Chapter 80
Demographic Influences on E-Payment Services

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ABSTRACT

This study investigated customers' preferences of payment systems and the influence of demography on the attitude of customers towards e-payment services. Survey responses were received from 558 bank customers. The t-test and the analysis of variance were employed to examine the differences in perception of security, ICT literacy, customer satisfaction, and the use of e-payment services based on customers' age, gender, and the level of education. The findings revealed no significant differences between the male and female customers in the use of e-payment services. However, the male customers had higher ICT skills, yet perceived e-payment services less secured. Moreover, there were no significant differences in satisfaction and e-payment use, though, customers with higher level of education felt less secured using the services. Also, whereas the older customers were more satisfied with e-payment services, the younger customers had more ICT skills and use the services much more. These findings are necessary for formulating strategies for marketing e-payment services.

INTRODUCTION

Advancement in information technology facilitates developments in electronic payment (e-payment) systems where goods and services are traded without the use of physical cash (Tee & Ong, 2016). An electronic payment is an electronic or a type of non-cash means of making payments (Morgan, 2013). The current growth in the use of e-payment systems demonstrates its potential to transition the unbanked and poor communities into the mainstream financial services (Eraker, Hector, & Hoofnagle, 2011). This

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would as a result transform a cash-based economy to a cashless economy. There are two main classifications of payment instruments, namely cash or non-cash. Cash is generally paper-based (physical cash) while non-cash instruments are predominantly performed by electronic means. An economy may be primarily non-cash or cash-based depending on the level at which e-payment services are being used.

In many developing economies trading and settlement activities are still densely cash-based. For example, the ratio of currency outside banks in some selected developed and developing nations shows that Ghana as at the end of 2014 had the highest currency with the public to narrow money ratio of 39.96% as compared with Nigeria (20.77%), Gambia (33.46%), Bulgaria (32.68%) and Romania (33.64%), United Kingdom (4.52%) and Sweden (3.93%) (Bank of Ghana Annual Report, 2014). Adopting e-payment systems have numerous positive impacts on an economy. Unlike traditional cash transactions, e-payments systems simplify making economic transactions, provide quicker access to funds (Oginni et al. 2013) and discourage robbery and other cash related crimes (Armey et al., 2014). On the contrary, cash transactions do not keep documentary evidence of movement of money; can promote bribery and corruption, tax evasion, under invoicing; and have very high risk implications (Zandi & Singh, 2010). Besides, cash transactions require huge cost of printing new notes and destroying mutilated ones. But the developments of the card payment system allow for lowering the costs of money in circulation and thereby lead to significant economic gains (Goczek & Witkowski, 2016).

There has been an increasing deployment of various e-payment services by the banks and the telecommunication service providers; ranging from the use of cards (credit and debit cards), electronic cheque clearing, electronic funds transfer, Internet banking (Jagannathan et al., 2016), to mobile banking (Liébana-cabanillas et al., 2014). Internet banking (e-banking) is an electronic payment platform that allows the users to perform financial transactions through the financial institution's website. Similarly, mobile banking (m-banking) allows smartphone users to perform online banking transactions. In recent years, telecommunication service providers have introduced various innovative e-payment services. These include Airtel money, Tigo funds transfer, MTN money transfer, Vodafone money transfer, and e-zwich. Though these services are available, user acceptability and utilization are of critical importance (Nwankwo & Eze, 2013).

Previous studies examined factors influencing e-commerce adoption (Al-Somali et al., 2015), consumer's intention to use e-payment systems (Widodo & Junadi, 2015), and the adoption of mobile payment services (Keramati et al, 2012) with little focus on customers' demographic characteristics (age, gender, and educational level). This paper draws on the unified theory of acceptance and use of technology (UTAUT) to gain deeper understanding of how customers' demographic differences influence their perception of e-payment security, the level of information and telecommunications technology (ICT) literacy, perceived satisfaction with available e-payment services, and the current level of e-payment use. The perception of security is the extent to which a user trusts that the e-payment service providers would protect their sensitive data. According to Panel (2002), ICT literacy is a "person's ability to use digital technology, communication tools, and/or networks to define, access, manage, integrate, evaluate, create, and communicate information ethically and legally in order to function in a knowledge society". The user's satisfaction with a technology is a feeling of pleasure or disappointment as a result of comparing a service performance in relation to the user's expectation (Nimako et al, 2013). The intention to use a technology is the degree to which a person has formulated conscious plans to perform or not to perform some specified future behavior (Venkatesh, et.al. 2012).

These behavioural factors are important as the continuous patronage of e-payment systems depends largely on the customers' perception of e-payment security (Andreev, Pliskin, & Rafaeli, 2012; Kamoun