

## **The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness**

**Ahmed Ibrahim Ahmed Al Hosani \***

Department of Business Management & Entrepreneurship

Faculty of Management & Economics

Universiti Pendidikan Sultan Idris

35900 Tanjong Malim Perak

Email: [adkingdom@hotmail.com](mailto:adkingdom@hotmail.com)

**Associate Professor Dr. Zuraidah Zainol**

Department of Business Management & Entrepreneurship

Faculty of Management & Economics

Universiti Pendidikan Sultan Idris

35900 Tanjong Malim Perak

Email: [zuraidah@fpe.upsi.edu.my](mailto:zuraidah@fpe.upsi.edu.my)

### **Abstract**

A satisfactory customer experience is necessary for the e-government's success globally and captures the attention of recent researchers and policymakers. Thus, the present study investigates the impact of customer experiences such as customer satisfaction, customer comfort, and customer usability on e-government success in Abu Dhabi. This research also examines the mediating effects of customer happiness among the nexus of customer satisfaction, customer comfort, and customer usability on the e-government success in Abu Dhabi. Questionnaires have been used for data collection, while smart-PLS has been used for analysis. The results indicated that customer satisfaction and customer usability have a positive association with e-government success in Abu Dhabi. The outcomes also revealed that customer happiness significantly mediates among the nexus of customer satisfaction, customer comfort, and e-government success in Abu Dhabi. This study has guided the regulators related to the policy formulation regarding e-government success.

**Keywords:** Customer experience, Customer satisfaction, Customer comfort, Customer usability E-government success, Customer happiness

### **Introduction**

## The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness

Over the years, the word "electronic government" or "E-Government" or "digital government" emerged, and there is no widely agreed definition of the term. Some see E-Government as the transfer of government information and services to an online distribution model, where the contact between government and residents (G2C), government and business organizations (G2B), and inter-agency dealing (G2G) is protected by the reach of e-government. E-Government is seen by some as providing routine government information and transactions using electronic means, especially those that use Internet technologies, whether distributed at home, at work, or by public kiosks (Hooda & Singla, 2020). In this regard, the findings of Kumar, Kumar, Sachan, and Gupta (2020) indicate that the concept of e-government service has eight contributing dimensions: quality of the system, efficiency, protection, usability, quality of content, the capability of service, interactivity, and responsiveness. Perceived service worth is a strong mediator between the standard of service and the desire of citizens to use it continuously. The purpose of the use is the level of service, the importance of service, and satisfaction (Kumar et al., 2020). In this fast-moving world, societies are adopting different technological innovations by shifting from the industrial to the technological development period. Therefore, the major emphasis of different developed states is to turn themselves in a sustainable state by integrating the concept of e-Government successfully to provide e-services to the people, businesses, workers, and other states. However, the UAE government is one of such states who are attempting to execute e-Government projects and initiatives in society.

The inception of ICT has drastically changed the dynamics, procedures, and operations of public sectors that are executed everywhere or about to be implemented by developed and developing countries (Santa, MacDonald, & Ferrer, 2019. Nuseir et al., 2021). To cater to this important government requirement, e-government applications have been developed by the government to interact with its people by providing different services. The e-Government is solely based on the relationship between government, people, and technology. Adaptation of e-Government has not remained a choice for the country, but it has become an important requirement for countries aspiring to have proper control and authority. The services provided by e-Government have a huge potential to transform the public sector and the relationships between people, business, and the state by allowing collaboration, transparency, open interaction, and public discourse in framing national guidelines based on customer experience. The success of e-Government depends on 20% technology and 80% with the people and organizational processes (Iqbal, Hassan, & Habibah, 2018). Citizens are the major factors in the success of e-Government, and their behaviors towards e-Government should be acknowledged. The major requirement to persuade the people to adopt e-government services has resulted in the major interest in the assessment of the success of e-government services by considering the perspective of the users of such services.

This research is E-Government services provided by Abu Dhabi, known as TAMM-Abu Dhabi government service. It has developed e-services to assist information dissemination among its people. It is developed by the government of Abu Dhabi that focuses on achieving service excellence in Abu Dhabi by changing the service delivery framework in a single online platform. Different services have been provided to the customers by the government through this platform. Since there is a concern regarding the success of e-government service in different countries, the e-government services provided by Abu Dhabi is the main concern of the research. The Abu Dhabi government aims to be the top five e-government in the world (Aljumah et al., 2021. Chien, Sadiq, et al., 2021. Dahi & Ezziene, 2015). In order to achieve the goal, the Abu Dhabi government needs to provide top-notch services, improve customer experience and happiness among the population of around 1.6 million people, businesses, and its employees (Kumar, Sachan, &

Mukherjee, 2017). Also, the government of Abu-Dhabi needs to improve the experience of customers, which will consequently improve the usage of e-Government and help them achieve an objective to be the top five e-government in the world. Therefore, the present study aims to find out the customers' experience and happiness on e-Government services in Abu Dhabi. Citizen awareness in the UAE was assessed, and it was found that the public still lacks basic understanding and has myths and misconceptions about the e-government initiative. (it indicates a gap). In the last e-government implementation stage, citizen awareness is seen (Bawack, Wamba, & Carillo, 2021). The reliability and the provision of e-services to citizens must be known by the citizens and their usage. Thus, the situation awareness among citizens has a huge gap that needs to be sealed. The government needs to provide essential education and necessary training to citizens to support the embracing of e-government. This will lead to the efficacious development of e-services in the UAE (Bawack et al., 2021).

Countries worldwide are attempting to achieve e-government success due to the potential of Information and Communication Technologies (ICTs) in fostering and pursuing economic growth and development at the government, industry, and citizen levels. In a 2012 UN e-government development index study, a survey of 193 global countries' online provision revealed that 190 countries surveyed had no online provision. A survey of 193 global countries' online provision showed that 190 of the examined countries had online services, according to a UN e-government development index study 2012. As previously stated, global efforts to achieve e-government are increasing by the day, but not all e-government initiatives and programs are successful. This is particularly noticeable in the case of Abu Dhabi. For that reason, Abu Dhabi falls short of the UN's global e-government growth index (Mishra & Geleta, 2020). Therefore, due to the low level of e-government growth in the country, citizens are still dependent on conventional government goods and services, and governments are still faced with high rising costs such as printing, storing, and filing paper, mailing hard copies, or having wide staff levels with out-of-date skills. Only about 15% of e-government initiatives are successful in Abu Dhabi and transitioning countries, with the remaining 85% failing completely or partially (Moghaddasi & Heidari, 2019).

