



MOBILE PAYMENT SYSTEM ADOPTION AMONG INFORMAL SECTOR IN ANAMBRA STATE

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Abstract: *Advancements in mobile technologies have led to an increased uptake of smart phones. This has led to a growing trend in mobile payment (m-payment) activities. However, Mobile payment system have not taken off as fast as expected. The slow adoption rate of mobile payment system raise many questions about what influences consumer behavioural intention to adopt. The main objective of this study was to ascertain the extent of Mobile Payment adoption among informal sector in Anambra State of Nigeria. The study adopted a survey research design because this design allowed the researcher to collect data from the respondents and make inferences from this information. The study examined the constructs developed from the literature reviewed, which are Perceived Usefulness, Perceived Ease of Use, Perceived cost, Perceived Trust and Perceived Risk as regards adoption of mobile payment system, which is supported by the extended Technology Acceptance Model (TAM). The data for this study was collected using a structured questionnaire and out of the 246 questionnaire distributed to the mobile phone users, operating under the informal sector of the three major cities (Awka, Onitsha and Nnewi) in Anambra state, 236 questionnaires were returned. The findings showed that Perceived risk and Perceived cost have a negative influence on Behavioural Intention to adopt mobile payment among the informal sector. While Perceived ease of use, perceived usefulness and Perceived trust do not significantly influence Behavioural Intention to adopt mobile payment among the informal sector. The researcher therefore recommends that Mobile payment parties should ensure that they offer mobile payment service at cheap cost so that informal sector will feel convenient to use it as they are mostly price conscious.*

Keywords: Mobile Payment, TAM, Informal Sector.

Introduction

In this new digital era, mobile phones have become one of the most prominent consumer products ever to be launched. Mobile phones and the services provided by them rapidly became basic necessities of daily life throughout the world. The increasing popularity of the mobile devices around the globe may be attributed to their Omni-present access to a wide range of services (communication, access to information, entertainment, or commerce). Today, virtually every aspect of human

interaction is being affected by the use of mobile phones (Odumeru, 2013; Kiesnoski, 2000). With a greater penetration of mobile phones in every household, the usage of mobile devices in terms of accessing social media, watching videos, and playing games and using other apps for entertainment has gone up dramatically. The cheapest cell phone today has enough computing power to become a digital “mattress” and digital bank for the poor (Friedman, 2010).

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Mobile phone has advanced to the extent that it has made life more comfortable and efficient. The comfort of being able to pay for goods and services from any point of transaction, using mobile payment system has become a vital issue as it saves a lot of time and the risks involved in carrying cash. There is a general consensus that the mobile devices are the most promising way to reach the masses and to create a tie-in among current customers, due to their ability to provide services anytime and anywhere; moreover, these devices have high rate of penetration and potential to grow even among the less educated (Agwu, Atuma, Ikpefan & Iyoha, 2014). Agwu (2012) stressed that the mobile phones remain the only and most available feasible means to provide mass marketing and could serve as alternative to branch banking in Nigeria. He further stressed that the internet has a penetration rate of only 6 percent in a population of 140 million in Nigeria but mobile technology is close to 50 percent penetration with prospects for growth.

The increasing adoption of mobile devices and e-commerce have led to the emergence of mobile commerce, also known as M-commerce. The use of mobile devices for buying products and services is getting more common every year. According to a research on 3,000 retailers by Criteo in 2015, mobile devices accounted for 31% of e-commerce transactions in the U.S. (that corresponds to a 15% annual increase) and half of the transactions in Japan and South Korea (Criteo, 2015). This increasing popularity is also evident in the recent report by IBM Commerce (2015), analyzing the so-called Black Friday sales in the U.S. IBM's report revealed that 40% of the online transactions and nearly 60% of the online traffic originated from mobile devices. According to a customer survey report in 2008, many Nigerians have adopted the service and the transactions made accounted to N360 billion but it has not been able to address the on-the-go access due to the barrier of a Personal Computer (PC) and Wireless technologies (Adebisi, Alabi, Ayo & Adebisi, 2013). These increase in the use of mobile devices in e-commerce

coupled with the popularity of mobile phones have led to the emergence of mobile payment (M-payment).

