

**UNIVERSITY OF GHANA**

**PERFORMANCE OF SMEs IN GHANA: DO MOBILE MONEY  
PAYMENTS MATTER?**

**BY**

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THE AWARD OF MPhil IN MARKETING DEGREE**

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## DECLARATION

I do hereby declare that this work is the result of my own research and has not been presented by anyone for any academic award in this or any other university. All references used in the work have been fully acknowledged.

I do bear sole responsibility for any shortcomings.

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## CERTIFICATION

I hereby certify that this thesis was supervised in accordance with procedures laid down by the University of Ghana.

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DATE

## **DEDICATION**

This work is dedicated to my husband, Mr. Philip Delali Zumanu, who has never stopped believing in me. You spur me on to greater heights. This is just the first step to where you wish to see me. With your unflinching support and strong push, I know I will get there pretty soon. Keep being my number one fan.

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## ABSTRACT

Studies investigating SME performance is rather limited. On the other hand, calls have been made for better collaborative effort in producing more comprehensive studies on mobile money payments and the value they offer stakeholders. Indeed, whereas some studies have established the impact of varied factors on SME performance, it is still unclear the influence mobile money payments have on the performance of SMEs. Therefore, the study sought to assess the impact of mobile money payments on the business performance (financial, operational, service) of Ghanaian SMEs; to explore the performance measurement indicators adopted by SMEs; and to examine the types and preference of payment systems adopted by Ghanaian SMEs. Qualitative research approach was adopted to provide direction for the study. Specifically, a multiple case study design was used. Twenty (20) cases (SMEs) were explored through face-to-face in-depth interviews. One significant finding of the study was that, most SMEs in recent time were relatively younger, highly educated, had occupations entirely different from their professions, operated young businesses and were very customer oriented. The key finding of the study indicated that, mobile money payments had enhanced the financial, operational and service performance of the SMEs. The study concludes that, the ‘convenience’ feature of mobile money payments was the key factor for its adoption by SMEs, underscoring their preference of mobile money payments over other payment systems. In view of these insights, policies must be instituted to create a favourable environment for the sustainability of the businesses of the budding SMEs, and to further attract more of such entrepreneurs as a way of minimizing the unemployment canker in the country. Again, the mobile money payments service has come to stay and it is a huge blessing to SMEs. Providers of the service must therefore prioritize the needs of SMEs in their scheme of things and employ more customer-focused approaches in their business activities.

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

The chapter provides an overview of the entire study. Specifically, it covers the research background, statement of the research problem, research purpose, research objectives, research questions, significance of the study, and chapter disposition.

#### **1.1 Research Background**

Gopalakrishnan (2000) emphasizes that, organizational performance has wide-ranging descriptions. Organizational performance focuses first, on measures related to efficiency, that is, the connection between input and output; next, on measures related to effectiveness, viz a viz, employee satisfaction and business growth. Organizational performance is also characterized by financial (e.g. profit growth, return on investment and return on assets) and non-financial measures from objective and subjective perspectives. Again, organizational performance is perceived to be reliant on the attainment of the mission, objectives and goals of the company (Lusthaus et al., 2002). Abor & Biekpe (2007), validate this assertion by arguing that, maximizing firm performance is the aim of management as this demonstrates the accomplishments of management. To this, Lusthaus et al. (2002) further suggest that, business objectives can be echoed through profitability, growth, customer and employee satisfaction. Likewise, Small and Medium Enterprise (SME) performance has been conceptualized in literature using different classifications, some of which are: operational performance, financial performance and environmental performance (Negrão et al., 2017; Masakure et al., 2009; St-Pierre & Delisle, 2006).

Empirical studies undertaken on SME performance have also unearthed the multi-dimensional nature of performance (Agyapong et al., 2016; Tangen, 2005). These studies

span diverse areas including the determinants of performance (Carey, 2015; Shah et al., 2015); how SMEs measure their performance (Franco-Santos et al., 2012; Sillanpaa, 2011; St-Pierre & Delisle, 2006) as well as factors impacting SME performance (Masakure et al., 2009; Hawawini et al., 2003; Lockett & Thompson, 2001). These factors include CEO duality, levels of skill and education of the management, as well as corporate governance structures (Abor & Biekpe, 2007); internal and external branding capabilities (Odoom et al., 2017); among others. Mobile money payments are yet another factor, whose influence on SME performance remains uncertain in spite of the considerable attention it has received in mobile money research and business literature (Oliveira et al., 2016; Guo & Bouwman, 2016; Dahlberg et al., 2015; Hedman & Henningsen, 2015).

Mobile money payments are believed to have emerged as the “game changer” and the “new normal” for the payments’ ecosystem, which includes businesses (Hedman & Henningsen, 2015). Before now, goods and services were being paid for, using principally, the traditional means of payment such as: cash, credit cards and cheque (Oliveira et al., 2016). But the landscape for payments has changed with the introduction of mobile money, which emerged from the Financial technology (Fintech) era of the 2008 global financial crisis. In the heat of the crisis, financial institutions and global financial centers began searching for novel business development avenues and opportunities to keep their industry going, due to soaring operational costs. They therefore took to adopting nascent internet and information technologies like Fintech to improve their financial services delivery (Artie & Kwok, 2017).

Undoubtedly, Fintech has triggered the speedy progress of the payment services market (Barberis, 2014) and is known to influence in many ways numerous stakeholders including customers and merchants like SMEs (Leong et al., 2017). For instance, in Ghana, the use of mobile money payments has garnered some gains in both the cross-border and domestic front; especially within the SME space, where more and more SMEs are adopting mobile

money payments for their businesses. However, the influence of the payments on the business performance of these SMEs is not well-known, hence, the need to conduct this study.

## **1.2 Research Problem**

Studies on SME performance have commissioned a clear path for future research. Atristain & Rajagopal (2010) called for researchers exploring the performance of SMEs to undertake comparative studies of their work, in order to identify other performance-driving factors. Literature has also established that, studies investigating SME performance is rather limited, which is corroborated by St-Pierre & Delisle (2006) who expressed the need for more studies on SME performance to enhance understanding in the area, including an assessment of how SMEs adopt and implement best business practices and their impact on the performance of enterprises.

Additionally, studies on mobile money payments abound; but Dahlberg et al. (2015) bemoan the area as extremely intricate to study, making it even worse for new researchers, who studies have confirmed, are struggling to comprehend the phenomenon. In the light of the aforementioned, calls have been made for better collaborative effort in producing more comprehensive studies on mobile money payments and also to ascertain the value mobile money payments offer stakeholders within the mobile money payments ecosystem; which stakeholders or market actors comprise consumers, merchants, service providers, device manufacturers, regulators and financial institutions, issuers, acquirers and traffic carriers (Dahlberg et al., 2015). Others are: market factors such as available network, legislation, consumer and merchant technology and habits on payment instrument used (Dahlberg et al., 2015). Besides, whilst the era of Fintech has brought about the growth of a number of technology-enabled products and services including mobile money, which undoubtedly has

a lot of benefits for SMEs, there still remains a dearth of studies on the impact of mobile money payments on SME performance.

As earlier highlighted, some studies have established the impact of varied factors on SME performance (Masakure et al., 2009; Abor & Biekpe, 2007; Hawawini et al., 2003; Lockett & Thompson, 2001). However, it is still unclear the influence of mobile money payments on the performance of SMEs.

### **1.3 Research Purpose**

The study seeks to investigate whether mobile money payments influence the business performance of Ghanaian SMEs.

### **1.4 Research Objectives**

The objectives of the research are:

1. To explore the performance measurement indicators adopted by SMEs.
2. To assess the impact of mobile money payments on the business performance (service, financial, operational) of Ghanaian SMEs.
3. To examine the types of payment systems used by Ghanaian SMEs and to determine which is the most preferred.

### **1.5 Research Questions**

1. How do Ghanaian SMEs measure the performance of their businesses?
2. What performance benefits do Ghanaian SMEs derive from mobile money payments?
3. What are the perspectives of Ghanaian SMEs on payment systems?



### **1.6 Significance of the Study**

This study contributes to extant literature by providing SMEs with empirical information to help them determine the extent to which mobile money payments impact their business performance; while providing more highlights on mobile money in general. By disseminating the findings of the research through publications, SMEs would become conscious of widely accepted standard protocols for business performance measurements for adoption to ensure more accurate performance measurements. The study would again serve as a valuable guide to Fintechs in Ghana, to improve their services through the development of customized services for SMEs. To researchers, the gaps and recommendations would offer direction for future Mobile Money research. Regulators of the mobile money industry and other policy makers will find the results useful in enhancing regulation.

### **1.7 Scope of the Study**

The study covers Micro and Small Enterprises in Ghana, as classified in the National Board for Small Scale Industries (NBSSI, 1990) definition of SMEs, which categorizes SMEs using the number of employees and asset size. Thus, enterprises with  $\leq 5$  employees are deemed micro, 6-29 employees, small; 30-39 employees, medium; and  $\geq 100$  employees, large (NBSSI, 1990); engaged in any sector of the economy, and who have used mobile money payments for their businesses for at least two years.

### **1.8 Chapter Disposition**

The study is organized in six chapters.

Chapter one gives an overview of the study. It explains the background to the study and states what the research problem is. This is followed by the research objectives and research

questions; the significance and scope of the study are also presented, together with the chapter disposition.

Chapter two presents an overview of the Ghanaian as well as the Global mobile money industry. It principally sheds light on the mobile money ecosystem, the key functions, benefits and trends, mobile money interoperability as well as payment systems. The issues emphasized also cover the history and journey of mobile money, including the recent developments in the mobile money industry in Ghana and elsewhere around the world.

In chapter three, relevant literature is reviewed together with the Technology Acceptance Model (TAM), which underpins the study. The literature review was done in two parts: the theoretical and empirical reviews. A conceptual framework is also developed to guide the study.

Chapter four presents a detailed outline of the process used in conducting the research, in an attempt to find answers to the research questions. The interpretivist paradigm which reinforces the study is also discussed. Again, the chapter highlights the various aspects of the research methodology employed for the study.

