

## Chapter 72

# The Moderating Effects of Awareness on Antecedents of Behavioral Intention to Adopt Mobile Government Services: The Moderating Effects of Awareness

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### ABSTRACT

*The motives behind this study were to examine the moderating effect of awareness as well as direct effect of several determinants on behavioral intention to adopt m-government services. A quantitative survey was conducted in Tanzania rural area to collect data used in this study. Stratified and multi-stage sampling techniques were employed to select unit of interest. 407 usable questionnaires were collected and analyzed by using structural equation modelling. The results show that awareness does not have moderating effect on the specified model's paths. Furthermore, the study shows that relative advantage, ease-of-use, compatibility and government support have significant direct influence on rural farmers' behavioral intention to adopt m-government services. This study expands scholars' knowledge on the moderating effect of awareness on the adoption of m-government technologies, furthermore the study provides useful practical implications to policy makers on how to increase the adoption of m-government services in Tanzania rural areas.*

### INTRODUCTION

Most of the government institutions have adopted the use of information and communication technology (e-government) to enhance effectiveness and efficiency in providing public services. Through electronic government services, accountability and transparency in government services have increased and hence good governance (Aman, Al-Shbail, & Mohammed, 2013). E-government requires availability of fixed

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internet infrastructures and personal computers in order to deliver the intended public services to stakeholders particularly citizens (Qian & Aquaro, 2014). The uses of e-government have been considered to be effective in developed countries where communication infrastructures are well established (Qian & Aquaro, 2014). Contrary to that, in developing countries, rural areas in particular where large population lives, the use of e-government is considered to be ineffective due to lack of internet communication infrastructures required to enable its operations (Kushchu, 2007; Qian & Aquaro, 2014). Most of the developing countries are considered to have insufficient resources to finance development of e-government infrastructures (Chen, Chen, Huang, & Ching, 2006). As a result of this, dependence on e-government for delivery of public services and information is not viable. Nevertheless, the evolution of mobile technology is considered as alternative channel which can enhance accessibility of public services and information in developing countries, particularly in rural areas where communication infrastructures are considered to be limited (Kushchu, 2007). Most of the governments worldwide have adopted the use of mobile government (m-government) in providing public services.

Mobile government services are considered as the uses of mobile technology, services and applications to deliver public services and information to stakeholders (Kushchu, 2007). The uses of m-government services is considered as the value-added-services (VAS) to e-government services (Turban, King, Lee, Liang, & Turban, 2015). This is because, through m-government services: (1) government could expand e-government services accessibility; (2) increases the number of services users (3) allow citizens living in isolated and rural areas to access public services and information anytime, anywhere. The uses of m-government services has attracted a number of empirical studies to broaden scholars, practitioners and policy makers' knowledge on factors which could influence citizens to adopt and use m-government services (Abu-Shanab & Haider, 2015; Althunibat, Alrawashdeh, & Muhairat, 2014; Liu et al., 2014; Osman, 2013; Wang, 2014). Nevertheless, there is lack of empirical studies in developing countries particularly in Sub Saharan countries that examine factors which could enhance m-government adoption. Therefore, the current study fills the existing gap by examining factors which could influence rural farmers in Tanzania to adopt m-government services.

Different studies have been conducted in Tanzania to identify problems which limit adoption of ICT (Dewa & Zlotnikova, 2014; Munyoka & Manzira, 2014; Oreku & Mtenzi, 2012; Yonazi, 2013). Factors such as inadequate government support, lack of awareness and technological factors related to lack of usefulness, complexity, incompatibility have been widely considered to limit ICT adoption (Dewa & Zlotnikova, 2014; Yonazi, 2013). Therefore, in examining the determinants of m-government in Tanzania rural areas, this study extended innovation diffusion theory (IDT) with government support to develop the conceptual model.

Furthermore, due to the fact that awareness is considered as the major factor in adoption of e-government (Meftah, Gharlegghi, & Samadi, 2015), this study incorporated awareness as the moderating factor to examine how different levels of awareness could affect determinants of m-government services in Tanzania rural areas. This is because, rural farmers with different levels of awareness on m-government services could be influenced by different factors (de Pablos & Lytras, 2009).

Moreover, inadequacy of information about a certain technology may cause potential adopters to have different perception with those who have adequate information about the technology (Rogers, 1995). While there is evidence that the, level of awareness may show some variations in UTAUT results (Abubakar & Ahmad, 2015; Pugh, 2017), there is no evidence of any study which has been conducted to examine if the level of awareness could be the source of variation in Innovation Diffusion Theory's result. This

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