CITIZEN AWARENESS TO E-GOVERNMENT SERVICES FOR INFORMATION PERSONALIZATION

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ABSTRACT

In the government agency environment, citizen is the customer that utilizes the service provided by government agency as the service provider. The success and acceptance of e-government initiatives depends on citizen willing to utilize the service provided (Carter L and Belanger F, 2004). The core issue in e-government domain now is about the social issue rather than the technical issue. Findings from literatures reveal that the initiative from government side in promoting and building the awareness of citizen is considered low. And by the unawareness of citizen, the communication between government and citizen cannot successfully be built. Therefore the purpose of this paper is to review the success factors of e-government adoption and the issues that influence citizen to aware and adopt the service provided by various researchers. In addition, this paper also discusses the formulation of a citizen-centric framework. The benefit of the framework is to assists the analysis on the relationship between government and citizens. This is to ensure that a suitable method could be further proposed to enhance the relationship and communication between government and citizens. The Citizen-centric framework considers the needs in promoting service to citizen so that information personalization can successfully be accomplished.

Keywords: Citizen-centric, information personalization, e-government, service, citizen

1.0   INTRODUCTION

Citizen-centric governments deliver cost-effective, personalized and relevant e-services that simultaneously enhance communication and rules with citizens (Undheim Trond Arne and Blakemore M, 2007). However, the progress of realizing the government-citizen relationship is still lacking. To make real progress on transforming government services, it is required for a government to positively transform the relationship between the government and citizens. It is believed that personalization has the capacity to enhance the relationship and communication between government and citizen. As the value of citizen centric strategy, personalized can enhance the relationship and communication between government and citizen, so that government can deliver the information and service based on the needs of citizen. On the Citizen-centric approach, there are some issues that need to be considered at each level of the framework. It starts from the lowest level, which is promotion of e-government citizen awareness, engagement and adoption to e-government services until the highest level which is information personalization. There are some factors and issues needed to consider in building citizens awareness. Many researchers try to come out with their own findings about the factors and strategies to improve citizen awareness and engage citizen to use service provided before the information personalization achieved. Every researchers have their own findings regarding the factors that influence citizen to make they aware and adopt the services provided by government. Therefore the aim of this paper is to review the issues in order to promote citizen awareness to e-government services. A survey conducted by Taylor Nelson Sofres (TNS), a world leader in market research, global market information and business analysis, reported that Malaysia is placed as one of the lower-ranked users of government on-line services, ranking 26th among the 31 countries and territories surveyed in the study (Farouk, Mohamed F and Kalid and Shafee K, 2005). Based on the findings from this survey, government should emphasize the social issue about how to socialize the service in e-government. Government should be proactive in building the awareness of citizen rather than concentrating on the technical

issue because without the awareness and adoption of citizen the technology utilized is just a wasteful of budget.

2.0   RESEARCH OBJECTIVES AND METHODS

Following thorough review of literatures, a few research questions were developed and become the basis for the formulation of research objectives of this study. Appropriate research activities were designed, which explain in detail methods for data collection and analysis. The two research questions are listed as below.

What are the factors that influencing citizen willingness to use e-government service provided ?

What are the strategies needed to reach the Information Personalization stage ?

2.1   Objective

To achieve the success of e-government, it is critical to influence citizen by understanding their behavior so that there is a willingness from citizen to use e-government services. Because the success of e-government initiatives is determined by citizens' willingness to use these services (Carter L and Belanger F, 2004). Without citizen awareness and adoption, it will be the main obstacle to build a citizen's willingness to use e-government services . To build citizen awareness, it needs an understanding what the cause of citizen reluctance to utilize the service in e-government and what factors that influence them to be aware and adopting the service for all customers from various background. Mostly government always providing the service by utilizing high technology and ignoring how to socialize it henceforward it will cause citizen reluctance to utilize service in e-government. Thus this study will investigate about how to improve citizen awareness for information personalization initiative, From the broad goal, the main objectives of this research are :

1. Analyze the factors to improve citizen awareness from another researchers and strategies used by another countries.
2. Proposed a Citizen-centric framework for the notion of e-government service to improve citizen awareness to reach information personalization initiative.

Numerous studies have analyzed success factors of e-commerce. Yet to date, no study has identified the success factors of e-government. This study applied their approach in a context to a government-to-citizen (G2C).

2.2 Literature Survey

There are many studies and strategies conducted by previous researchers and countries to improve citizen awareness, for example, identifying the factors and variables regarding the service provided by government. Every researcher has their own findings based on the case study conducted from their survey and those factors become a strategy for them to socialize the awareness of e-government services. Researcher will try to analyze previous findings by another researchers and countries hence come out with proposed citizen centric framework for the notion of e-government service.

