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IEEE Computer Society Nigeria Chapter

33rd ECOWAS iSTEAMS ETech Multidisciplinary Conference (ECOWAS-ETech)

Use & Gratification and Its Effect on the Post Adoption and Continuous Use of Mobile Payment Technologies in Nigeria

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ABSTRACT

The evolution of the mobile payment services market, which has fostered flexible and easy payment services, is regarded as the fastest growing FinTech service sector today in Nigeria. New mobile payment systems (e.g. Momo, Paga, ALAT, Apple pay, K pay, Android pay, AliPay) have reshaped the mobile payment service industry by allowing individuals to access their cash and conduct business at their convenience from any part of the world. Despite the benefits of mobile payment systems, researchers have always focused on the adoption and use of mobile payments. Usage challenges after adoption and the continuation of usage are seldom addressed in literature we posit that factors such as gratification as continued to influence the dynamics of diffusion of these technologies post deployment and adoption. Our effort in this research is to evaluate existing user gratification components inculcated into mobile payments systems in Nigeria viz-a-viz their influence on consumer adoption and continuous usage. We will employ the uses and gratification theory which has mostly been applied to social media usage to seek to understand the role of gratification in the continuous usage of Mobile Payment Systems. A mixed research method to examine, evaluate and draw inference on the role that use and gratifications plays on users' attitudes towards continuous use of mobile payment use will be adopted using qualitative and quantitative research methods. . The intention is to be able to determine the role Use and Gratification plays in continuous usage and thus proffer possible recommendations to service providers, policy makers and the consuming public on the dynamics that gratification plays in the use of mobile payment systems

Keywords: Use, Gratification, Post Adoption, Continuous Use, Mobile Payment, Nigeria

Proceedings Citation Format
Longe E.O. & Jimoh, R.O. (2022): Use & Gratification and Its Effect on the Post Adoption and Continuous Use of Mobile Payment Technologies in NigeriaMultidisciplinary Conference. University of Ghana/Academic City University College, Ghana. 29th Sept – 1st Oct, 2022. Pp 196-206. www.isteams.net/ghanabespoke2022. dx.doi.org/10.22624/AIMS-/ECOWASETECH2022P39

1. INTRODUCTION

The advancement in Information and Communication Technology (ICT) has led to the rapid and wide diffusion of mobile phones in Nigeria. This has giving consumers in the financial services industry manynew services (Chang, Wong, Lee, & Jeong, 2016).). Over the years, the capabilities of ICT have been harnessed to automate financial sector transactions. Thus, Financial Technology (FinTech) has recently emerged and increasingly being adopted by businesses. The term FinTech from the blend of the words "Financial" and "Technology" (Ryu, 2018). FinTech refers to an economic sector consisting of companies adopting and using technology to make financial systems more efficient (McAuley, 2014).

Progressively, FinTech has become a metaphor for technologies that disrupt the traditional way of offering financial services by enabling individuals to make payments, transfer monies, access and request for loans, raise funds, manage assets and perform other banking transactions on mobileplatforms (Mathur, Karre, Mohan, & Reddy, 2018). This, therefore, enables individuals to conductfinancial transactions at their convenience anywhere and anytime on their mobile device (Nicoletti,2019; Wang, Hahn, & Sutrave, 2016; Yonghee, Young-Ju, Jeongil, & Jiyoung, 2016). Examples of key FinTech innovations are mobile payments, cryptocurrencies and blockchain, artificial intelligence and machine learning, equity crowdfunding, peer-to-peer loans, and new digital advisory and trading (Philippon, 2016; (Kang, 2018; Wang et al., 2016; Yonghee et al., 2016).) .

