

A Conceptual Model of the Mediating Effect of Service Value on Smart Government Service Quality and Users Satisfaction in UAE

Fahed ¹, Ng Kim Soon ²

¹ Researcher, Faculty of Technology Management and Business, University Tun Hussein Onn Malaysia, Batu Pahat, MALAYSIA

² Lecturer, Faculty of Technology Management and Business, University Tun Hussein Onn Malaysia, Batu Pahat, MALAYSIA

ABSTRACT

Smart government provides e-service through many different information technology applications. UAE provides e-services to deliver an integrated public services to its citizen easily through various information technology including smart phone application. This paper presents an initial study to establish relationship between the service qualities with citizen satisfaction for UAE smart government services. Based on the literature review a proposed conceptual model was presented. The model is a mediation model where it intended to determine the mediating effect of service value on smart government service quality and users satisfaction in UAE smart government service. It depicted six noteworthy groups of components, specifically information quality, service quality, system quality, product quality, service value and citizen satisfaction. This research is significant because citizen satisfaction is one of the most important in terms of activity rates, labor absorption and creating employment opportunities among others. This model is expected to assist the government in providing quality service to users' satisfaction in UAE

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

1. Introduction

In 2013, the UAE government has formulated a smart government by adopting mobile Government services to its citizens [1]. The main intention of the smart government was to adopt the advantages of technology advancement in giving better services to the people. Through smart services, it integrates all public services and make it easier to deliver to its citizens through smart phone application [2]. With smart government service, it introduces easy access to government information in alternative forms to attract people to participate and to increase citizen-oriented services. To ensure all the smart services are integrated, all system like wireless and mobile networks infrastructure, software development, data security and privacy and legislation on data protection, should be considered. UAE Smart Government needs to seriously look on these matters for continuous future development future [1].

Smart government is a more sophisticated new concept as compared with e-government concept. Since the users of smart government whether individuals or organizations have many expectations about the smart government services, then it can relate with e-service that provides services through many different information technology applications. Thus it can be said that smart government is the government that use e-service to provide various category of services

with all dimensions and characteristics. Smart government electronic services will speed up the completion of transactions and giving convenient to customer. With providing services smartphone, customer does not need to go to the government department for the services. Smart government services can be defined as the implementation of a set of business processes and underlying information technology capabilities that enable information to flow seamlessly across government agencies and programs to become intuitive in providing high quality citizen services across all government programs and activity domains [3, 5]. Hence it is important to determine the service quality of the smart government to fulfil the customer requirement. Service quality (SQ) is important to organization as it is associated with customer satisfaction, customer retention, costs, profitability, and positive word of mouth. Service quality has been recognized as one of the major factors for organization sustainability. It is also considered as one of the driving forces for an organization's achievement. Service quality represents the comparison between customers' expectations of how a company or organization should perform and the service performance that customers perceive [4, 6]. To improve UAE smart government, it is important to identify customer satisfaction on the service provided in its e-services. By identifying the customers' expectations and also satisfaction on the provided

services continuous improvement will achieve the target of the smart government [7].

2. Service quality

It is not an easy task to measure citizen satisfaction especially if measurement factors and criteria are not well specified. Development of e-government citizen satisfaction measurement criteria is still progressing. Several researches were conducted to uncover factors to measure e-government citizen satisfaction [12, 13]. Hence there is a need for more study on citizen satisfaction on e-government services. The findings will provide an input to the government to improve the service and this will finally achieve the smart government [14, 15]

Many researchers adopted SERVQUAL scale in their study related to service quality. The original SERVQUAL scale consists of 22 items that measure perceived service quality across five dimensions. These five dimensions are tangibles, reliability, responsiveness, assurance and empathy. The tangibles dimension measures the effects of the appearance of the physical facilities, equipment, personnel, and communication materials on the client's perception of service quality. Reliability addresses the ability to perform the promised service dependably and accurately. Responsiveness is defined as the willingness to help clients and provide prompt service. Assurance measures the knowledge and courtesy of employees and their ability to convey trust and confidence. Empathy is the caring and individualized attention provided to clients [1, 9].

