Factors Affecting e-Payment Adoption in Nigeria

Roya Gholami, Aston Business School, UK
Augustine Ogun, Aston Business School, UK
Elizabeth Koh, National University of Singapore, Singapore
John Lim, National University of Singapore, Singapore

ABSTRACT

The payment system of a country plays a crucial role in its economy; however, despite the benefits of e-Payment and efforts by financial authorities, Nigeria still has a low e-Payment adoption rate. In this regard, there is an urgent need to investigate the factors that affect individuals' intention to adopt e-Payment. Drawing on the unified theory of acceptance and use of technology (UTAUT) model, this paper develops a theoretical model for e-Payment adoption in Nigeria. Additionally, a survey was conducted on 500 respondents with 213 complete responses received to test the model, and results show that perceived benefits, effort expectancy, social influence, trust, awareness, and demographic variables affected individuals' intention to adopt e-Payments. Based on the findings, managerial and theoretical implications are deliberated.

Keywords: Adoption, E-Commerce, E-Payments, Nigeria, Unified Theory of Acceptance and Use of Technology

INTRODUCTION

The growth of information and communication technology (ICT) has revolutionized traditional systems of payment. Individuals can now carry out many kinds of transactions for goods and services using new methods instead of traditional methods of cash and cheques. This phenomenon of cashless payment is known as e-Payment. With e-Payment systems, individuals can pay for goods and services over the counter and via the Internet without the use of cash. E-Payment systems have various properties, some of which include; convenience, safety, transparency, time and cost savings of transactions. The payment system of a country plays a crucial role in its economy, as this is the enabling channel for the flow of financial resources. Nigeria, although a developing country, is a regional leader and one of the world’s largest producers of oil. Her economy is heavily dependent on the oil sector, which accounts for about 95 percent of export earnings and 75 percent of government revenues (CIA World FactBook, 2009). It has the fastest growing ICT market in Africa and; its banking system is currently facing the largest industry convergence in the history of banking in Africa.

DOI: 10.4018/jeco.2010100104
According to the Economist Intelligence Unit’s (2007) study of government e-Payment adoption, Nigeria was ranked 42nd among the 43 countries that were investigated. Nigeria scored poorly in all six categories – consumer to government, government to consumer, business to government, government to business, infrastructure, and the educational, economic and political context. Ayo (2006) investigated the prospects of e-Commerce in Nigeria based on ability, motivation and opportunities (AMO) model and observed that virtually all companies in Nigeria have online presence. The paper reported the motivation and opportunities for e-Commerce as low based on lack of e-Payment infrastructure and access to ICT facilities.

The Central Bank of Nigeria (CBN) has been very concerned about the lack of adoption in Nigeria not just because of the risk of carrying cash, but also the costs involved in issuing cash which include; production, storage, processing, distribution, security and transportation (Babalakin & Co, 2002). Much effort has been invested to improve the payment system and to move the country from a cash-based economy toward a cashless society. For instance, a national payment system has been set in force to encourage e-Payment adoption. The banks and electronic switching companies have also rolled out infrastructure to facilitate the use of e-Payments.

Despite efforts by CBN and other financial institutions, Nigeria is still a country that is highly dependent on cash with over 90% of funds in circulation (Ovia, 2003; Ojo, 2004). According to CBN records, cash circulation as of 31st January 2008 was N867,454,000,000 (USD 5972,000,000) which is a 40% increase from 2005. It might be argued that Nigeria is a developing country and as such the low e-Payment adoption might be due to its underdeveloped infrastructure; however when compared to other developing countries like China, Brazil, Turkey and South Africa, these countries have gone ahead of their infrastructure in e-Payment adoption (Economist Intelligence Unit, 2007).

A possible reason arises from the many fraudulent incidents originating from Nigeria. Several scams have made Nigeria infamous such as the Advance Fee Fraud (Ayo, 2006) and individuals are concerned about fraud risks from e-Payment (Agboola, 2006; Lee, 2009). Nevertheless, there is a slow but increasing attitudinal change among the population due to measures to curb fraudulent practices (Ayo, 2006). For instance, laws were tightened to increase criminalization of fraudulent activities such as the Money Laundering Act of 1995 and a national cybercrime working group was set-up. An e-Payment system facilitated by InterSwitch has also raised security standards. Thales e-security – a global industry leader in WAN data encryption, has recognized the reliability and security provided by the company and has appointed it as its Gold Partner (Oronsaye, 2006).

Another inhibiting factor could be the rate of Internet adoption. Yet, Minwatts Marketing Group (2008) reports that the Internet penetration rate in Nigeria has been steadily increasing from 3.1% of the population in September 2006 to 7.2% of the population in March 2008. Research is needed to examine the underlying reasons for the reluctance among individuals in Nigeria to adopt e-Payments. Some previous studies have been done in the area of online banking, e-commerce and mobile commerce (Babalakin & Co, 2002; Ayo, 2006; Chiemeke, Evwiekpaefe, & However, 2006) there exists limited research on e-Payments adoption in Nigeria especially studies with a theoretical foundation (e.g., Ayo & Babajide, 2006). Therefore it is important to investigate individual adoption of e-Payments within the country. The unified theory of acceptance and use of technology (UTAUT) model (Venkatesh & Morris, 2003) incorporates internal and external influences that predict an individual’s behaviour. It has also been increasingly employed in the adoption literature. Using the UTAUT model, this paper will seek to address the following research question, what are the factors that influence
Related Content

Internet of Things (IoT) Service Architecture and its Application in E-Commerce
Xiaopu Shang, Runtong Zhang and Ying Chen (2012). *Journal of Electronic Commerce in Organizations* (pp. 44-55).
[www.irma-international.org/article/internet-things-iot-service-architecture/72897/](www.irma-international.org/article/internet-things-iot-service-architecture/72897/)

Towards Improved Performance: A Model for Testing Email Newsletter Design
Mari Hartemo, Reima Suomi and Ulla Hakala (2016). *Journal of Electronic Commerce in Organizations* (pp. 1-16).
[www.irma-international.org/article/towards-improved-performance/160307/](www.irma-international.org/article/towards-improved-performance/160307/)

Online Management of the Goods and Services Tax
[www.irma-international.org/chapter/online-management-of-the-goods-and-services-tax/199945/](www.irma-international.org/chapter/online-management-of-the-goods-and-services-tax/199945/)

E-Learning is a Social Tool for E-Commerce at Tertiary Institutions
[www.irma-international.org/chapter/learning-social-tool-commerce-tertiary/30321/](www.irma-international.org/chapter/learning-social-tool-commerce-tertiary/30321/)

Information Technology and Microfinance Institutions: Challenges and Lessons Learned
[www.irma-international.org/article/information-technology-microfinance-institutions/42978/](www.irma-international.org/article/information-technology-microfinance-institutions/42978/)