Based on the thematic areas extracted from the data, chapter five discusses the findings of the study using existing literature. The six themes derived comprise: SMEs' perceptions of performance measurement; mobile money payments and their influence on SMEs' performance; SMEs and drivers for the use mobile money payments; mobile money transactions performed by SMEs; SMEs and payment systems and SMEs perspectives on measures to address mobile money payment system challenges.

Chapter six presents a synopsis of the study in respect of the research gap and the purpose of the study and principally the steps taken to conduct the study. A summary of the key findings of the study is also highlighted. Extrapolations are made to serve as conclusions

for the study. Recommendations are again made for the SMEs, MTN, Government and other stakeholders of the mobile money industry. Further research guidelines are also proposed for researchers.

### **1.9 Chapter Summary**

This introductory chapter of the study highlighted the background of the study, research problem, research purpose, research objectives, research questions, significance of the study, as well as the organization of the study.

## **CHAPTER TWO**

### **CONTEXT OF THE STUDY: AN OVERVIEW OF THE MOBILE MONEY INDUSTRY**

#### **2.0 Introduction**

The mobile money industry has witnessed tremendous growth over the years. The chapter presents a broad picture of the industry in the global and national contexts. It captures the progress made so far as well as the trends within the industry.

#### **2.1 Overview of the Global Mobile Money Industry**

Since the maiden Mobile Money Summit held in Cairo, Egypt in 2008, the mobile money industry has grown significantly in size, scope and sophistication (Khalil, 2009; Dolan, 2009) resulting in remarkable progress. However, with more than two billion individuals being financially excluded, efforts must be sustained to hasten the financial inclusion agenda. To this end, the then president of the World Bank Group (WBG), Kim (2017) initiated a project in 2013, to attain 'Universal Financial Access' by year 2020, such that, all adults would own accounts that allowed them to store value besides making and receiving payments. This initiative was also in the hope that, by the attainment of full financial inclusion, all consumers would have access to a variety of suitable financial products, dispensed in a responsible and sustainable manner. Further, the initiative maintained that, financial inclusion would be an avenue for individuals to smoothen out consumption; manage economic shocks, as well as invest in their health, education and economic well-being.

#### **2.2 The Mobile Money Ecosystem**

At a glance, the mobile money ecosystem encompasses both local and international financial institutions and donors, mobile network operators, solutions vendors, development

organizations and policymakers. Others are: airtime sales agents and other retailers, employers, utility companies, regulators, civil society organizations, technology firms and governments (Kendall et al., 2013; Dolan, 2009). Within the mobile money industry, perceptions are that, the players are improving in the management of the interdependence and harmonization required by productive and dynamic mobile money ecosystems. Bains (2018) noted how the participants within the mobile money ecosystem saw the worth in working together, realizing how partnership with regulators had improved dramatically; hence, the perception of Dolan (2009) that, the development and firming up of the mobile money ecosystems will enhance the move of the industry from its evolution stage to a growing phase and ultimately, a mature stage.

### **2.3 Features and Benefits of Mobile Money**

Mobile money has brought in its wake many benefits for users, including SMEs and other stakeholders alike (Dolan, 2009). SMEs are particularly recognized as an important market segment, considering their higher payment capacities. Being the epicenter of supplier and customer networks, SMEs are likely to stimulate adoption along the value chain upwards and downwards (Kendall et al., 2013). For most businesses, mobile money is a means to reach new customers, improve and vary services for existing ones. For individual customers, mobile money grants increased security and affordability (GSMA, 2017; Dolan, 2009). According to BoG (2017), in Ghana, mobile money can be used for the payment of goods and services, including purchasing airtime, payment of DSTV and utility bills, as well as salaries and taxi fares, money transfer from one person to another (P2P), savings, micro-insurance and micro-credit. Further, the convenience, reach and privacy features of mobile money, make it a predominantly attractive remittance network for rural households and women. For Mobile Network Operators (MNOs), the mobile money service has proven to help decrease customer turnover, a noteworthy challenge for them. They also perceive

mobile money as a safer option than cash besides saving travel time and reducing the risk of theft. Some small businesses use the service for digital salary payments; to help the timely payment of fees by parents and to form informal savings groups (GSMA, 2017; Kendall et al., 2014). In Kenya, people receiving remittances into their mobile money accounts are able to buy government bonds. The service is also used to mobilize deposit accounts, which has helped improve the financial capability of the hitherto underserved segments of the population (GSMA, 2017; Muthiora, 2015). Still, some non-payment organizations source real-time financial data from operators, which eventually helps reduce record-keeping, while increasing transparency and also reducing the cost incurred on payments by governments, through the adoption of digital payments. Consumers also benefit from related savings, minimizing the need for expensive physical infrastructure (Kendall et al., 2013). Undeniably, the advancement in the mobile money sub-sector has enhanced the growth of the payment environment, while deepening financial inclusion and the advocacy for a cash-lite economy (BoG, 2017).

Consumers progressively comprehend and value the prospects mobile money offers. Four out of five M-PESA users in Kenya trust that, not using the services of M-PESA would have a huge negative influence on their lives (FSD Kenya, 2009). FSD Kenya (2009) also found that, over 95% of mobile money users perceive M-PESA to be more secure, faster and more convenient than the other informal approaches mostly used to receive or send money. For instance, in the Philippines, CGAP (2009) discovered that, close to 90% of mobile money users thought their monies to be safe, hence, would mention the services to their families and acquaintances. Besides, Consumers will remain great beneficiaries for a long time to come as services provided by banks increase in sophistication, spreading convenience, speed and security to more products such as credit and savings (Dolan, 2009). Undeniably, the growth of mobile money could be enhanced through the facilitation of financial sector

inclusion, reaching low-income consumers in the process. Though mobile money has benefitted traditional financial institutions in the form of new bank accounts opening, MNOs within the industry have however outperformed them due to the perception held by existing bank customers that, mobile banking was a mere value-added service (Dolan, 2009; FSD Kenya, 2009). In all of this, research seems to be the way forward for the financial sector in breaking through within the mobile money industry, while more and more sophisticated consumer demands are expected to push the development of new regulation and services and possibly, new technologies (Dolan, 2009). Dolan (2009) further explains that, First National Bank (FNB) in South Africa for instance, whose mobile money services have grown rapidly over the years, was said to have launched consumer research into the quality of their services and how to enhance them.

#### **2.4 Evolution of Mobile Money**

Interestingly, though Sub-Saharan Africa has long been the focal point of mobile money and growth within the region, the maturity within the industry has spilled over to other parts of the world. South-Asia, which saw the highest year-on-year growth of 47% in accounts, compared to any other region, now has 34% of registered accounts globally. While the year 2017 saw the commencement of a possible substantial shift for mobile money to serve as a means of saving money with accrued interest, participants in a Global Adoption Survey acknowledged being offered mobile money-enabled savings, pensions or investment product (GSMA, 2017). It has also become 50% cheaper to send remittances through the mobile money service, as compared to using global Money Transfer Operators (MTOs) (Farooq et al., 2016). WorldRemit data indicates that, their customers prefer to send money to the rural areas using mobile money (Scharwatt, 2017). With mobile money playing a critical role in formalizing international remittances, formal remittances to developing countries was 450 billion dollars in 2017 (KNOMAD, 2017); though the true volume of

remittances is thought to be suggestively higher, with large flows going through loose informal channels. Customers seem to be making more digital transactions, as cash-out dropped from 81% in 2012 to 74% in 2017 (GSMA, 2017). In December 2017 alone, transactions made within the global mobile money ecosystem was \$12.6 billion, 75.4% being agent cash-ins. This is a dip in cash-ins from 88% in 2012 (GSMA, 2017). The mobile money industry has experienced a high level of digitization since 2012, resulting in reduced cash conversion rate. Bulk disbursements, bank-to-mobile transactions and bill payments have accounted for this change, which has consequently improved provider revenues, since agents' fees received for cash services for customers are naturally subsidized by the provider. Again, digital payments done through mobile money has significantly helped streamline the collection process, as in, reducing activity time and improving complete collections, settlement and reporting. The move from cash to digital payments has again resulted in a surge in cost savings and revenue collection, while improving operations of Ministries, Departments and Agencies (MDA) of government, as seen in government services and the National Transportation Safety Authority of Kenya (GSMA, 2017).

This remarkable evolution in financial access by Kenya, a country which currently has one of the highest mobile money penetration rates in the whole world, can be traced to the year 2007, when non-bank providers began offering mobile money products, by giving incentives to service providers to invest in mobile money (Di Castri, 2013). The traditional financial services sector has also been instrumental in the success of mobile money in Kenya, having over 20 banks connected to the mobile money services network (Muthiora, 2015). Additionally, an increasing Fintech community tries to infuse innovation into mobile money, a welcoming move which may serve as the doorway to the digital economy, and gradually become pivotal to the story of mobile money.



## **2.5 Trends in the Mobile Money Industry**

GSMA (2017) reports that, the year 2017 embraced some progressive trends in mobile money with the service being available in over 90 countries as follows: From an acceleration of growth in bank-to-mobile interoperability, to South Asia's growth as the fastest budding region as well as a range of inventions intended to serve the most underserved. According to GSMA (2017), the mobile money industry processed one billion dollars daily, making revenues of over 2.4 billion dollars, with 690 million registered mobile money accounts worldwide; thus, placing mobile money as the top payment platform for the digital economy in numerous developing markets. GSMA (2017) asserts that, this strong growth in customer registrations in 2017 witnessed an addition of more than 136 million new accounts, a 25% increase from 2016, while activity rates of a budding range of mobile money services was over 50%; with bulk disbursements, bank-to-mobile transactions and bill payments being the main triggers of this trend. Again, GSMA (2017) reports that, as mobile money becomes progressively digital, it is connecting the wider economy and as such, becoming more valuable to consumers while yielding healthy margins for a budding number of providers. To this end, over one out of four mobile money deployments are reported to have posted strong 'Earnings Before Interest, Taxes, Depreciation and Amortization' (EBITDA) margins of 25% or more, although in other circles, profitability is said to be a challenge for other providers (GSMA, 2017).

