RES MILITARIS
REVUE EUROPEENNE D ETUDES EUROPEAN JOURNAL OF MILITARY STUDIES
Social Science Journal

Quality of Digital Government Services

By

Salem Ahmad Alrhaimi
Professor, Police Science Academy-Sharjah, United Arab Emirates
Email: 0salemalrahimy@gmail.com

Imad Mohammed Rabeh
Professor, Police Science Academy-Sharjah, United Arab Emirates

Abstract

The study aimed to recognize the level of quality of digital government services provided by the Government of Sharjah in the United Arab Emirates using smart (digital) electronic applications, from the point of view of clients of police services in the state of Sharjah. The study relied on the questionnaire as a primary tool for data collection. The study sample included 282 digital service users who were selected using the convenience sample method that can use smart applications. Data analysis was relied on the Statistical Package for Social Sciences (SPSS). The quality of services has been achieved at high levels, except for the dimension of tangibility, which came at a medium level. It also showed that there were no statistically significant differences at the 0.05 level between the achieved quality levels due to the variables of gender, age and work sector, and the difference was only in the educational qualification variable. The study recommended spreading digital culture, encouraging clients to use smart applications and motivating them with prizes, competitions, awareness and training programs, especially for those with minimum academic qualifications, to improve their electronic capabilities so that they can deal with digital services applications correctly, and to engage clients and take their opinions on the level of digital services evaluation and the determinants of their application through making tours Field and direct meetings with them.

Keywords: quality, digital services, digital government, police services, Sharjah

Theoretical framework

Introduction

As a result of the rapid developments in the world of communication and its tools, information technology, the multiplicity of entities and their different types, and the rapid developments in all different areas of life; This was accompanied by the growth and development of electronic services and their digitization in all fields, which was reflected in digital applications through the entity of the knowledge economy , the digital economy and the adoption of digitization as a method of work and dealing, instead of the physical and traditional methods that people are accustomed to. Which prompted governments and business organizations of all kinds and forms to confront these changes by using modern and innovative programs and applications that changed the form of physical administrations to virtual, so organizations and governments appeared that practice their business and provide their services electronically.

Quality of digital government services

The quality of digital services is related to the ability of government agencies to provide their services in a way that meets the requirements, needs and desires of the beneficiaries, through

perfecting the work and achieving it in the best possible way. The service is defined as any activity, achievement or benefit provided without resulting in ownership, and the service is intangible whether or not associated with a physical product (Kotler & Keller, 2012). The service is distinguished from physical products by characteristics: intangibility, Inseparability, Perishability, Heterogeneity or Variability, and non-possession. As for the digital service, it is the implementation of services in an informational way that depends on the Internet (the Internet) in accordance with certain security necessities that protect the beneficiary and the service provider, using technology to improve and manage work affairs. (Bin Qasim Jawad, 2016).

Digitization is based on employing data and investing it as a life resource; It was called the term Oil of the Age (Al-Rabighi, 2022) as an expression of the importance of digital assets, through the investment, sharing and employment of knowledge in the production of innovative products and the provision of electronic services to serve humanity, and its contribution to facilitating decision-making based on equality, justice and transparency, which helps in creating competitive advantage and achieving sustainable development. This prompted governments to move towards digital and adopt smart programs and applications to provide their services in the required manner to achieve the satisfaction of their beneficiaries and dealers, which requires the transfer of knowledge and the application of digital technology easily and effectively in accordance with the approved quality application standards, and the accompanying obstacles to the application of digitization and the transition of work to the virtual world, and the accompanying challenges of confidentiality and privacy (Alharbi & Yanhui, 2020), In addition to the emergence of many global crises and disasters that cast their shadows on the whole world, as is the case in the Corona pandemic (Covid 19), the spread of many epidemics with new strains and mutations, climatic changes and wars, and their repercussions on the political, economic and social systems (Ababneh et al., 2022; Bataineh et el., 2022; Mugableh & Hamouri, 2022).

The digital government is represented as the government agency that is responsible for providing and completing official services in a digital way, whether between government agencies or between these agencies and customers (Al-Taher et al., 2009), using administrative methods and applications to organize information and communication technologies in completing their work and providing their services. (Matar, 2013), and exploiting applications in carrying out the tasks and responsibilities of the agencies to improve and develop administrative processes, simplify procedures and transactions, and provide services to beneficiaries in the required manner (Lounis, 2017).

Government digital services in the UAE

The UAE government has taken it upon itself to keep pace with globalization and openness to the world and to foresee the future to achieve excellence in the quality of services and reach the level of competitiveness, which puts it in an advanced position in the world. It has worked on adopting digital services, preparing the requirements for their application, and creating ways that make it easier for customers to implement them.

