importance of electronic citizen feedback (e-feedback), as well as effectiveness and actual usage of e-government in policy decision-making [15].

On the other hand, e-feedback is the evaluative response given by user-citizens of e-government public services. E-feedback measures the mediation process between the parties involved in the e-communication [12]. It is an essential tool for evaluating the actual performance of e-government in terms of services offered, reports generated through e-governments services, mediation

process through responses and engagements between e-government officers and e-government users [8].

Earlier research by Bastaki and Geray specifically argues that e-feedback responses should be evaluated and rated from three perspectives [7]. First, responses should be evaluated and rated regarding the engagements between officers and users. Second, evaluate suggestions on future improvements to rate whether an e-government service is significant. Third, e-feedback should be evaluated on ratings of advantages and limitations of e-government services [7]. The best method of quantitative assessment of e-government against e-feedback effectiveness is to use a 5-scale measure of qualities of e-government services. The 5-scale methods deems "Exceptional" the highest quality, followed by "Very good", "Moderate", "Below Average" and "Poor". These points of measurement are likened to the 5-point Likert scale [7].

E-government services include offering information awareness to citizens, providing a platform through which government can share business opportunities; offering two-way communication, thus enhancing customer relationship management in public service and increasing civic involvement in municipal governance; and finally, offering essential services through public participation [12]. E-government offering awareness involves publishing government information concerning regulatory services, public holidays, hearing schedules, issuance of briefs and public notification over its websites [9].

A government can use digital platforms to perform business with its citizen-clients [10]. Commonly, conducting of government transactions such as tax returns, applications for grants, online payments and online tendering and contracting can be facilitated through e-government. Additionally, two-way communication increases dialogue between the service provider and service user [9]. E-government services are offered through digital platforms that ensure open two-way communication to help the posting of user questions and service provider responses. Through the Internet, information can be shared and understood better due to illustrations, comments, explanations, and requests [10].

With appropriate e-feedback, the advantages and significances of e-government services are likely while minimizing its limitations. E-feedback will offer support to enhancement of efficiency, effectiveness, inclusivity, transparency and accountability of government agencies and services [6]. E-feedback ratings on: accessibility, affordability, reliability, applicability, essential services and provisional documentaries of by e-government digital platforms will help governments focus on how to improve their e-service delivery [6].

The above background and related literature review shows the effectiveness, actual usage and importance of electronic citizen feedback (e-feedback) to make policy decisions about e-government service delivery. Though the UAE local governments have fully implemented e-government in service delivery, underlying shortcomings and limitations remain in incorporating a successful e-government system with a well-orchestrated e-feedback submission system to monitor its progress. Unique limitations that have hindered the progress and success of e-government service delivery include implementation costs, reliability problems, cyberattacks, negative effects of internet access, and problems with internet accessibility. Therefore, this study seeks to analyze e-government interactive service delivery and communication through quantitative assessment of the relationship between e-government services and the effectiveness of their e-feedback collection.

3. Purpose of the Study

Given the unique limitations of e-government service delivery and problems associated with e-feedback, the study examines e-government interactive service delivery through a quantitative assessment of the relationship between e-government services and the effectiveness of their e-feedback collection. This purpose will be addressed appropriately by formulating specific research objectives along with research questions and research hypotheses.

3.1. Research Objectives

The following objectives were formulated to analyze e-government interactive service delivery through a quantitative assessment of the relationship between e-government services and e-feedback effectiveness.

 i. Identify and evaluate the ratings of common e-government services and practices in United Arab Emirates
 ii. Establish e-feedback responses on e-government services and practices in United Arab Emirates
 iii. Determine the association between e-feedback responses and its effective influence on e-government services and practices in United Arab Emirates.
 iv. Determine the significant predictors of best e-government practices in promoting e-government services provision in United Arab Emirates
 v. Establish factors that hinder usage of e-government services and practices and e-feedback responses in United Arab Emirates

3.2. Research Questions

The following research questions were derived from the research objectives.

 i. What are the ratings of common e-government services and practices in United Arab Emirates?
 ii. Which are e-feedback responses on the e-government services and practices in United Arab Emirates?
 iii. Are there any significant associations between the e-feedback responses and its effectiveness and e-government services and practices in United Arab Emirates?
 iv. Are there any significant predictors of best e-government practices in promoting e-government services provision in United Arab Emirates?
 v. Which factors hinder the usage of e-government services and practices and e-feedback responses in United Arab Emirates?