## **2.6 Payment Systems and Mobile Money in Ghana**

Payment systems have had an interesting journey globally, traveling from barter trade, through to coins, cards and currently mobile payments (Asare, 2017). Asare (2017) further revealed that, all through the evolution of payment systems, customer convenience had always stood out as a major driver of the evolution.

A study on payment systems in Ghana by BoG (2017) explains that, usually, a rigorous payment system is necessary for safeguarding the safety, stability and soundness of a financial system. A well-organized payment system enables the completion of financial transactions in a timely manner, to improve the standard of living, job creation and economic growth. General enhancement in payment systems echoes in the whole economy, usually done via its inter-connections with the fiscal, external and the real sectors.

Ghana's payment system is made up of a collection of institutional arrangements and processes that enable transfer of financial entitlements between a couple or more economic units. The institutional provisions and processes comprise several steady payments including Real Cheque Codeline Clearing (CCC), Time Gross Settlement (RTGS) and the Ghana Automated Clearing House (GACH) made up of Direct Debit and Direct Credit. Others are: E-zwich, mobile money, payments cards and other providers of payment services (BoG, 2017). This study discusses the mobile money payment system.

Sub-Saharan Africa is also having a reasonable share of the expansion of mobile money beyond traditional footholds. In 2017, Central and Western Africa were the fastest growing areas in Sub-Saharan Africa, led by incredible growth in registered accounts in countries like Ghana, Cameroon and Côte d'Ivoire. Interest payments are made quarterly on the balance of mobile money float, by virtue of the 'store of value' feature of mobile money (Apiors & Suzuki, 2018). The 2015 regulatory guidelines from the central Bank of Ghana allows customers to accrue interest on mobile money deposits, facilitating exponential growth in total deposits in the Ghanaian market (GSMA, 2017). Mobile money customers can also purchase treasury bills using their handsets, which was made possible through a collaboration between MTN Ghana and Ecobank Ghana in September, 2016 (BFA, 2017).

Mobile money may well be defined as electronic cash, supported by a corresponding amount of Bank of Ghana's coins and notes, stored through the use of SIM (Subscriber Identification Module) in a mobile telephone as an identifier (BoG, 2017). GSMA (2013) also defines mobile money as a transformational service, which employs non-bank retail and ICT channels to spread the distribution of financial services to clients who cannot be reached easily through traditional branch-based financial services, in a profitable manner. Some functions of mobile money are: peer-to-peer (P2P) transfers using electronic wallets or receipt of salaries and government to person payments (G2P). Universally, the typical daily value of P2P trade on a mobile money platform is projected by GSMA (2013) to be nearly USD35 (GH¢150).

Indeed, the exponential growth in mobile money usage in Ghana, is partially due to growing penetration and application of mobile phones, particularly in rural areas. Hini (2017) noted that, although mobile money payments were accessible across the entire country, it was more prevalent in the cities where many more activities took place, adding that, the rural areas had not been left out. The extensive explosion of mobile money use among the underserved and unbanked has also been found to be on account of current developments in chip and mobile network technologies; handset functionality and enhancement in Point-Of-Sale (POS) infrastructure.

A Graphic business news report by Bruce (2017) on the theme "Mobile money is the future of payment systems" illustrated that, a lot of work had been done particularly, from the mobile perspective, the reason for which today, people were able to do many things with their phones and also having applications that permitted them to link up with a payment solution provider and a merchant or other integrated payment systems (Hini, 2017). He also reported that, many options for payment systems were available in Ghana, although only a few of them were being accessed. Hini added that, the degree of acceptability of mobile

payments as the new form of payment system in Ghana, had been incredible, as statistics available from the Bank of Ghana indicated a surge in the volume of transactions for mobile money nationwide from GH¢222 million in the first half of 2016, to GH¢423 million in the first half of 2017.

A study by BoG (2017) also concluded that, the mobile money sub-sector was a key driver of payment systems in Ghana. With the movement of the mobile money industry from an evolving stage into an expanding stage, mobile money providers have been advised to learn more about their consumers, particularly, the hitherto unbanked segments, while paying attention to the business propellers for better partnerships and deepening of the government-business discourse, on making environments receptive for growth. Hence, enhancing mobile money networks will push the industry to reach critical mass, achieving its potential in terms of market opportunity, while serving as a tool for poverty alleviation (Dolan, 2009). Subsequently, a stronger emphasis on data regulation is expected. As providers collaborate with a wide range of institutions on their platforms, regulators will also be contemplating management issues relating to data sharing between institutions, security, cross-border flows, privacy, analytics and more. The results of these pertinent discussions will assist in shaping future business models, cost of financial services and consumer protection in several emerging markets. In summary, as the burgeoning community of financial inclusion stakeholders works hard to address new regulatory questions, the sense of achieving the policy end-result of vibrant and sustainable markets that progress inclusion must remain at the heart of every debate (GSMA, 2017).

## **2.7 Key Players in Ghana's Mobile Money Industry**

The key players within the mobile money industry in Ghana differ, with diverse roles and responsibilities, highlighted by the BoG (2017) below. The key players include the Mobile Money Operators, banks, the Bank of Ghana, and the National Communication Authority,

retailers and merchants, Financial Technology (Fintech) companies and agents, among others. According to BoG (2017), mobile infrastructure, agents' network and customer base are provided by Mobile Money Operators (MMOs). The MMOs are institutions that aim at maximizing profits while issuing electronic money held in the banks. The banks also provide the set-up for the movement of money between two parties, thus, providing physical custody of electronic money. All the units of electronic money issued by the MNOs are supported by a comparable amount of Bank of Ghana coins and notes stored in a bank to facilitate equilibrium in the mobile money market. Again, the role of the Bank of Ghana is to regulate and superintend the activities of the Specialized Deposits-taking Institutions (SDIs) and banks to ensure the safety, efficiency and reliability of the banking sector as well as the payment ecosystem. Similarly, crucial matters such as Countering Financing of Terrorism and Anti-Money Laundering and (CFT, AML) are the priority of the Banks. Other issues of equal concern to the banks are: promotion of competitive practices, consumer protection; solvency, asset quality, earnings, systems and control, liquidity, as well as management responsibility towards the mobile money sub-sector. In the same vein, the National Communications Authority ensures customers' data security and the integrity of mobile money technologies; they also oversee and regulate the activities of the MNOs that own the mobile money Companies, whereas the agents of the MNOs facilitate cash-in transactions, where cash is converted into cash-out and electronic form, issuing cash on demand, to facilitate convertibility from mobile money to cash and vice versa. Hence, agents are considered liquidity managers in the mobile money industry. Additionally, merchants and retailers accept mobile money payments in exchange for a variety of services and products. Lastly, companies within the Fintech space provide an extensive collection of support services which include manufacturing of mobile phone, software and network equipment.

## **2.8 Mobile Telecommunications Operators in Ghana**

BFA (2017) Ghana country diagnostic report specified that, the telecommunications sector in Ghana has been characterized by immense competition. At the end of December, 2018, there were four mobile telecom operators, namely, MTN, Airtel-Tigo, Glo and Vodafone, with total mobile voice subscriptions of 40,934,875 (NCA, 2018). The market share for the top three voice networks in 2018 in respect of mobile voice subscriptions were as follows: MTN – 49.08% representing 20,092,798 mobile voice subscribers; AirtelTigo – 25.14%, representing 10,289,491 mobile voice subscribers and Vodafone – 23.97%, representing 9,813,234 mobile voice subscribers (NCA, 2018).

Mobile phone diffusion stood at 135% in 2016, an 11% leap from 99% in 2012 (NCA, 2017). In respect of geographic coverage, MTN covered 79% of districts in Ghana (MTN, 2017), which represented approximately 171 out of 216 districts (Ghanaweb General News, 2017). However, the mobile money landscape in Ghana currently has three service providers: MTN Mobile Money, AirtelTigo Money, and Vodafone Cash, with MTN leading the market with 80% share as of June, 2016 (BTCA, 2016). MTN was also the first to introduce the mobile money service to Ghana in July 2009 (CGAP/Intermedia, 2015). The merger of AirtelTigo in April 2018, made them the second largest Mobile Network Operator in Ghana after MTN (AirtelTigo, 2019).

## **2.9 Ghana's Mobile Money Industry Metrics and Payment Aggregators**

In Ghana, “Cash is still king and this covers all the physical notes and cheques that are given to individuals and many smaller companies on a daily basis to complete most transactions in the economy” (Andani, 2018). Comparative payment systems statistics from the Bank of Ghana (2019) indicated that, there was a decrease in the general use of cheques across the country by 6.7%. The total value of cheque transactions was GHC35.7 billion in the first quarter of 2018 but declined to GHC32.1 billion in the same period in 2019, representing a

10.2% decline. This finding supports the assertion in the 2017 World Payments Report, of the declining role of cheques as a means of payment, given the rise of other efficient electronic payment methods (Abbey, 2019).

However, the Ghanaian mobile money industry metrics have experienced remarkable growth. By the close of December 2018, registered mobile money accounts was 32 million, representing a value of GHC233 billion in transactional value and 1.4 billion in transactional volume; sadly, out of the 32 million registered mobile money subscribers, only 13 million subscribers were said to be active as at December 2018 (JoyBusiness, 2019).

Besides, in the first quarter of 2019, mobile money had developed as one of the most patronized means of payments with the transaction volume for the first quarter of 2019 growing at over 39% compared to the same period in 2018 (Abbey, 2019). Abbey also reports the following Bank of Ghana mobile money statistics for the first quarter of 2019: Active mobile money accounts improved by 13.13%, up from 11.2 million accounts in the first quarter of 2018 to 12.7 million in the same period in 2019. Again, the value of all mobile money transactions conducted in the first quarter of 2019 yielded an amount of GHC66.4 billion, as against GHC52.4 billion in the same period in 2018, representing a more than 26% growth.