Based on the "Digital Customer and Digital Government Policy" approved by the UAE (Prime Minister's Office, UAE, 2021), which aims to make the UAE government one of the best countries in the world in providing services to beneficiaries, by providing the required digital services and improving the customers' experience In obtaining all the government services they need digitally, raising the efficiency in providing the required services, and providing a comprehensive and integrated linking system between the digital government systems, with an emphasis on enhancing the confidence of customers in using digital services to complete their transactions.

The UAE government also issued a guideline for indicators of digital government enablers 2022, and the fifth indicator was related to quality standards by adhering to the quality standards of digital services through the website of the service provider, the website dedicated to the mobile phone, and through smart applications, in line with the UAE vision 2021 to be the state The first globally in the smart services index, by defining the digital services quality index with main axes: digital transformation strategy, usability, information quality, reliability, responsiveness, customer reassurance, and customer service (Telecommunications Regulatory Authority and Digital Government - United Arab Emirates, 2022).

The study emphasized customers, knowing their point of view, and sharing their opinions on these services and their various applications on a regular and continuous basis, as they are the basis for achieving their goals, and in accordance with the principle of "the customer is always right" or "the customer is the king of the market." Hence the idea of this study emerged by analyzing the level of services provided by the UAE government from the point of view of the customers, taking into consideration the transcendent trends of service measurement, but this study adopted the simplicity method based on surveying the customers' answers and analyzing them to show the level of completion of the service provided (Al-Rahimy, 2013), And their perception of it based on the SERRVPERF model with five dimensions: tangibility, reliability, responsiveness, assurance, and empathy (Parasuraman, et. al., 1988).

Problem of study

The problem of the study stems from the possibility of determining the level of quality of digital services provided by the Government of Sharjah to its clients and knowing their views on that; Based on the principle of focusing on customers as they are the most knowledgeable and affected by the quality of the digital services provided, in addition, especially after the United Arab Emirates adopted the policy of implementing the digital government for all its agencies in all its states.

Importance of study

The importance of the study emerges from the novelty of its topic, and the digital services provided by the electronic management technology that facilitates the government to provide services in an integrated manner within the approved quality standards and to achieve its objectives. The possibility of determining the level of quality dimensions of digital services from the point of view of customers to work on developing and sustaining them; To raise the level of quality of digital government services in a way that ensures the position of the United Arab Emirates at an advanced level in accordance with the standards of digitization and e-government, and enhances its competitive position at the international level, in addition to enhancing the capabilities of the digital government and developing the capabilities of its providers according to the capabilities and desires of clients; To ensure quality improvement, customer happiness and their satisfaction.

Objectives of study

1 Introducing the concept of the quality of digital services in general and its application in the state of Sharjah in particular
2 Knowing the level of quality of digital government services from the point of view of customers and improving it
3 Improving the capabilities of providing digital government services in line with global developments
4 Developing the capabilities of providers and followers of digital government services

5 Achieving customer satisfaction and happiness

Study hypothesis

There are no statistically significant differences at the 0.05 level between the level of quality of digital government services (tangibility, reliability, responsiveness, assurance, and empathy) and the characteristics of clients (gender, age, educational qualification, and work sector).

Methodology and Procedures

Study Methodology

The study adopted the quantitative approach by describing the variables, analyzing the data and testing the hypothesis, through the statistical packages for social sciences (SPSS), where frequencies and ratios were used to describe the sample, the arithmetic mean and the standard deviation to determine the level of quality of digital government services, analysis of variance to test hypotheses, and Cronbach's alpha to measure the reliability of questionnaire as study tool.

Study population and sample

The statistic population consisted of all dealers with digital government services in the state of Sharjah during the period of data collection for the initial study (15/8 - 15/9/2022). The sample size was 300. It was determined by the convenience sample method, whose selection is based on the ease of access and appropriateness of the answers (Bougei & Sakaran, 2022); This is due to the inability of all beneficiaries of digital government services to use the electronic software applications used to provide services to beneficiaries in an appropriate manner; 300 questionnaires were distributed to the sample members, of which 290 were recovered and 7 were excluded due to their lack of completeness and suitability for statistical analysis. Thus, 283 questionnaires were analyzed, representing 94.3% of the distributor. Table No. (1) Shows the characteristics of the sample.