Based on the information revealed above, it can be established that Abu Dhabi citizens generally find e-government services to be effective. This is because most of the citizens demonstrated confidence and trust in the services, at 63.64%. Nevertheless, a greater percentage of the citizens are still below average in e-government services depicting the requirement of an improvement in the services that the government provides. Even though the figures seem that Abu Dhabi is performing well in regards to e-government services, that data is still low compared to other well-performing countries such as Denmark, Finland, Australia, UK, US, Netherlands, Republic of South Korea, Singapore, Japan, Norway, Sweden, New Zealand, and Iceland (Dabbous, Aoun Barakat, & Merhej Sayegh, 2020). In this regard, several steps can be undertaken to attract citizens to enhance their e-government services. However, the first step involves fostering security, comfort and improving customer service in the system to encourage more citizens to believe in the system and actively involve in the process. Security is the most fundamental aspect of realizing e-government policies. There should be a development of the implicit atmosphere that the citizens can fully ensure security for the government to achieve the e-government objectives by offering excellence in assimilated and quality services. This is important because, without belief in government, there will be a low pace in e-government adoption among citizens (Li & Shang, 2020a).

The major challenge for the Abu Dhabi government is to attract the citizens' to use the e-Government services and adopt digitization all over the country. This aims to achieve the objective of being among the five top E-Governments in the world. Nguyen, Phan, Le, and Nguyen (2020) suggest that "to achieve a

## The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness

goal, it is important for Abu Dhabi government needs to provide top-notch services, improve customer experience and their happiness among the population of around 1.6 million people, businesses and its employees". It is estimated that the E-Government portal of Abu Dhabi does not possess depth and flexibility. Therefore, it misses the mark to benefit from the innovative technologies by the customers or to become a real base of modern vision. The success of e-Government services in Abu Dhabi remains neglected in the current studies in literature where it was shown: how such projects are successful and how much was determined by the customer experience (Titien & Puspaningrum, 2021). As a result, this present study aims to examine the mediating effect of customer happiness on the relationship between customer experience and e-Government success in Abu Dhabi. Therefore, for clarity and precision, the customer experience was further breakdown into comfort, security, usability, and customer satisfaction, while perceived usefulness and perceived usefulness served as a supporting independent variable.

### Literature Review

According to Tromer (2019), comfort in technology adoption is important. They found that comfort, convenience, and ease of use are strongly related to the constant usage of technology which further determines its success. Rey-Moreno, Felício, Medina-Molina, and Rufín (2018) also identified that comfort is a multidimensional factor that motivates the user to adopt e-Government technology in their life. This shows that comfort has a positive linkage with the usage and adoption of E-Government services. The improvement in comfort level can motivate the customers to use e-Government. When customers find the usage of e-government very easy and comfortable, the choice to use e-Government is improved, which further determines the rate of success of Government Digitalization. Learnability refers to the level to which learning to use E-government service is easy for the users (Rey-Moreno et al., 2018).

Accessibility refers to the level to which such websites are accessible for the users whenever they want to use them (Chien, Sadiq, et al., 2021). Clarity refers to the level to which such websites are clear to the user to understand and use. Also, Instruction availability is known as the level to which the government provides proper information and instruction to the user to learn to use such websites (Scholta, Mertens, Kowalkiewicz, & Becker, 2019). Comfort focuses on the level of effort needed in using E-government. It is generally evaluated by competence, learnability, accessibility, simplicity, and instruction availability. Competence focuses on the level to which government makes it comfortable and accessible for the user to be competent enough at availing government services with the help of E-government (Scholta et al., 2019). Therefore, based on that, the following hypothesis was formulated for the study:

**H1:** Comfort has a significant effect on E-government Success.

Usability is recognized as one of the components of customer experience found to have a positive relationship with the behavioral intention of Information systems (IS). The usability component is well-defined in the Technology Acceptance Theory (TAM3) where usability is considered an important determinant, which leads to the intention to use the technology. Numerous dimensions of customer experience have been identified in the theoretical discussion shown in the literature above. Berlilana, Hariguna, and Lai (2018) showed that usability is the prominent factor that has taken into account while describing e-government adoption. Therefore, in other to further justify the claim particularly, in Abu Dhabi, the following hypothesis was formulated for the study:

**H2:** Usability has a significant effect on E-government Success.

According to Shuib, Yadegaridehkordi, Ainin, and Feng (2019) user satisfaction is an important construct of the Technology Acceptance Model (TAM) that determines the intention to use technology. Santa et al. (2019) also found that user satisfaction positively relates to E-Banking Applications in Pakistan. Also, Alkrajji (2020) provided that when individuals are highly satisfied with the experience in using E-Government portals, it is more than likely that he adopts the technology that further determines the technology's success. Basahel and Yamin (2017) adopted the TAM model to determine the impact of E-Commerce Website Usability on the adoption of E-Commerce website among users. The researcher accepted the assumption of the TAM model and showed the positive relationship between usability and the adoption of an E-Commerce website among users. In support, Veeramootoo, Nunkoo, and Dwivedi (2018) also showed that while the users can use such websites in an efficient and effective manner, such websites' adoption rate can be increased. Thus, based on the above studies, the relationship between customer experience and E-Government Success has been established. Considering the literature and framework illustrating the relationship between dimensions of Customer experience and E-government success. Therefore, based on that, the following hypothesis was formulated for the study:

**H3:** Customer satisfaction has a significant effect on E-government Success.

Comfort has been used in the studies related to user experience, mostly when the user has a direct or indirect interaction with the application (Nawaz et al., 2020). Studies on user experience are somewhat overlapped with user interaction studies and cognitive psychology. Using the knowledge on how individual cognitive procedures work, the user interaction with the technology can be improved with the increase in comfort level in using the application (Fatima, Di Mascio, & Sharma, 2020). Comfort is strongly linked with the satisfaction in user experience in a way that if the energy needed for doing a task or getting a service using the specific system is reduced, the satisfaction level will increase as it will become simple to do the task with the help of the system. Researchers have also stated that the quality of the system determines the level of comfort in technology usage (Mohsin, Kamran, Nawaz, Hussain, & Dahri, 2021). The factors in maintaining the system's quality can decrease the effort of users in using information technology. Comfort can also be achieved by customization of that IS's functionalities, contents, and interfaces according to the users' requirement based on knowledge achieved with the help of service and user interaction (Altinay, Song, Madanoglu, & Wang, 2019). This makes the user access or uses the system comfortably without any hassle.