2.2.1 Samer Ibrahim Mofleh and Mohammed Wanous (May 26, 2008)

Based on the findings from Samer Ibrahim Mofleh and Mohammed Wanous , they tried to understand the Factors Influencing Citizens' Adoption of e-Government Services in the Developing World and Jordan as a Case Study (Mofleh Ibrahim S and Wanous M, 2008). The research model for this study will examine people's demand on different levels on e-Government services in addition to testing different variables that might affect citizens' demand on e-Government (Mofleh Ibrahim S and Wanous M. 2008). Based on their findings, there are two types of variable regarding factors in e-government adoption, they are dependent and independent variable. The dependent

variable is Intention to Use (IU) e-Government, it determines the demand on different levels of e-Government service (Mofleh Ibrahim S and Wanous M. 2008). Demand levels are divided into four major categories. These are informative, interactive (e.g. e-mail inquiry), integrative (e.g. provide personal info), and advanced integrative (e.g. pay online) (Mofleh Ibrahim S and Wanous M. 2008). While Independent variables are the variables that are expected to affect people's levels of demand on e-Government services. The independent variables are trust of the internet, trust in Government, Compatibility, Awareness, Previous experience (Mofleh Ibrahim S and Wanous M. 2008).

2.2.2   Suha AlAwadhi and Anne Morris (August 2009)

Based on another researcher which is Suha AlAwadhi and Anne Morris regarding Factors Influencing the Adoption of E-government Services in Kuwait, they identified other factors that are likely to influence the adoption of e-government services (AlAwadhi S and Morris A, 2009), those factors are based on the survey dedicated to citizens and the respondents are from undergraduate and postgraduate students at Kuwait University. Researcher will go into detail to their findings as discussed below.

i.   Usefulness of e-government services

They favored e-government services over traditional services because of convenience of access, savings in time, money and effort, and the efficiency of service delivery. Citizens thought that such services would prevent them encountering stressful situations, such as waiting in long queues, and dealing with uncooperative employees (AlAwadhi S and Morris A, 2009).

ii. Ease of use

The overall perception of the participants was that online services are easy to learn and use, especially when support is provided . 63% of participants claimed that any online e-government services needed to be easy to use if they were to be used by those with little Internet Experience .However, the ease of use is apparently a significant determinant of the intentions of people with limited Internet experience. As long as the customer of government agency is citizen from various background, government should emphasize this factor to prevent their reluctance to use e-service (AlAwadhi S and Morris A, 2009).

iii.   Reforming Bureaucracy

Based on the survey conducted by them, 53% of participants also expressed a cynical attitude towards government bureaucracy that requires them to follow unnecessary and complicated procedures when completing government transactions (AlAwadhi S and Morris A, 2009).

iv.   Cultural and social influences

Kuwaiti students would use e-government services if the need arose, even if their peers or family did not. Similarly, this study found that those participants with experience of online services would be more likely to use e-services even though others did not (AlAwadhi S and Morris A, 2009).

v.   Technical issues

These results suggest that technical problems might cause a great deal of annoyance to users who might be frustrated if they find it difficult to conduct their transactions successfully since this would lead to them having to start all over again (AlAwadhi S and Morris A, 2009).

vi.   Trust in the Internet

Suha AlAwadhi and Anne Morris showed that trust in the Internet is likely to influence the adoption of e-government services. Their trust to internet is regarding the electronic transaction done by fraud and hackin (AlAwadhi S and Morris A, 2009).

vii.   Lack of awareness

The literature reveals that awareness campaigns have been undertaken in Kuwait regarding e-government services through organizing exhibitions, conferences and seminars, the *e-Kuwait* periodical bulletin and through TV, radio and press interviews. About half of participants (49%) also mentioned that lack of awareness of e-government services was essentially a lack of knowing about the benefits to be gained, and of how to use the services (AlAwadhi S and Morris A, 2009).

Suha Al-Awadhi and Anne Morris found that those factors will influence the adoption of e-government services based on their quantitative questionnaire survey research (AlAwadhi S and Morris A, 2009). And the selected respondents are university student which they considered as amongst the adult population that the Internet has become part of their daily routine.

2.2.3   E-Government Strategy, US Department of the interior.

The US Department of the Interior (DOI) e-Government Strategy identified four essential Customer-Centric Objectives (CCO) to strengthen the Department's Mission Delivery while implementing E-Government initiatives (Hoffman P, 2007). The results of their strategies are building upon customer-centric initiatives which this strategy emphasized the commitment to provide superior E-government services to the customers. On 2007, DOI resulted the Customer-Centric Objectives (CCO) strategy, such as Objective 1; Promote E-Government Customer Awareness, Engagement, and Training to Strengthen the Relationship between the DOI Mission Delivery and E-Gov Services

(Hoffman P, 2007), Objective 2; Achieve a High Level of Customer Satisfaction as a Managing Partner and Shared Service Provider (Hoffman P, 2007), Objective 3; Improve the Management of E-Gov Investments Including Customer Relationship Management (Hoffman P, 2007), Objective 4; Improve E-Gov Information Sharing and Reliability (Hoffman P, 2007). From all findings by various researchers above, researcher will summarize the factors and variables that address to this study. And it is illustrated as the table 1 below.