M-payment services covers different types of payment, such as downloaded digital mobile content services (e.g. games, music, news, logos, ringtones, and mobile applications), fares for taxis, trains or buses, parking fees, and tickets for flights, movies or concerts (Phonthanakitithaworn, Sellitto, & Fong, 2015; Loilier, 2013). Mobile payment can be defined as “payments for goods, services, and bills with a mobile device such as mobile phone etc. by taking advantage of wireless and other communication technologies” (Dahlberg, Mallat, Ondrus, & Zmijewska, 2008). M-Payment is considered as an important alternative method of payment to credit cards and cash. M-Payment systems are expected to be major tools in various transactions owing to the increasing popularity of mobile devices and rapidly emerging mobile commerce activities (Ondrus & Pigneur, 2006). Mobile Payment System (MPS) is an innovative application on the mobile phone platform that allows a person to initiate a transaction and make a payment using a mobile phone. MPS as an emerging payment system allows commercial transactions to be carried out anytime, anywhere and by anyone with a mobile phone which is a form of payment system that supports the emergence of Cashless economy. For the purpose of this study, mobile payment (m-payment), is the use of a mobile device to make purchases in physical or online stores; such purchases might include goods, services, digital content, and fund transfers. M-payment system offer significant cost-benefit advantages for consumers, business groups and national governments over traditional cash and/or financial card transactions. On the benefit of mobile payment system, Adebisi, Alabi, Ayo & Adebisi (2013) assert that mobile Payment will help to curb the problem of long queues in banks and also will be very convenient as the users can have access to financial services at any time and place. M-payment compared to traditional payment methods, has its benefit in terms of ubiquity coverage, convenience, flexibility and greater



accessibility (Okifo & Igbunu, 2015). Gartner (2015) has stated that m-payment system make payments by phone much safer, easier and less complicated than credit cards, primarily because the private information of customers is not stored directly in the mobile phones but instead in an encrypted 'cloud data' server database that blocks unauthorized access to personal account information. This protects users from possible cyber hacking, since the information transmitted during transactions is encrypted in a cloud environment (Gartner, 2015).

The Informal Sector refers to economic activities or sources of income that are not fully regulated by the government and other public authorities; this includes enterprises that are not officially registered and workers who hold jobs lacking basic social or legal protection and employment benefits. The informal sector denotes economic activities that obtain outside the formal standard of economic transaction established by the state and formal business practices, although it may not be illegal (Ismail & Adegbelemi, 2012). Examples of informal sector players include: street traders, subsistence farmers, unregistered small-scale producers (e.g. pastry cooks etc.) and service providers (e.g. mechanics, hairdressers, plumbers, private taxi drivers, electricians, tailors, bricklayers, upholsterers, cobblers, printers and carpenters among others.

A fast growing view is that informal economy offers significant job creation and income generation potential, as well as the capacity to meet the needs of poor consumers by providing cheaper and more accessible goods and services. In support with this statement, Okeke and Eze (2018) assert that it was estimated that between July 2012 and June 2014, 2.48 million jobs were created, with the informal economy contributing the most at 1.41 million (57%), the formal economy contributing 40%, and the public sector contributing 3%. According to the Bank of Industry (BOI), the Nigerian informal sector accounted for ~65% of Nigeria's 2017 GDP. With the significant contribution of informal sector to the Nigerian economy, an undeniable truth is that any notion of economic

development in the country is one that hugely depends on the state of affairs of the informal sector.

Despite all the benefits of M-payment system and given that Informal Sector plays crucial role in national development, there is little or no evidence in literature on the adoption of M-payment systems by the Informal Sector in Nigeria (Ayo and Ukpere, 2010). As a result, it is difficult to determine whether or not Informal Sector in Nigeria with particular reference to South-East Nigeria are adopting M-payment systems. It is believed that conducting this study will enhance the knowledge capacity and accessibility of Informal Sector to M-payment system. It is against the above background that this study is geared towards ascertaining the Predictors of mobile payment system adoption among the informal sector in South-east Nigeria.