**H4:** Comfort has a significant influence on customer happiness.

The usability dimension of customer experience is significantly related to how people assess the customer experience with technology in terms of joy and happiness (Shair et al., 2021). Nonetheless, this type of relationship is dependent in a challenging way on the application and system, the customer's experience, and the context of the usage. In addition, usability in terms of effectiveness and efficiency needs to be considered for different objectives for happiness. Chaouali, Lunardo, Yahia, Cyr, and Triki (2019) formed a framework to study the impact of usability of technology on different emotions-related constructs, and the study found a positive correlation between usability and lifelong satisfaction. In different cases, significant relationships have been found in terms of usability and happiness, which motivate the researcher to form a sub-hypothesis of the study that states that usability positively impacts customer happiness.

## The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness

Gezmen and Eken (2021) stated that usability had been the major concept in evaluating E-Government success. Usability has a major part in E-Government because it influences the wider acceptance of E-Government websites by the citizens and affects the daily interactions with the E-Government system. Sahu, Deng, and Mollah (2018) stated that if E-Government sites are not designed in the best way considering the usability factor, they are expected to restrict less knowledgeable users to have the best experience with government, which will impede e-Government success. The study formulated the following hypothesis:

**H5:** Usability has a significant influence on customer happiness.

The concept of user satisfaction is an important part of user experience in using IS and has been studied from a different context. Gong and Yi (2018) assessed user satisfaction as a major theoretical and conceptual construct that determines a user's experience. As Han and Yang (2017) stated, the favorable experience of a user increases the level of satisfaction of a user, and the unfavorable experience of a user results in dissatisfaction. This satisfaction level then determines the level of usage and adoption of the technology. User satisfaction is a majorly used subjective factor to measure the effectiveness of IS and the major critical and accepted factor to evaluate the success or failure of IS. These perspectives include user satisfaction in terms of attitudes toward information systems, information quality achieved, and IS effectiveness. Due to customer satisfaction and user experience, the study will use the customer happiness definition from this perspective (Han & Yang, 2017). In addition, this definition is also in line with the research objectives and goals of customer happiness. The study formulated the following hypothesis:

**H6:** Customer satisfaction has a significant influence on customer happiness.

Researchers have studied the adoption of E-Government technology conceptualized as a hedonic information system. For instance, the study of Niedermeier, Albrecht, and Jahn (2019) showed the way adoption of technology could be explained by integrating perceived enjoyment and well-being, which determine the adoption of technology according to the Technology Acceptance Model (TAM). The study showed that both perceived enjoyment and well-being are the determinants of technology adoption. Similarly, in their study, Zhong and Moon (2020) showed the intention to use E-Government technology constantly. The study results suggested that happiness and enjoyment are the important factors that determine technology adoption. Moreover, Alzoubi, Alshurideh, Kurdi, and Inairat (2020) conducted a study to determine the determinants of technology adoption. They found that user gratification and happiness to have access and comfort with the technology positively affect the technology usage. The studies attempted to find out the construct of happiness included social motivations, utilitarian, and hedonic concepts that influence technology usage. Thus, based on the above studies, the relationship between customer happiness and E-Government Digitalization Success has been established, which is shown in the figure below:

**H7:** Customer happiness has a significant influence on e-Government success.

### **The Mediating Effect of Customer Happiness**

Happiness is the construct that was not found as a mediator in past studies related to technology acceptance (Chien, Pantamee, et al., 2021). However, happiness can be hypothesized as lifelong satisfaction, wellbeing, positive emotion, affect, utilitarian factors, or hedonic motivation to use technology. The study of Hsieh,

Chiu, Tang, and Lin (2018) showed the mediating role of hedonic motivation in the relationship between perceived ease of use and perceived usefulness in technology adoption and found that hedonic motivation has a strong mediating role in predicting the relationship between perceived ease of use and perceived usefulness in technology adoption. Yi and Natarajan (2018) showed the mediating role of hedonic motivation on the relationship between the determinants and adoption of e-banking. The study found that Hedonic motivation mediates the relationship between PU, perceived security, and e-banking adoption. However, the research also found that hedonic motivation does not mediate the relationship between perceived ease of use and e-banking adoption.

On the contrary, Assanovich, Veretilo, Bich, Pushkina, and Khilmanovich (2019) studies the role of user experience in determining the quality of life by using the TAM model. The research found no mediating effect of quality of life on the relationship between user's experiences. Similarly, Soderlund and Berg (2019) showed that using technology brings lifelong happiness among the users. Lifelong happiness shows the maximum level of satisfaction of the users, making them constantly adopt and use specific technology. In support, Goswami and Sarma (2019) also showed that the potential of technology to provide the best experience and usefulness to the user improves the quality of their life, which determines the adoption of technology. Thus, based on the above studies, the relationship between customer experience, customer happiness, and e-government success has been established. Considering the literature and framework illustrating the relationship between customer experience, customer happiness, and e-Government success, the following hypothesis is established for the study.