According to the B&FT (2018), balance on float, which represents the total balance held in all 'MoMo' wallets, was reported to be GHC2.7 billion by the end of March, 2019, as compared to GHC2.2 billion in the first quarter of 2018, a 49.3% increase over that of Quarter 1 of 2017. At the end of December 2016, mobile money agents were a total of 107,415, with MTN mobile money garnering 54%; Tigo Cash, 24.9%; Airtel Money, 11%; and Vodafone Cash, 10.1% (BoG, 2017). This number went up to 180,664 in 2018 (BoG, 2018).

For the leading mobile money network operator, MTN Ghana, the story could not be any different. Mobile money accounted for 15% of the total revenue recorded in the first quarter of 2018 (B&FT, 2018). From the end of June 2012 to the end of June 2017, registered mobile money accounts grew exponentially in five-fold, from 2 million - 10 million mobile money subscribers (GSMA, 2017). This was achieved through education, customer and agent incentives, increased engagement through door-to-door information and use of community activators' instant mobile money registrations, increased investment in agent visibility, training, increase in agent numbers and building partnerships with banks, merchants, SMEs and Micro Finance Institutions (MFIs) (GSMA, 2017). Customers are also responding to the opportunity to earn interest by keeping more money in their mobile money accounts while performing more digital transactions (GSMA, 2017).

While the mobile money industry creates job opportunities for service providers, agents and users including retailers, Fintech companies, aggregators and merchants, an interoperable platform with the capacity to manage cheques and all forms of digital payments is absent; payment aggregators comprising Slydepay, ExpressPay, Interpay and mobile money providers have integrated with merchants, multiple banks and billers to offer a variety of pioneering payment solutions including card to account, card to wallet, account to wallet, account to account, wallet to account and wallet to wallet payments (BFA, 2017). Meanwhile, rising competition in the Fintech space is pushing innovation and growing the number of case studies for digital payments (BFA, 2017).

## **2.10 The Potential of Mobile Money in Ghana**

In their study, Dzokoto & Mensah (2012) reported that, in Ghana, MTN re-introduced mobile money in 2009, after its initial introduction was poorly received earlier. By 2010, Airtel and Tigo, as separate institutions then, had also launched their mobile money products, while Vodafone was getting ready to launch theirs. Back then, there was consumer



resistance to new money products such as e-zwich, the redenominated currency and visa. In the same study, perceptions from the low income, non-poor recipients indicated the following: “will never use MoMo”; “Would like to try it”; “It is convenient, but the truth is, Mobile Money will be my last resort”; “Prefer to keep my money in the bank since I cannot trust ‘MoMo’, could lose my money due to possible transaction failure”. The higher income group perceived it as safer, cool and faster than other forms of money transfers but raised issues with network, fraud and logistics. The merchants, like the low-income group, had a knowledge gap; they had heard about it, but did not know what it was, neither did they understand it. Some merchants even considered moving back to cash since there was no success with visa and e-zwich due to technical and fraud challenges. Most vendors did not accept Mobile Money. Although there was visible marketing on TV, radio, banners, billboards and magazines, awareness was still low. The study also reported barriers to the use of ‘MoMo’ such as: lack of money; insufficient knowledge about product; lack of trust in the product in relation to safety; access to vendors/proximity; and confusion about the role of banks. Others were: the likelihood that ‘MoMo’ will cause them to spend more money; having nobody to remit money to; preference for cash; just have not gotten around it; fear of losing phone and concerns about technology; susceptibility to fraud; human error and logistical hitches; as well as low awareness of global context of ‘MoMo’. The general conclusion of the study was that, in Ghana, cash was still king and low-income and high-income earners, as well as the urban poor were at diverse stages of awareness and acceptance of mobile money.

In a Graphic business news report, Asare (2017) mentioned that, there were doubts as to whether mobile money would work when it was introduced in Ghana, but today, mobile payments are dictating payments across the country such that even the big financial

institutions have realized how important it was for them to get into the space so as to embrace the changing lifestyles and needs of their customers.

### **2.11 Mobile Money Interoperability in Ghana**

Beyond the traditional functions of mobile money, new functions continue to emerge. One of such functions is Mobile Money Interoperability (MMI). Interoperability is deemed to have occurred when diverse systems are technically able to work together as one; It also refers to “the linking of networks that allows users of one network to access the services of another network” (GSMA, 2009b). The Ghana Interbank Payment & Settlement Systems (GhIPSS), a subsidiary of the Bank of Ghana, described MMI as a service which permits seamless and direct transfer of funds from one mobile money wallet to another across networks.

MMI covers different functions, for instance, customers of one provider can make payments to customers of another provider; customers can also carry out transactions by means of any mobile network operator conduit; customers can similarly switch mobile network operators without switching their banks; and customers of one provider can use the agents of another provider and vice versa (Lyman, 2009).

In Ghana, ‘Interoperability’ is the new phase of mobile money. MMI was launched in Ghana in May, 2018 (Graphic Online, 2018). GhIPSS (n.d.1) explained that, before MMI was introduced, MNOs did not function as opened platforms. As such, subscribers of a particular network were unable to do direct transfers to subscribers of other networks. Hence, mobile money subscribers had to join several networks to make it possible for them to send money straight to other subscribers of those networks. Currently, MMI enables mobile money subscribers of one network to flawlessly and directly transfer money across other mobile money networks to their subscribers.

In terms of benefits, MMI enhances value to customers by increasing the places and ways mobile money could be accessed (GhIPSS, n.d.1). MMI creates convenience for users of mobile money; facilitating financial inclusiveness; reducing transactions cost; increasing service coverage; and decreasing dependence on cash. Others are: 24/7 funds availability to users with bank accounts and wallets; and the movement of funds with ease between bank accounts and wallets; besides the effortless of making and receiving payments for services and goods.

GhIPSS (n.d.1) further explained the process by which subscribers can access the MMI service. To access the service, one would simply dial their current mobile money short code. The mobile network the person is on will then provide the menus for the MMI service. Currently, all mobile money subscribers in Ghana can access the MMI service. To authorize all transactions to other networks, subscribers would have to use their existing mobile money PINs. Subscribers could also make transfers in line with the daily permissible limit of their mobile money network operators. The additional services offered by MMI are outlined as follows: Mobile money subscribers can transfer money from their wallets to any bank account using the platform of a Fintech (Wallet to Account: W2A). They can also transfer money from their bank accounts to any mobile money wallet or debit their bank accounts, then credit their wallets (Account to Wallet: A2W). For subscription to the MMI service, mobile money subscribers can apply to their banks to link up their mobile money wallets or phone numbers to their bank accounts. Likewise, it is possible to transfer funds straight from a subscriber's mobile money wallet to any e-zwich card (Wallet to e-zwich: W2E) and vice versa, that is, (E-zwich to Wallet: E2W).

Data sourced from GhIPSS (n.d.2) indicated that, since the launch of MMI, funds transfers across mobile networks have chalked consistent growth in both value and volume of transactions, recording a total value close to GHC12.458 million from 136,469 of wallet to

bank and wallet to wallet transfers together, in only the first month of operation. Specifically, GHC8.310 million was realized from 96,904 wallet to wallet transactions while GHC4.148 million was garnered from 39,665 wallet to bank transactions. A Bank of Ghana comparative statistics schedule for payment systems in Ghana reported a Mobile money interoperability transactions volume of 2,266,631 in 2018, representing a transactions value of GHC212,885,629 (BoG, 2018).

A GhIPSS (n.d.3) report also explained that, before the introduction of MMI, transactions from one network to another through the token system was nearly 90,000 transactions on the average per month. This demonstrates that cross-network transactions have increased by over 200% compared to the token system. Cross-network mobile money transactions reached nearly 800,000 at the end of August, 2018; the constant rise in the volume of cross-network mobile money transactions being indicative of the importance of MMI to the public. Cross-network mobile money transactions was valued at GHC72 million between May and August, 2018.

GhIPSS (n.d.3) also reported that, the launch of MMI has eliminated the previous inconveniences and complexities linked with transfers amongst all the networks within the country. MMI has also deepened financial inclusion as people who did not have bank accounts have now been roped into the banking system due to the fact that, any money kept in a mobile money wallet was essentially held at a bank. Besides, MMI has given the Fintechs and other Financial institutions the opportunity to come out with various products that will operate on the system and create convenience for customers. Deposit and micro credit schemes can also be offered to the public through MMI since people are now able make payments to mobile money wallets irrespective of their networks.

Dolan (2009) found that, consumers were previously responding to the limited interoperability availability by obtaining several mobile money accounts and substituting SIM cards when need be, thus, reducing the efficiency of mobile money. He added that, anytime the desirable level of interoperability was unavailable, the value of mobile money will be restricted so significantly, which may thwart the efforts of industry to attain critical mass; consequently, the challenges of harmonizing partnership and competition have hindered interoperability. Dolan also mentioned that, despite extensive acknowledgement of its significance, mobile money providers who seek to create competitive advantage in new markets, have been reluctant to surrender control to provide such an arrangement but market forces are expected to drive increasing interoperability over time.

### **2.12 Mobile Money and SME Performance**

The convenience, accessibility and lower costs associated with mobile money activities have generally occasioned the development of the business operations of SMEs. For some enterprises, mobile money is perceived as a means to make new customers, besides enhancing and expanding offerings for current ones (Dolan, 2009).

A study on mobile money found how significantly it had contribution to the SME sector, seeing that a greater number of the businessmen depended on it for their everyday transactions, in contrast with the formal banking sector (Nyaga & Okonga, 2014). Another study by Chale & Mbamba (2014) revealed that, the business growth of SMEs is enhanced when they adopt mobile money services as part of their business activities, such as sales transactions, payment for goods and services, savings, efficiency in the acquisition of stock, money transfer and payments from customers. Others are: payment of bills, taxes and loan repayments. All these activities are reported to be time and money-saving, resulting in the business growth of SMEs in relation to revenue, profitability and market share.

Additionally, a study by Onyango et al. (2014), found the relationship between mobile money services and performance of SMEs in Kenya to be positive.

Research suggests that, whereas the extensive use of the mobile money service in Kenya has culminated in immensely improving the efficiency of the National Payment System (NPS), the use of the service in making payments to suppliers has also been seen to improve financial performance of SMEs through access to credit (Beck et al., 2015).

