The User Based Design Model to Enhance Satisfaction by Using Government Online Information: Conceptual Framework

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Abstract

Government online information is a transformations of internal and external public sector relationships, through Information and Communications Technology (ICT) in order to optimize government service delivery and citizen participation. A pressing issue in this regard is how public can adapt traditional structures and processes to the innovative field of online information to create public satisfaction. This study aims to provide the user based design model to enhance satisfaction by using government online information. The proposed conceptual model for evaluating publics' satisfaction to use online information constructs from Uses and Gratification Theory. The proposed model will improve the service delivery of UAE government departments by enhancing the satisfaction of public towards the online information usage.

Keyword: User based design, public, satisfaction, public, smart government, online information.

I. INTRODUCTION

Government online information is actually very important as it acts as important agent to delivering all the policies or any other crucial information from government to citizens. It is essential for country to implement government information online as it helps to smooth the state's administration system, especially in the developed country. That is why the low number of usage of government information online will become a liability to the country itself. However, considered the current era, known as the Information Age (also known as the Computer Age, Digital Age, or New Media Age), which is the historic period in the 21st century characterized by the rapid shift from traditional industry that the Industrial Revolution (Matyjas, 2015), the most challenging tasks is to ensure the government information online is inclusive to the all generations, which can be identified into three categories, namely the digital natives, digital immigrant and digital immigrants.

For enhancing government information online, the usage pattern of the users from different generations need to be taken into consideration in order to synchronize it with the problem faced by the users. In this context, the enhancement of the user response actually depends on the problem facing and the usage pattern by the user which come from different generations. However, there have been very limited works to capture or analyze the usage pattern specific for each of the three generations. Most of the works tend to study on the

enhancement of the users response generally (Ball et al., 2017), rather than the division of digital generation. In fact, in order to enhance the satisfaction of the user of government online information, it is essential to identify the usage pattern used by them and what types of problem faced by users. Therefore, enhancing the satisfaction and loyalty to the different users of government information online in one of the ways to create a better learning process for all the generation which will became a great prospect for their future. government public administrator feedback on how close they are in accomplishing their goals and visions.

The rest of this paper is organized as follows: Section II presents the background and motivation. Section III presents the user based design model proposed in this paper. Section IV concludes the paper with some discussions about user based design model and future works.

II. LITERATURE REVIEW

A. Satisfaction toward government online information

Nowadays, loyalty and satisfaction of the user for using government online information should be focused in order to achieve a solid system and trust for this type of online information. This involves satisfaction and loyalty quality attributes such as happiness, comfort ability and manageability towards the government information online user. User's satisfaction is a critical and decisive factor for persistent use of government information online services as it can substantially impact on failure or success of e-Government projects. Main hurdle for e-government planners and practitioners is to find out the key determinants of satisfaction of their citizens. Citizen satisfaction has been investigated and evaluated in an indirect way through the related technical dimensions of systems such as system quality, information quality and service quality.

User loyalty is viewed as the strength of the relationship between an individual's relative attitude and repeat patronage. Simply, loyalty happens when people trust. It implies as keeping confidence that one's promises can be relied which make the people want to use it repeatedly. The significance of loyalty of users has been pointed out by many scholars as well as this particular factor make significant influence on adoption and use of e-government services

Enhancing loyalty and satisfaction from user is a complex process, but it is crucial to the success of government services. Hence, the researchers need to study the root of the problem why people still does not loyal and satisfied to the government information online. This is to ensure that the developed system is not inaccurate, inconsistent and incomplete.