**H8:** Customer happiness mediates the relationship between comfort and e-Government success.

**H9:** Customer happiness mediates the relationship between usability and e-Government success.

**H10:** Customer happiness mediates the relationship between customer satisfaction and e-Government success.

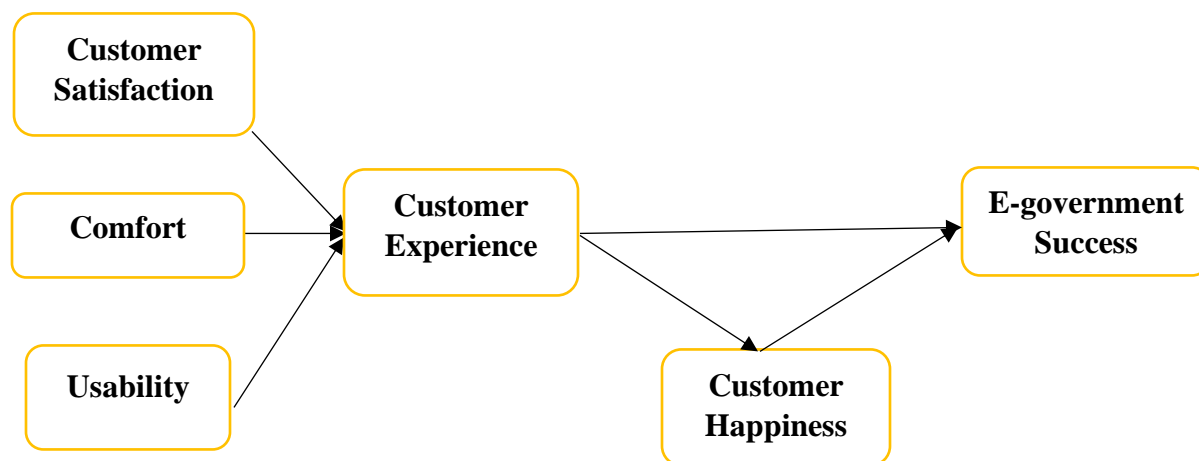
## **Methods and Material**

The present study adopts the quantitative method for data collection to answer the research question. Also, the selection of the quantitative method was deemed appropriate as the aim of this study is to predict (theory testing rather than theory development) the role of customer experience dimensions' and customer happiness in using e-Government service in the context of Abu Dhabi. . Furthermore, the adoption of the mono-method choice can ensure research efficiency in terms of time and cost. This study has adopted the cross-sectional design that involves collecting data for one time, thereby requiring less time and cost than longitudinal design. The population of this study consists of all the visitors to the Tamm service centers who have used E-Government services. The target population respondents were the individuals who visited Tamm service centers, both male and female that are within 18 years and above as a government put a condition of dealing with any formal application, for who approached the service center who are in a good position to answer all the research objectives/questions.

In order to select a sample, this study utilized a non-probability sampling technique. A purposive sampling technique was chosen that a non-probability sampling is deemed the most appropriate sampling procedure for this study. In order to determine accurate sample size, the researcher uses the Krejcie and Morgan 1970 table. From Krejcie and Morgan, the sample size 290 citizens. A total of 480 questionnaires were sent and

## The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness

received around 292 that represents about 60.83 percent response rate. This research has used the smart-PLS to check the relations among constructs due to model complexity, high sample size, and hypotheses testing purposes (Hair Jr, Babin, & Krey, 2017). This study has taken e-government success (EGS) as the dependent variable with ten items (Andry, Christianto, & Wilujeng, 2019), while customer happiness (CH) is the mediating variable with ten items (Gupta, Singh, & Bhaskar, 2018). This study has taken the customer experience as the independent variable with three dimensions such as customer satisfaction (CS) with fourteen items (Li & Shang, 2020b), comfort (CM) with four items (Okunola & Rowley, 2019), and usability (US) with seven items (Okunola & Rowley, 2019). These constructs are shown in Figure 1 with links.



**Figure 1:** Theoretical Framework

### Research Findings

The convergent validity has been checked by using factor loading along with AVE, and the values of both the measures are larger than 0.50. In addition, Alpha and composite reliability (CR) are also the measures to check the convergent validity, and values of both are larger than 0.70. These values have been indicated that high nexus between items and convergent validity is proved as valid. These values are highlighted in Table 1.

**Table 1:** Convergent Validity

Constructs	Items	Loadings	Alpha	CR	AVE
Customer Happiness	CH1	0.875	0.941	0.951	0.710
	CH10	0.822			
	CH2	0.862			
	CH4	0.839			
	CH6	0.789			
	CH7	0.833			
	CH8	0.866			
	CH9	0.852			
	Comfort	CM1			
CM2		0.845			



	CM3	0.704			
	CM4	0.817			
Customer Satisfaction	CS1	0.801	0.941	0.948	0.571
	CS10	0.859			
	CS11	0.786			
	CS12	0.852			
	CS13	0.651			
	CS14	0.667			
	CS2	0.861			
	CS3	0.719			
	CS4	0.662			
	CS5	0.680			
	CS6	0.803			
	CS7	0.851			
	CS8	0.655			
	CS9	0.667			
E-government Success	EGS1	0.757	0.900	0.918	0.532
	EGS10	0.614			
	EGS2	0.803			
	EGS3	0.776			
	EGS4	0.783			
	EGS5	0.752			
	EGS6	0.806			
	EGS7	0.780			
	EGS8	0.555			
	EGS9	0.619			
Usability	US1	0.953	0.959	0.968	0.834
	US2	0.829			
	US4	0.952			
	US5	0.954			
	US6	0.827			
	US7	0.954			

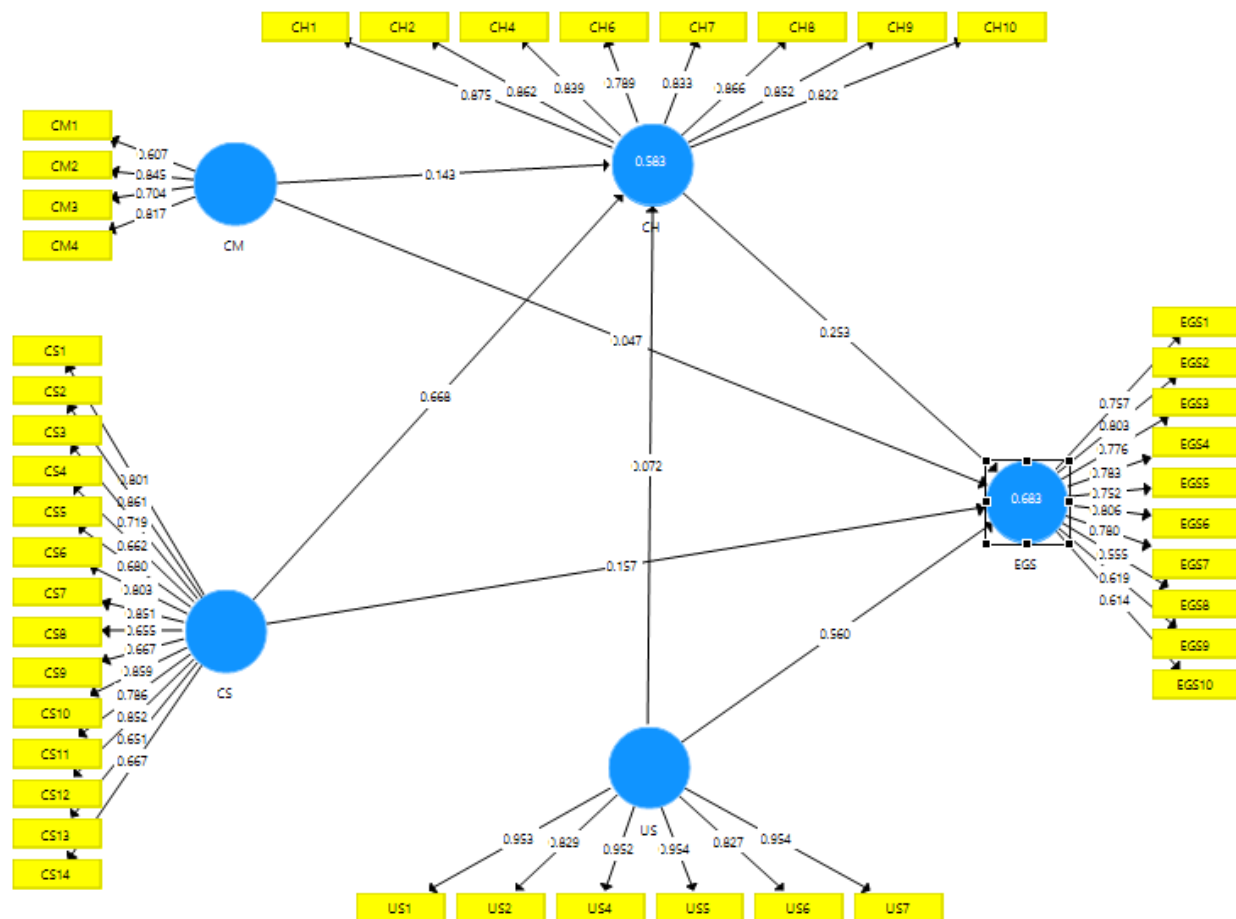
The discriminant validity has been checked using the Heterotrait Monotrait (HTMT) ratio, which is a latest method of checking discriminant validity. The ratios of HTMT are lower than 0.85, and these values have been indicated that low nexus between variables and discriminant validity is proved as valid. These values are highlighted in Table 2.