According to Kirui & Onyuma (2015), the use of mobile money improves the performance of SMEs by dint of their flexible and ubiquitous nature, as well as their time and cost savings characteristics. In Kenya, the preference of using mobile money services over traditional banking services has also proven to positively impact the performance of SMEs (Masocha & Dzomonda, 2018). Mbogo (2010) indicates that, micro businesses use mobile payments to enhance their performance for growth and success.

However, a study by Ngaruiya et al. (2014) report adverse findings of their research which showed a negative influence of mobile money services on SME performance. Similarly, a study by Simiyu & Oloko (2015) reveals an insignificant relationship between mobile money services and the development of SMEs in Kisumu.

### **2.13 Chapter Summary**

The chapter presented highlights of the Ghanaian as well as the Global mobile money industry. It particularly sheds light on the history and developments in the mobile money industry in Ghana and globally. The issues emphasized include the mobile money ecosystem, the key benefits and functions of mobile money, trends in mobile money, MMI, payment systems as well as mobile money and SME performance.

## CHAPTER THREE

### LITERATURE REVIEW

#### 3.0 Introduction

This chapter reviews extant literature in two different ways: theoretical and empirical. The theoretical perspective comprises an analysis of some key theories in performance and mobile money research; while the empirical review captures studies undertaken by other scholars in the aforementioned areas. The conceptual framework to guide the study is also developed in this section.

#### 3.1 Theoretical Review

In reviewing performance literature, different theories have been adopted to elucidate the concept of SME performance. Among them are Resource based view (Agyei, 2018; Masakure et al., 2009; Agyapong et al., 2016; Atristain & Rajagopal, 2010; Carey, 2015; Azar & Drogendijk, 2014; Franco-Santos et al., 2012); Customer Based Brand Equity (CBBE) Model (Asamoah, 2014); Porter's generic typologies (Agyapong et al., 2016); Marketing Orientation Concept (Spillan et al., 2013); Shah et al., 2015); Institutional theory (Ede, 2018); Theory of internationalization (Singh, et al., 2010); Diffusion of Innovation Theory (DoI) (Acheampong & Hinson, 2018); Social Network Theory (Acheampong & Hinson, 2018) and some proposed models.

Further, theories used in mobile money studies over the years include: Contingency Theory (Dahlberg et al., 2015); Porter's Five-Forces model (Dahlberg et al., 2015); Technology Acceptance Model (TAM) (Kim et al., 2010); as well as proposed frameworks (Guo & Bouwman, 2016; Oliveira et al., 2016; Hedman & Henningsen, 2015; Liébana-Cabanillasa et al., 2014). Other studies have also used Crepon, Duguet & Maitresse (CDM) model (1998), Technology Environment Assessment Framework, Institutional Theory,

Contingency and Configuration Theory, Resource Based View (RBV), Resource Dependence Theory and Value-Discipline Model. Of all these theories and models that have been adopted for mobile money studies, the two most frequently used models are the Resource Based View (RBV) and Technology Acceptance Model (TAM).

### **3.1.1 Resource Based View (RBV)**

Following from the theoretical review, it was found that, the theory which arguably dominates studies in SME and firm performance is the Resource Based View (RBV). RBV highlights the firm's external environment and internal dynamic competences as the main elements of success (Lockett & Thompson, 2001; Hawawini et al., 2003). The key concept in the RBV emphasizes the fact that, organizations compete against others on the basis of their competences and resources (Barney, 1991). The RBV assesses differences in the performance of organizations contingent on their resources (Peteraf & Barney, 2003). There are two key assumptions to the theory; that, there will be variability in the resources of organizations within an industry and second, these resources may not be seamlessly movable across organizations, so variability in organizational resources may linger for a long while (Barney, 1991).

The RBV theory describes how organizations preserve exclusive and maintainable positions in their competitive milieus (Hoopes, Madsen, & Walker, 2003). The theory also emphasizes efficiency-based variability rather than pursuing alternative means by which organizations could set themselves apart, in terms of strategic behaviors, collusion or market power (Peteraf & Barney, 2003).

An organization creates a competitive advantage for itself when it applies a unique, profitable, strategy which creates value and which none of its competitors are using. (Barney, 1991). Subsequently, that unique strategy then becomes a Sustainable Competitive



Advantage (SCA) if the competition is unable to copy it. When this happens, then an organization is said to have capabilities and resources that are Valuable, Rare, Inimitable, and Non-substitutable (VRIN) (Barney, 1991).

The RBV has been critiqued as being pleasingly simple with instant face legitimacy; the theory's essential ideas are also attractive and are not difficult to teach or understand (Kraaijenbrink, Spender, & Groen, 2010). It has also been broadly critiqued for its lack of directives on the usage of the VRIN resources (Miller, 2003; Connor, 2002; Priem & Butler, 2001). Another criticism is the assumption that managers have complete control over their resources or can envisage the worth of resources in the long term. Again, the predominant criticism of the theory is the assertion that, resources and capabilities are all treated in like manner, that is, not distinguishing the static from the dynamic (Kraaijenbrink et al., 2010). The RBV is further criticized for the absence one feature which is of critical importance to the theory. The variables usually used in the literature do not adequately evaluate the impact of knowledge and skill acquisition, in order to capture the implicit knowledge of the entrepreneur (Masakure et al., 2009). Again, as per the empirical review of this study, the RBV has been found to be arguably overly-used.

### **3.1.2 Technology Acceptance Model (TAM)**

TAM (Davis, 1989; Davis et al., 1989) is one of the earlier models adopted to ascertain the probability of individuals, groups and corporates adopting a technology, that is, their technology adoption behaviour. In other words, it is used to predict the use of Information Technology and user acceptance (Venkatesh & Davis, 1996). The central rationale underpinning the model is that, users of IT behave rationally when they choose to use a new information technology. TAM suggests that, the Behavioural Intention (BI) to use a system is decided by two beliefs: Perceived Usefulness (U) and Perceived Ease of Use (EoU). 'Perceived usefulness' is defined as the extent to which a person perceives that, adopting

the system will enhance their job performance/productivity, while ‘perceived ease of use’ is explained as the extent to which a person believes that, adopting the system will be devoid of effort (Kim et al., 2010; Venkatesh & Davis, 1996). Given that, perceived ease of use is explained in terms of effort, users are likely to report their appraisal of the process of using a system, hence, legitimizing perceived ease of use as a ‘process expectancy’, while perceived usefulness tends to be an ‘outcome expectancy’ (Venkatesh & Davis, 1996). Perceived usefulness holds an instant consequence on adoption intention, while perceived ease of use has both indirect and immediate effects on adoption intention through perceived usefulness (Kim et al., 2010). Users’ intentions have also been found to be somewhat better predictors of system usage (Ginzberg, 1981). Again, ease of use has a twofold influence on attitude, due to its instrumentality and self-efficacy (Davis et al., 1989); efficacy being one of the main factors behind intrinsic motivations.

TAM also hypothesizes that, the influence of external stimuli or variables (example: the design characteristics and competences of the system, user participation in the design of the system, user training and nature of the implementation process) on behavioural intention to use are facilitated by the two believes: perceived usefulness and perceived ease of use (Chuttur, 2009; Venkatesh, 1999; Venkatesh & Davis, 1996). In relation to TAM, perceived usefulness is also affected by perceived ease of use since all things being equal, the easier it is to use a system, the more beneficial it can be (Venkatesh & Davis, 2000).

One significant advantage of the TAM model is that, it presents a basis on which the influence of peripheral variables on the use of systems can be assessed (Kim et al., 2010). Perceived usefulness has constantly been a strong determinant of usage intentions across many experimental tests of the model, whereas perceived ease of use has revealed a less steady effect on intention across studies (Venkatesh & Davis, 2000). Venkatesh & Davis (2000) also reported that, perceived ease of use was likely to be more impactful on system

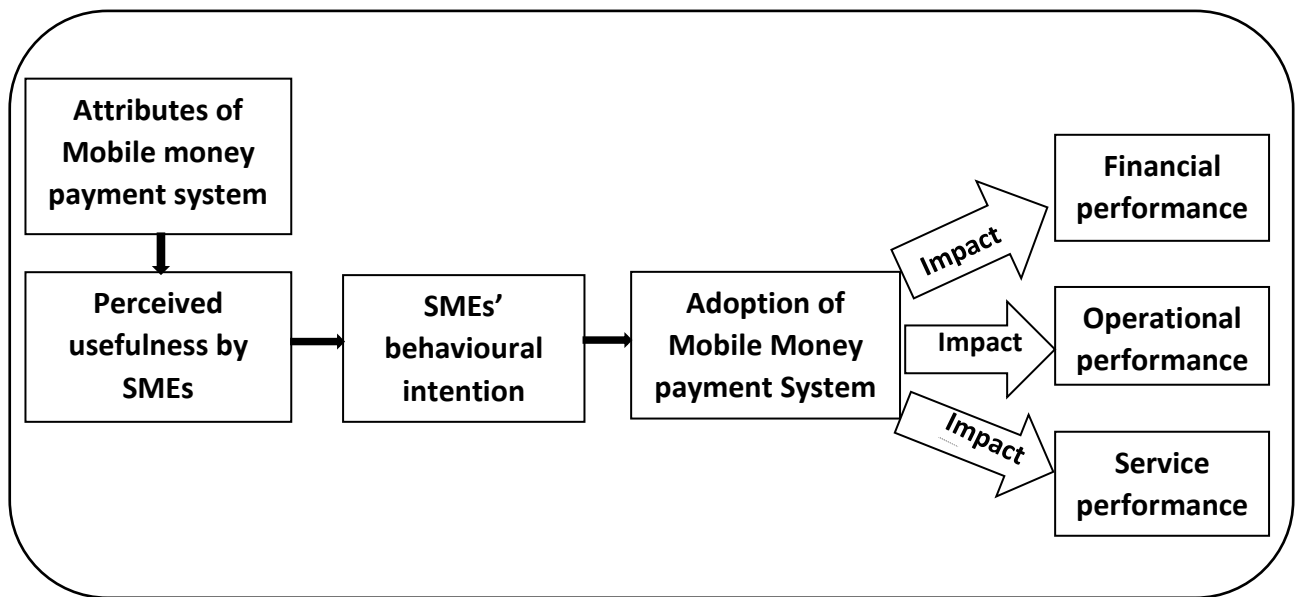
acceptance in mandatory situations than perceived usefulness. However, perceived usefulness was found to be more impactful on system acceptance on voluntary settings than perceived ease of use (Davis, 1985). Findings by Burton-Jones & Hubona (2006) indicated that, perceived usefulness and perceived ease of use may not mediate all influences from external environmental factors on system usage.