In spite of all the benefits of mobile payment, the rate of adoption of mobile payments is much lower than expected especially in the informal sector, both in the developed and developing economies. The reason for this relatively low adoption of M-payment system is not clear and needs to be ascertained. It is against the above background that this study is geared towards ascertaining the extent of adoption of mobile payment by the informal sector mobile users, for retail payments typically required on their day to day payment needs.

Statement of the Problem

Traditionally, the modes of payment for goods and services are cash, cheques, cards as well as electronic based payments. With the growing penetration of the mobile phone, the mobile payment is bound to be a strong competing mode of payment for goods and services. But cash and to some extent card payment, have been ingrained in people of Nigeria's habits and lifestyles as they are considered to be convenient to use. With an increase in the use of smart phones (mobile phones) in Nigeria especially by the informal sector, mobile payments activities are expected to increase. However, Nigeria's m-payment services have not taken off as fast as expected. Supporting



the above statement, Phonthanukitithaworn, Sellitto, & Fong (2016a) assert that it is unclear why m-payment services have lagged behind in relation to the high degree of mobile phone usage in Thailand, given the significant advantages associated with m-payment system in terms of convenience and flexibility. Agwu, (2012) stated that mobile phones and its applications are still highly under-utilized. Iddris (2012) also noted that the widespread adoption and large usage of mobile telephones did not reflect on the adoption and usage of mobile payment. Furthermore, studies such as Phonthanukitithaworn, Sellitto, & Fong (2015); Yang, Gupta, Cao and Zhang (2012); Okifo and Igbunu (2015); Gokhan & Sebnem, (2016); Edda & Noel, (2017); have shown that there have been bottlenecks in the rate of adoption of mobile payment services in various parts of the world. Hence, it becomes necessary to ascertain the reasons why the Nigerian Informal Sector, with particular reference to Anambra mobile phone users, are not using mobile payment services, particularly against the background of the market entry of the aforementioned mobile phone and the forecasted numbers.

Furthermore, there is little empirical evidence and research on mobile payment system adoption in Nigeria. It becomes crucial to further assess the informal sectors' view on the relevance of the factors identified in the literature in the context of Mobile Payment adoption in Anambra State of Nigeria.

Objective of the Study

The general objective of the study was to ascertain the extent of Mobile Payment adoption among informal sector in Anambra State of Nigeria. The specific objectives are as follows;

1. To find out the extent to which perceived usefulness influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.
2. To examine the extent to which perceived ease of use influence the behavioral intention to adopt M-

payment system by the informal sector in Anambra State.

3. To examine the extent to which perceived cost influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.
4. To evaluate the extent to which Perceived Trust influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.
5. To ascertain the extent to which perceived risk influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.

Theoretical and Conceptual Review

To understand what influences user adoption of mobile payment systems, it seems logical to consider the use of some already established and tested acceptance models. Some of these originating theories included the theory of reasoned action (TRA) (Ajzen and Fishbein, 1980), the theory of planned behavior (TPB) (Ajzen, 1991), the diffusion of innovation (DOI) (Rogers, 2003), then the Davis's (1989) technology acceptance model (TAM) and its extension. Each of the models mentioned above has strengths and weaknesses. However, comparisons between innovation adoption theories show that the TAM appears to have advantages over the TPB and the DOI because it is a simpler model that is easier to apply and also benefited from the inclusion of various other constructs to explain user adoption intention in a wide range of technology products (Mathieson, Peacock, and Chin, 2001; Hong, Thong, & Tam, 2006). Another reason is its parsimony due to the vast amounts of data and empirical studies conducted that reaffirmed the validity of this theory. (Goeke & Pousttchi, 2010; Keramati et al., 2012; Kim et al., 2010; Koenig-Lewis, Palmer, & Moll, 2010; Nguyen et al., 2016; Schierz et al., 2010; Shin, 2010).