**Table 2:** Discriminant Validity

	CH	CM	CS	EGS	US
CH					
CM	0.464				

## The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness

CS	0.776	0.424		
EGS	0.677	0.546	0.648	
US	0.418	0.525	0.435	0.790



**Figure 3:** Measurement Model Assessment

The results indicated that customer satisfaction and customer usability have a positive association with e-government success and accept H2 and H3. However, the results also indicated that customer comfort has an insignificant association with e-government success and reject H1. In addition, the results indicated that customer satisfaction and customer comfort have a positive association with customer happiness and accept H4 and H6. However, the results also indicated that customer usability has an insignificant association with customer success and reject H5. These links have been highlighted in Table 3.

**Table 3:** Direct Path

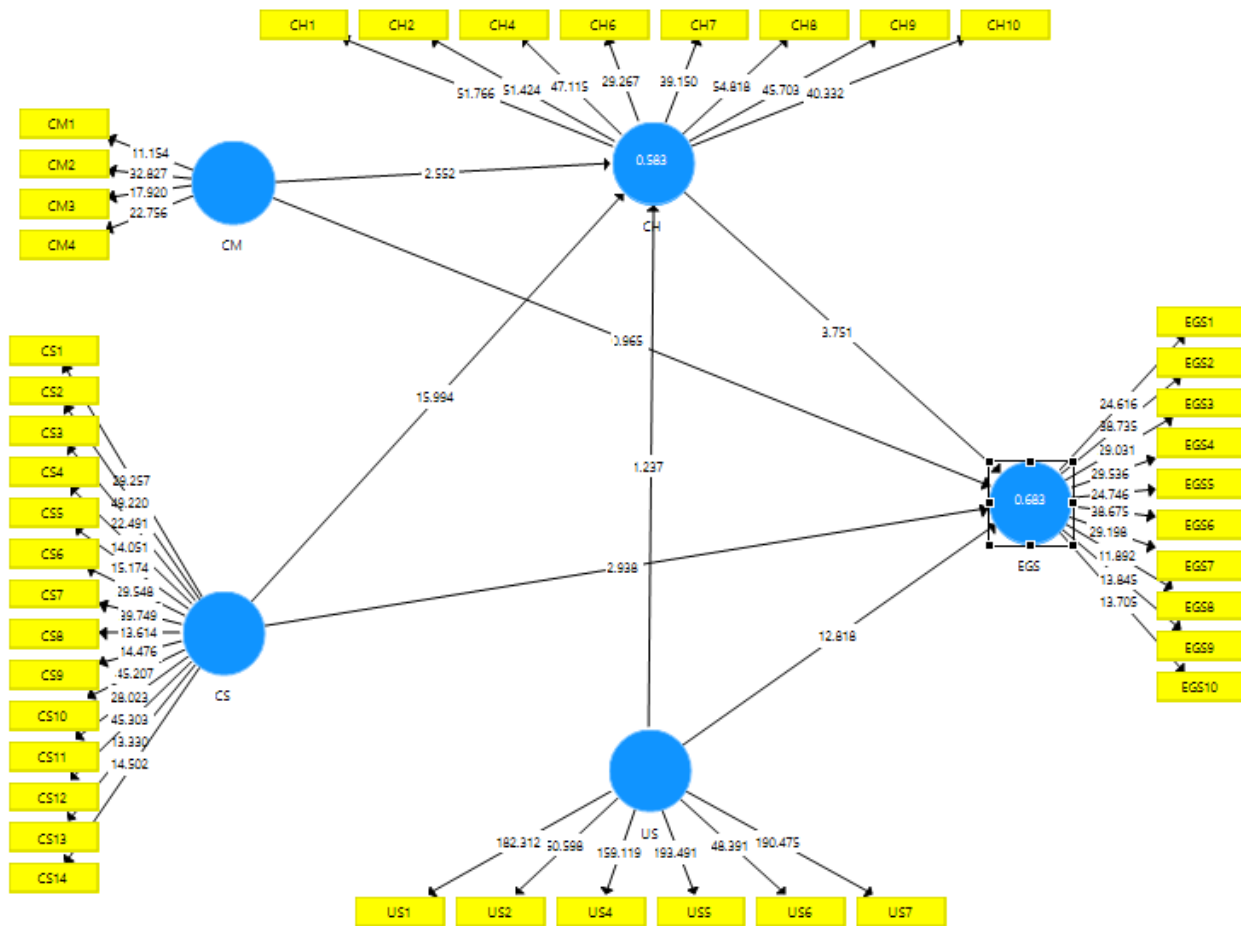
Relationships	Beta	S.D.	T Statistics	P Values	L.L.	U.L.
CH -> EGS	0.253	0.067	3.751	0.000	0.126	0.355
CM -> CH	0.143	0.056	2.552	0.006	0.045	0.225
CM -> EGS	0.047	0.048	0.965	0.168	-0.026	0.115
CS -> CH	0.668	0.042	15.994	0.000	0.599	0.739

CS -> EGS	0.157	0.053	2.938	0.002	0.082	0.243
US -> CH	0.072	0.058	1.237	0.109	-0.016	0.163
US -> EGS	0.560	0.044	12.818	0.000	0.501	0.623

The outcomes also revealed that customer happiness significantly mediates among the nexus of customer satisfaction, customer comfort, and e-government success and accept H8 and H10. However, the outcomes also revealed that customer happiness insignificantly mediates between customer usability and e-government success and rejects H9. These links have been highlighted in Table 4.