Table 1 : Factors and variables from many researchers

	Samer Ibrahim Mofleh and Mohammed Wanous.	Suha AlAwadhi and Anne Morris	E-Government Strategy, US Department of the interior.
Trust of the internet	X	X	
Trust in Government	X		
Compatibility	X		
Awareness	X	X	X
Previous Experience	X		
Intention to use e-government	X		
Usefulness of e-government services		X	
Ease of use		X	
Reforming Bureaucracy		X	
Cultural and social influences		X	
Technical issues		X	
Promote E-Gov Customer Awareness, Engagement, and Training			X

Achieve a High Level of Customer Satisfaction as a Managing Partner and Shared Service Provider			X
Improve the Management of E-Gov Investments Including Customer Relationship Management			X
Improve E-Gov Information Sharing and Reliability			X

Regarding trust, it has been revealed as an important variable determining people's demand on e-government, some issues in trust are associated with personal characteristics such as race, age, gender (Mofleh Ibrahim S and Wanous M, 2008) and another information profile especially related to information personalization that will required citizen's information profile. Recent research conducted in Lebanon, which is a Middle East country with a similar profile to Jordan, indicated that awareness of the existence of e-Government services is positively related to the usage of e-Government services (Mofleh Ibrahim S and Wanous M, 2008). It is agreed on that citizen experiences and satisfaction with e-Government is positively associated with demand on e- Government services (Mofleh Ibrahim S and Wanous M, 2008). Previous experience with e-Government is a variable associated with people who have been previously engaged with e-Government (Mofleh Ibrahim S and Wanous M, 2008). It will measure their satisfaction with e-Government services .

Suha AlAwadhi and Anne Morris showed that trust in the Internet is likely to influence the adoption of e-government services (AlAwadhi S and Morris A, 2009). Their trust to internet is regarding the electronic transaction done by fraud and hacking. The literature reveals that awareness campaigns have been undertaken in Kuwait regarding e-government services through organizing exhibitions, conferences and seminars, the *e-Kuwait* periodical bulletin and through TV, radio and press interviews (AlAwadhi S and Morris A, 2009). About half of participants (49%) also mentioned that lack of awareness

of e-government services was essentially a lack of knowing about the benefits to be gained, and of how to use the services (AlAwadhi S and Morris A, 2009). Suha Al-Awadhi and Anne Morris found that those factors will influence the adoption of e-government services based on their quantitative questionnaire survey research. And the selected respondents are university student which they considered as amongst the adult population that the Internet has become part of their daily routine.

3.0   RESULT AND DISCUSSION

Researcher chooses those researchers and strategy because those findings are considered compatible and suitable with this study. By those findings, researcher will come out with researcher's proposed framework which is Citizen-centric framework that is adopted from many researchers and strategies. In an effort for improving citizen awareness for achieving information personalization initiatives, there are some issues that need to be considered. And the figure of citizen-centric framework is illustrated as table 2 below.