B. Related works approach/framework/model in enhancing satisfaction using government online information

There are few works done to analyze the enhancement of loyalty and satisfaction of using government information online. For example Iii, (2011), analyse the government related website satisfaction and loyalty across the e-government and e-business domains. In this study, by using a sample of survey responses from end users of e-business and e-government websites, data from the American Customer Satisfaction Index (ACSI), they uses structural equation modeling to compare determinants and outcomes of satisfaction across these domains. Results from the models show that while some similarities do exist, for e-business users, satisfaction is predominantly a function of the 'personalisability' of the website, while satisfaction with e-government is determined more equally by the various predictors

In an attempt to examine the the loyalty and satisfaction of user towards government information online, Schoettle and Sivak (2014) conducted survey through a developed questionnaire that distributed to an appropriate sample of beneficiaries of the services provided by the Ministry of Interior of the United Arab Emirates. Then, they analyse the data analysis by using appropriate statistical methods and it were used to test the hypotheses of this study involving loyalty and satisfaction of customer.

Likewise, Chatfield (2013), represented their aims by developing conceptual model that explains citizen loyalty with e-government self-service delivery options in a research context of integrated interoperable transactional e-services provided via Saudi Ministry of Higher Education (MOHE) portal. They empirically test the proposed model through the linear multiple regression analysis of 402 survey responses collected from Saudi citizens/users of transactional e-services. In summary, we have developed a research model that aims to explain citizen loyalty with e-government self-service delivery options.

Then, Mastoi and Gul (2016) had explored to determine the most significant decisive factors on the Pakistani citizen's satisfaction from the e-Government services provided by the Pakistan Punjab Province e-Government portal. However, they do not apply on citizen loyalty. Although they may be suitable in Paskistan only, but we think that the method can also been refer to the other researcher to contributing on loyalty factors.

Yap et al. (2017), emphasized on loyalty and satisfaction in using government information online. However, they only focused on senior citizen. In this research, they undergo empirical research to examine the satisfaction of senior citizens with e-government portals. Thirdly, the study includes the concept of social influence as the determinant of senior citizen satisfaction and loyalty with e-government portals and finds support for the argument.

In the last few years, researchers have witnessed the development model to enhance satisfaction and loyalty by using government information online. Matter (2010) discussed on satisfaction of the consumers. Their work proposes using citizen satisfaction as a measure of e-government success, as well as explores its relationships with e-government service quality. The researcher then conduct survey by implements systematic sampling among the random citizen in Sweden, which 425 valid responses were received.

What is the most interesting from this research is on how they explain detail on how to enhance satisfaction for the IT consumer. To simple explanation, citizen satisfaction with e-government services is related with citizen's perception about online service convenience (transaction), reliability of the information (transparency) and engaged electronic communication (interactivity) as performance measurements and service outcomes as citizen satisfaction.

The list of related works in satisfaction and loyalty are presented in a table of comparison as shown in Table 4. Table 4 shows the comparison analysis of the approach, framework, model and method involved in using government online information. Referring to the contribution aspect in Table 4, most of the existing works focus on developing model, frameworks and approach, while limited works were involved in conducting experiment and literature study and none was reported on developing tools and approach. The finding indicates that there is no outstanding work of user based design model to enhance loyalty and satisfaction of using government online information.

III. CONCEPTUAL FRAMEWORK

This study attempts to extend UGT and focuses on user based design. UGT extension has generally taken one of the three approaches: by introducing factors from related models, by introducing additional or alternative belief factors, and by examining user based design model. It is important to include other explanatory variables into UGT. Relating to the specific nature and uniqueness of behavioral intention to use online information in smart government, satisfaction and new variables have been included in the model. Figure 1 shows the user based design model to enhance public satisfaction by using government online information.

A. Privacy

Some of the people from digital natives' generation also worry about their privacy when using government online information because through the worldwide, some governments carry out online surveillance and don't really allow their citizens to web browse privately. In the UK, the Investigatory Powers Act allows government authorities to legally spy on the browsing and internet use of British citizens. As such, the government can directly breach citizen online privacy if they suspect you may be involved in criminal

activity, though they need to apply for a warrant to do so. However, the Investigatory Powers Act forces internet service companies to collect metadata on their customers and hold it for twelve months, which with a warrant can be collected in bulk by a government authority and used to combat terrorism or stop organised crime. Hence, the government should convince on how the data used only for countermeasure against negative things. This study establishes one hypothesis as follows:

H1: Privacy has significant relationship with satisfaction public in using government online information.