Therefore, based on the recommendations of past studies and the inherent superiority of the TAM, this study



modified the TAM by maintaining the major constructs of PU, PEOU, and behavioral intentions while extending the model with other relevant constructs viz; perceived cost (PC), Perceived Trust (PT) and perceived risks (PR).

Perceived usefulness (PU)

According to Davis (1989), perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance. 'Job' can be replaced with 'everyday life' in regards to m-payments (Zmijewska, et al, 2004). Several studies have found that perceived usefulness had a significant influence on mobile payment adoption (Poustchi & Wiedemann, 2007; Liébana-Cabanillas, et al 2014; Yang, et al 2012). Phonthanakitithaworn, et al. (2015) points out that PU captures how m-payment can help users to achieve task-related goals, such as being more effective and efficient in activities. For instance, a consumer may feel that m-payment services will allow him/her to pay via their mobile phone at anytime from anywhere. Consequently, PU will have positive influence on the adoption of mobile payment system by the informal sector in Anambra State. Based on these studies the following null hypothesis was proposed:

H1: *Perceived usefulness (PU) does not significantly influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.*

Perceived ease of use (PEOU)

Davis (1989) defined perceived ease of use as the degree to which a person believes that using a particular system would be free of effort. Many studies have shown that the impact of perceived ease of use on a user's intention to adopt an innovation is either directly or indirectly through perceived usefulness. Chitungo and Munongo (2013) in their study on the adoption of mobile financial services in Zimbabwe found that perceived ease of use has a positively significant influence on the adoption of mobile financial service. In another research by (Cheah et. al, 2011), perceived ease of use was found positively related with the intention to adopt mobile banking services in Malaysia.

Based on these empirical evidence, the following null hypothesis was proposed:

H2: *Perceived ease of use (PEOU) does not significantly influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.*

Perceived Cost (PC)

Perceived cost (PC) is defined as the extent to which a person believes that using m-payment would cost money (Luarn and Lin 2005). The cost may include the transactional cost in the form of service charges, mobile network charges for sending communication traffic (including SMS or data) and mobile device cost (Ernest & Simon, 2016). Perceived cost was also proposed into the TAM by Amberg, et al. cited in Ernest & Simon (2016). Masinge (2010) asserts that low income people have a low purchasing power and are price sensitive. Compared with traditional payment, users' intention to adopt M-payment would be negatively influenced by cost (Peng et al. 2011). In the study by Mallat (2007) assessing M-payment in Finland, it was also stated that cost might have a significant influence on M-payment. People preferred to use cash payment because of the extra transaction costs charged by M-payment when purchasing on vending machines. Furthermore, cost considerations may prevent people from adopting mobile financial services if it is high, but if it is affordable it can be a motivation to faster adoption (Tobbin and Kuwornu 2011; Dass and Pal, 2011). Thus, the following null hypothesis was proposed:

H3: *Perceived cost (PC) does not significantly influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.*

Perceived Trust (PT)

Trust is an important element that affects consumer intention to adopt new technologies. According to Dahlberg, Mallat, Ondrus & Zmijewska (2008) TAM's capability to predict behavioral intention can be strengthened by adding trust element to the model. Dass and Pal (2011) define trust as a psychological expectation that a trusted part will not behave opportunistically. For the



purpose of this study, the construct of Perceived Trust was used to reflect the level of trust that the consumer believes he/she can invest in the parties involved in the M-payment process (such as banks, mobile operators, merchants, and third parties) to perform expected activities without taking advantage of the consumers. It is required that consumers must first of all register with mobile payment entities to set up an account, before they can use M-payment services. Arguably, if consumers sense a lack of trust in M-payment entities, they may refuse to provide them with their personal information, such as telephone number, date of birth, address, credit card number, and so on. Therefore, higher levels of trust in a service provider will lead to a greater intention on the part of the user to adopt mobile payment system. Extant research showed that trust can promote users' intention to user and reuse the service (Zhou 2013). Dahlberg et al. (2003) in their study, found out that perceived security and trustworthiness of different parties significantly affect consumers' perception of a mobile payment system. The trust in mobile payments is more important for non-users than for users in encouraging them to use mobile payments (Jia et al., 2015). This research thus proposes the following null hypothesis:

