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### **The impact of fraud on the financial performance of mobile payment (telecom) companies in Ghana**

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#### **ABSTRACT**

Mobile payment is one of the emerging payment methods that have received serious attention in the western world because of its capability of reducing entirely the stressful situations customers go through in the commercial banks. Notwithstanding that, it has brought serious payment issues to general public and this has drawn the attention of both the past and present government of Ghana. There have been serious financial frauds happening in Ghanaian circles which portray that the established practice on fraud is not complied with. The study seeks to investigate the impact of due diligence practice that guides against the current and recent rampant financial frauds in mobile payment companies in Ghana. Methodologically, this study employs three- step approaches; The first step investigates the nature of fraud in the mobile payment companies .The second step looks at the direct impact of fraud and victims. The third approach investigates management implication behind the financial fraud theories which are being used by mobile payment companies. The study use secondary data from published financial statement. The study follows mixed method both quantitative and qualitative approach. Data gathered was analyzed using descriptive statistical tools such as tables ,charts and diagrams. The finding indicates that globally more than 48% of companies have fallen victim to fraud with global cost of fraud amounting to \$1.5 trillion per year. Based on the outcome of the findings, the study offers theoretical, policy and practical implications for scholars, policy makers and practitioners and make specific useful recommendations for further research and managements of mobile payment companies in Ghana .

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Key words : Mobile payment, Policy implication, theoretical implications and practical implications.

#### **1.0 INTRODUCTION.**

##### **Research Backgrounds**

Mobile payment services provided by mobile network operators enable funds transfers to be made on mobile devices of end-users, using digital equivalent of cash (electronic money) without any bank accounts involved. In

Ghana, mobile money simplifies banking relationships and facilitates financial inclusion, and therefore, is rapidly expanding all around Ghana. Mobile payments are defined as the use of a mobile device to conduct a payment transaction in which money or funds are transferred from a payer to a receiver via an intermediary, or directly without an intermediary. While this definition includes mobile payment transactions conducted via mobile banking systems, a distinction between mobile payments and mobile banking services should be noted. Mobile banking services are based on banks' own legacy systems and offered for the banks' own customers. Mobile payments, on the other hand, are offered as a new payment service to a retail market. The application of alternative payment methods such as mobile payment was not common in Ghana until recently where these emerged through major service providers who have penetrated Ghanaian markets. These providers are Mobile Telephone Network (MTN), Glo, Airtel/Tigo and Vodaphone mobile payment providers. These major providers have created the unique markets for mobile customers in Ghana.

### **1.1 Statement of the problem**

Although mobile payment is an emerging method in Ghana, there are a lot of problems encountered by the agents, companies and the customers. Even though these problems might have received attention of researchers in the western world, it has not received much critical attention from researchers in Ghana. A review of the extant literature on mobile payment indicates that most of the researches were conducted within the context of developed economies. The few studies conducted within developing countries context focused only on the customer adoption of the mobile payment without considering the due diligence practice on detecting fraud and its impact on the financial performance of the mobile payment companies. This has created a vacuum of knowledge about how frauds can be remedied in Ghana mobile payment companies. This study seeks to fill this research gap by examining and integrating the financial frauds of due diligence and study them holistically to assess its impact on victims and the performance of the companies. There have been recent and rampant financial frauds and this has sounded a caution to both the companies, agents and potential customers on the need to adhere to the practice that guide against financial frauds. Ascertaining the causal factor that lead to financial performance of the companies will enable both companies and agents to improve their services and restore public trust on mobile payment method. This study aims to solve this unresolved question and explores how the financial fraud affects the performance of the mobile payment companies in Ghana. In the nutshell, the purpose of this study is to assess the impact of financial fraud in the mobile payment companies. The study seeks to relate it to other financial indicators to reduce mobile frauds in Ghana's mobile payment companies and even globally.

### **1.2 RESEARCH OBJECTIVES**

#### **1.2.1 General Objective**

The general objective of the study is to fill the gap in literature and contribute to the general body of knowledge and research work in the area of fraud by providing theoretical evaluation of the impact of fraud on the performance of mobile payment companies in Ghana to support financial transactions.

#### **1.2.2 Specific Objectives**

In order to achieve the general objective of exploring the impact of financial frauds on financial performance of the mobile companies, specific objectives have been developed to drive the research. The study seeks to achieve the general objective through the accomplishment of the following specific objectives;

1. To examine the nature of fraud in the mobile payment companies in Ghana.
2. To investigate the relationship between fraud and performance of mobile payments companies.
3. To identify some of the common theories of fraud and its implication to management research.

#### **1.2.3 Research Questions**

The major questions that will be addressed in this study is: what are the types of fraud and its impact on financial performance of the mobile payment companies in Ghana. In order to achieve the research objectives, this study adopts the approach used by Havrylchyk and Jurzyk (2006) by investigating research questions instead of research hypothesis. The specific questions that are resolved in order to achieve the research objectives include the following;

1. Among the different types of fraud which ones are most commonly found in the mobile payment companies in Ghana?
2. To what extent does the fraud impact the financial performance of the mobile payment companies in Ghana?

3. What are some of the theories in fraud and their implication to management?

### **1.3 Significance of the study**

The research will have theoretical, practical and policy implication. Theoretically, findings on research will be used to deal with the causes of fraud in the mobile payment companies and can contribute to the body of knowledge on types of fraud for their inclusion in fraud theories. In terms of practice, the findings can encourage organizational managers to play strategic role in fraud prevention. It will also encourage financial intermediaries to bring out new innovations that will detect fraud in financial transactions. In addition, the findings can also encourage the adoption of multiple-theoretical approach to research in frauds and call for further research into the area. In terms of policy, findings of the research will encourage policy makers such as the government and central bank authorities to either revise existing policy or make new policies that will properly regulate the activities of the mobile payment companies to ensure profitability while attracting foreign direct investment in Ghana.

### **1.4 Limitations and Delimitations**

#### **1.4.1 Limitations**

The major limitation of this study is on data availability and accessibility. Some of the mobile companies have just been listed on the Ghana stock exchange. Therefore, information about them will be public and easily accessible at the stock exchange. The other mobile companies who are not listed will be reluctant in disclosing sensitive information on their financial statement if not required by regulation to do so. This study will be limited by the data collected by secondary method. For effective generalization, this study will be more robust if data is collected from the entire population of mobile Companies. In addition, the secondary data that will be used for analysis may be affected by institutional biases and errors in the preparation of financial statement. Most of the audited financial statement are widow dressed or manipulated and therefore some of the information disclosed may not be very reliable.