3.3. Research Hypotheses

Based on the above research questions, there are three testable research hypotheses formulated to help in data analysis. The three research hypotheses will help in answering research questions 3, 4 and 5. The research null hypotheses are stated below.

Hypothesis (RQ3): There is no significant association between e-feedback responses and their effectiveness and e-government services and practices in United Arab Emirates.

Hypothesis (RQ4): There are no significant predictors of best e-government practices in promoting e-government services provision in United Arab Emirates

Hypothesis (RQ5): There are no significant factors that hinder usage of e-government services and practices and e-feedback responses in United Arab Emirates

4. Research Methodology

This section presents research design, study variables, sample size and data collection and data analysis procedure. It presents the statistical procedures and methods of collecting data, analyzing the data and generating the conclusions of the study.

4.1. Research Design

The study employs a quantitative survey research design. This design is suitable for the study because it helps to analyze e-government interactive service delivery through assessing the relationship between e-government services and the effectiveness of their e-feedback collection methods. The quantitative survey research will enable collection of quantitative data through use of online-designed questionnaires. Ratings on views, attitudes, perceptions and opinions related to e-government interactive service delivery from the UAE population will be collected.

4.2. Study Variables

The study variables are grouped into three broad categories: dependent variable, independent variables and intervening variables. The dependent variable of the study is the e-government services and practices including ratings on e-government interactive service delivery.

The independent variables include: e-feedback ratings on: accessibility, affordability, reliability, applicability, essential services and provisional documentaries by e-government digital platforms. The other independent variables are e-feedback ratings on the limitations of electronic digital device delivery such as costs of implementation, reliability problems, cyberattacks, negative effects of internet, etc.

The intervening variables include personal demographic attributes such as education level, IT experience, IT training, gender, age and socio-economic status.

4.3. Sample Size

The study targeted all e-government services providers (officers) and e-government services users affected by e-government interactive service delivery. Due to the large concentration of e-government services providers and users and limited time and resources, a sample size of 174 individuals from metropolitan cities and micropolitan areas was found adequate for this research. Simple random sampling was used to select the 250 students for the study. The simple random stratified sampling was used by the researcher to obtain a representative sample by allowing any individual in the population to have an equal chance of being selected to be part of the stratified study sample.

4.4. Data

An online survey-style questionnaire was used as a research instrument to gain insight concerning the e-government interactive service delivery by assessing the relationship between e-government services and their e-feedback effectiveness. The online survey design was also found reliable and faster in providing information for valid generalizations. The online survey-styled questionnaire was checked for feasibility, validity, and reliability by revising methods akin to the 5-point Likert scale.

4.5. Data Analysis Procedure

The collected data was coded into SPSS interface in readiness for analysis. The socio-demographic data was organized using frequency tables, graphical methods and descriptives.

The data concerning the research questions were analyzed using descriptive statistics, Pearson's correlations and multiple regression analysis. The F-ratio (F), t-values (t), the beta values (β) and their respective p-values were used to evaluate the research hypotheses. The results were interpreted to generate the conclusions of this study.

5. Results

This section presents data analysis on socio-demographic factors of the study participants as well as the analysis concerning research objectives.

5.1. Analysis of Socio-demographic Factors

Table 1 shows that 53.4% respondents participating in the study of e-government interactive service delivery were males while 46.6% were females. This showed no gender parity among e-government interactive service providers and users in UAE. Concerning the age of respondents, the majority age group was 25-34 years who comprised 42.0%, followed by those above 45 years of age at 24.1%, and age group 35-44 years at 20.7%. Participants under the age of 25 comprised the minority age group.