However for information system service quality, the dimension of tangibles means that the hardware, software, and information of the information system can be updated frequently; for reliability dimension it means the trustworthiness of service provider; for responsiveness it means that the services are provided timely; for assurance it means that the service providers have sufficient knowledge and ability to do a good job and finally for empathy it means the services are very enthusiastic and patient to the customer [8].

There are many service quality dimensions that need to be evaluated before can be adopted in smart government applications especially for UAE. Furthermore, the basic concerns which need to handle in e-government research are such as identifying problems which hold back the advancement of e-government, the sustainability

of e-government, the ability of e-government to improve the government current poor quality of services, evaluating the e-government services and others. Several research found that in developing countries, about 35% of e-government projects failed, 50% partially failed and only 15% are successful [10, 11]. To overcome these issues, there is a need to conduct research to evaluate citizen satisfaction using e-government services and this can improve the services especially for the UAE government administration.

3. Conceptual model of smart government service quality

Many studies had uncovered smart government e-service quality however the most popular quality dimensions are information quality, service quality, system quality and product quality;

- Information quality refer to provide informative, necessary and authoritative timely, reliable and accessible information services [18, 19]
- Service quality refers to rapid service, convenient service, and many other aspects [20, 21].
- System quality based on reliability, flexibility, ease of use, a level that includes many elements such as response time [22, 23].
- Product quality is based on performance, features, reliability, conformance, durability, serviceability, aesthetics, and perceived quality [24]

Service quality represents the comparison between customers' expectations of how a company or organization should perform and the service performance that customers perceive [4, 6]. While service value is to create value in the form of services. Service value system encourages service providers to think about how all the different components needed to deliver services can work together to help co-create value with service consumers [7]. To improve UAE smart government, it is important to identify customer satisfaction on the service provided in its e-services. By identifying the customers' expectations and also satisfaction on the provided services continuous improvement will achieve the target of the smart government. For this reason, a conceptual model is proposed as figure 1

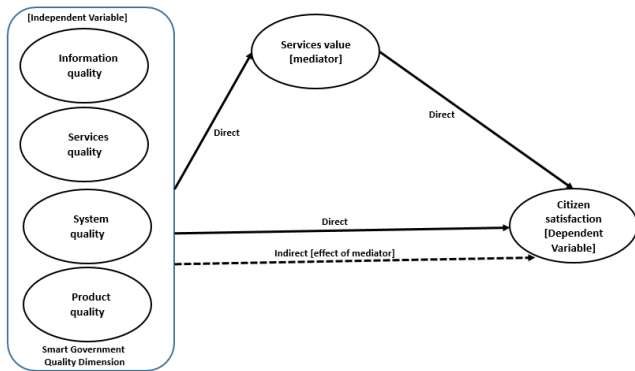


Figure 1 – The Development of the Conceptual Model

Figure 1 shows the proposed mediation model for UAE Smart government services. It consisted of four dimensions of service quality act as independent variable construct which relates to one dependent variable construct of citizen satisfaction and also on mediator construct of service value. The hypotheses that can be derived from this model are the service quality has significant relationship with citizen satisfaction and the mediator has some effect to this relationship.

4. Conclusion

The citizen satisfactions are extremely varied and impacted significantly to the quality of services that the smart government provided. This paper presents an initial study to establish relationship between the service qualities with citizen satisfaction for UAE smart government services. Based on the literature review a proposed conceptual model was presented. The model is a mediation model where it intended to determine the mediating effect of service value on smart government service quality and users satisfaction in UAE smart government service. It depicted six noteworthy groups of components, specifically information quality, service quality, system quality, product quality, service value and citizen satisfaction. This research is significant because citizen satisfaction is one of the most important in terms of activity rates, labor absorption and creating employment opportunities among others.

Acknowledgement

The authors would like to thank the Universiti Tun Hussein Onn Malaysia for supporting this research work.