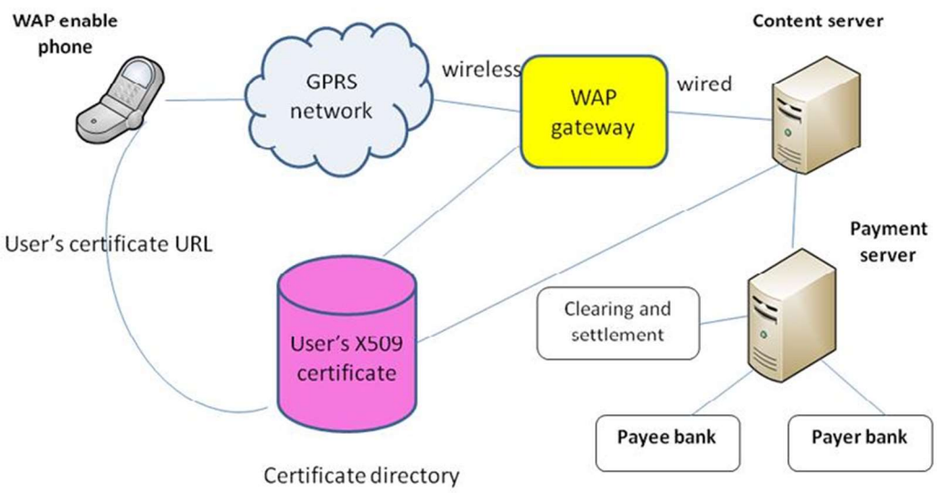

Fig. 1: Mobile Payment System Architecture
Source: https://www.researchgate.net/figure/The-architecture-of-mobile-payment-platform-based-on-WAP-GPRS_fig2_228409169

1.1 Mobile Payment Systems

Mobile payments give both customers and business owners more flexibility in how transactions are handled. Consumer interest in mobile payments has increased over the past few years There are different types of payment technologies with unique features and benefits, despite that they are often described under the generic term “mobile payments.”

Mobile payments with a credit card

Mobile payments that involve swiping or inputting credit card information into a mobile device (like a smartphone or tablet) or small card reader (called a dongle) that plugs into the headphone jack of a mobile device are particularly cost-efficient options for small-business owners. Not only might the business owner already own the mobile device required to process credit or debit card transactions (once he/she has established a merchant account with a payment provider), fees tend to be nominal, and flexible based on the business’s transaction frequency.

The technology is simple to use, and doesn’t require an investment in point of sale terminals, or that a business have a sophisticated infrastructure. Businesses that choose a mobile payment processor that guarantees payment card industry (PCI) compliance can manage the risk associated with handling sensitive customer data to ensure it is appropriately encrypted during transaction processing. This form of mobile payment options also gives customers the added convenience of paying with a credit card at a business’s physical storefront, or at remote events like trade shows, festivals, or even, at the client’s home or place of business. Despite the point of sale conveniences, the customer must still carry a wallet or card in order to pay.

Mobile wallets

Mobile wallets, by contrast, empower customers to leave their physical wallets and cards at home. Once the customer has established a mobile wallet and uploaded the forms of payment he/she wants to keep securely stored in it, the customer can access the mobile wallet’s app to pay at the point of sale, using a mobile device. While the merchants who are now equipped with the near-field communications (NFC) readers at point of sale terminal required to use the technology are on the rise (thanks in part to the recent launch of mobile wallet technologies like ApplePay), mobile wallet acceptance is still inconsistent. If a merchant isn’t equipped with a NFC terminal, consumers may not be able to use their mobile wallet to pay.

Digital wallets

Similar to mobile wallets, digital wallets securely store a registered user’s financial and credit card information, negating the need to enter card information or present a physical card to a merchant. (PayPal was one of the first versions of digital wallet technology). Digital wallet technology could be considered the “forefather” of the mobile payments movement, however they are not inherently designed for use on mobile devices. However, some are now accessible on a mobile device, if the customer has downloaded the provider’s mobile app. Unlike a mobile payment transaction that involves the merchant entering the customer’s card information into a reader, both digital and mobile wallet transactions empower customers. Customers (not the merchant) initiate the transaction, and choose the payment processor. Subsequently, digital and mobile wallets lower the risk merchants absorb when customers use credit or debit cards to pay: Merchants do not handle any aspect of processing, handling or storing customer’s sensitive financial data when a mobile or digital wallet is used to pay.

Mobile Payment Systems in Nigeria

Some mobile payment Systems in Nigeria include

a) Skrill. Skrill Nigeria is one of the most popular eWallets in the world and with good reason. ...
b) Quickteller. ...
c) Transferwise. ...
d) Neteller. ...
e) Ecopayz.