The results indicate that most e-government interactive service providers and users in UAE had an IT experience of between 7-9 years (34.5%), followed by those with between 10-12 years IT experience (32.2%). The minority IT experience groups include those with over 13 years, between 4-6 years and 0-3 years, who had relative frequencies of 19.0%, 10.3%, and 4.0% respectively.

Regarding participant IT training, results show that majority of the e-government service providers and users have intermediate IT training (31.6%), followed by those with basic IT training (31.0%). The high and masterly levels of IT training have relative frequencies of 27.6% and 9.8%, respectively. The frequency distribution of IT training is shown using a histogram below.

Table 1. Frequency Distribution and Descriptive Statistics of Demographic Factors

| Variable	Attribute	Freq	Percent	Mean	Std Dev
Age	Less 25	23	13.2		
	25-34	73	42.0		
	35-44	36	20.7	39.6	1.00
	45+	42	24.1		
	Total	174	100.0		
Gender	Male	93	53.4		
	Female	81	46.6	1.47	0.50
	Total	174	100.0		
Education level	High school	17	7.3		
	Diploma	60	25.6	2.18	0.72
	University	157	67.1		
	Total	234	100.0		
IT Training	Basic	54	31.0		
	Intermediate	55	31.6		
	High	48	27.6	2.16	0.98
	Masterly	17	9.8		
	Total	174	100.0		
IT experience	0-3	7	4.0		
	4-6	18	10.3		
	7-9	60	34.5		
	10-12	56	32.2	3.52	1.04
	13+	33	19.0		
	Total	174	100.0		
Socio-economic status	Low	50	28.6		
	Middle	65	37.2	2.12	0.74
	High	59	34.2		
	Total	234	100.0		
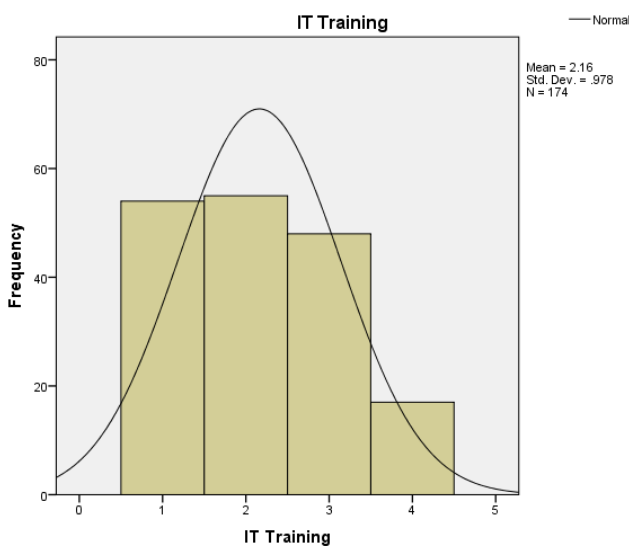
Figure 1. Histogram of distribution of IT training

The study also inquired of respondents' highest level of education achieved. Table 1 shows that 67.1% had a university level of education, 25.6% had diploma level of education, and 7.3% had high school level of education. These results show that most of the e-government interactive service providers and users had university level of education. Regarding participant socio-economic status, 37.2% of respondents had middle level socio-economic status, followed by 34.2% who are of high socio-economic status and finally, 28.6% are of low socio-economic status. These results showed that most of the e-government interactive service providers and users in UAE are uniformly spread across the three cadres of socio-economic status. The pie chart below shows the education distribution of study participants.
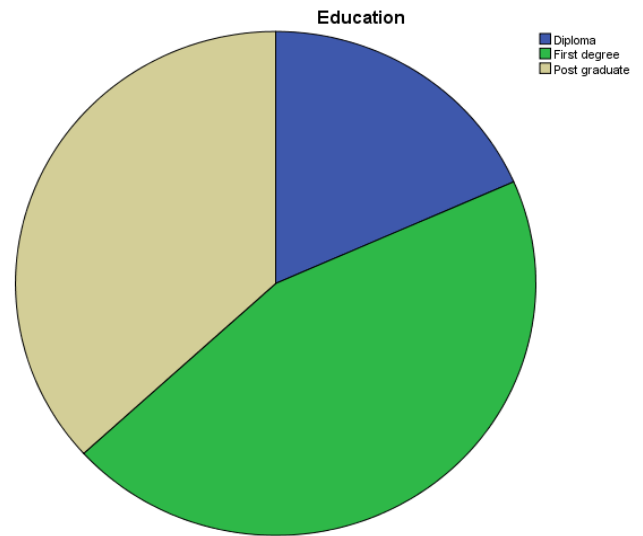