References

- [1] Adetunji, O., & Yadavalli, V.S. (2013). "Assessment of the quality of service provided by a national regulatory institution". *South African Journal of Industrial Engineering*.
- [2] Elsherif, H. M., Alomari, K.M., & Alkatheri, A.S.A.A.O. (2016). Mobile Government Services Satisfaction and Usage Analysis: UAE Government Smart Services Case Study. *International Journal of Computer Science and Mobile Computing*, 5 (3) pp. 291-303.
- [3] Harsh, A., Ichalkaranje, N. (2015). "Transforming e-Government to Smart Government: A South Australian Perspective". *Intelligent Computing, Communication and Devices, Advances in Intelligent Systems and Computing*, 308, PP. 9-16.
- [4] Jain, P. & Aggarwal, V. (2015). "Service quality models". *BVIMSR's Journal of Management Research*, PP. 125-136.
- [5] Alanezi, M.A., Kamil, and A. (2010) "A proposed instrument dimensions for measuring e-government service quality". *International Journal of u- and e- Service, Science and Technology*, 2010, Vol. 3, No. 4, PP.1-18.
- [6] Smart Dubai, (2015). White Paper: A collaborative approach to smart city transformation
- [7] Woodruff, S. L., & Cashman, J. F. (1993). Task, domain, and general efficacy: A reexamination of the Self-efficacy Scale. *Psychological Reports*, 72(2), pp.423-432.
- [8] Fan, J., Yang, W. (2015). "Study on E-Government Services Quality: The Integration of Online and Offline Services". *Journal of Industrial Engineering and Management, JIEM*, 8(3): 693-718.
- [9] Yarimoglu, E. (2014). "A Review on Dimensions of Service Quality Models". *Journal of Marketing Management*.
- [10] Alanezi, M.A., Kamil, and A. (2010) "A proposed instrument dimensions for

- measuring e-government service quality". *International Journal of u- and e- Service, Science and Technology*, 2010, Vol. 3, No. 4, PP.1-18.
- [11] -Shehri, AM, Al-Haqwi AI & Al-Sultan M, (2008). Quality Issues in Continuing Medical Education in Saudi Council Arabia. *Annals of Saudi Medicine*; 28(5) pp.378-381.
- [12] Zhao, Q. (2010). E-government evaluation of delivering public services among cities in Yangtze River Delta. *The International Information & Library Review*, Volume 42, Issue 3, September 2010, Pages 208-211
- [13] Rorissa, A., & Demissie, D. (2010). An Analysis of Africane-Government Service Websites, *Government Information Quarterly*, 27 (2),pp. 161-169
- [14] Kaisara, G., & Pather, S. (2011). The e-Government Evaluation Challenge: A South African Batho Pele-aligned Service Quality Approach, *Government Information Quarterly*, 28 (2).pp211-221
- [15] Wong, M.,Hideki, N. (2011). "The Use of Importance-Performance Analysis (IPA) in Evaluating Japan's E-government Services". *Journal of Theoretical and Applied Electronic Commerce Research*.
- [16] Scholl, H. J., Scholl, M. (2014). "Smart Governance: A Roadmap for Research and Practice". p. 163–176.
- [17] Shareef, M.A., Archer,N.,& Dwivedi, Y.K.(2015). Examining Adoption Behavior of Mobile Government, *Journal of Computer Information Systems*, 53 (2),pp.39-49.
- [18] Baker, R.S.J.D. (2009). The State of Education Data Mining in 2009: A Review and Future Vision. *Journal of Education Data Mining*, 1 (1) pp.3-14.
- [19] Burroughs, J.M. (2009). What users want: Assessing Government Information Preferences to Drive Information Services, *Government Information Quarterly*, 26 (1), pp 203-218.
- [20] Yang, Z., Fang, X. (2004). Online service quality dimensions and their relationship with satisfaction. *International Journal of Service Industry Management*, 15, pp.302–326.
- [21] Pho, H.T. & Tambo, T. (2014). Integrated Management systems and Workflow-Based Electronic Document Management: An Empirical Study. *Journal of Industrial Engineering and Management*, 7 (1) pp. 194-217.
- [22] Layne, K., & Lee, J. (2001). Developing Fully Functional E-Government: A Four Stage Model, *Government information Quarterly*, 18 (2), pp 122-136.
- [23] Delone, W.H. & McLean, E.R. (2003). The DeLone and McLean model of information systems success: a ten-year update. *Journal of Management Information Systems*, 19(4), pp.9-30.
- [24] Rai, A., Lang, S.S., & Welker,R.B. (2002). Assessing the Validity of IS Success Models: An Empirical Test and Theoretical Analysis, *Information Systems Research*, 13 (1).