#### **1.4.2 Delimitations**

The study will be limited to Mobile payment companies. The study does not cover other financial institutions. This is because previous studies had covered the other financial institutions. In addition, the study review literature on fraud related to mobile companies generally from developed countries simply because literature on mobile payment in Ghana are very limited or not even available. Other literature in other companies will not be reviewed as they are enough existing literature from prior researchers. The study does not examine the other demographic characteristics of mobile companies' merchants as it will not be very relevant to the present study. The study uses secondary data based on the premise that the consolidated audited financial statements of mobile companies are suitable in this case and easily available. Also, the use of statistical tools such as tables are selected on the fact that the independent variables can be measured with no error. The study uses the four registered mobile payment companies in Ghana. This is because if any mobile company is not listed on the stock exchange its estimate of their market figures could lead to errors.

## **2.0 LITERATURE REVIEW**

### **2.1 Introduction**

The concept of fraud is seen as the whole set by which an organization can effectively manage to increase its financial performance. Whenever fraud increases in a company as prevailing in Ghana, it does not only affect the institutions but also deter investors from putting their investment in a particular venture. Portfolio investors who are not directly involved in the management of the company are most concerned about cases of frauds in place. According to them, what normally happens in the ideal situation is that, the investors provide capital to the firm, and the managers regulate the firm in the interest of the investors for compensation for their service. However, the issue of fraud reduce the level of trust in management and ownership. The principal-agent" problem is reflected in management pursuing activities that may be detrimental to the interest of the shareholders. Mensah et al.,( 2003). Some analysts predict that, globally, mobile payment transactions will increase to \$55 billion in 2008. The rest of the chapter is organized as follows; Section 2.2 discusses general definition underlying fraud. Sections 2.3 discusses the previous studies and point out gaps for this study, 2.4 discusses the various fraud theories applicable in mobile payment and the gaps existing in the literature for this study and 2.5 gives the summary of the gaps for the justification for this study.

### **2.2 General definition of Financial Fraud**

Fraud, in general, is defined in Oxford English Dictionary as "wrongful or criminal deception intended to result in financial or personal gain." A definition for financial fraud can be deduced from financial fraud main categories: bank

fraud, insurance fraud, securities and commodities fraud. Financial fraud taxonomies present several definitions on “fraud” concept. An understanding of these definitions and classification models is fundamental to prevent and detect fraud. Definition of fraud is important in both accounting and auditing profession. Association of Certified Fraud Examiners (ACFE) defined fraud as deliberate misrepresentation of entity financial condition through intentional misstatements or omission of amounts or disclosures to deceive financial statement users. The Objectives of financial fraud is to overstate profits, assets, and revenues and understate losses, expenses and liabilities. The acceptance of a new payment service method by users and providers and thus the economical operation of the service depend on strict practice criteria both financial and non financial. In particular, frauds or probable fraud attempts must be detected reliably and at an early stage. If possible fraud attempts are detected before the payment transaction, the transaction can be timely declared invalid and blocked. If frauds are detected only after the transaction, the concerned user and the provider can at least be blocked for further transactions; other legal measures and measures by the police can also be taken. The term ‘fraud’ commonly includes activities such as theft, corruption, conspiracy, embezzlement, money laundering, bribery and extortion. The legal definition varies from country to country but generally, fraud is an intentional act of individuals among management, employees or third parties who produce errors in financial reporting in favour of their personal desires. Fraud is seen as an act of deliberate action made by an entity, knowing that such action can result in a possession of unlawful benefits.

### **2.3 Prior Research Efforts and the gap for the study**

Yelland(2013) found out that most people think about fraud and security in the mobile industry as having their phone stolen or hacked. About \$58billion a year in revenues are being lost to fraud due to lack of appropriate revenue protection. The use of mobile technology has become widespread with astonishing speed all over the world, particularly among the poor. The more mobile phones go to the hands of people who formerly lacked access to financial services, the more the notions of mobile money, mobile payment and mobile banking become pervasive as a means of financial inclusion. Merritt,(2011) found out that Money transfer schemes such as the mobile channel have evolved to the next generation of electronic payments. Money transfer services for both domestic and international remittances are shifting from traditional providers to wireless carriers who are able to compete for consumer market share on the basis of technological ubiquity and lower-cost services (Heikkinen and Iivarinen(2011).

#### **Gap in these studies:**

The researchers though admitted the occurrence of fraud in mobile companies but they fail to discuss the nature of these fraud and their impact on the financial performance of the mobile companies. Moreover, there were no fraud protection strategies mentioned by these researchers to help combat the increasing rate of fraud. This study seeks to fill this gap by identifying the types of fraud occurring in the mobile payment companies.

Meanwhile, Balakrishnan (2011) posits that currently dominant payment instruments do not meet the requirements of new technological environments such as the internet or mobile payment. Recognizing the importance of efficient and safe electronic payments is important in retaining public trust in these payment instruments. There is a lack of consistent data on electronic payments fraud, but already the reported losses are huge. Hotenzia,etal(2013) stated that the growth of electronic commerce is dependent upon the emergence of appropriate electronic payment systems. Klein and Mayer (2011) argue out that Mobile banking is growing at a remarkable speed around the world, although, it is creating considerable uncertainty about the appropriate regulatory response to this newly emerging service. Finally, by unbundling payments services into its component parts, mobile payment provides important lessons for the design of financial regulation more generally in developed as well as developing economies. Choi,Crowgey,Price,and Vanpelt,(2006) assert that the advancement of mobile technology is growing and with this comes many new opportunities with mobile payment. With the increase in knowledge, mobile payment is within reach, but issues such as security, trust and privacy must first be handled clearly for successful delivery of service.

#### **Gaps in these studies:**

Besides the issues of uncertainties and security and frauds concerns raised by these authors on mobile payments, their studies failed to study the underlying causes of these frauds and what can be their impact on the company’s financial performance. Their studies fail to offer specific strategies for dealing with any type of frauds ,hence this research study tries to fill this gap in the prior literature.