**Table 4: Indirect Path**

Relationships	Beta	S.D.	T Statistics	P Values	L.L.	U.L.
CM -> CH -> EGS	0.036	0.018	2.021	0.023	0.012	0.074
CS -> CH -> EGS	0.169	0.046	3.689	0.000	0.087	0.237
US -> CH -> EGS	0.018	0.017	1.100	0.137	-0.005	0.048



**Figure 4: Structural Model Assessment**

**Discussions**

## The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness

The study results have indicated that customer satisfaction, the part of customer experience, has a significant positive association with e-government success. The study implies that when the customers have a good experience of the services by e-government organizations and are satisfied with these experiences, it determines high e-government success. These results are in line with the previous study of Chen, Hu, Tseng, Juang, and Chang (2019), which elaborates that when the customers are satisfied with the interaction, products, or services which are provided by the government using digital devices, up-to-date communication network, and information technology, the government organizations are encouraged to apply these devices, technology, and apps their operations. The study results have also indicated that customer comfort, the part of customer experience, does not linked with e-government success. The study states that the government is not motivated to apply the electronic ways of communication, sales of products and services when it finds a positive response from the customers, which is possible when they are satisfied and have a good experience. These results are supported by the past study of Kumar et al. (2017). When a government institution applies up-to-date information technology, communication network, digital devices, internet facilities, different apps, and websites to interact with the customers, and the customers sometime do not feel comfortable with these initiatives of government, they are encouraged in this regard.

The study results have indicated that customers' usability which is a part of customers' experience, is linked with the e-government success. These results are supported by the past study of Veeramootoo et al. (2018), according to which the act of government to apply digital devices, communication network, information technology, and the technology used to render different services to the general public, gets successful, when the customers have good experience about the usability of different technologies applied, products sold, and services rendered by the government. The study results have also indicated that customer happiness is a significant mediator between customer satisfaction, a part of customer experience, and e-government success. These results are approved by the past study of Basahel and Yamin (2017), which suggests that when the customer gets satisfaction from their experience of the interaction with products and services of government institutions that have electronic ways of business dealings, e-government is successful. These results are also in line with the previous study of Alzahrani, Al-Karaghoul, and Weerakkody (2018), which elaborates that when the customers have good experience with the services of e-government, institution and have satisfaction, they become happy with the institution and their happiness results in the e-government success.

It has also been indicated by the study results that customer happiness is a significant mediator between customer comfort, a part of customer experience, and e-government success. These results are also in line with the past study of Santa et al. (2019); when the customers feel comfortable while interacting with the services of e-government institutions, they become happy with the organization and the extent of customer happiness determines the e-government success. The results of the study have revealed that customer happiness is an insignificant mediator between customer usability, a part of customer experience and the e-government success. These results are in line with the previous study of Hariguna, Rahardja, and Aini (2019), which indicates that when customers find the products and services efficient and free from errors or defects during their experience of interaction with the e-government organization, they sometimes do not feel happy, and thus, there is the low degree of government success.

### **Conclusion**

The current literary article investigates the degree of e-government success in the fast-emerging or developed country of UAE. In this context, it throws light on the three parts of customer experience customer satisfaction, customer comfort, and customer usability. The study examines that customer satisfaction, the part of customer experience, enhances e-government success. When the customers have a good experience of the interaction with products and services provided by e-government organizations and are satisfied with these experiences, it determines high e-government success. The study tells that customer comfort, the part of customer experience, does not determine the level of e-government success. When the government institutions have good quality information technology, communication network, digital devices, the internet, and different apps to have contact with the customers and the customers, sometimes do not feel comfort the government e-government is encouraged and become successful. Similarly, the customers' usability, which is a part of customers' experience, enhances the e-government's success. The government's initiative to apply digital devices, electronic communication network, information technology, and internet to provide public services, become successful when the customers have good experience of these services and are satisfied. The study suggests that the two parts of customers' experience of dealing with the e-government services, such as customer satisfaction, and customer usability, enhance the customers' happiness, which is helpful in making the e-government successful.

### **Implications**

The study makes both theoretical and empirical implications. It has great theoretical importance because of its contribution to the literature on the progress in the electronics and digital world. This study examines the influences of three parts of customers' experience of dealing with the e-government, such as customer satisfaction, customer comfort, and customer usability, on the e-government success. In the past literature, customer happiness as a mediator between customer satisfaction, customer comfort, and customer usability, and e-government success has not to be given much attention, though the impacts of customer happiness on e-government success have been addressed. It secures a significant place in the literature because of its introduction of customer happiness as a mediator between the three parts of customer experience, such as customer satisfaction, customer comfort, and customer usability, and e-government success. The study also has great empirical significance in the developed country of UAE as it provides a guideline on how to make e-government organizations successful. This study suggests that e-government can be made successful by improving customer experiences such as customer satisfaction, customer comfort, and customer usability on the e-government success.

### **Limitations and Future Directions**

The current study faces certain limitations. These limitations must be fulfilled by the authors in the future while replicating or extending the concepts of the study. First of all, the author has analyzed only customer experience in three forms customer satisfaction, customer comfort, and customer usability and their impacts on e-government success. The financial factors and government policies which are essential for e-government success have not been addressed by this study. Future scholars are recommended to address more number of factors affecting the e-government success for a more comprehensive study. Moreover, the quantitative data has been collected from one source to support the concepts of this study. The use of a single to acquire the supportive data keeps the validity of the study in confusion. Therefore, the authors in the future must collect data from multiple sources so that the study is comprehensive and valid enough to get the desired response from the audience.