Fig 2: Typical Mobile Payment Scenario
Source: https://squareup.com/ca/en/townsquare/mobile-payments

1.2 Gratification

Coined in the early 1940s by **Katz and Blumler** (1974), the uses and gratifications theory deals with understanding why people use certain types of media, what needs do they have to use them, and what gratifications do they get from using them

The Uses and Gratifications Theory is **a Mass Communication theory that focuses on the needs, motives and gratifications of media users**. The theory states that media consumers are passive consumers of mass communications; rather, they play an active role in media consumption The main advantage of the uses and gratification approach is that **it gives an insight to motivation for consuming a particular media content**, which complements the findings about the interaction between the media and its users. The basic premise of uses and gratifications theory is that **individuals seek out media that fulfill their needs and leads to ultimate gratification** (Lariscy et al., 2011). Examples of Uses and Gratification Theory. **People choose from their own choices and moods**. The needs of the particular person are met through the media used. Some people might watch news for information, some for entertainment, and some for self-reassurance. Some watch according to their moods. The main advantage of the uses and gratification approach is that **it gives an insight to motivation for consuming a particular media content**, which complements the findings about the interaction between the media and its users.

In a previous research (Mutia et al, 2019) explored the motives of GO-PAY users in using gamification, as one of the loyalty programs, by using uses and gratification(U&G) perspectives. U&G perspectives was successfully implemented to identify the factors that effect on continuous intention to use a variety of media, but its application in mobile payment context is still limited. Hedonic gratification (perceived enjoyment and passing the time), utilitarian gratification (ease of use, self-presentation, information quality, and economic rewards), and social gratification (social value) were found to influence continuous usage.

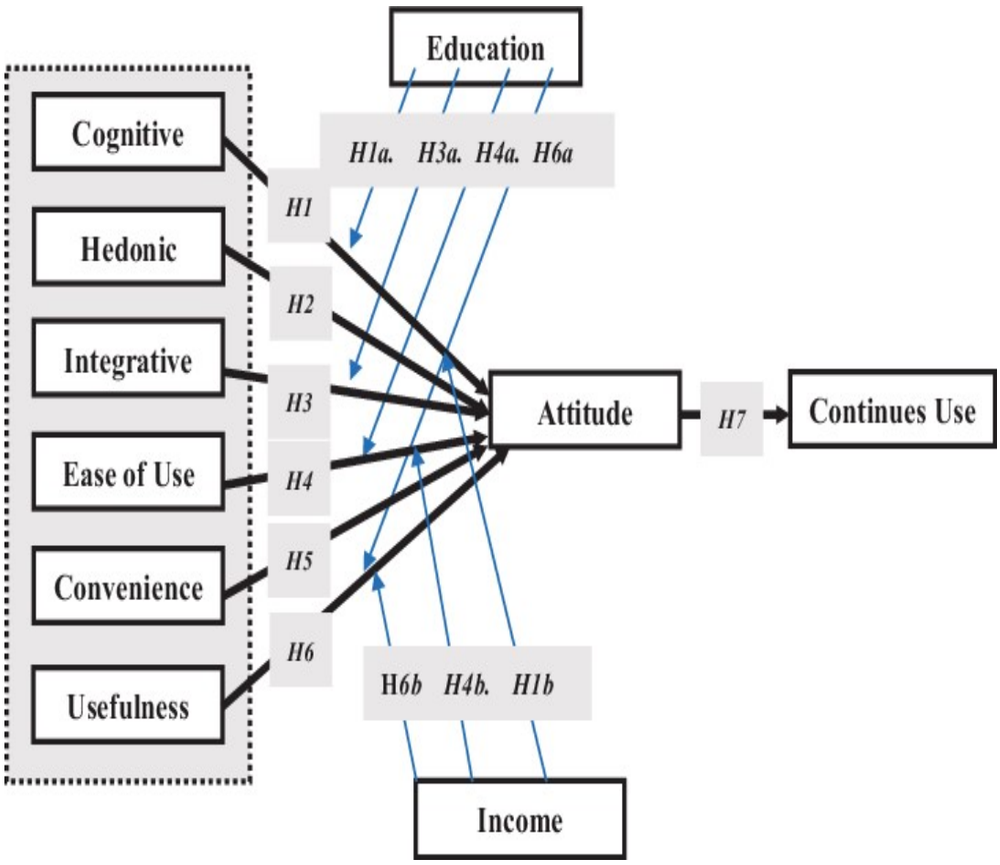

Fig 2: Conceptual Model of Use and Gratification
Source: AlHassan et al, 2020.