Moreover, Adudai and Kingoo (2012) in their Kenyan study revealed that electronic banking has strong and significance marginal impacts on returns on asset in the Kenyan banking industry. Therefore, there exists positive relationship between electronic banking and bank performance. Anwar and Zulfiquar (2007) added that if mobile technology fulfils its possibilities, then users could be making payments with their mobile phones.

#### **Gap in this study:**

The study was done in Kenya . A research is required to relate the same condition to Ghana environment to provide comparison to Kenyan's environment to that of Ghana. Hence this research focuses on Ghana's mobile payment companies.

## **2.4 Theories of frauds in mobile payment**

Thanasak (2013) states that before making any efforts to reduce fraud and manage the risks proactively, it is important for the business organizations to identify the factors leading to fraudulent behaviour by understanding who are the fraudsters, when and why frauds are committed. Various theories have attempted to explain the causes of fraud and the most cited theories are the Fraud Triangle Theory (FTT) of Cressey (1950) , Fraud scale theory by Albrecht(1983) , Hollinger-Clark theory (1984) and Fraud Diamond Theory (FDT) of Wolfe and Hermanson (2004). Both of these identify the elements that lead perpetrators to commit fraud.

### **2.4.1 Fraud Triangle Theory**

The origin of the Fraud Triangle Theory (FTT) dates to the works of Edwin Sutherland (1939) who coined the term white-collar crime, and Cressey was one of the Sutherland's former students. Cressey (1950) focused his research on the factors that lead individuals to engage in fraudulent and unethical activity. His research later became known as the Fraud Triangle Theory (FTT). This theory consists of three elements that are necessary for fraud to occur: (i) perceived pressure, (ii) opportunity, and (iii) rationalization. In order for fraud to occur, three conditions must exist: rationalization by the person committing the fraud, incentives or pressures to commit fraud and also the opportunity to do so .These factors are commonly known as the Fraud Triangle, which was first created by Dr. Donald Cressey when he was studying criminology, specifically the behavior of fraudsters. Pressure is typically what causes a person to commit fraud. Finally, rationalization involves making excuses for why it is acceptable to commit fraud in certain circumstances.

#### **2.4.2 Gap in the Fraud Triangle Theory**

The theory ignores other key additional elements in the model. This has to be enhanced to improve both fraud prevention and detection by considering an additional element above the three, mentioned elements of Fraud Triangle Theory (FTT). The theory has been criticized for its narrowness because it ignores key additional elements. However, the theory has been adapted in this study to help better explain the implication to management to provide direction for management in the prevention of future frauds.

### **2.4.3 Hollinger-Clark fraud Study**

Hollinger and Clark study (1983) Surveyed 10,000 workers. They found out that theft was caused by job dissatisfaction .The Hollinger-Clark Study found that employees steal primarily as a result of workplace conditions and concluded that the true costs of employee theft are vastly understated. They found that employee theft are caused by external economic pressures motivated by theft Contemporary employees .They also found that (particularly young ones) are not as honest and hardworking as those in past generations. Every employee could be tempted to steal from his employer (assumes people are greedy and dishonest by nature), job dissatisfaction is the primary cause of theft. There is a statistical relationship between employees' concern over their financial situation and the level of theft. Higher theft individuals are more likely to be concerned about their finances, particularly those who ranked finances as the first or second most important (personal) issue. There is also a direct correlation between (younger) age and (higher) level of theft. The research of Hollinger and Clark indicated that thefts were the highest for those with greater access to the things of value in the company. Employees who are dissatisfied with their jobs are more likely to engage in counterproductive or illegal behavior because formal organizational controls do not provide a strong deterrent effect on employee theft. Therefore, management must increase the perception of detection to provide a significant deterrent to employee theft.

#### **2.4.4 Gap in the Hollinger-Clark fraud Study**

The study places too much emphasis on employer to meet even greedy employees need. Even though, the study identified the job dissatisfaction as the main cause of the employees fraud, the true cause behind the dissatisfaction were

not known especially for the greedy employees. However, this study has been adapted to help to explain the role of management in fraud detection and prevention.

#### **2.4.5 The Fraud scale theory**

Albrecht (1984) developed the fraud scale theory. The fraud scale model was originally developed as an alternative to what is known as the fraud triangle model. The fraud scale model places an emphasis on personal integrity rather than on rationalization. This model is especially applicable to financial reporting fraud. Fraud is caused by situational pressures such as immediate problems with environment and usually debts/losses. It is also caused by Perceived opportunities due to Poor controls. Thirdly, fraud is also caused by Personal integrity due to individual code of behavior. If the situational pressure, perceived opportunity are high it leads to low personal integrity of an individual which result in, high fraud in the company. Conversely, if the situational pressure and opportunity to commit fraud are low, it leads to high personal integrity which results in no fraud.

#### **2.4.6 Gap in the fraud scale theory.**

The theory has been criticized for placing too much emphasis on personal integrity which is influenced by situational pressure without specifying guidelines for overcoming the environmental pressure by the individual. However, it fails to discuss how this environmental pressure can be controlled by the individuals as such, and the theory is very narrow and concerned with assumption of self interest. The theory has been adapted to help explain the strategic roles management must play in assessing individual level of integrity at the work places to reduce fraud.

#### **2.4.7 The Fraud Diamond Theory**

The Fraud Diamond Theory (FDT ) was first presented by Wolfe and Hermanson(2004). It is viewed as an expanded version of the Fraud Triangle Theory (FTT). In this theory, an element named capability has been added to the three initial fraud components of the Fraud Triangle Theory (FTT). They argued that although perceived pressure might coexist with an opportunity and a rationalization, it is unlikely for fraud to take place unless the fourth element (capability) is also present. In other words, the potential perpetrator must have the skills and ability to commit fraud. They maintained that opportunity opens the doorway to fraud, and incentive (pressure) and rationalization lead a person toward the door. However, capability enables the person to recognize the open doorway as an opportunity and to take advantage of it by walking through repeatedly. In their separate works, Gbegi and Adebisi (2013) examined and discussed the Fraud Diamond Theory (FDT). Their main conclusion was that the Fraud Diamond Theory (FDT) is an extended or improved version of the Fraud Triangle Theory( FTT ) with an addition of “capability” added to the three basic elements of fraud in the Fraud Triangle Theory (FTT). Therefore, they explain further the convergent and divergent of Fraud Triangle Theory (FTT) . They considered four sided Fraud Diamond Theory (FDT) thereby adding capability as the fourth element. They stated that fraud cannot successfully conceal unless the fraudster has the capability to have all personal traits and abilities even in the presence of the other three elements. Hermanson believed that the former Fraud Triangle Theory ( FTT ) has to be enhancing to improve both fraud prevention and detection by considering an additional element above the three mentioned elements of FTT.