Table (1) *Sample properties*

Characteristics of the unit of analysis (sample individuals) (n:283)		Frequency	Percentage (%)
Gender	Male	246	87
	Female	37	13
Age (in years)	less than 25	40	14
	25 - 35	93	33
	36 - 45	85	30
	46 - 55	54	19
	Greater than 55	11	4
Qualification	High school or less	102	36
	Diploma	76	27
	Bachelor	65	23
	Postgraduate	40	14
The labor sector	Public	62	22
	Private	218	77
	None	3	1
The grand total of the sample		283	100

Study sources

1 Secondary sources: represented by books, studies, journals, and websites of the relevant authorities on the Internet.

2 Secondary sources: represented by the questionnaire, which is the study tool, and it consisted of two parts; the first relates to the characteristics of beneficiaries of digital government services, which included: gender, age, educational qualification, and the work sector; the second part was concerned with measuring the level of service quality through five dimensions: tangibility, reliability, responsiveness, assurance, and empathy; at five levels for each dimension according to the five-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree) on a scale of five to one, respectively.

Study Tool

Validity was tested by presenting the questionnaire to a group of academics, specialists, clients and those responsible for providing digital government services within the framework of the study community, and their opinions were taken by making the appropriate modifications. As for the reliability, it was tested using the Cronbach's alpha scale, the results of which were appropriate as in Table No. (2), where its value for all dimensions of the quality of digital services ranged from 78.9% - 90.0%, and for all dimensions together it reached 92.3%, all of which are greater than 70%, thus achieving the condition Dependence of Reliability (Bougei & Sekaran, 2022).

Table (2) *Cronbach's alpha values for the dimensions of digital government service quality*

Dimension	Alpha
Tangibility	78.9
Reliability	88.1
Responsiveness	86.3
Assurance	90
Empathy	84.2
All dimensions together	92.3

Data analysis and results

The level of quality of digital government services

The results of the analysis, as in Table (3), showed that all dimensions of quality in digital government services in the State of Sharjah have been achieved; Where all of its arithmetic means are greater than 3 (the standard mean), as well as the total quality, due to the government's interest in digital transformation and preparing the appropriate requirements for its application to achieve the general vision of the UAE.

The order of the level of quality achievement for its dimensions came in the following sequence: reliability, assurance, empathy, responsiveness, and tangibility; The levels of all dimensions were high, except for the tangible dimension, which was medium, due to the characteristics of the service in general, which are difficult to comprehend compared to the physical products (less than 2.33 low, from 2.34 - 3.76 medium, greater than 3.77 high).

Table (3) *Quality of digital government services*

Dimension	Mean	Standard deviation	Importance rank	Quality level
Tangibility	3.74	0.77	5	Medium
Reliability	4.21	0.61	1	High
Responsiveness	3.82	0.75	4	High
Assurance	4.16	0.59	2	High
Empathy	3.99	.69	3	High
All dimensions together	3.97	0.68	----	High

Hypothesis testing

Table No. (4) Shows the results of the hypothesis test- "There are no statistically significant differences at the 0.05 level between the level of quality of digital government services and the characteristics of clients (gender, age, educational qualification, work sector)- as follows:

1 Gender variable: The calculated P-value amounted to 2.87, which is not indicative of the presence of differences at the significance level of 0.05, and thus the hypothesis is accepted. The level of quality of digital services does not vary according to the gender variable; this is due to the fact that all clients of digital services, regardless of their gender, have equal opportunities in digital interaction and benefit from the digital services provided.

2 Age: The calculated P-value amounted to 0.37, which is not statistically indicative of the existence of differences between the levels of quality of government digital services according to age groups at a significance level of 0.05, which means that the hypothesis is accepted, this is due to the fact that government agencies provide all digital services at the same opportunities for their users of different ages.

3 Academic qualification: The calculated P-value amounted to 5.44, which is a statistical indication of the existence of differences between the levels of quality of government digital services according to the educational qualifications of the respondents at the significance level of 0.05, and with a statistical significance of zero, which is less than 0.05; Which means that the hypothesis is accepted. The differences are in favor of the postgraduate group; due to their scientific knowledge, which qualifies them to deal with digital simply and more easily than their peers at the lower scientific levels.

4 Labor sector: The calculated P-value amounted to 0.173, which is not statistically indicative of the existence of differences between the levels of quality of government digital services according to the labor sector at a level of significance of 0.05, which means that the hypothesis is accepted. This is due to the fact that government agencies do not distinguish between those who work with them or with the private sector or those who do not work by providing the same conditions and opportunities as is the case with

the variables of gender and age.