Table 2 : Citizen Centric Framework
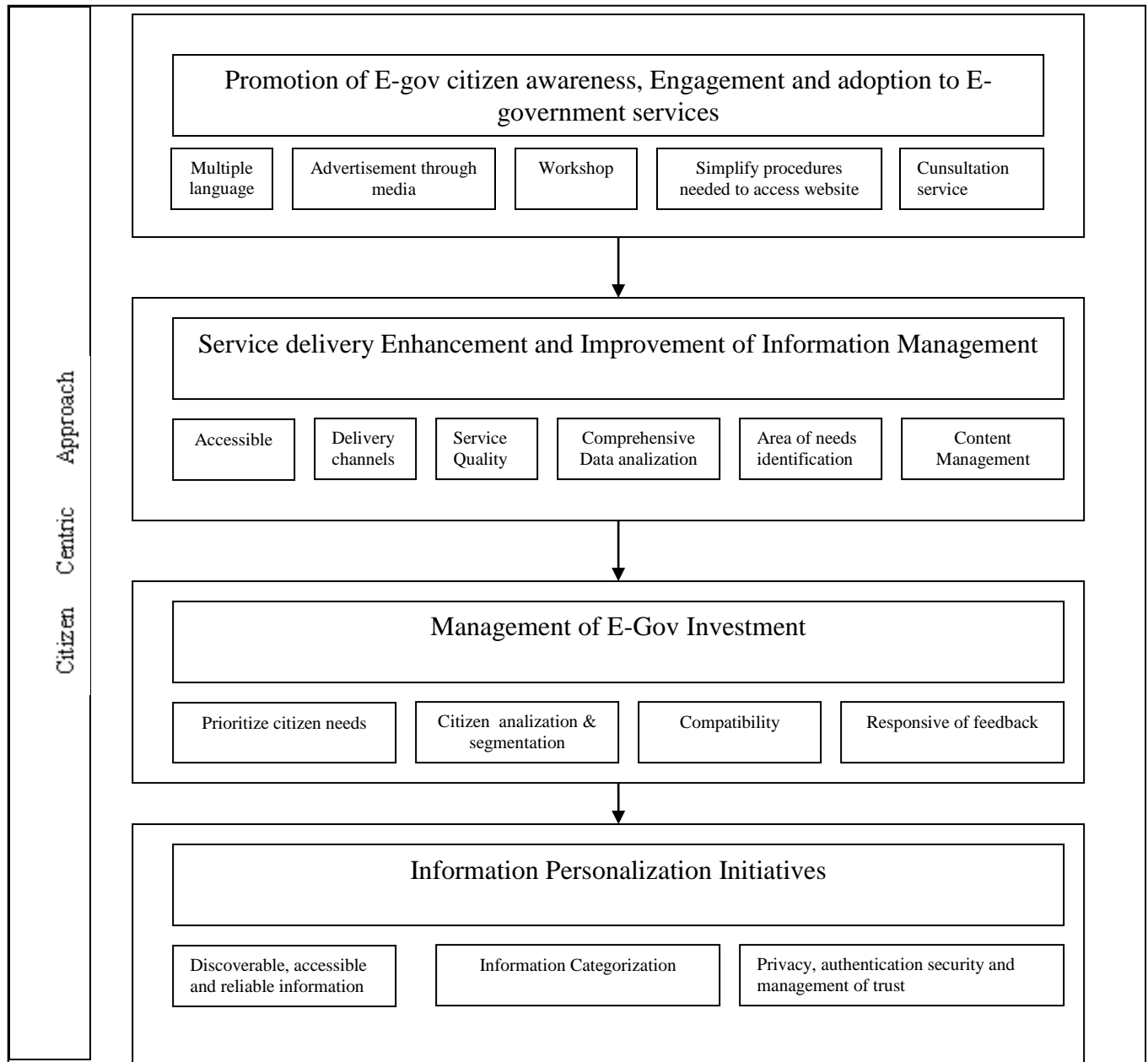
Citizen-centric approach is adopted from the customer centric objective in US DOI E-government, Regarding the Promotion of E-government citizen awareness, Engagement and adoption to E-government services level, Multiple language, Advertisement through media, Workshop, Simplify procedures needed to access website, Consultation service

are the main issues in building citizen awareness, researchers chose advertisement through media based on the findings from Suha AlAwadhi and Anne Morris in lack of awareness factors can be overcome by the advertisement through various media channel, Simplify procedures needed to access website is also adopted from Al Awadhi and Anne Morris findings. Those levels are adopted from many researchers hence citizen awareness to e-government service can be improved so that information personalization can be achieved

4.0   CONCLUSIONS AND FUTURE WORK

As mentioned earlier, the purpose of this research is about investigating the awareness of citizen to e-government services in order to engage citizen to use service provided, and analyze the current implementation of how e-government tries to promote their service, hence the behavior can be identified so that information and service can be delivered in more personalized way. By analyzing the factors from many researchers and strategies from another countries, researcher comes out with citizen-centric framework.

There are several open issues related to this study that needed for further study. By this Citizen-centric framework, hopefully the awareness of citizen is increasing and the last stage of citizen-centric framework can successfully be achieved. As mentioned earlier, another countries have adopted the information personalization approach. Using this citizen-centric approach, the best information personalization model can be analyzed aligns with the services and the needs for the citizen as well as the government agency.

An aspect that requires more study is related to the best information personalization model that will be adopted to this study. There are many personalization models can be adopted based on the needs of the business, and the future study is about what best personalization model should be adopted for government agency in Malaysia.

LIST OF ABBREVIATIONS

TNS	=	Taylor Nelson Sofres
ICT	=	Information Communication and Technology
G2C	=	Government to Citizen
IU	=	Intention to use
E-Services	=	Electronic Services
E-Government	=	Electronic government
E-Mail	=	Electronic Mail
TV	=	Television
DOI	=	Department of the Interior
CCO	=	Customer-Centric Objectives
MPJBT	=	Majlis Perbandaran Johor Bahru Tengah
US	=	United States

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