H4: *Perceived trust (PT) does not significantly influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.*

Perceived Risk (PR)

Innovations usually are believed to come with risks. Perceived risk is defined as the consumer's subjective expectation of suffering a loss in pursuit of a desired outcome (Suki, 2010). PR is a construct that reflects feelings of uncertainty among consumers regarding the possible negative consequence of using new technology that may dissuade adoption (Phonthanukitithaworn, et al., 2015). Perceived risk may be in the form of financial risk, security or privacy risk, social risk, time risk and performance risk (Lee 2009). In this scenario, it could be argued that the adoption of mobile financial services creates concern that there may be financial losses,

password insecurity, network errors, hacking and loss of personal information. A recent empirical study by Tan and Lau (2016) confirmed the negative impact of PR on behavioral intentions to adopt mobile banking services among generation Y consumers in Malaysia. It is therefore stated that perceived risk has a negative influence on mobile banking adoption. The hypothesis is stated in null as:

H5: *Perceived risk (PR) does not significantly influence the behavioral intention to adopt M-payment system by the informal sector in Anambra State.*

Behavioral Intention to Adopt (BIA)

Behavioural intention refers to an individual's intention to behave in a certain way, which in turn determines the actual usage of a system. The behavioral intention to adopt M-payment system (BIA) is a dependent variable used to determine whether users will actually use or adopt m-payment system. For example, past studies have found a direct and significant influence between behavioral intention and actual usage of the system (Shroff, et al, 2011; Bong-Keun & Tom, 2013; Aydın & Burnaz, 2016; Phonthanukitithaworn, et al. 2015).

Methodology

A research design is the conceptual structure within which research is conducted. A research design constitutes the blueprint for the collection, measurement and analysis of data (Kothari, 2004). This study is a descriptive survey research because the study sorts to assess the informal sectors' view on the factors that influence Mobile Payment adoption in Anambra State of Nigeria. Descriptive surveys are suitable for gathering data whose intention is to describe the nature of the existing patterns. The research covers mobile phone users in the Informal Sector who reside in the three major cities (Awka, Onitsha and Nnewi) in Anambra State.

The target population for the study comprises of business people, who are mobile phone users, operating under the informal sector of the three major cities (Awka, Onitsha and Nnewi) in Anambra state. This includes street traders,



subsistence farmers, unregistered small-scale producers (e.g. pastry cooks e.t.c.) and service providers (e.g. hairdressers, private taxi drivers, electricians, tailors, bricklayers, pastry cooks, upholsterers, cobblers, printers and carpenters among others. This implies that the population of the study is infinite.

Since the population is unknown, Okeke, Olise and Eze (2014) thus, suggested that where the population is infinite, consider using the formula that estimates the representativeness of the sample on certain critical parameters at an acceptance level of probability. The infinite population formula is given as.

$$N = \frac{Z^2 (P) (Q)}{E^2}$$

Where N= sample size, Z=standard deviation given a corresponding confidence level, P= estimated proportion of incidence of cases in the population or assumed success rate with the instrument. Q= (1-p) or assumed failure rate, E= proportion of sampling error. The sample size was then determined using the following assumptions: Z= 95% confidence level which corresponds to Z-value of 1.96, P=80% (0.80) is assumed, Q= 1-0.80 (0.20), E= 0.05 since 95% confidence level was chosen. The sample size for this study was **246**.

The 246 participants were shared equally among the three major cities in Anambra state; Awka (86 participants), Onitsha (86 participants) and Nnewi (86 participants). The sampling technique used for this study was simple random sampling, which ensured that everyone has equal chance of being selected. Questionnaire was used to collect data.