B. Safety

Merriam Webster Dictionary online defined safety as reputation as a device designed to prevent inadvertent or hazardous operation. Safety is a factor of user based design to increase the user satisfaction toward government online information. There are researchers refers online safety is trying to be safe on the internet and is the knowledge of maximizing the user's personal safety and security risks to private information and property associated with using the internet and the self-protection from computer crime. This study establishes one hypothesis as follows:

H2: Safety has significant relationship with satisfaction public in using government online information.

C. Time

For digital intermediates, they actually one of the majority users of government information online compare to the other generation. This is because they are the one that governance it or always involve to this related government online service. To be simplified, most of them are busy. Hence that's why one of the biggest challenges for digital intermediates when using government information online is time constraint. This is because some of the government websites or portals require longer loading comparing to the others website. This kind of flaw should be monitored frequently in order to ensure that the E-government services will be running smoothly and the satisfaction of the user can be enhanced. This study established one hypothesis as follow

H3: Time has a significant relationship with satisfaction public using government online information.

D. Awareness

The young people or any of the responsible party from the government should aim to make the generation of digital immigrant understand the role that ICT especially on the importance of government information online itself in order for creating and sustaining social interactions among older

people over time, which we consider crucial elements in enhancing e-government services for senior citizens. The digital immigrant does not really use the government information online because they lack of awareness the importance of it.

H4: Awareness has a significant relationship with satisfaction public using government online information.

IV. CONCLUSION AND FUTURE RESEARCH DIRECTION

This study explored the relevant factors surrounding the smart-government adoption by publics, and their satisfaction to use the online information in United Arab Emirates. A research framework based on UGT model was proposed and need to be tested. The research framework offered a list of factors of user based design in satisfying to use the online information for a smart government. Interestingly this study found one factors that would be to explore further into the user based design in satisfying the online information, namely privacy, security and awareness. Understanding all the factor of user based design in the view of United Arab Emirates citizens will enable practitioners to introduce online information related to public services more effectively. Further, empirical research is needed to validate the conceptual model using the UAE context, and subsequently facilitate in confirming the factor of user based design to ensure the successful smart-government services satisfaction in the UAE.
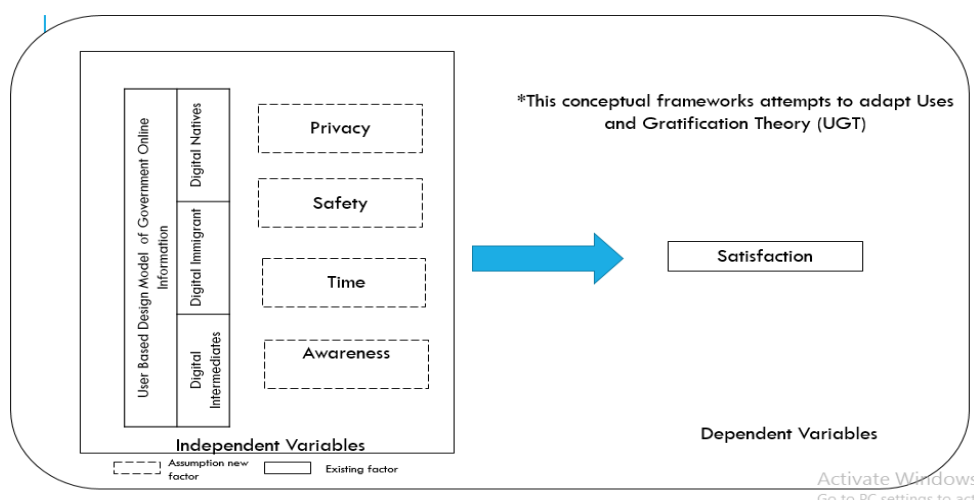

Fig. 1. The proposed conceptual framework

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