#### **2.4.8 Gap in the fraud diamond theory.**

Even though Fraud Diamond Theory (FDT) is a new version of Fraud Triangle Theory (FTT), both the two theories converged on the three of the elements as pressure to commit fraud; Opportunity to exploit the organizational weaknesses as well as the rationalization which is a way to justified the course of action by the fraudster. Considering the diverged element ‘capability’ which is an addition over the three mentioned elements, this makes it quite clear to page a way or sources for further research to be conducted, such as the influence of capability towards committing fraud as stated by the researchers. The study has adapted it to explain the implication of the theory to management.

### **2.5 Summary of Research Gap**

The recent happenings in mobile payment in Ghana are worrying and have reduced many consumers confident and trust in using the payment method. The numerous recent cases of frauds have caught the attention of many users and portray signs that the fraud practice is being compromised. Therefore, this research aims to investigate the fraud practice and associate it with financial performance of the mobile payment companies to assess the extent of the achievement of management objective of maximizing profitability of operations. However, although some research exists on consumer adoption of mobile payments concept, studies and research on how to associate current frauds practice to the company’s financial performance in Ghanaian context are very limited. The few studies that have looked at it from this perspective in the western world were very skeptical in relating the concept of fraud to financial performance.

Andani(2008) asserted that ,there is an increasing fraud in the Ghanaian business circles; therefore vigilance is needed to prevent it through good internal controls. He pointed that,10% of employees will steal, and 10% will not steal,80% have not decided but when given the opportunity ,they will steal hence lack of internal controls is the cause of fraud in Ghanaian business and the world at large .Even though Andani studied the relationship between fraud and he did not relate his findings to any specific measurement of financial performance of the companies thus leaving a gap in the literature to be studied. Meanwhile, fraud prevention leads to the improvement in financial status of the companies. However, financial status can usually be measured objectively in quantitative measure to aid the decision of different stakeholders. The first reason for the gap is that, mobile payment frauds were written from advance world perspective at the expense of developing countries. Research has not shown how these measures can be applied in emerging economy such as Ghana. Apart from that, establishing the relationship on frauds and financial performance has received little or no attention from Ghanaian researchers. In Ghana numerous studies have been conducted on fraud but the focus is not on financial frauds on mobile payment. Moreover, most of the research from western economies treats financial frauds as separate theory. However, this research combines the nature and financial theories and relates them to the financial performance of Mobile payment institution in Ghana. Therefore a research in this area will close the knowledge and fill the large holes and the gaps in Ghanaian literature on mobile payment.

### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter spells out the methodological issues relating to the subject of fraud on mobile payment companies in Ghana. Various researchers have used different methods and techniques for different studies on mobile payment companies. The choice of a method of study depends on a number of factors such as the expectation of the possible results from the study, the theory underlying the study, the objectives of the study, availability and quality of the data to be used, the reliability of the methods used and the variables under investigation. This chapter presents a brief discussion of the research design and method, research format and research techniques. It also spells out data collection methods and the population and sampling procedure used as well as the significance, limitation and delimitation of the study.

#### **3.2 Research Design and Method**

The study uses mixed method (quantitative and qualitative or descriptive) to describe facts collected through secondary data of interest . The data collected was standardized, allowing for easy comparability and understandability (Saunders et al., 2007). In qualitative research, the information being sought is not about facts and figures. The research results may be affected by the subjectivity of the researcher. Also, quantitative research, if properly designed, can produce results that can be seen as real and unbiased as quantitative studies usually require extensive statistical analysis. The research design is a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings. Research design is seen as “a plan that describes how, when and where data are to be collected and analyzed”. It describes a qualitative approach as “a systematic subjective approach used to describe life experiences and situations to give them meaning”. Qualitative research focuses on the experiences of people as well as stressing uniqueness of the individual. Researchers use the qualitative approach to explore the behaviour, perspectives, experiences and feelings of people and emphasize the understanding of these elements.

### 3.2.1 Justification for the secondary method

The purpose of using descriptive and quantitative methods is useful because of the following obvious reasons: First, both descriptive and quantitative data together will provide a better understanding of the research Problem than either of them. Second, either descriptive or quantitative will not be enough to answer all the research questions than the two together can answer (Kerliner and Lee, 2000). Third, the two approaches together provide multiple view point, address biases and give subjective and objective views. In Ghana, research on mobile payment companies has received less attention in Ghana. Besides, this research involve many 'key components of measuring the underlying variables related to financial performance .Hence, a descriptive and quantitative method of study could enable this study to gain insights into the mobile payment industry . Apart from the quantitative approach which assesses the relationships within the research questions, the qualitative aspect would probe the challenges relating to government and management relationships. Hence, the outcomes of the mixed approach will be likely to help management identify fraudsters , understand and predict behaviours of fraudsters at the workplace. Mixed methods research is an intellectual and practical synthesis based on qualitative and quantitative research; it is the third methodological or research paradigm. It recognizes the importance of traditional quantitative and qualitative research but also offers a powerful third paradigm choice that often will provide the most informative, complete, balanced, and useful research results. Johnson et al. (2007): define mixed method as “an approach to knowledge (theory and practice that attempts to consider multiple viewpoints, perspectives, positions, and standpoints (always including the standpoints of qualitative and quantitative research)”.

### 3.2.2 Data Collection Method

The study employs secondary data based on the objectives of the study which was related to the research questions. Secondary data collection is justifiable because much work has already been done to provide financial records of mobile companies for public use.

### 3.2.3 Sources of Data

Annual financial Reports of the various mobile payment companies in Ghana showing financial performance of all the mobile payment companies in Ghana are available for public use. The annual financial reports and archival sources of mobile payment companies provide information on total cases of fraud and amount involved in mobile payment companies for the year, as well as fraud cases reported at the end of the year, etc. This enables the researcher obtain information on factors that attract fraudsters to a particular mobile payment companies.