The questionnaire is divided into 2 sections: First section was used to collect respondents' demographic profile and second part was used to identify level of user's perception on the adoption of m-payment services. The questionnaire items used to measure the constructs (**PU, PEOU, PC, PT, PR and BIU**) were adapted from the extant literature, allowing the researcher to align the final questionnaire with the m-payment context (see the appendix). Each questionnaire item used a 4-point scale, where 1 = "strongly disagree", 2= "disagree", 3 = "agree" and 4 = "strongly agree". Out of the 246 questionnaires distributed to the mobile phone users, operating under the informal sector of the three major cities (Awka, Onitsha and Nnewi) in Anambra state. 236 questionnaires were returned; Awka (78 questionnaires), Onitsha (82 questionnaires) and Nnewi (76 questionnaires).

With the aid of SPSS-Version 22, dimension reduction was done using factor analysis, while Multiple Regression analysis was used to assess the effect of the independent or predicting variables on the dependent variable (behavioural intention towards Mobile payment adoption). The model equation is stated thus: Behavioural intention to adopt Mobile payment = $\alpha + b_1$ Perceived usefulness + b_2 Perceived ease of use + b_3 Perceived trust + b_4 Perceived cost + b_5 Perceived risk. The b_1 - b_5 are the regression coefficients, which indicate the amount of change in dependent variables (behavioural intention towards Mobile payment adoption) given a unit change in any of the independent variables (Predictors).



Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.784 ^a	.614	.606	.62759932	1.763

a. Predictors: (Constant), Perceived Risk, Perceived Usefulness, Perceived Cost, Perceived Trust, Perceived Ease of Use

b. Dependent Variable: Behavioural Intention

Source: SPSS version 22

TANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	144.407	5	28.881	73.325	.000 ^b
	Residual	90.593	230	.394		
	Total	235.000	235			

a. Dependent Variable: Behavioural Intention

b. Predictors: (Constant), Perceived Risk, Perceived Usefulness, Perceived Cost, Perceived Trust, Perceived Ease of Use.

Source: SPSS version 22

The Anova table above tests the overall validity of the model. F-statistic and p-value were associated. The f- statistic is mean square (Regression) divided by the mean square (Residual): $28.881/0.394 = 73.3$. The p-value (F- Significance) is compared to some alpha level in testing the null hypothesis that all of the model coefficients are zero. The p- value (.000) is smaller than 0.05 (alpha value). This means that at least one explanatory variable is significant, and therefore the model is valid.

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.826E-016	.041		.000	1.000		
	Perceived Usefulness	.006	.060	.006	.096	.924	.470	2.127
	Perceived EaseofUse	.039	.075	.039	.521	.603	.302	3.316



Perceived Trust	.006	.060	.006	.107	.915	.464	2.156
Perceived Cost	-.127	.044	-.127	-2.902	.004	.872	1.147
Perceived Risk	-.800	.043	-.800	18.441	.000	.890	1.124

a. Dependent Variable: Behavioural Intention

Source: SPSS version 22

Discussion of the Findings

H₀₁: Perceived usefulness does not significantly influence behavioral intention to adopt M-payment system by the informal sector in Anambra State. The coefficient of **Perceived usefulness** (.096) is not significantly different from zero (0), since p-value (.924) is greater than 0.05. **Perceived usefulness** ($t = .096$, $P = .924 > .05$), we accept the null hypothesis that Perceived usefulness does not significantly influence Behavioural Intention to adopt mobile payment among informal sector. This means that, though the informal sector in Anambra state perceive mobile payment as useful, their perception may not lead to increase personal or business adoption of the mobile payment. This finding however, does not support the previous studies that perceived usefulness have a significant influence on mobile payment adoption (Liébana-Cabanillas, et al 2014; Schierz et al., 2010; Kim et al., 2010). The result is also inconsistent with the theoretical perspective of the technology acceptance model (TAM) proposed by Davis (1989), that perceived usefulness and ease of use are the prime factors which influence the adoption of new technology.