Within ten years of its development, TAM had become an authoritative model in forecasting user acceptance (Venkatesh & Davis, 2000). The model has also been used extensively in many Information Systems studies (Liébana-Cabanillasa et al., 2014; Kim et al., 2010). The model hinges on Fishbein and Ajzen's (1975) Theory of Reasoned Action (TRA), which specifies that, a person's performance of a stated behavior is assessed by their behavioral intention (BI) to perform the said behavior (Kim et al., 2010). Many more versions of TAM have been developed beyond the original TAM. They comprise TAM2 (Venkatesh & Davis, 2000) which introduces organizational and social variables such as subjective norm, image, output quality, job relevance and results demonstrability, perceived to have direct impact on PU. Others are: UTAUT and TAM3 (Kim et al., 2010).

Empirical evidence has shown TAM to be a 'complete mediating model' by exhibiting that, the influence of ease of use on behavioral intention is principally through usefulness. TAM is similarly highly recommended for its parsimony and predictive influence which makes it fluid in applying to varied situations (King & He, 2006; Venkatesh, 2000). The TAM model has a high predictive ability towards acceptance (Venkatesh & Davis, 2000).

The TAM model is the theory underpinning this study, based on which the conceptual framework has been developed below:

**Conceptual Framework: Extended TAM Model**



**Figure 3.1: Conceptual Framework**

**Adapted from the TAM Model (Davis, 1989; Davis et al., 1989)**

The Mobile Money Payment System (MMPS) is characterized by certain attributes which make the service attractive to SMEs. These attributes are in respect of payments and include: ease of accessibility, convenience, time-saving, instant, affordability, ease of use and security. These attributes naturally influence the perceptions of the users including SMEs, on the usefulness of the system. Subsequently, since Behavioural Intention (BI) to use a system is determined by Perceived Usefulness (U) and Perceived Ease of Use (EoU), the behavioural intentions of the SME owners are likely to be positively influenced, thereby taking a step further to adopt and use the MMPS. By adopting the system, the SME owners have expectations as to what value the system would offer them. Hence, it is anticipated that, the use of the system will have a positive impact on the business performance of the SMEs, particularly, their financial, operational and service performance. The key objective of the study is to ascertain if truly, mobile money payments have any impact on the business performance of SMEs.

## 3.2 Empirical Review

### 3.2.1 Conceptualizing Small and Medium Enterprises (SMEs)

In conceptualizing SMEs, the European Commission (2015) categorizes SMEs by the maximum caps for employee headcount and either a balance sheet cap or revenue cap as follows: Medium-sized: < 250 employees with a balance sheet total of  $\leq$  € 43 million or  $\leq$  € 50 million revenue; Small: < 50 employees with a balance sheet total of  $\leq$  € 10 million or revenue of  $\leq$  € 10 million; and Micro: < 10 employees with a balance sheet total of  $\leq$  € 2 million or  $\leq$  € 2 million revenue. Mensah (2004) conceptualized a small-sized Ghanaian enterprise as a firm with employees  $>5$  with a maximum of 50 employees, with assets (without building, land and working capital) valued at  $<$  \$US30,000, and an annual revenue of between \$US6,000- \$US30,000; while a medium-sized enterprise should have employees between 50-100. Generally, there is no consensus on the standard classification for the definition of Medium-Sized Enterprises (Spillan et al., 2013). Usually in Ghana, SMEs are defined based on the number of employees a business has (Agyei, 2018). Mensah (2004) further indicated that, for the Ghana Statistical Service, businesses with employees below ten (10) are considered small while businesses with over ten (10) employees are considered medium or large. The National Board for Small Scale Industries (NBSSI) in Ghana further categorizes SMEs using the number of employees and asset size. Thus, enterprises with  $\leq 5$  employees are deemed micro, 6-29 employees, small; 30-39 employees, medium; and  $\geq 100$  employees, large (NBSSI, 1990). Moreover, most start-ups in developing countries have been confirmed to be Micro and Small-sized Enterprises (MSEs) employing less than five workers (Franck, 2012). Contextualizing their study in Ghana, Mensah et al. (2007) define microenterprises as a “businesses employing no more than four persons”. However, the official definition of SMEs in Ghana often excludes a sole definition for micro-enterprises; rather, they are categorized together with small enterprises (Masakure et al., 2009).

Consensus in literature in respect of a universal definition for SMEs is absent. However, a critical examination of the definitions indicates a common basis for defining SMEs, which is ‘number of employees’.

- **SME Definitions based on employees**

AUTHOR/ CATEGORIZATION	European Commission (2015)	NBSSI (1990)	Mensah (2004)	Ghana Statistical Service
MICRO	<10	≤5	-	-
SMALL	<50	6-29	5-50	<10
MEDIUM	<250	30-39	50-100	≥10

Source: Literature review, May 2019

- **The study’s definition of Micro, Small and Medium-sized Enterprises (MSMEs)**

Based on the definitions above, the study conceptualizes MSMEs as follows: Micro enterprises: firms with 0-5 employees; Small-sized enterprises: firms with 6-50 employees; and Medium-sized enterprises: firms with 50-100 employees. However, the NBSSI (1990) definition of SMEs is adopted for this study to contextualize it, being a definition from a nationally recognized institution for small scale industries in Ghana.

### 3.2.2 Nature of SMEs

SMEs in developing countries such as Ghana are deemed to be sole proprietorships (Ayyagari et al., 2014). This is corroborated by Odoom et al. (2017) in their study which reported that, 70.3% of the Ghanaian enterprises sampled were sole proprietorships. Hart (1995) corroborates this assertion by emphasizing that, in several instances, SMEs were characterized by only the owner, who happens to be the manager and at the same time the sole proprietors. Again, the Ghana Statistical Service (2005, vol. 2) places only 7.1% of the self-employed as employing other workers. This indicates that, approximately 93% of these businesses are micro enterprises.

SMEs globally share mutual characteristics, which includes employment-inspired motivations for the setting up of their businesses and the desire for augmented income opportunities. Others include: informal business processes, family ownership, sole proprietorships and community relationships. The others are: lack of professional practices and managers, including limited access to external funding, with limited geographical reach, having mainly relatives, neighbours and friends as their main customers (Ayyagari et al., 2014; Hussain & Yaqup, 2010; Mir, 2008). Agyei (2018) added that, largely, SMEs thrive on the values and ideals of the owners, hence, the ability for them to succeed or fail is dependent on the resources accessible by the owners. Generally, assets of SMEs are more of current assets than fixed assets necessitating more prudent measures of managing working capital to facilitate debt management, company growth and long-term survival (Odoom et al., 2017; Pais & Gama, 2015).

Undeniably, the critical role played by SMEs in the economic development and growth as well as the welfare of nations makes them well positioned for worldwide attention including academia. Globally, SMEs constitute 90% of businesses and are known to provide means of livelihood for many through productivity and employment (Agyei, 2018; Pais & Gama, 2015; Perera & Baker, 2007; Krake, 2005). In Ghana, Statistics from the Registrar General's Department reveal that, close to 90% of registered businesses in Ghana are SMEs (Mensah, 2004). Ghanaian SMEs are also known to contribute 70% of the nation's GDP and constitute 92% of the entire portfolio of the Ghanaian business community, while generating employment and contributing to poverty alleviation efforts (Abor & Quartey, 2010; Aryeetey, 2001; Kayanula & Quartey, 2000).

In Nigeria, 70% of industrial employment and 95% of formal manufacturing activities could be attributed to SMEs; similarly, South African MSEs in 2003 were said to have contributed over 55% of the entire employment figures and 22% to GDP (Kauffman, 2005). Mexican

SMEs share a few characteristics with SMEs globally, but also operate a very unique growth strategy whereby businesses are funded from their own resources or by a few people who multiply to create a society; and employee strength could grow from as low as 11 to as many as 250 (Krake, 2005; Wong & Merrilees, 2005).

However, the progress of SMEs is inhibited to a large extent by factors like as rules, regulations and legislations (Abor & Quartey, 2010). These challenges, faced by SMEs, give a strong indication that the economic environment may not be so favourable as to offer a conducive financial environment for them to thrive, which may eventually affect their performance. Even in the midst of the constraints, SMEs need to identify other factors that impact their performance to ensure their limited financial resources are not invested in unfruitful areas of the business which may not be yield substantial value.

In a study by Odoom et al. (2017), the authors also routed for regulations that enhance the activities of SMEs to be executed in order to grow existing enterprises and remain appealing to new ones to facilitate industrialization in emergent markets. This recommendation makes a strong case for the critical nature of SMEs.

### **3.2.3 SME performance**

It has become increasingly imperative for businesses, including SMEs to assess their performance consistently in order to have a fair measure of the health of their businesses (Jarvis et al., 2000), to serve as a means to respond to competitive pressure as well as sophisticated customer requirements. Besides these, there are a variety of other motives attributed to why SMEs should track or measure their performance. In the welfare services space, the fundamental reason for measuring performance, is the need for organizations to prove their worth and show their accomplishments to various stakeholders; while the need for financial accountability is paramount in not-for-profit organizations. Nevertheless, the



principal reason for performance measurement is the provision of pertinent information for management decision-making and strategic planning (Packard, 2010; Greiling, 2010; LeRoux & Wright, 2010; Moxham, 2009).