## References

- Aljumah, A.I., Nuseir, M.T. and Alam, M.M. (2021), Organizational performance and capabilities to analyze big data: do the ambidexterity and business value of big data analytics matter? *Business Process Management Journal*, <https://doi.org/10.1108/BPMJ-07-2020-0335>
- Aljumah, A.I., Nuseir, M.T. and Alam, M.M. (2021), "Traditional marketing analytics, big data analytics and big data system quality and the success of new product development", *Business Process Management Journal*, <https://doi.org/10.1108/BPMJ-11-2020-0527>
- Alkrajji, A. I. (2020). An examination of citizen satisfaction with mandatory e-government services: comparison of two information systems success models. *Transforming Government: People, Process and Policy*, 15(1), 36-58. doi: <https://doi.org/10.1108/TG-01-2020-0015>
- Altinay, L., Song, H., Madanoglu, M., & Wang, X. L. (2019). The influence of customer-to-customer interactions on elderly consumers' satisfaction and social well-being. *International journal of hospitality management*, 78, 223-233. doi: <https://doi.org/10.1016/j.ijhm.2018.09.005>
- Alzahrani, L., Al-Karaghoul, W., & Weerakkody, V. (2018). Investigating the impact of citizens' trust toward the successful adoption of e-government: A multigroup analysis of gender, age, and internet experience. *Information Systems Management*, 35(2), 124-146. doi: <https://doi.org/10.1080/10580530.2018.1440730>
- Alzoubi, H., Alshurideh, M., Kurdi, B., & Inairat, M. (2020). Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context. *Uncertain Supply Chain Management*, 8(3), 579-588.
- Andry, J. F., Christianto, K., & Wilujeng, F. R. (2019). Using Webqual 4.0 and Importance Performance Analysis to evaluate e-commerce website. *Journal of Information Systems Engineering and Business Intelligence*, 5(1), 23-31.
- Assanovich, B., Veretilo, Y., Bich, N., Pushkina, A., & Khilmanovich, V. (2019). *Recognition of Genuine Smile as a Factor of Happiness and its Application to Measure the Quality of Customer Retail Services*.
- Basahel, A., & Yamin, M. (2017). Measuring success of e-government of Saudi Arabia. *International Journal of Information Technology*, 9(3), 287-293. doi: <https://doi.org/10.1007/s41870-017-0029-4>
- Bawack, R. E., Wamba, S. F., & Carillo, K. D. A. (2021). Exploring the role of personality, trust, and privacy in customer experience performance during voice shopping: Evidence from SEM and fuzzy set qualitative comparative analysis. *International Journal of Information Management*, 58, 102-117. doi: <https://doi.org/10.1016/j.ijinfomgt.2021.102309>
- Berlilana, B., Hariguna, T., & Lai, M. T. (2018). Effects of relationship quality on citizen intention use of E-government services: An empirical study of e-government system. *International Journal of Electrical and Computer Engineering*, 8(6), 5127-5135.
- Chaouali, W., Lunardo, R., Yahia, I. B., Cyr, D., & Triki, A. (2019). Design aesthetics as drivers of value in mobile banking: does customer happiness matter? *International Journal of Bank Marketing*, 38(1), 219-241. doi: <https://doi.org/10.1108/IJBM-03-2019-0100>
- Chen, Y.-C., Hu, L.-T., Tseng, K.-C., Juang, W.-J., & Chang, C.-K. (2019). Cross-boundary e-government systems: Determinants of performance. *Government information quarterly*, 36(3), 449-459. doi: <https://doi.org/10.1016/j.giq.2019.02.001>

- Chien, F., Pantamee, A. A., Hussain, M. S., Chupradit, S., Nawaz, M. A., & Mohsin, M. (2021). Nexus between financial innovation and bankruptcy: Evidence from information, communication and technology (ICT) sector. *The Singapore Economic Review*, 1-22. doi: <https://doi.org/10.1142/S0217590821500181>
- Chien, F., Sadiq, M., Kamran, H. W., Nawaz, M. A., Hussain, M. S., & Raza, M. (2021). Co-movement of energy prices and stock market return: environmental wavelet nexus of COVID-19 pandemic from the USA, Europe, and China. *Environmental Science and Pollution Research*, 1-15.
- Dabbous, A., Aoun Barakat, K., & Merhej Sayegh, M. (2020). Social commerce success: Antecedents of purchase intention and the mediating role of trust. *Journal of Internet Commerce*, 19(3), 262-297. doi: <https://doi.org/10.1080/15332861.2020.1756190>
- Dahi, M., & Ezziane, Z. (2015). Measuring e-government adoption in Abu Dhabi with technology acceptance model (TAM). *International Journal of Electronic Governance*, 7(3), 206-231. doi: <https://doi.org/10.1504/IJEG.2015.071564>
- Fatima, J. K., Di Mascio, R., & Sharma, P. (2020). Demystifying the impact of self-indulgence and self-control on customer-employee rapport and customer happiness. *Journal of Retailing and consumer services*, 53, 101-112. doi: <https://doi.org/10.1016/j.jretconser.2019.101967>
- Gezmen, B., & Eken, İ. (2021). Increasing Customer Satisfaction in Mobile Applications in the Digitalized World in Terms of Usability: Model Application *Strategic Outlook in Business and Finance Innovation: Multidimensional Policies for Emerging Economies*: Emerald Publishing Limited.
- Gong, T., & Yi, Y. (2018). The effect of service quality on customer satisfaction, loyalty, and happiness in five Asian countries. *Psychology & Marketing*, 35(6), 427-442. doi: <https://doi.org/10.1002/mar.21096>
- Goswami, S., & Sarma, M. K. (2019). Modelling customer delight in hotel industry. *Global Business Review*, 20(2), 405-419. doi: <https://doi.org/10.1177/0972150918825396>
- Gupta, K. P., Singh, S., & Bhaskar, P. (2018). Citizens' perceptions on benefits of e-governance services. *International Journal of Electronic Governance*, 10(1), 24-55. doi: <https://doi.org/10.1504/IJEG.2018.091261>
- Hair Jr, J. F., Babin, B. J., & Krey, N. (2017). Covariance-based structural equation modeling in the Journal of Advertising: Review and recommendations. *Journal of Advertising*, 46(1), 163-177. doi: <https://doi.org/10.1080/00913367.2017.1281777>
- Han, J.-S., & Yang, D.-H. (2017). Effects of consumption experience on customer satisfaction and customer happiness for dessert cafe. *Culinary science and hospitality research*, 23(5), 12-24.
- Hariguna, T., Rahardja, U., & Aini, Q. (2019). Effect of social media activities to determinants public participate intention of e-government. *Procedia Computer Science*, 161, 233-241. doi: <https://doi.org/10.1016/j.procs.2019.11.119>
- Hooda, A., & Singla, M. (2020). Reengineering as a strategic stance for e-governance success-mediating role of core competencies. *Transforming Government: People, Process and Policy*, 14(2), 205-235. doi: <https://doi.org/10.1108/TG-01-2020-0017>
- Hsieh, Y.-C., Chiu, H.-C., Tang, Y.-C., & Lin, W.-Y. (2018). Does raising value co-creation increase all customers' happiness? *Journal of business ethics*, 152(4), 1053-1067. doi: <https://doi.org/10.1007/s10551-016-3293-5>
- Iqbal, M. S., Hassan, M. U., & Habibah, U. (2018). Impact of self-service technology (SST) service quality on customer loyalty and behavioral intention: The mediating role of customer satisfaction. *Cogent business & management*, 5(1), 142-151. doi: <https://doi.org/10.1080/23311975.2018.1423770>