### 3.2.4 Population and Sampling procedures

The populations of the study are the four mobile payment companies registered in Ghana and all their registered branches in Africa which are depicted in the consolidated financial statement. The quantitative aspect of this study is collected using audited financial statement of the mobile companies. The consolidated audited financial statement depicts all their financial performance within sub-Saharan Africa. Parahoo (1997) defines population as “the total number of units from which data can be collected”, such as individuals, artifacts, events or organizations. Burns and Grove (2003) describe population as all the elements that meet the criteria for inclusion in a study. They define eligibility criteria as “a list of characteristics that are required for the membership in the target population”. The criteria for inclusion in this study are: mobile payment companies must be registered in Ghana and currently working for the mobile payment companies in Ghana.

### 3.2.5 Sampling frame and sampling size:

The sample size of this study are the four mobile payments companies namely (MTN,Vodafone,Glo ,Airtel/Tigo). Polit et al (2001) define a sample as “a proportion of a population”. A carefully selected sample can provide data representative of the population from which it is drawn. The rationale for choosing this approach is that the study is seeking knowledge about the fraud within the mobile payment companies operating in Ghanaian environment.Eventhough the sample size is the mobile payments companies in Ghana while the population is the consolidated performance within Sub-Saharan Africa, the findings of this research can be generalized to other African environment .

### 3.6.2 Variable Definitions

This research will use finance-specific variables. This section define these variables an

Variable	Meaning
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Theory	It is a concept, knowledge or simplification of reality
Management	Industry leaders who provide leadership for the organization
Focus	The direction of the study
fraudsters	People who engage in fraud or crime
Victims	The public who suffers from the action of fraudsters
policy	Regulations and procedure for carrying out something

### 3.6.3 Method of Soliciting Information

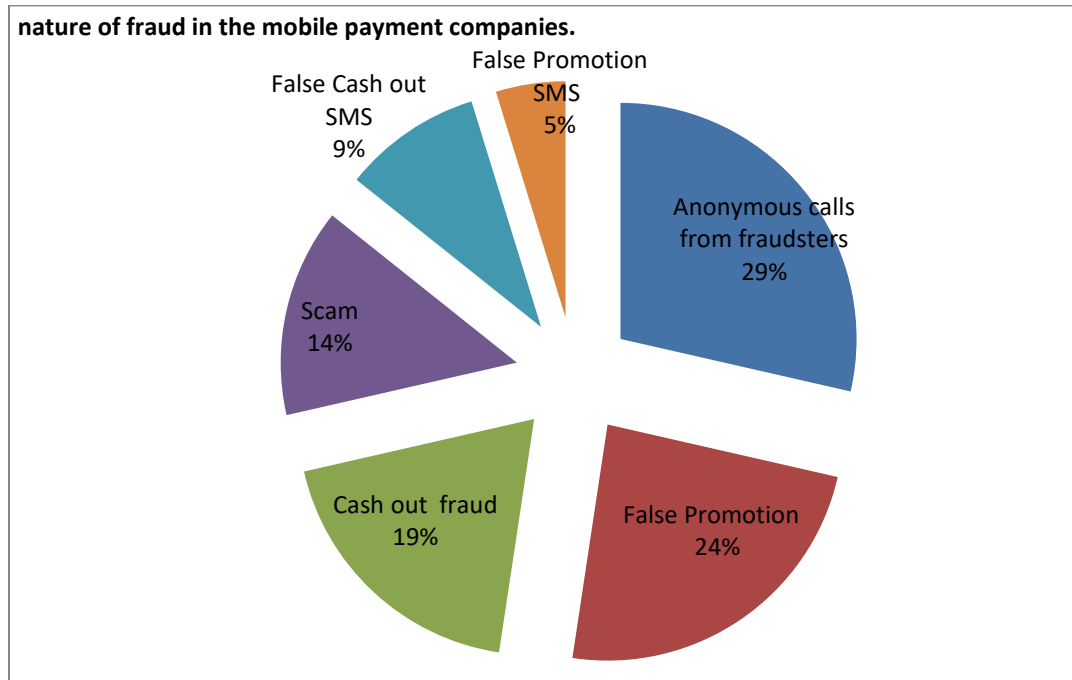
This study uses secondary data for analyses based on the objectives of the study which is related to the research questions. Such secondary data is information obtained mostly from different published sources like audited financial reports by companies or statistics published by private and government agencies. In this study, both qualitative and quantitative data will be analyzed. The quantitative information can be obtained from the audited financial statement of the mobile. These are mainly quantitative since the information will be mainly numerical which will involve statistical analysis. Research question one and three are mainly descriptive and qualitative while research question can be measured quantitatively using secondary data.

### 3.6.4 Ethical Considerations

According to Bell,(2005),research is considered ethical when it satisfies the demands of justice, respect, and protection for those involved. Hence, ethical issues ought to be considered whenever a research will be associated with the collection of data from human participants. Further, individuals' companies' anonymity and confidentiality will be assured and maintained, and every finding will be treated with utmost confidentiality and will be for the purpose of the research only. This assurance enable companies to give their consent to participate; and will be the way for the research protocols to be operationalised.(DeRenzo and Moss, 2006).The secondary gathered from published sources are used purposely for this research.