Figure 2. Pie chart of level of education distribution

5.2. Analysis Concerning the Research Objectives

In this section, the analysis seeks to quantitatively assess the relationship between e-government services and the effectiveness of their e-feedback collection methods. The association between e-government services and their e-feedback effectiveness will be analyzed using descriptive statistics, correlation analysis and multiple regression analysis. The analysis will help answer the research questions.

5.2.1. Descriptive Statistics of Ratings on E-gov Services

Table 2. Descriptive statistics on ratings of e-government services and practices

E-government services	N	Min	Max	Mean	Std. Dev.
Government Information	174	1	5	3.32	1.041
Government business services	174	1	5	3.54	1.022
Customer Relations management	174	1	5	2.07	0.576
Governance issues	174	1	5	2.76	1.112
Provision of essential / vital services	174	1	5	3.57	1.011

1=Very low, 2=Low, 3=Moderate, 4=High, 5=Very high

Results in Table 2 show the average Government Information has (Mean=3.52 & SD= 1.041) while in Government business services, the average is (Mean=3.54 & SD=1.022). Concerning Customer Relations management, the average is (Mean=2.07 & SD= 0.576). The Governance issues average is (Mean=2.76 & SD= 1.112). Provision of essential / vital services being one of the e-government services, it showed greatest average value (Mean=3.57 & SD=1.011).

5.2.2. Descriptive Statistics of Ratings on E-feedback

Table 3. Descriptive statistics on ratings of e-feedback on e-government services

E-government services	N	Min	Max	Mean	Std. Dev.
Accessibility	174	1	5	2.96	0.912
Affordability	174	1	5	2.52	0.041
Reliability	174	1	5	1.64	0.249
Applicability	174	1	5	2.03	1.353
Essential Documentaries	174	1	5	3.12	0.941

1=poor, 2=Below average, 3=Average, 4= Good, 5=Exceptional

Per Table 3, results indicate that the average e-feedback on Accessibility of e-government services has (Mean=2.96 & SD= 0.912) while Affordability of e-government services has an average e-feedback of (Mean=2.52 & SD= 0.041). Concerning Reliability of e-government services, the average is (Mean=1.64 & SD= 0.249). The average e-feedback on applicability of e-government services is (Mean=2.03 & SD= 1.353). Finally, on e-government services based on Essential Documentaries the average e-feedback rating is (Mean=3.12 & SD= 0.941).

5.2.3. Descriptive Statistics of Ratings on Limitations

Table 4 displays the average e-feedback on limitations of e-government services in terms of need for training has (Mean=3.07 & SD= 1.176), while the cost of gadgets and

implementation of e-government services has an average e-feedback of (Mean=2.67 & SD= 1.142). Concerning fear of cyberattacks of e-government services, the average e-feedback rating is (Mean=3.03 & SD= 1.354). The average e-feedback on delivery limitations of e-government services was at (Mean=2.48 & SD= 0.827). Regarding the need for power and electricity for e-government services, the average e-feedback has (Mean=3.43 & SD= 1.264). Finally, e-feedback for negative effects of internet has (Mean=2.83 & SD= 1.053).