We intend to apply U& G context to continuous usage of mobile payment in Nigeria and thus determine the underlying factors influencing post adoption usage in this context. We will extend this framework by further examining other issues such as security, reward systems, government financial policies, customer recognition, efficiency and derivable values viz-av-z the role they play in influencing continuous usage

2. MOTIVATION FOR THE STUDY

Literature has established that Integrative gratification, Ease of use gratification and Usefulness gratification significantly influence users' attitudes towards mobile payment use. As aresult, mobile payment service providers need to ensure that services provided continuously enable users to enjoy these forms of gratification (that is, Integrative gratification, Ease of use gratification and Usefulness gratification). That is, when they enjoy these gratifications, they intend to patronize mobile payment services more. Similarly, results indicate that Hedonic, Convenience, and Cognitive gratifications did not influence users' attitudes towards mobile payment use.

Therefore,there is need for mobile payment service providers to integrate mobile payment with featuresof these gratifications so that individuals can enjoy them. To policy, creating a favorable ICT environment will positively influence users to adopt and use mobile payment services. An enabling ICT environment in the form of ICT access and infrastructure will equip individuals with the necessary tools to conduct mobile payment transactions. Similarly, an enabling environment in the form of ICT legislation and policy will ensure that users' financial information is protected and secured. Thus, this study will provide policymakers, especially the financial sectors, a clear insight into the gratification effect on their customers attitude towards the adoption and use of mobile payment services.

3. STATEMENT OF THE PROBLEM

Mobile payment is gradually changing the payment service sector and transforming the way traditional banking is been carried out (Yonghee et al., 2016). This type of payment service bringsbanking to the doorstep of customers by ensuring that they can access their cash and transact business from any part of the world at their own convenience (Kang, 2018). However, despite thenumerous benefits this disruptive technology brings, there exists a dearth of literature on this disruptive technology (Puschmann, 2017).

Extant research on mobile payment has largely focusedon initial adoption and use of mobile payments (Chang et al., 2016; Ozturk et al., 2017; Yongheeet al., 2016). There exists a dearth of research on post-adoption studies of mobile payment (Zhou,2014). In addition, previous studies on initial adoption have largely focused on the functional benefits users derive from mobile payments and how it affects their adoption patterns. For these studies, mobile payment is a service that adds functional value to its users (Chang et al., 2016; Ozturk et al., 2017) rather than a non-functional one.

4. RESEARCH OBJECTIVES AND APPROACH

With reference to the gaps identified in literature regarding the continuous usage of technologies especially mobile payment systems, this study aims to identify and examine the effect of use and gratifications on user attitude and post adoption and continuance use of mobile payments in Nigeria.

This Research Objectives are;

a) To investigate the nature of mobile payments Systems in Nigeria
b) To evaluate existing gratification components embedded in existing mobile payment systems
c) To examine the effect of gratifications on user attitude towards post adoption usage of mobile payment systems

5. OVERVIEW OF EXISTING LITERATURE

In this section we present findings as well as gaps from exiting literature

Table 1- Overview of Existing Literature

S/No	Previous Research/ Article	Finding & Conclusions	Limitations/Gaps
1	Factors that motivate individuals to adopt FinTech services Chang et al.(2016)	• It was found out that, perceived usefulness and perceived ease of use both significantly influence attitude to use mobile payment. In addition, attitude towards mobile payment use has a positive significant effect on the intention to use . • Regulatory focus theory (RFT) using Quantitative approach	Need for future studies to consider both functional and non-functional benefits obtained from mobile payment use and its influence on use intention
2	Extended TAM Kim, Mirusmonov,& Lee (2010)	• Findings suggest that strong determinants of intention to use mobile payment systems are perceived usefulness and perceived ease of use .	Researchers have criticized these theories (eg. TAM) for not being able to appropriately explain user's behavior

