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The Utility of the UTAUT Model in Explaining Electronic Government Services Usage in Baghdad-Iraq

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Abstract: Electronic government (EG) is the application of computers, computer applications and electronic appliances in the governing activities and operations of a government; whereby both the government and the public interact transact electronically. Baghdad being tagged as a unsecured place to live area has received lesser related studies on practicability of EG. Variables like infrastructure, social factors, security, users behaviour and the more are to be determined majorly before the adoption of EG as a technological package. With the theoretical perspectives of the Unified Theory of Acceptance and Use of Technology (UTAUT) this study is aimed at investigating the related variables that could mitigate the adoption of EG in Baghdad. Scores of studies have employed UTAUT to achieve similar objectives, but none has implemented UTAUT to the adoption of EG in public agencies and particularly in a poor infrastructure and risky streets like Baghdad. This study proposes to quantitatively examine the usage behaviour of EG in Baghdad, with that, data would be gathered from Baghdad- Iraq.

Keywords: Baghdad, UTAUT, Conflict, EG, Adoption, Quality of Living.

1. INTRODUCTION

Electronic government is an electronic application with the main orientation of serving beneficiaries faster and wider than the traditional governmental settings can offer. In other word EG mean “the use of

information technologies in public administration” (Biasiotti & Nannucci, 2006). The literature of information system missing to cover the attitude, intention and use of information technology in general and EG services in specific in unstable environment (violence, crisis, wars, threats, conflicts, corruption, bad environments to live). Khan (2010) posited that there is a significant affection between the conflicts, security and quality of living and the successful adoption of EG, but still there is no explicit proof on whether violence and risky streets can affect the adoption EG. The present life and unbalance nature of Baghdad therefore necessitate the effort to examine what effect the poor live in Baghdad could contribute to the acceptance of EG in Baghdad. In that purpose, this study proposed to adopt the theoretical perception of UTAUT to examine the adoptability of UTAUT in Baghdad and in that course, will elaborately explain the type of conflicts in the world.

2. WELFCARE (QUALITY OF LIVING) AND CONFLICTS

Baghdad retains the lowest spot as the city with the world’s worst quality of living, regarding to the Mercer 2012 Quality of Living Survey. Globally, the cities with the lowest quality of living are Khartoum, Sudan got (217); N’Djamena, Chad got (218); Port-au-Prince. Moreover, Haiti (219); and Bangui, Central African Republic (220). Finally, Baghdad, Iraq (221) ranks at the last. Among the live quality in violence and unsafe places, Pedersen (2002) explains that the world is increasingly witnessing different types of conflicts, several numbers of developing countries are burning from the flames of civil war and riots such as Afghanistan, Burma, India, Iraq, Myanmar, Nigeria, Pakistan, Philippines, Russia, Somalia, and Sri Lanka (HIIK 2008). HIIK (2008) estimated that among the 345 conflicts and crisis ongoing globally, the intrastate amounted to the largest and interstate attract a very minor number. The estimate is also presented that up to 111 conflicts are ongoing within Asia and Oceania, while Africa is staging up to 79 conflicts, 65 conflicts in being stages also in the Europe, 47 conflicts are ongoing in the Middle East and the Northern African while 43 conflicts is estimated in America.

Table 1
Conflicts forms in all over the world and location

<i>Conflicts forms in all over the world</i>	<i>Conflicts located in</i>
111	Asia and Oceania
79	Africa
65	Europe
47	Middle East and Maghreb
43	Americas

Source: HIIK (2008)

Obviously it takes little effort to describe the consequence of civil disorder on the country’s environment, mass psychological distortion, economical setback, and sometimes lead to the total downfall of the country (state of emergency) (Pedersen, 2002; Landrigan *et al.*, 2004). Khan (2010) echo that extant information technology literatures have been negligent about the possible inference of uprising conflicts from every corner of the world on the successful adoption, and usability of technological applications and services. Meanwhile some researches there exist on the effect of organizational conflicts on the adoption

of technology in the organization (Smith & McKeen, 1992). Invariably, the influence of organizational conflict on the adoption of technology is transmissible and could be potentially similar to the kind of role civil conflict plays on electronic government adoption.

Reported reasons and items justified for the occurrence of the conflict are enumerated as follows: Territory, Secession, Decolonization, Autonomy, System/ ideology, National power, Regional predominance, International power, and Resource control (HIIK, 2008).