Table 4. Descriptive statistics on ratings of e-feedback on limitations of e-government services

e-government services	N	Min	Max	Mean	Std. Dev.
Needs training	174	1	5	3.07	1.176
Cost of gadgets and implementation	174	1	5	2.67	1.142
Fear for cyber attacks	174	1	5	3.03	1.354
Delivery limitations	174	1	5	2.48	0.827
Need for power and electricity	174	2	5	3.43	1.264
Negative effects of internet	174	1	5	2.83	1.053

1=poor, 2=Below average, 3=Average, 4= Good, 5=Exceptional

5.2.4. Correlations between E-gov & E-feedback Ratings

The results in Table 5 show that e-government information services (GIN) is significantly and either moderately or strongly correlated to four other e-government services: GBU=Government Business Services (r=0.587, p=0.000), GCR=Customer Relations Management (r=0.661, p=0.000), GIS=Governance Issues (r=0.704, p=0.000) and GES = Provision of Essential / vital Services (r=0.719, p=0.000). E-government information services are also significantly and moderately correlated to one e-feedback response: EDOC= Essential Documentaries (r=0.570, p=0.000). The other e-feedback responses are either weakly or non-significant correlated to e-government information services.

Table 5. Correlation results

		GIN	GBU	GCR	GIS	GES	ACC	AFF	REL	APP	EDOC
Overall	*r*	.655**	.498**	.511**	.623**	.651**	.511**	.147	.512**	.518**	.570
	Sig	.000	.000	.000	.000	.000	.000	.415	.000	.000	.000
GIN	r		.587**	.661**	.704**	.719**	.455**	.070	.334**	.355**	.570
	Sig		.000	.000	.000	.000	.000	.415	.000	.000	.000
GBU	r			.198*	.547**	.272**	.194*	-.572**	.194*	.628**	-.373*
	Sig			.020	.000	.001	.023	.000	.023	.000	.003
GCR	r				.365**	.397**	.333**	.200**	.089	.142**	.200**
	Sig				.000	.000	.000	.000	.052	.002	.000
GIS	r					-.260**	.215*	-.260**	.215*	.591**	-.019
	Sig					.002	.011	.002	.011	.000	.827
GES	r						.778**	.752**	.236**	.859**	.547**
	Sig						.000	.000	.003	.000	.000

e-government services: GIN=Government Information, GBU=Government business services, GCR=Customer Relations management, GIS=Governance issues, GES=Provision of essential / vital services
e-feedback responses:ACC= Accessibility, AFF= Affordability, REL= Reliability, APP= Applicability, EDOC= Essential Documentaries.

On the other hand, e-government business services (GBU) is significantly and moderately correlated to two other e-government services: GIN=Government Information (r=0.587, p=0.000), and GIS=Governance issues (r=0.547, p=0.000). The e-government business services are significantly correlated to two e-feedback responses: AFF= Affordability (r=-0.572, p=0.000), and APP= Applicability (r=0.628, p=0.000). However, the e-feedback response on affordability is negatively correlated with e-government business services.

The results also show that e-government services on customer relations (GCR) is correlated only to GIN=government information services (r=0.661, p=0.000). GCR is neither strongly correlated to other e-government services nor to e-feedback responses.

Concerning e-government services on Governance Issues (GIS), e-government services are significantly and moderately correlated to two other e-government services; GBU=Government business services (r=0.587, p=0.000), and GIN=Government Information (r=0.587, p=0.000). On the other hand, e-government information services are significantly and moderately correlated to one e-feedback response, APP= Applicability (r=0.591, p=0.000). The other e-feedback responses are either weakly or non-significant in correlation with e-government governance issues.

Finally, results in Table 5 show that e-government services Provision of Essential/ vital Services (GIS) is significantly and moderately correlated to one e-government services, GIN=Government Information (r=0.719, p=0.000). On the other hand, e-government information services are significantly and either strongly or moderately correlated to four e-feedback responses: ACC=Accessibility (r=0.778, p=0.000), AFF= Affordability (r=0.752, p=0.000), APP= Applicability (r=0.859, p=0.000), and EDOC= Essential Documentaries (r=0.547, p=0.000).