## **CHAPTER FOUR : ANALAYSIS**

Figure 1 : Nature of fraud happening in the four mobile companies in Ghana



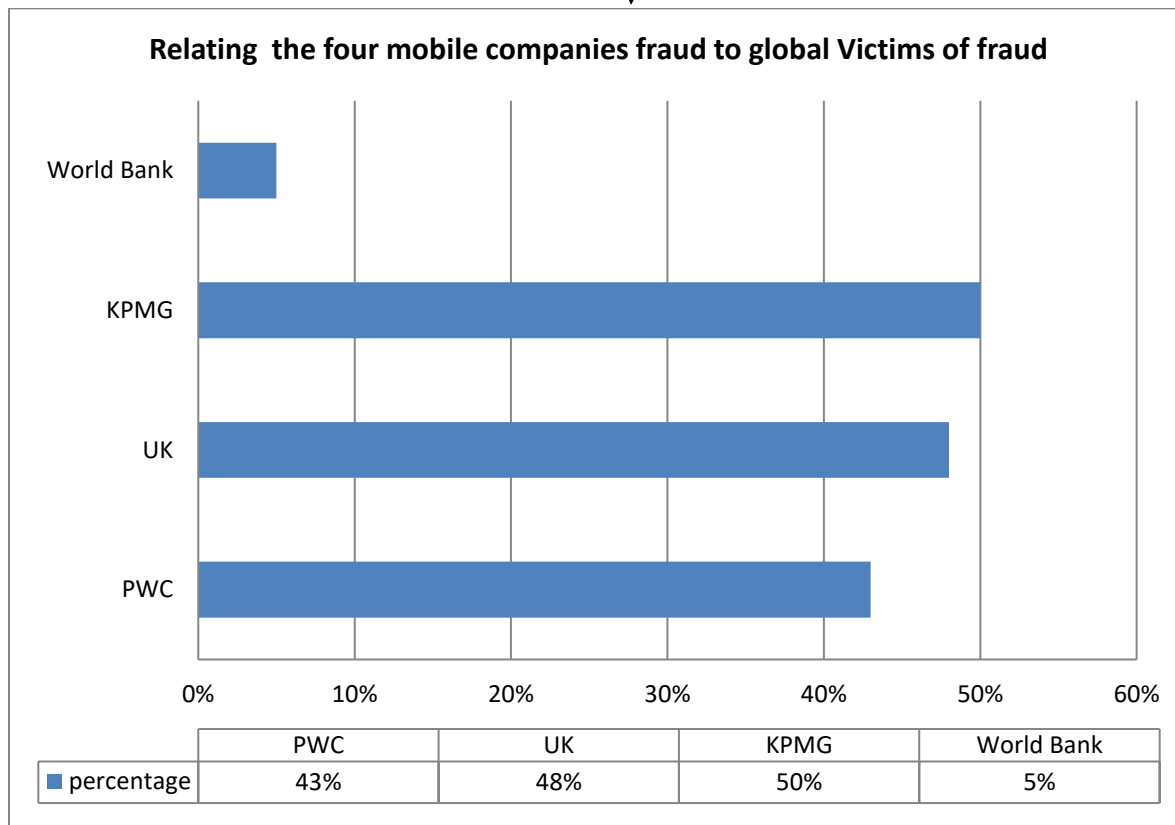
The nature of fraud in the mobile companies in Ghana differs but can be easily classified into separate groups. The same fraud type happens in all the four companies so it is difficult to differentiate them by companies but the general public experience any of these types of fraud in each of the four mobile companies. The first and the most frequent type begins with anonymous calls (29%) from fraudsters. Customers receive calls from fraudsters after deposits to transfer funds received with the claim being airtime. The next is false Promotion(24%): Customers are lured to authorize cash out transaction with the claim of winning Mobile Money promotion .Other Customers are lured to visit merchant point to redeem price won through Mobile Money. Cash out fraud(19%) is the third strategy fraudsters used : Customers are pushed payment approval prompt and lured to enter their pin code in order to receive price won through Mobile Money. In the case of scam(14%), fraudsters call to dupe customers under the pretext of delivering goods from abroad. Some fraudsters call and ask for specified amounts to be deposited into a mobile money account, in exchange for goods from relatives/friends from abroad. With regards to false Cash out SMS(9%), Fraudsters send false cash out messages to merchants for authorization of which the physical cash is issued by the merchant to the fraudster without the equivalent e-cash. Finally, under false Promotion SMS(5%), fraudulent consumers send fake SMS to agents either from their own handsets or generated from computers. The SMS looks genuine to the recipient. In Ghana these are the different types of SMS fraud that happen in all the four companies.

Fig.2: Investigating the relationship between fraud and financial performance of four mobile payments companies in Ghana .

Mobile Money, Tigo Cash, Airtel Money and Vodafone Cash have recorded 388 money fraud cases in 2016 as against 278 in 2015 which impact their profitability.

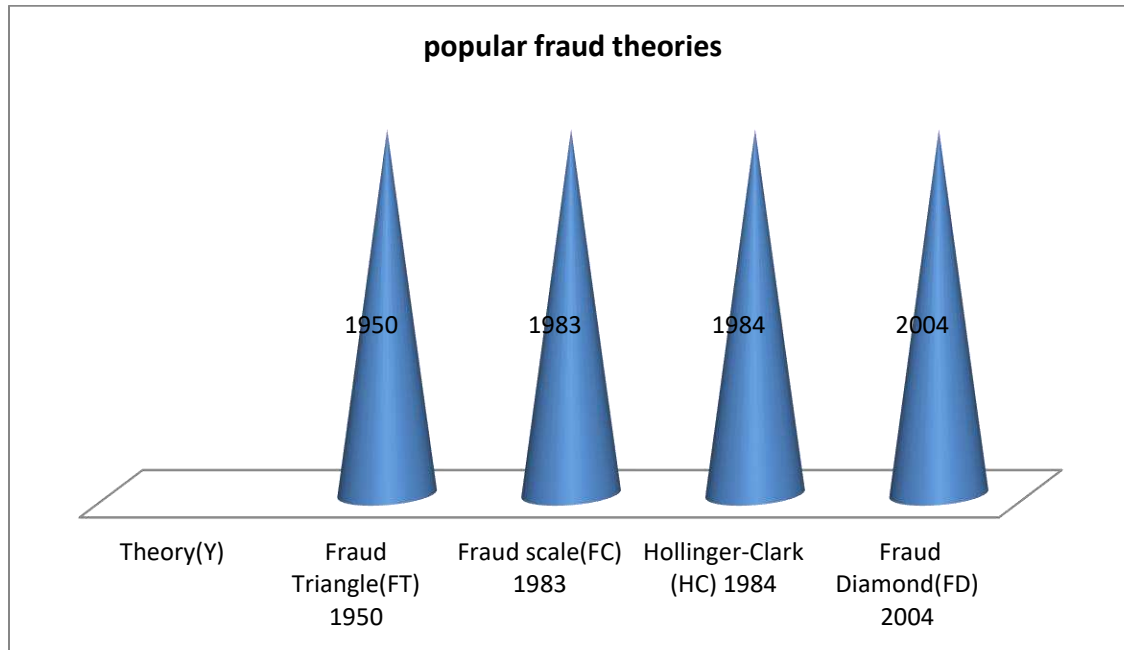
Scammers steal monies ranging from GHC200-GHC3, 500. MTN, has sanctioned 3,000 mobile money agents allegedly caught in mobile money fraud in the last three quarter of 2018.