- **Business performance drivers**

At the heart of business performance assessment is the need for businesses to identify specifically the collective and unique drivers of business performance (Underdown & Tallury, 2002; Yusof & Aspinwall, 2000). These drivers include: lean manufacturing practices, dynamic capabilities of entrepreneurial ventures and market orientation (Negrão, Godinho Filho & Marodin, 2017; Arend, 2014; Shah et al., 2015).

Studies have also been undertaken to examine SME performance. A study by Odoom et al. (2017) examined the consequence of brand regulations on the nexus between the external and internal branding capabilities of enterprises on one hand and performance on the other hand. The findings indicated that, together, the external and internal phases of branding capabilities, positively impact the performance of enterprises. Likewise, a study by Agyei (2018) on SME performance in Ghana, gathered that, determinants of firm performance include age, corporate governance, savings and investment.

The results from a study by Abor & Biekpe (2007), to evaluate the extent to which the use corporate governance structures impacted the performance of Ghanaian SMEs, found a positive influence of corporate governance structures on the performance of Ghanaian SMEs. Interestingly however, they discovered that, smaller firms performed relatively better than larger firms. They also found that, SMEs with a lower debt in their capital structure appeared to perform better than those that adopted high debt policies. The findings also confirmed the positive and statistically noteworthy relationship that existed between

education of the management, levels of skill and CEO duality on one hand and firm performance on the other hand.

In their paper, Masakure et al. (2009) highlighted literature which proposed that, the variation in differences in firm performance was caused by multiple variables which included firm-specific capabilities and advantages exhibited in the form of age, gender, firm size, technology and management skills which comprise entrepreneurial ability. The study used three variations of profitability as models of firm performance: Annual profits, monthly profits and profits per worker. The study further identified three types of resources constituting the resource structure, typical of a firm. They are: organizational resources entrepreneurial resources and technological resources, collectively representing the firm and entrepreneurial characteristics of a business and also echoing the internal resources of the enterprise. These were found to have substantial impact on performance. Similarly, the study revealed that, the geographical location of the enterprise as well as the sector in which the firm operated, have an impact on firm performance.

- **Classification of SME performance (financial, operational and service performance) and their measurement indicators**

SME performance has been classified in different ways including operational performance, financial performance and environmental performance (Negrão et al., 2017; Masakure et al., 2009; St-Pierre & Delisle, 2006). In another study by Jacks et al. (2011), a meta-analysis conducted on organizational performance generated three categories of variables used to define organizational performance, namely Productivity, Profitability and Intangible benefits. Hence, the financial, operational and service variables of performance in this study, fall within Jack et al.'s (2011) framework of organizational performance as follows: Productivity (operational performance), Profitability (financial performance), and Intangible benefits (service performance). In the view of Jacks et al. (2011), profitability

could be better called ‘financial performance’ since variables such as market share and sales were branded as profitability. The authors again reported profitability variables such as sales growth, costs, profits, market share and return on investment; as well as productivity variables which comprised operational efficiency, business process outcomes, production output and labor productivity. The ‘intangible benefits’ category included seven items: industry performance (dynamism, longevity, visibility, reputation), customer satisfaction (goodwill), public image, human resource management, quality improvement, number of downloads, social productivity and client loyalty.

One of the objectives of a study by Perera & Baker (2007) was to investigate the organizational performance features usually measured by SMEs and the measurement criteria used. The respondents in the study were asked to identify performance indicators from two categories (Financial and Non-Financial) which peculiar to their businesses. The Financial and Non-Financial indicators were further re-grouped into three sets of performance measures, namely: a) Firm performance measures: profit, sales revenue, delivery, sales growth, quality, cashflow, customer satisfaction, ROI, cost reduction, market share, distributors performance, number of products, and innovation. b) Employee performance measures: individual performance targets, quality, team performance, output, absenteeism, department performance and defects/returns, and c) Product measures: quality, units sold, defects/returns, warranty claims, customer satisfaction, units produced, speed of delivery, discounted products, product innovation and product performance. The study found that, SMEs were more reliant on financial measures of performance, though larger firms appeared more inclined towards using non-financial measures. Besides, the study revealed that, non-owner managers of SMEs made greater use of a combination of performance measures than owner managers.

In another study by Jarvis et al. (2000), owner-managers of businesses constantly revealed their use of a variety of measures to evaluate the health of the businesses: financial/quantitative/formal/objective/tangible measures with indicators such as cash, cashflow and profit. The conventional economic theory suggests profit as the key indicator of business performance (Jarvis et al., 2000). Jarvis et al. (2000) further revealed that, since cash as a measure of performance seemed too financially leaned, owner-managers do not depend so much on it, thereby, occasionally adopting non-financial/qualitative/informal/subjective/intangible indicators, believed to be more responsive and suited than cash indicators in the measurement of business performance. These non-financial measures include the number of telephone enquiries; being active or busy and getting the work done; intuition; inference based on knowledge; as well as quality of raw materials and debt settlement rate by buyers. This phenomenon tends to arise from the experiences and motivations as well certain rationalities owners of small businesses develop in the course of running their businesses. The authors again mentioned that, together, the financial and non-financial measures created a dynamic recipe for measuring business performance throughout the buying process. The preference of using non-financial measures over financial measures in the study was also noteworthy.

Similarly, Lönnqvist (2004) proposed that, performance be assessed in terms of actual or future activity outcomes.

St-Pierre & Delisle (2006) further recommended the use of strategic benchmarking tools which allow SMEs to compare their business functions and practices as well as performance, with those of other firms within similar environments, in order to identify possible business areas that need attention, for improved performance. In their study, St-Pierre & Delisle (2006) also investigated the PDG (Performance, Development and Growth) system which analyses financial and non-financial data jointly for a better appreciation of SME

performance. Until recently, the system was popular within large enterprise circles, but remained underutilized by SMEs. The authors also iterated the importance of every strategic tool, and recommended that, no matter the extent of customization, the tool must imbibe the central concepts of benchmarking such as performance, quality and competitiveness. The authors suggested that, in all of these, SMEs should strive to ultimately impact productivity, overall performance, prosperity and survival.

### **3.3 Financial Technology (Fintech)**

Innovation or new Developments in Information Technology have given rise to the creation of revolutionary financial services popularly known as Financial Technology, also called Fintech, (Ryu, 2018), an acronym of “Financial and Technology”. Fintech is conceptualized as the design and delivery of technology-enabled financial solutions (Leong et al., 2017; Arner et al., 2015). Lee & Kim (2015) also describe Fintech as the technical process resulting from developing and establishing new financial software, which might affect the entire traditional system. Ryu (2018) adds that, although Fintech is innovative, it is also disruptive. Gozman et al. (2018) attribute the emergence of the global financial technology to the efforts to de-construct and re-imagine business models rooted within the financial services sector.

Fintech was born out of the Global financial crisis in 2008. The crisis aroused self-doubt within the financial sector, causing the sector to accept change (Gomber et al., 2017). The aftermath of the crisis led to low levels of confidence and trust in service providers at the time, which led to the search for alternatives (Leong et al., 2017). Financial institutions and global financial centers also searched for novel business development opportunities to keep their industry going, due to soaring operational costs occasioned by regulatory pressures. They took to adopting nascent internet and information technologies like Fintech to improve their financial services delivery (Artie & Kwok, 2017).

The Fintech era was characterized by innovations in financial products and Services, for instance the digital wallet, which offered better convenience, lower cost and improved efficiency, thus, making it a better choice than the offerings of the traditional system. The era was also facilitated by a fusion of numerous advances in technology, viz-a-viz, the availability of a robust infrastructure which was also affordable (Leong et al., 2017). The infrastructure comprised the Internet, sensors and mobile technology plus maturing technological applications such as platform and big data analysis. The others comprised a favourable regulation, information technology and the business operations, characterized by a sharing economy (Lee & Shin, 2018; Leong et al., 2017).

Ryu (2018) emphasized the long-time relationship between financial services and IT; however, Fintech is different from prevailing electronic financial services in respect of the opportunities, legal and risk associations as well as the progressive and enhancing role IT plays within the Fintech space. Fintech startups distinguished themselves from traditional financial system by offering customized niche services, an innovative culture, data-driven solutions, and remained agile organizations (Lee & Shin, 2018), as the offline industry became quickly integrated with online technologies (Lee & Shin, 2018; Barberis, 2014). They (Lee & Shin, 2018; Barberis, 2014) further described Fintech as a product of the merger of social network services (SNS) and offline financial services with cloud and mobile technologies, big data, electronic finance, internet technologies, artificial intelligence, social media and social networking services; necessitating the rapid development of the payment services market and its associated technologies, while causing them to spread past the borders of traditional banks.

By taking advantage of the rapid evolution of Internet-based services, Fintechs, who are usually non-financial providers, have transcended the boundaries of the traditional online-banking and other online platform application systems, adopted by the traditional financial

institutions. This has facilitated the provision of advanced and unique financial services, which are more relevant and contemporary, such as mobile payment, mobile remittance and other mobile environments (Shim & Shin, 2016; Lee & Kim, 2015). Fintech-inspired financial services also include non-traditional payments, money transfer, loan requests, managing assets, making investments, purchasing insurance and disruption in the currency market (Leong et al., 2017; Barberis, 2014), as well as Peer-to-Peer (P2P) lending and crowdfunding (Ryu, 2018), third-party payments, authentication and risk management (Barberis, 2014). Others are: a transition from money market funds, through to lending services, online funds and internet-based private banking services (Shim & Shin, 2016). These developments have occasioned a rude awakening on the part of companies in the traditional financial services sector in respect of Fintech startups, whose activities are unsettling the traditional business space.

Leong et al. (2017) have for a long while confirmed the influence of Fintech on diverse stakeholders such as customers, financial institutions, merchants and regulators. Gomber et al. (2017) hold the view that, the fusion and application of technological abilities in Fintech reduces barriers-to-entry and allows new entrants to place themselves in value chains, while offering innovative services and products. This has consequently fostered competition and cooperation with incumbents for value creation.