5.2.5. Multiple Regression Analysis

The multiple regression analysis involves three tests: the model summary measure, the Analysis of Variance (ANOVA) of the model's regression and the model's variables significance.

Table 6. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.981a	.962	.961	.045

Table 6 shows that the R-squared is 0.962 with a standard error of 0.045. Therefore, per the R-squared, the explained variation in the dependent variable based on our model is 96.1%. Depending on these results, the e-government service delivery can be explained and predicted using the independent variables and the e-feedback ratings on responses by roughly 96.1%.

Table 7. ANOVA of the multiple regression model

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.778	5	4.756	235.88	.000b
	Residual	.949	468	.02		
	Total	24.726	473			

The ANOVA test results show that the multiple regression model has the significance (F=235.88 &

p=0.000). These results indicate that the multiple regression is significant in the prediction of e-government service delivery using the analyzed independent variables (e-feedback responses).

Table 8. The models coefficients

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	1.602	.024	66.04	.000
Accessibility	.339	.003	40.94	.000
Affordability	-.227	.004	32.07	.000
Reliability	.045	.003	6.47	.078
Applicability	.051	.003	1.06	.120
Essential Documentaries	.274	.045	10.95	.000
Needs training	.173	.013	22.08	.004
Cost of gadgets and implementation	-.135	.011	16.01	.000
Fear for cyber attacks	.215	.021	6.76	.128
Delivery limitations	-.201	.009	22.94	.000
Need for power and electricity	-.227	.004	18.17	.051
Negative effects of internet	.007	.001	2.47	.378

The results in Table 8 show that six of the eleven independent variables are significant in the prediction of the outcome of e-government service delivery. They include: accessibility (t=40.94 & p=0.000), affordability (t=32.07 & p=0.000), essential documentaries (t=10.95 & p=0.000), needs training (t=22.08 & p=0.004), cost of gadgets and implementation (t=16.01 & p=0.000) and delivery limitations (t=22.94 & p=0.000).

The results also show the constant (B=1.62) indicates that without the input of independent variables e-government service delivery stands at 1.62 at a scale of 5. Similarly, for accessibility (B=0.339) e-government service delivery will increase by 0.339 when accessibility of e-government services increases by one. On the other hand, affordability (B=-0.227), e-government service delivery will decrease by 0.227 when affordability of e-government services increases by one.

For essential documentaries (B=0.274), e-government service delivery will increase by 0.274 when the need for essential documentaries in e-government services increases by one. Similarly, needs training (B=0.173), e-government service delivery will increase by 0.173 when the needs for training of e-government services increases by one, while the cost of gadgets and implementation (B=-0.135) e-government service delivery will decrease by 0.135 when the cost of gadgets and implementation of e-government services increases by one. Finally, on delivery limitations (B=-0.201), e-government service delivery will decrease by 0.201 when delivery limitations on e-government services increases by one.

6. Conclusions of the Study

Based on the data analysis results, the study realized the following findings and conclusions based on the five research objectives.

6.1. The Ratings of Common E-government Services and Practices in UAE

The common e-government services offered by UAE local governments were: government information (μ=3.52 & SD= 1.041), government business services (μ=3.54 & SD= 1.022), customer relations management (μ=2.07 & SD= 0.576) governance issues (μ=2.76 & SD= 1.112) and provision of essential/ vital services (μ=3.57 & SD= 1.011). These services indicate that government information services, government business services, governance issues and provision of essential/ vital services are rated above average on a scale of 5. This implies that out of five commonly offered e-government services, four are rated as better services and practices by e-government service delivery.