H₀₂: Perceived ease of use does not significantly behavioral intention to adopt M-payment system by the informal sector in Anambra State. **Perceived ease of use** ($t = .521$, $P = .603 > .05$), we accept the null hypothesis that Perceived ease of use does not significantly influence Behavioural Intention to adopt mobile payment among informal sector. This shows that, though the informal sector in Anambra state perceive mobile payment to be simple and easy to use, this perception may not lead to

increase personal or business adopt of the mobile payment. This result is in support of the findings of Sayid et al. (2012) in Somalia where they found that perceived ease of use has no significant influence on the adoption of mobile payment. However, the result contradicts the theoretical perspective of TAM which identifies usefulness and ease of use as instrumental factors that influence the adoption of a new technology. Similarly, the result is also inconsistent with the empirical findings of other studies that indicated that perceived ease of use has a significant positive influence on the adoption of mobile M-payment (Liébana Cabanillas, Sánchez-Fernández, & Muñoz-Leiva, 2014; Tobbin and Kuwornu 2011; Chitungo and Munongo, 2013).

H₀₃: Perceived trust does not significantly influence behavioral intention to adopt M-payment system by the informal sector in Anambra State. **Perceived trust** ($t = .107$, $P = .915 > .05$), we accept the null hypothesis that Perceived trust does not significantly influence Behavioural Intention to adopt mobile payment among informal sector. This result shows that the adoption of mobile payment by the informal sector in Anambra State may not increase even though they believe that the M-payment parties are trust worthy. This finding contradicts the studies by Chitungo and Munongo (2013) and Marumbwa and Mutsikiwa (2013) who found perceived trust to have a significant influence on the adoption of mobile payment system.

H₀₄: Perceived cost does not significantly affect behavioral intention to adopt M-payment system by the informal sector in Anambra State. **Perceived cost** ($t = -2.902$, $P =$



.004 < .05), we accept the alternative hypothesis that Perceived cost significantly affects Behavioural Intention to adopt mobile payment among informal sector. This finding implies that the informal sector's intention to adopt and use mobile payment system is negatively affected by the cost of access. The result is consistent with the findings of other studies that cost considerations may prevent people from adopting mobile payment if it is high, but if it is affordable it can be a motivation to faster adoption (Tobbin and Kuwornu 2011; Sripalawat et al 2011; Dass and Pal, 2011).

H₀₅: Perceived risk does not significantly behavioral intention to adopt M-payment system by the informal sector in Anambra State. **Perceived risk** ($t = 18.441$, $P = .000 < .05$), we accept the alternative hypothesis that Perceived risk significantly influence Behavioural Intention to adopt mobile payment among informal sector. The finding shows that the Perceived risk have a negative influence on behavioral intention to adopt m-payment among informal sector in Anambra State. In other words, Perceived risk discourages informal sectors' intentions to use m-payment system, particularly among those who have no understanding of m-payment services. The findings of this study is consistent with the findings of some studies which found a significant negative influence on the adoption of mobile financial services (Marumbwa and Mutsikiwa 2013; Dass and Pal 2011; Tan and Lau 2016)

Conclusion

Based on the findings of this study and the empirical evidences available, the researcher came to the following conclusions that Perceived risk have more effects on Behavioural Intention to adopt mobile payment among the informal sector, followed by Perceived cost and Perceived ease of use. While perceived usefulness and trust have the same effect. The study also revealed that perceived ease of use, perceived trust and perceived usefulness have no significant influence on the adoption of mobile payment.

Recommendations

Based on the forgoing findings and conclusion, the researcher makes the following recommendations:

1. Mobile payment parties should designed and developed M-payment to provide added values and increased level of security. This is because the informal sector need to have a convincing reason to switch to MP method.
2. Since, the informal sector do not perceive M-payment to be useful to their business, service providers should carefully plan marketing campaign that can evangelize the usefulness of M-payment.
3. Mobile payment parties should ensure that they offer mobile payment service at cheap cost so that informal sector will feel convenient to use it as they are mostly price conscious.

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