It now becomes important to re-undergo an evaluation process to study the environmental factors that are affecting behavioural intention to use the EG services using UTAUT as the main theory. This is to also study how civil crisis and unstable environment status affect the usage behavioural of EG services.

Baghdad suffered from this long period of internal crisis (violence, risky streets and poor public health service) that led to lost of lives and property (Graafland-Essers & Ettetdgui 2003; Khan *et al.*, 2010; Van der Meer, 2003; Westall, 2011; Mercer survey, 2012).

3. BAGHDAD AND EG

The EG will transform the traditional access and transaction of governmental services through a portal where everyone can logon anywhere and anytime. Logically, besides the technical (infrastructure) and financial needs to determine the success of such project, there are still some social impediments that can still hinder the practicability of EG in Baghdad, some of them are investigating the adoptability EG by the people of Baghdad, the attitude of the citizenry towards technology as whole and EG in particular, examine the technical know-how of the citizenry and the more under social variables that have been studied before and have been reported capable of intervening the success of a technology application. Alongside, there is a limited research on the effects of civil conflicts on adoption of technology and in particular EG services (Khan *et al.*, 2010). In corroborating with the claims of Almutiri (2007) some factors dictate the success and the failure of technology implementation, and these factors ought-to to be identified explicitly (Almutairi, 2007), hence this study is obliged to examine the factors that inform the success and the failure of EG in Baghdad-Iraq.

4. UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY IN CONTEXT

The aim of this study is to explore the theoretical perspective of UTUAT in the context of a conflict zone. The adoption of EG would be examined in while employing the theoretical elements of UTAUT to set the paradigm of the examination (Venkatesh *et al.*, 2003). Further noted that examining theories in new contexts can result in their breakdown and opportunities for the creation of new knowledge (Alvesson & Karreman, 2007). Moreover, (UTAUT) has four constructs to predict users' behavioural intention and behaviour of use, namely: (i) performance expectancy, (ii) effort expectancy, (iii) social influence, and (iv) facilitating conditions (Venkatesh, 2003). The relationships between these constructs, behaviour intention and behaviour of use are moderated by four key factors i.e. age, gender, voluntariness, and experience (Venkatesh *et al.*, 2003). The following Figure (1) shows the UTAUT diagram. Among the other technology adoption and acceptance model, UTAUT is the most complex model that combines the elements of other models to present a more appropriate adoptable model for the purpose of this study. UTAUT has been widely adopted in bounties of researches that tend to be relevant and recent in the realm of technology acceptance studies.

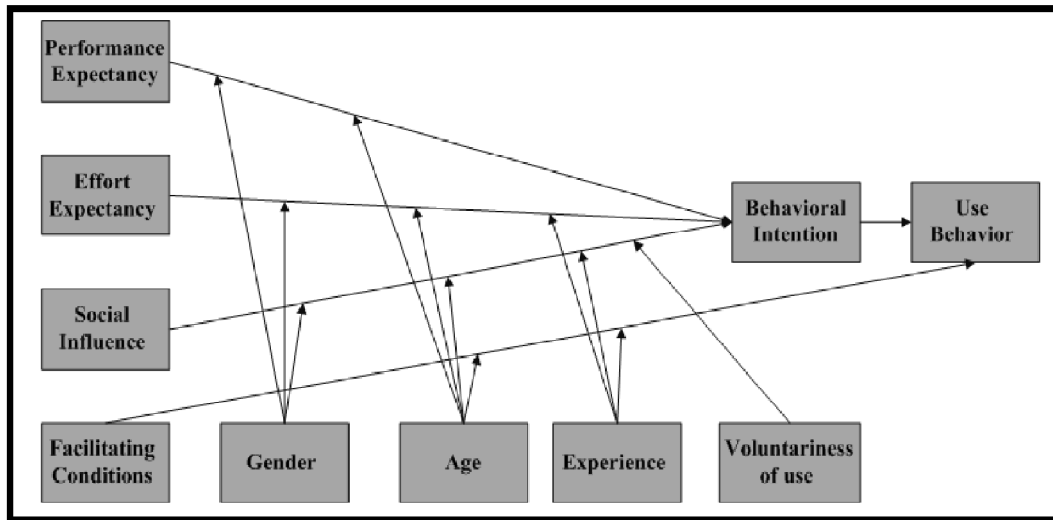


Figure 2: Unified Theory of Acceptance and Use of Technology (UTAUT)

Source: Venkatesh *et al.*, 2003.