MTN Ghana receives about 365 complaints of fraud from subscribers in the country.  
At least five out of 10 mobile money subscribers have either experienced one form of fraud.



The mobile fraud in Ghana in a way contribute to the global fraud statistics .Price waterhouse Cooper’s Global Economic Crime Survey (PwC’s survey) in 2007 found that over 43% of international businesses were victims of fraud during the previous two years. In the UK, the figures were higher than the global average, with 48% of companies having fallen victim to fraud. KPMG’s Fraud Barometer, which has been running since 1987, has also shown a considerable increase in the number of frauds committed in the UK in recent years, including a 50% rise in fraud cases in the first half of 2008. According to the UK report of PwC’s survey, the average direct loss per company over a two year period as a result of fraud has risen to £1.75 million, increasing from £0.8 million in the equivalent 2005 survey. The World Bank has estimated that the global cost of corruption and bribery is about 5% of the value of the world economy or about \$1.5 trillion per year.

Fig.3 Some of the popular theories of fraud and its application to the management are described in the table below:



**Fraud scale theory  
by Albrecht**

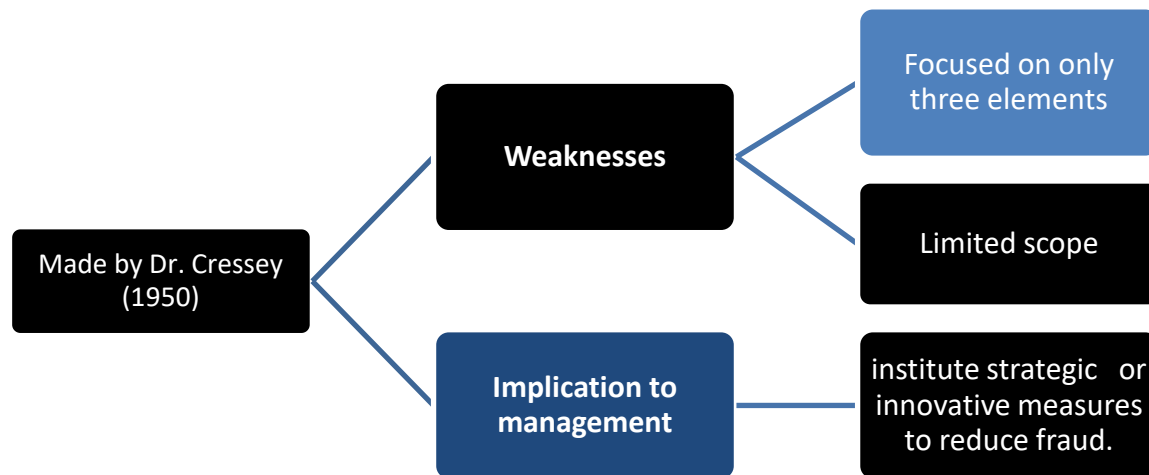
- Weakness:** Places too much emphasis on personal integrity.
- Implication to management:** alerts management to pay particular attention to employees integrity .

**Fraud Diamond Theory  
by Wolfe and Hermanson**

- Weakness:**Single element named capability added is not enough.
- Implication to management:**Management must monitor capability of the individual who commit fraud in the company and avoid them

**Hollinger-Clark**

- Weakness:** employees steal primarily as a result of workplace conditions.
- Implication to management:** Management must treat different employees in terms of age groups .



## DISCUSSION OF FINDINGS

This research work will make a contribution to existing knowledge. The research has theoretical, practice and policy implication. Theoretically, findings on Research objective one (research question one) which deals with examining the nature of fraud in the mobile payment companies can contribute to the body of knowledge on types of fraud for their inclusion in fraud theories. It will provide further insight into the ongoing debate on mobile payment interoperability issues. In terms of practice, the findings on Research objective two which deals with investigating the relationship between fraud and financial performance of mobile payments companies can encourage organizational managers of the four mobile companies to play strategic role in fraud prevention. It will also encourage financial intermediaries to bring out new innovations that will detect fraud in financial transactions.

In addition the findings on Research objective three (Research question three,) which identify the fraud theories can help future researchers and government research department to come out with new theories and frameworks that will embody the current changes happening in the industry. The research objective two (research question two) which deals the impact of fraud to financial performance can contribute to practice in terms of provision of new policies to protect investors interest and also promote the maximization of shareholder wealth. The findings can also contribute to practice on guideline on attracting foreign direct investment and institutional investors. Additionally, the findings can also encourage the adoption of multiple-theoretical approach to research in frauds and call for further research into the area.

## CONCLUSION

The research begins with the types of fraud available in the four mobile companies in Ghana, of which this study adopt both mixed designs. The method is adopted because the weaknesses of qualitative variable can be catered for by the quantitative analysis. The research format for the study is descriptive. It is adapted because the descriptive helps to describe the characteristics of the data that was collected. The population, sampling, instrument, data collection and measurement of variables are also discussed. A case is made to justify for the adoption of the statistical analyses which include descriptive data analysis. The study employed secondary data in examining the relationship between the variables. Only mobile companies with complete annual reports and financial statements for the period was included in the study to ensure that, the study meets the requirements. Finally, the limitations and delimitations are also discussed. The research is of much interest to the field of finance because its contribution to general body of knowledge would be mostly felt by every Ghanaian using mobile payment. It will also point out areas of further research in the mobile payment industry in Ghana especially on the ongoing debate on interoperability. Most of the previous related research works were limited to only secondary data. However, an attempt has been made to include the percentage of victims who are directly affected by the activity of mobile payment companies by giving out the reports by international financial institutions such as world bank report. Even though there has been series of research on mobile payment adoption by customers, this is the first time fraud and their effect on financial performance has been investigated in one research in Ghana and even relate this fraud cases to the global fraud victims..