The Impact of Customer Experience on the E-government success: Mediating Role of Customer Happiness

- Kumar, R., Kumar, R., Sachan, A., & Gupta, P. (2020). An examination of the e-government service value chain. *Information Technology & People*, 34(3), 889-911. doi: <https://doi.org/10.1108/ITP-09-2018-0438>
- Kumar, R., Sachan, A., & Mukherjee, A. (2017). Qualitative approach to determine user experience of e-government services. *Computers in human behavior*, 71, 299-306. doi: <https://doi.org/10.1016/j.chb.2017.02.023>
- Li, Y., & Shang, H. (2020a). Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China. *Information & Management*, 57(3), 103-116. doi: <https://doi.org/10.1016/j.im.2019.103197>
- Li, Y., & Shang, H. (2020b). Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China. *Information & Management*, 57(3), 103-117. doi: <https://doi.org/10.1016/j.im.2019.103197>
- Mishra, S. S., & Geleta, A. T. (2020). Can an E-Government System Ensure Citizens' Satisfaction without Service Delivery? *International Journal of Public Administration*, 43(3), 242-252. doi: <https://doi.org/10.1080/01900692.2019.1628053>
- Moghaddasi, N., & Heidari, M. (2019). The impact of modern information technology on customer satisfaction considering the mediating role of organisational health. *International Journal of Services and Operations Management*, 34(3), 279-305. doi: <https://doi.org/10.1504/IJSOM.2019.103566>
- Mohsin, M., Kamran, H. W., Nawaz, M. A., Hussain, M. S., & Dahri, A. S. (2021). Assessing the Impact of Transition from Non-renewable to Renewable Energy Consumption on Economic Growth-Environmental Nexus from Developing Asian Countries. *Journal of Environmental Management*, 284, 1-8.
- Nawaz, M. A., Hussain, M. S., Kamran, H. W., Ehsanullah, S., Maheen, R., & Shair, F. (2020). Trilemma association of energy consumption, carbon emission, and economic growth of BRICS and OECD regions: quantile regression estimation. *Environmental Science and Pollution Research*, 1-15.
- Nuseir, M.T., Aljumah, A., Alshurideh, M.T. )2021 (How the Business Intelligence in the New Startup Performance in UAE During COVID-19: The Mediating Role of Innovativeness. *Studies in Systems, Decision and Control*, 334, pp. 63–79
- Nuseir, M.T., El-Refae, G.A., Aljumah, A.(2021). The e-Learning of Students and University's Brand Image (Post COVID-19): How Successfully Al-Ain University Have Embraced the Paradigm Shift in Digital Learning. *Studies in Systems, Decision and Control*, 2021, 334, pp. 171–187
- Nguyen, T. T., Phan, D. M., Le, A. H., & Nguyen, L. T. N. (2020). The Determinants of Citizens' Satisfaction of E-Government: An Empirical Study in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7(8), 519-531.
- Niedermeier, A., Albrecht, L., & Jahn, B. (2019). "Happy Together": Effects of Brand Community Engagement on Customer Happiness. *Journal of Relationship Marketing*, 18(1), 54-76. doi: <https://doi.org/10.1080/15332667.2018.1534063>
- Okunola, O. M., & Rowley, J. (2019). User experience of e-government: the Nigeria Immigration Service. *Library Hi Tech*, 37(3), 355-373. doi: <https://doi.org/10.1108/LHT-09-2018-0138>
- Rey-Moreno, M., Felício, J. A., Medina-Molina, C., & Rufín, R. (2018). Facilitator and inhibitor factors: Adopting e-government in a dual model. *Journal of Business research*, 88, 542-549. doi: <https://doi.org/10.1016/j.jbusres.2017.11.015>



- Sahu, N., Deng, H., & Mollah, A. (2018). *Investigating the critical success factors of digital transformation for improving customer experience*. Paper presented at the International Conference on Information Resources Management (CONF-IRM).
- Santa, R., MacDonald, J. B., & Ferrer, M. (2019). The role of trust in e-Government effectiveness, operational effectiveness and user satisfaction: Lessons from Saudi Arabia in e-G2B. *Government Information Quarterly*, 36(1), 39-50. doi: <https://doi.org/10.1016/j.giq.2018.10.007>
- Scholta, H., Mertens, W., Kowalkiewicz, M., & Becker, J. (2019). From one-stop shop to no-stop shop: An e-government stage model. *Government Information Quarterly*, 36(1), 11-26. doi: <https://doi.org/10.1016/j.giq.2018.11.010>
- Shair, F., Shaorong, S., Kamran, H. W., Hussain, M. S., Nawaz, M. A., & Nguyen, V. C. (2021). Assessing the efficiency and total factor productivity growth of the banking industry: do environmental concerns matters? *Environmental Science and Pollution Research*, 1-17. doi: <https://doi.org/10.1007/s11356-020-11938-y>
- Shuib, L., Yadegaridehkordi, E., Ainin, S., & Feng, G. C. (2019). Malaysian urban poor adoption of e-government applications and their satisfaction. *Cogent Social Sciences*, 5(1), 156-161.
- Soderlund, M., & Berg, H. (2019). Employee emotional displays in the extended service encounter: A happiness-based examination of the impact of employees depicted in service advertising. *Journal of Service Management*, 31(1), 115-136. doi: <https://doi.org/10.1108/JOSM-06-2019-0208>
- Titien, F. S. S., & Puspaningrum, Y. W. I. I. (2021). The Impact of Knowledge Management, Administrative Management, Information Technology for E-Government Success. *Annals of the Romanian Society for Cell Biology*, 2, 12728-12741.
- Tromer, R. (2019). *Creating a usable and customer-oriented e-government website: A case study: Identifying the wishes and needs of customers through usability tests*. University of Twente.
- Veeramootoo, N., Nunkoo, R., & Dwivedi, Y. K. (2018). What determines success of an e-government service? Validation of an integrative model of e-filing continuance usage. *Government Information Quarterly*, 35(2), 161-174. doi: <https://doi.org/10.1016/j.giq.2018.03.004>
- Yi, Y., & Natarajan, R. (2018). Customer satisfaction in Asia. *Psychology & Marketing*, 35(6), 387-391. doi: <https://doi.org/10.1002/mar.21093>
- Zhong, Y., & Moon, H. C. (2020). What drives customer satisfaction, loyalty, and happiness in fast-food restaurants in China? perceived price, service quality, food quality, physical environment quality, and the moderating role of gender. *Foods*, 9(4), 460-471.