The UTAUT has been adopted widely, and several studies have confirmed and reconfirmed the model validity and reliability in different countries (Carlsson *et al.*, 2006; Wu *et al.*, 2007; AlAwadhi & Morris, 2008; Adulwahab & Dahalin, 2011; Maldonado *et al.*, 2011), evidently that justified it suitable for this study.

Scores of studies have examined the technology acceptance behaviour of users from developing countries (AlAwadhi & Morris, 2008; Al-Shafi & Weerakkody, 2009; Al-Shafi & Weerakkody, 2010 ; Yahya *et al.*, 2011). Venkatesh and Davis (2000) identified a strong relationship between a successful implementation of a technology and the acceptance behaviour of the technology (Venkatesh & Davis, 2000). Similarly, (Straub, 1997) planted that successful implementation of a technology is proportionate and related to acceptance and usage behaviour. Implementations and development of a technology are an inevitable crucial stage before determining the adoption, acceptance and the usage of the technology at all (Faaq *et al.*, 2009).

Wang and Shih (2009) illuminate that UTAUT has been aptly used to test for the adoptability and acceptance of a mass oriented technology and reported that several studies have adopted the UTAUT theoretical view to examine the adoption of EG in particular (Al-Shafi & Weerakkody, 2009; Wang & Shih, 2009; Al-Shafi & Weerakkody, 2010). The UTAUT model is a universal model that can be employed to test for any technology adoption process, most specifically to examine user's behavioural intentions (Liao & Jr, 2000).

This study is designed similarly to examine the adoption and the user acceptance of EG but uniquely determine to examine the adoption through the government to the citizen (G2C) view. Hence this study would focus the governmental terms of adopting EG from transactions with the citizenry. The benefits of the EG adoption of the governmental services (renewal of drivers license, paying of summons, Q card (Key card), registering and obtaining an international passport, Death and Birth registration, according to the list of governmental services by (Carter & Belanger, 2004).

5. POPULATION AND SAMPLING THAT PROPOSED TO IMPLEMENTATION UTAUT:

The study will focus on the (G2C) services mainly, covering the range of all government services, such as social, economical, and the rest in the specific context of crisis and war zone. Baghdad citizenry from Baghdad University from different levels of demographical features would therefore be surveyed for the purpose of this study.

6. FINDING

The findings of the study would practically and encouragingly contribute to the government decisions in Baghdad especially over the course of adopting an EG. And would also provide empirical lay down for the decision makers of Baghdad, IT practitioners, and posterity on the adoption of EG in Baghdad specifically and technological adoption and acceptance in Baghdad in general. Lastly, there are millions of Baghdadis have been waiting to improve in them live and reducing the corruption by enhancing the EG services.

7. LIMITATIONS OF THE PRESENT STUDY

This study proposes to include UTAUT as an underpinning theory to a determinant the effects of unsecured environment to live of citizen (users) among EG services. Therefore, there is a need to involve another theories to measure the environment's effects on users for example: Technology Acceptance Model (TAM), ii. an extension of TAM or what is known as TAM 2, iii. Innovation Diffusion Theory (IDT), iv. Theory of Reasoned Action (TRA), v. Theory of Planning Behaviour (TPB), vi. Combined TAM and TPB (C-TAM-TPB), vii. Motivational Model (MM), viii. Model of PC Utilization (MPCU), ix. Social Cognitive Theory (SCT) and DeLone & McLean. Moreover, this study carry out one services out of four, in another word this study concern on government to citizen services and there is a clear gap to measure the effect of environment and quality of living on different types of EG services such as; government to government, government to employee and government to business. In same time, there is a lack of testing the variables that affect attitude, intention and usage behaviour and satisfaction of users as well. Furthermore, there is a necessity to measure the electronic bank, electronic commerce, electronic learning, electronic system, electronic healthy record, electronic ticket, key card, Q card, smart card, visa card, master card, computer/iPad/tablet adoption, mobile government (M-G), telecenter adoption, under different forms of conflicts and poor quality of living in developing and developed nations.

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