## RECOMMENDATION

There can be no doubt that fraud is prevalent within organizations and remains a serious issue in Ghana especially the four mobile companies in Ghana. Education, training, written policies and procedures addressing internal fraud are systemic devices that a company can use to deter or prevent internal fraud. Combined with systemic devices and preventive efforts, addressing the fraud up front through consistent enforcement and sanctions, including discharging employees who commit fraud, will send a clear message to all that the company would not compromise its integrity. Once an allegation of fraud arises, the company is faced with many considerations, the company can conduct an in-house investigation and prepares a written report in connection with the investigation, a governmental agency could use that report as a road map for conducting its own investigation. Yet, allowing the fraud to go unaddressed in any company could be problematic. Sound business and legal judgment supports conducting an investigation but proceeding with skill, caution and confidentiality. In the end, an internal investigation should be conducted for no other reason than to stop the fraud or send a message throughout the company that fraud will not be tolerated. The investigator and the employer must be aware that companies are generally liable for the fraud committed by its directors, officers, employees, and agents. Fraud has grown rapidly over the last few years and there is a growing trend for large organizations to consider hiring professionals such as forensic accountants to reduce the pressure and potential of financial frauds. Fraud is an issue that all organizations may face regardless of size, industry or country. It is often high profile frauds in large multi-national organizations that are reported in the media and smaller organizations may feel they are unlikely to be a target of fraudsters. However, small businesses (classified as those with less than 100 employees) suffer fraud more frequently than large organizations and are hit by higher average losses. When small companies are hit by large fraud losses, they are less likely to be able to absorb the damage than a larger company and may even go out of business as a result. Even not-for-profit organizations are not immune to fraud, with government institutions and many charities falling victim to unscrupulous fraudsters. Therefore the future researchers must focus their studies on the innovative ways of detecting fraudsters such as preventing cybercrime by using large sample size from the industry.

## REFERENCES

Klein,U.M. and Mayer,C.(2011).mobile Banking and Financial Inclusion: The regulatory lessons.*World Bank practice Research Working paper* N0.5664.

Merritt,C.(2011).Mobile money transfer services. The next phase in the evolution of person-to-person payments. *Journal of payments strategy and systems*,vol.5,no.2,143-160.

Heikkinen,P. and Iivarinen,T.(2011).Ensuring trust in electronic payment media.*Journal of payments strategy and systems*,vol.5 ,No.2,161-168.

Balakrishnan,M.(2011). The impact of the adoption of emerging electronic payments options on improving working capital management and profitability of firms in India. *Journal of payments strategy and systems*,vol.5,no.2,188-208.

Hotenzia,W. and etal(2013).The feasibility of using mobile-phone based SMS reminders and conditional cash transfers to improve timely immunization in rural Kenya, *Journal of payments strategy and systems* ,vol.31,Issue 6,987-993.

Yelland,M.(2013). Fraud in mobile networks.*Computer fraud and security*,vol. ,issue 3,5-9.

Adudai,K.J. and Kingoo,N.(2012).The Relationship between Electronic Banking and Financial Performance Among Commercial Banks in Kenya. *Journal of Finance and Investment Analysis*,vol.1,no.3,99-118.

- Zulfiquar,U.S.and Anwar,S.K. (2007).Analysis of mobile payment security measures and different standards. *Computer fraud and security* ,Issue 6,12-16.
- Havrychyk ,O., and Jurzyk, E. (2006). Profitability of foreign banks in Central and Eastern Europe: Does the entry mode matter? Bank of Finland, BOFIT Discussion Papers 5.
- Hitt, M., R. Hoskisson,R., Johnson,R. and Moesel,D. (1996). "The market for corporate control and firm innovation: Effects of participation, strategy, size, and internal controls." *Academy of Management Journal*, 39(5), 1084-1119.
- Cressey,D.R.(1950) . The Criminal Violation of Financial Trust. *American Sociological Review*, Vol. 15, No. 6 , 738-743.
- Wolfe, D. T., and Dana R. Hermanson,D.R(2004) "The Fraud Diamond: Considering the Four Elements of Fraud." *CPA Journal* 74. no.12,38-42.
- Albrecht,W.S., Howe,K.R. and Romney,M.B.(1984) .Deterring fraud: the internal auditor's perspective, *Business and Economics*,169.
- Hollinger,C.R and Clark ,J.P (1983).Deterrence in the Workplace: Perceived Certainty, Perceived Severity, and Employee Theft .*Social Forces*, Vol. 62, Issue 2, 398–418,
- Saunders et al., (2007). The impact of institutional ownership on corporate operating performance . *Journal of Banking and Finance* ,Vol.31,Issue 6,1771-1794.
- Kerliner,F.N and Lee, H.B.(2000). Foundations of Behavioral Research. *Quantitative Methods in Psychology Series*, 890 .
- Mensah et al.,( 2003).Corporate Governance and Corruption in Ghana” *A Report prepared for IDRC CRD I ACMF CIPE*
- Thanasak, R. (2013). The Fraud Factors. *International Journal of Management and Administrative Sciences* , Vol. 2, No. 2, 01-05.
- Sutherland,E. (1939) . White colour criminology. *American psychological review* ,vol 5,no. 1,1-12.
- Gbegi, D. O., & Adebisi, J. F. (2013). The New Fraud Diamond Model -How can it help forensic accountants in fraud investigation in Nigeria? *European Journal of Accounting Auditing and Fiancé Research*. Vol.1, No. 4, 129-138,
- Choi,Y.S., Hyeon,J. , Jung,T. ,Lee,W,J. (2018). Audit Pricing of Shared Leadership. *Emerging Markets Finance and Trade*, vol.54, 336-358.
- White, G. L., Sondh, A. C., and Fried, D. (2005). The Analysis and use of Financial Statements Analysis. Basic Credit Handbook , City Bank USA.
- Moss,J. and DeRenzo,E.(2006).Writing Clinical Research Protocols. Ethical Considerations, Elsevier, Academic.vol.300.

Bell,J.( 2005). Doing Your Research Project, open University press. McGraw-Hill Education

Johnson et al. (2007): Toward a Definition of Mixed Methods Research ,*Journal of Mixed Methods Research* Vol. 1 issue: 2, 112-133 .

Parahoo, A.K. (1997) Nursing Research, Principles, Process, and Issues. London, MacMillan