Table (4) *Variance test results*

Variable	Source of variance	Sum of squares	Degree of freedom	Mean of squares	F	level of significance	Result
Gender	Between groups	96.37	1	96.37	2.78	0.059	Acceptance
	Within groups	4536.12	281	16.15			
	Total	4632.49	282	16.43			
Age	Between groups	24.46	4	6.12	0.37	0.83	Acceptance
	Within groups	4811.69	278	17.31			
	Total	4836.15	282	17.15			
Academic qualifications	Between groups	442.64	3	147.55	5.43	000	Refusal
	Within groups	4217.53	279	15.12			
	Total	4659.17	282	16.52			
Work sector	Between groups	191.26	2	95.63	0.17	0.84	Acceptance
	Within groups	56513.57	280	201.83			
	Total	56704.83	282	1.08			

Conclusions

Government at Sharjah state provides its digital services with equal opportunities for dealers and does not discriminate between them according to their characteristics

The differences in the level of quality of digital services are positively affected by the higher educational qualifications of the dealers, without the other differences.

Recommendations

Spreading digital culture, encouraging clients to use smart applications, and motivating them with prizes and competitions

Government and private agencies provide awareness and training programs, especially for those with minimum academic qualifications, to improve their electronic capabilities, enabling them to properly deal with digital service applications.

Participation of clients and taking their views on the level of digital service provision, the determinants of its application and its shortcomings, through field tours and direct meetings with clients.

References

Alharbi, N. N., & Yanhui, L. (2020). Impact of trust in government and privacy risk concern on willingness to provide personal information in Saudi Arabia. International Journal of Management Science and Business Administration, 6(2), 7-18.

Alkhowaiter, W. A. (2020). Digital payment and banking adoption research in Gulf countries: A systematic literature review. International Journal of Information Management, 53.

Al-Rabighi, R. M. A. (2022). Digital Government under Digital Transformation Programs and Achieving the Goals of the Saudi Vision 2030: The Digital Government Authority as a Model. The Arab International Journal of Information and Data Technology, 2(2).

Al-Rahimy, S. A. (2013). Student satisfaction with service quality in Jordanian universities. Interdisciplinary Journal of contemporary Research in Business, Institute of Interdisciplinary Business Research, 4(10), 638-644.

Al-Taher, A. F. (2009). Electronic government between theory and practice, first edition, Al-Raya for Publishing and Distribution, Jordan, 90-89.

Barbero, M., Potes, M. L., Vancauwenberghe, G., & Vandenbroucke, D. (2019). The role of Spatial data infrastructures in the digital government transformation of public administrations. Publications Office of the European Union: Luxembourg.

Bataineh, M. S. E., Zainal, S. R. M., Muthuveloo, R., Yasin, R., Al Wali, J., & Mugableh, M. I. (2022). Impact of inclusive leadership on adaptive performance: The role of innovative work behaviour. International Journal of Business Science & Applied Management (IJBSAM), 17(1), 28-43.

Bin Qassem, J. (2016). The impact of the quality of electronic services on the satisfaction of service recipients, an applied study in the Iraqi Authority for Accounts and Informatics, University of Information and Communication Technology. Journal of the College of Basic Education, 22(39), 293.

Bougie, R., & Uma (2022). Research Methods for Business: A Skill - Building Approach, 8ed Kindle Edition, Wiley: Kindle.

Castelnovo, W., & Sorrentino, M. (2018). The digital government imperative: a context-aware perspective. Public Management Review, 20(5), 709-725.

El-Khoury, A. M. (2021) Building e-government for the citizens of the twenty-first century, Arab Administrative Development Organization, Cairo.

Guidelines for Indicators of Digital Government Enablers (2022). Telecommunications Regulatory Authority and Digital Government - United Arab Emirates, June 2022 edition).

Hassan, A. A., Hel, A., Ahmad, F. A., Mohammad, H. A., Mugableh, M. I., Alhosban, A., PaulM K., Liubov, V., Olga, P., & Olena, M. (2022). Formation of scientific and methodological aspects of evaluation transformation of targets economic development of countries. Eastern-European Journal of Enterprise Technologies, 3(13), 52-66.

Kotler, P., & Keller, K. L. (2012). Marketing management, 14 Ed., Prentice Hall, Boston.

Lounes, N. (2017). Smart Government as a Modern Direction for Developing Government Services. Journal of Studies in Economics and Financial Trade, 6(3), 1064.

Matar, E. A. (2013). E-government between theory and practice, New University House, Egypt.

Mugableh, M. I., & Hamouri, M. A. (2022). Exploring The Impact of Financial Technology On the Economic Growth in Jordan. Webology (ISSN: 1735-188X), 19(3).

UNESCO (2022). E-governance available at: https://www.unesco.org/en.