6.2. The E-feedback Responses on the E-government Services and Practices in UAE

Results indicate that e-feedback rates accessibility of e-government services as (μ=2.96 & SD= 0.912) on a scale of 5, which translates to 58.2% accessibility across the country. On essential documentaries (μ=3.12 & SD= 0.941) on a scale of 5 translates to 62.4% provisional across the country. Therefore, accessibility and essential documentaries provisions of e-government services delivery were rated to be above average on a scale of 5. On the other hand, affordability of e-government services (μ=2.52 & SD= 0.041) was rated average on provision of e-government services. Concerning reliability of e-government services (μ=1.64 & SD= 0.249) and applicability of e-government services (μ=2.03 & SD= 1.353), below average ratings for their effects on e-government services. In conclusion, e-feedback rated the accessibility of e-government services and provision of essential documentaries as better practices of e-government services while reliability of e-government services and applicability of e-government services were rated as poor practices.

6.3. Associations between E-feedback Responses and E-government Services in UAE

The association between e-feedback responses and their effectiveness and e-government services and practices in UAE can be analyzed by testing the following hypothesis.

Hypothesis (RQ3): There is no significant association between e-feedback responses and their effectiveness and e-government services and practices in United Arab Emirates.

Based on the above research hypothesis, the study realized that:

- E-government information services are significantly and moderately correlated to provision of essential documentaries (r=0.570, p=0.000).
- E-government business services are significantly correlated to two e-feedback responses: affordability (r=-0.572, p=0.000) and applicability (r=0.628, p=0.000). But, the e-feedback response on affordability is negatively correlated with e-government business services.

- E-government services on customer relations is neither strongly correlated to other e-government services nor to e-feedback responses.
- E-government's offering of governance issues are significantly and moderately correlated to applicability (r=0.591, p=0.000).
- E-government services on essential documentaries are significantly are either strongly or moderately correlated to four e-feedback responses: accessibility (r=0.778, p=0.000), affordability (r=0.752, p=0.000), applicability (r=0.859, p=0.000) and essential documentaries (r=0.547, p=0.000).

Therefore, with above findings, the study concludes that generally, there is significant association between e-feedback responses and their effectiveness and e-government services and practices in United Arab Emirates.

6.4. Significant Predictors of Best E-government Practices and Services Provision in UAE

The significant predictors of best e-government practices and services provision by the local governments in UAE can be analyzed using the following hypothesis.

Hypothesis (RQ4): There are no significant predictors of best e-government practices in promoting e-government services provision in United Arab Emirates

The research found that six of the eleven independent variables are significant in prediction of the outcome of e-government service delivery. They include accessibility, affordability, essential documentaries, needs training, cost of gadgets and implementation and delivery limitations. These predictors had significant t-values and p-values that are less than 0.05. Therefore, the study rejects the null hypothesis and concludes that accessibility, affordability, essential documentaries, needs for training, cost of gadgets and implementation and delivery limitations are significant predictors of best e-government practices in promoting e-government services provision in United Arab Emirates.

6.5. Factors that Hinder the Usage of E-government Services Based on E-feedback Responses in UAE

The factors that hinder the usage of e-government services based on e-feedback responses in UAE can be analyzed using the following hypothesis.

Hypothesis (RQ5): There are no significant factors that hinder usage of e-government services and practices and e-feedback responses in United Arab Emirates

The results show that regarding affordability (B=-0.227), e-government service delivery will decrease by 0.227 when affordability of e-government services increases by one, while regarding cost of gadgets and implementation (B=-0.135), e-government service delivery will decrease by 0.135 when cost of gadgets and implementation of e-government services increases by one. Finally, on delivery limitations (B=-0.201), e-government service delivery will decrease by 0.201 when delivery limitations on e-government services increases by one. On the need for power and electricity (B=-0.227, t=18.17 & p=0.051),

e-government service delivery will decrease by 0.227 when the need for power and electricity for e-government services increases by one.

Therefore, the study rejects the null hypothesis and concludes that affordability of e-government services, cost of gadgets and implementation of e-government services, delivery limitations of e-government service, and the need for power and electricity are significant factors that hinder usage of e-government services and practices and e-feedback responses in United Arab Emirates.

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