S/No	Previous Research/ Article	Finding & Conclusions	Limitations/Gaps
3	Extended TAM Mun et al.(2017)	• Findings showed that perceived usefulness, perceived ease of use, social influence and perceived reputation significantly influence user's adoption of mobile payment systems with perceived usefulness been the strongest determinant". •	• The extended DML model is an undertaking of daunting proportions. In order to make this task manageable the reuse of related standards and taxonomies is required.
4	Factors that influence mobile payment ac Ozturk et al. (2017)ceptance	• Valence theory	• Future studies should examine variables such as; hedonic benefits, usefulness the intention to use in different contexts .
5	Factors influencing the continuance use of mobile payments Zhou (2014)	• Conceptual model	Future studies should focus on examining the effect of variables such as perceived enjoyment and switching cost on the user behaviour of mobile payments. the effect of flow experience (perceived enjoyment, perceived control and concentration), switching cost and perceived risk on use behaviour of mobile payment .
6	The Adoption of Mobile Payment Services for "Fintech" Yonghee et al. (2016)	• The study highlighted a set of standardized definitions and descriptions to represent significant threat agents. The goal to help in risk management and specifically to identify threat agents relevant to specific assets.	Call for future studies to investigate the effects of moderators such as age, income, etc. on mobile payment use intention .

S/No	Previous Research/ Article	Finding & Conclusions	Limitations/Gaps
7.	Effect of Gratification on User Attitude and Continuance Use of Mobile Payment Services: A Developing Country Context. Journal of Systems and Information Technology Alhassan et al (2020)	This study investigated the gratifications driving the attitude and continuance use of mobile payment services in developing country context, such as Ghana. Also, the moderating effect of income and education on gratifications and attitude of users is explored.	The study calls for replication in other countries
	Gratification Sought in Gamification on Mobile Payment Mutia et al, 2019)	explored the motives of GO-PAY users in using gamification, as one of the loyalty programs, by using uses and gratification(U&G	Same and other parameters not used here are recommended for consideration in different contexts of technology

6. RESEARCH METHODOLOGY

This study will adopt a mixed method approach using qualitative and quantitativeresearch method. Surveys will be utilized as a quantitative research approach that is grounded in the positivist paradigm. Furthermore, a research instrument will be developed to gather primary data for analysis. The study population will consist of various categories of users of mobile payment systems. Service providers will also be interviewed and questionnaire administered.

We will engage in a cross-sectional research that relies on questionnaires as its data collection instrument. The questionnaires will be administered in order to obtain data from respondents. The survey instrument (questionnaire) will be developed by reviewing literature on mobile payment adoption and use. From reviewing literature, the Uses and Gratifications theory will be adopted, and a pre-test of the questionnaire will be carried out by soliciting expert views and opinions regarding the test items.

Survey design

The questionnaire for this study will be made up of three parts. Part A concentrated on the demographics of the respondents. This will included questions such as Gender, Age, Marital status, Occupation, and Monthly income. Part B will be focused on mobile payment usage. Questions such as mobile payment service used, frequency of use and duration of use will be included in this part. Thefinal part, that is, Part C will focuse on the factors that drive gratifications obtained from mobile payment use. this part will also include questions on Attitude towards use and Continuance use of Mobile Payments.

Data Analysis

Data analysis of both qualitative and qualitative data will be done using in-vivo software. Structural equation modelling will also be carried out in order to draw inference from granulated data. Other statistical graphical tools such as pie and bar charts will be adopted top present results.

7. EXPECTED CONTRIBUTION TO KNOWLEDGE

Previous studies on the adoption and use of mobile payments described this field as promising. Assuch, they have called for future research to be carried out in order to unearth new findings that can add to literature, especially theories. With this advocacy, this study will be carried out to identify and examine the gratifications driving the attitude and continuous use of mobile payments in Nigeria. which has largely been ignored by previous research.

Similarly, the moderating effect of variables such as income and education on the relationship between gratifications obtained and continuance use intention have largely been ignored by previous research. Arguably, it is the firstresearch on gratifications and the continuous use of mobile payments. Therefore, this study will add to the existing literature in this area of research on mobile payment.

8. CONCLUDING REMARKS

Considering the deployment, adoption and diffusion of mobile payment systems globally, country specific studies which has become pertinent in order to relate the effect of socio-cultural, economic, policy and political factors as it affects the effectiveness and efficiency of these technologies. Our efforts is directed at employing mixed methods, qualitative and quantitative approaches so to unearth users' interpretations of the gratifications they obtain from mobile payment use. We hope to be able to identify the unique nature of antecedents based on the environment of the study and also find parallels that are global and applicable to other instances of the problem that is being addressed.

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