Fintech has been documented as a key innovation in the financial space (Laplanche, 2008). Undeniably, the fast-paced budding Fintech revolution has offered new openings for people to be empowered through cost reduction, enhanced transparency, quality improvement, better accessibility to financial information, elimination of middlemen, offering competitive advantage to businesses and a more stable and diverse financial landscape. (Lee & Shin, 2018; Zavolokina et al., 2016a; Laplanche, 2008).

### **3.4 Mobile Money Payment**

Mobile money payment is also called mobile payment or m-payment (Liébana-Cabanillasa & Lara-Rubiob, 2017; Oliveira et al., 2016; Kim et al., 2010). The definition of mobile payment has been subject to diverse interpretations. In order to elucidate the concept, Dahlberg et al. (2008b) captured mobile payments as payments for services, goods and bills using a mobile device (smart phone, mobile phone or Personal Digital Assistant), via a wireless or similar communication technologies. They also indicated that, mobile payment was usually transacted with a mobile payment instrument in the form of a mobile wallet or mobile credit card.

The first mobile payment transaction was made in 1997, after which studies in mobile payment began (Dahlberg et al., 2015). Dahlberg et al. (2008b) conducted over a decade-long research in mobile payments across several countries and continents in an attempt to provide direction for future study. The investigation was also occasioned by the researchers' many years of studies in mobile payment which revealed a worrying trend. For further illumination on the concept, Dahlberg et al. (2008b) designed a multi-faceted model to capture the literature and market for mobile payment. The findings, based on a systematic literature review of 188 studies published between 2007–2014 indicated that, mobile money researchers were just reinventing the wheel in terms of focus. They also discovered that, many mobile payment studies concentrated on two key areas: consumer adoption and technology. Researchers in the area usually ignored past research findings, thereby stifling continuity, through inadequate knowledge additions in new research areas. Again, researchers continued to use the same mobile payment theories namely TAM and UTAUT. Other studies also confirmed the sameness in mobile money research (Liébana-Cabanillasa & Lara-Rubiob, 2017; Guo & Bouwman, 2016; Oliveira et al., 2016; Liébana-Cabanillasa et al., 2014; Kim et al., 2010).



Close to eight years after this worrying trend was discovered by Dahlberg et al. (2008b), Dahlberg et al., (2015) launched a follow-up review to ascertain the extent to which researchers had departed from the monotony. Sadly, their study revealed only limited progress in the quality and quantity of mobile money studies. They learnt that, studies in the area lacked innovation, thus, not contributing much to the body of knowledge. In the study, three foremost areas in mobile payment studies were identified, namely, technological environment and technology; second, mobile payment adoption and strategy; and third, ecosystems. Of the three areas, consumer adoption had taken over all the other areas to become the most researched area in mobile payment research. These findings were similar to those of the earlier research (Dahlberg et al., 2008b).

In view of this, Dahlberg et al. (2015) made diverse propositions to infuse new direction and ideas into future research on mobile money payment. Their recommendations were as follows: to undertake further research to reinforce the theoretical foundations of adoption research and to sustain the collection of data in real-life mobile payment scenarios; to conduct multi-sided adoption studies within the same ecosystem, for example, to ascertain the payment instruments preferred by the different stakeholders of an ecosystem and why? and secondly, to assess how financial and any other incentives besides fees on payments impact such decisions. They also encouraged collaborative effort among researchers in mobile money payment studies to help avoid repetitive studies.

### **3.5 Chapter Summary**

In chapter three, relevant literature was reviewed in two parts: theoretical and empirical. The Technology Acceptance Model (TAM), which underpins this study was discussed. Again, for the empirical review, areas discussed were SMEs, SME performance, Fintech and mobile money payments. A conceptual framework was also developed to direct the study.

## CHAPTER FOUR

### RESEARCH METHODOLOGY

#### 4.0 Introduction

The chapter captures the step-by-step process the researcher adopted in selecting, developing and applying all the components of the research in a bid to find answers to the research questions. In the social sciences, methodology is defined as: the manner in which problems are tackled and answers are sought or how research is undertaken (Taylor et al., 2016). Similarly, methodology in research encompasses a complete strategy of theorizing and investigating a phenomenon (Cecez-Kecmanovic, 2011). Often, our interests, assumptions and purposes form the basis for the kind of methodology we adopt (Taylor et al., 2016).

This chapter comprises the research paradigm (philosophical approach), research design, research approach, data collection methods as well as sources and types of data. The other components are: study population and sample size, research instrumentation, data collection method, sampling technique, in addition to data collection procedure. Further, the chapter highlights data analysis, data presentation, ethical considerations, data reliability and validity, significance and limitations of the study.

#### 4.1 Research Paradigm

There is a key paradigm underpinning every research. The design and conduct of our research are shaped by our belief systems (frames of references) or mental models also known as “paradigms”, often applied in organizing our observations and reasoning (Bhattacharjee, 2012). Kuhn (1977) defines a paradigm as “an integrated cluster of substantive concepts, variables and problems attached with corresponding methodological approaches and tools”. Again, a paradigm is said to be a package of methods and ideas,

which combines to make up a means of doing science and an opinion of the world (Godfrey-Smith, 2003). Gephart (1999) highlights three major research paradigms or theoretical perspectives: Interpretivism, positivism and critical postmodernism. In the scheme of research process, paradigms have their peculiar philosophical assumptions underpinning each of them. These assumptions are mainly categorized into ontological, epistemological and methodological orientations (Guba, 1990).

#### **4.1.1 Positivist paradigm**

The positivist paradigm is also called postpositivist research, empirical science or scientific method (Creswell, 2014). Positivism is a doctrine developed by the French philosopher and founder of sociology, Auguste Comte (1798–1857), who coined it from a blend of empiricism and rationalism; “It holds that, science or knowledge creation should be restricted to what can be observed and measured”, and tends to depend completely on theories that can be tested directly (Bhattacharjee, 2012). Comte further explained that, theory and observations do have circular dependence on each other. Crotty (1998) additionally elucidates the positivist paradigm as a procedural philosophy in quantitative study where the approaches of natural science are used to unearth the study of social science. Therefore, a good understanding of real-life phenomena must be measured and supported with evidence (Hammersley, 2013).

#### **4.1.2 Critical inquiry paradigm**

The second paradigm is critical inquiry, also called the “transformative paradigm” (Riyami, 2015) with its ontology grounded on relativism, inferring that, reality is constructed socially through media, society and institutions. There is lack of standardized literature for describing this paradigm; the paradigm comprises teams of participatory action researchers, critical theorists; persons with disabilities; feminists, Marxists; ethnic and racial minorities; postcolonial and indigenous people, as well as members of the various sexual orientations

and queer communities. They hold the view that, inquiry into research must be intertwined with a political change agenda and politics to address social oppression at various stages (Creswell, 2014; Mertens, 2010). Thus, in the course of addressing explicit issues that speak to significant social matters, including empowerment, oppression, inequality, suppression, domination, and alienation, the research should contain “an action agenda for reform that may change lives of the participants, the institutions in which individuals work or live, and the researcher’s life” (Creswell, 2014, p. 38).

The critical inquiry paradigm also derives an advantage from attempts to develop connections among these interdisciplinary standards of present-day societies, thus, critical theorists are deemed to have formed “global visions of contemporary societies” as well as trailblazing themes for the conceptualization of social theories in the last six decades (Kellner, 1993). Another advantage of the critical inquiry paradigm is drawn from its purpose to identify, help solve and contest societal “gross power imbalance” so as to contribute positive change to system inequalities and injustices such as economic and social exclusion (Taylor & Medina, 2013).

#### **4.1.3 Interpretivist paradigm**

Interpretivism or phenomenology (Ferguson, Ferguson, & Taylor, 1992), as relates to epistemology and ontology, thrives on the belief that, there exist multiple and relative reality (Hudson & Ozanne, 1988). The interpretivist paradigm espouses the comprehension of information related to social and human sciences, and can therefore not be applied in the physical sciences for the reason that, people interpret their world and act based on that interpretation (Hammersley, 2013). Willis (2007) recommends that, interpretivists eschew the idea that, objective research on human behaviour is not possible, which makes them likely to value subjectivity rather than objectivity. Naturally, interpretivists fail to seek out answers for their research in rigid ways; instead, they adopt more personal and flexible

research structures (Thanh & Thanh, 2015; Carson et al., 2001). Yanow & Schwartz-Shea (2011) confirm that, indeed, interpretivist researchers do experience reality through the views of participants, as well as their own experiences and backgrounds.

Interpretivists are deemed ‘anti-foundationalists’, because, they fail to accept the possibility of standardizing research; to them, neither are there ethical boundaries to the search for knowledge nor a unique method that certainly leads to intellectual advancement; rather, they believe that, “products of a particular group or culture” inform the standards for research (Smith, 1993). Hence, interpretivists would rather probe an interviewees’ values, thoughts, prejudices, views, perceptions, perspectives and feelings (Wellington & Szczerbinski, 2007), in a bid to have a profound understanding of a phenomenon and the complexities associated with its exclusive setting, rather than trying to generalize to the whole population (Creswell, 2007).

A key limitation of interpretivism is the constrained predictive power and generalizability (Cohen, Manion & Marison, 2011). Again, the researcher’s belief system, thought processes, cultural preference and personal interpretation indisputably influences the research results, which causes a high level of bias (Tuli, 2010).

Since the study seeks to ascertain whether mobile money plays any role in the performance of SMEs, it calls for the varied views and personal experiences of the participants. Therefore, the interpretivist philosophical approach is adopted to guide and facilitate the acquisition of diverse answers to the research questions; afford the researcher an acquisition of profound knowledge as well as better insights into the phenomenon being studied.

#### **4.2 Research Design**

Research design is a “type of inquiry within qualitative, quantitative, and mixed methods approaches, that provides specific direction for procedures in a research study”, mainly

comprising designs also categorized into quantitative, qualitative and mixed methods (Creswell, 2003). Creswell (2014) further explains that, the quantitative research design comprises experimental and non-experimental designs, while the qualitative research design covers phenomenology, grounded theory, case study, narrative and ethnographies and designs. The designs for the mixed methods are: convergent, exploratory sequential, explanatory sequential, and transformative, multiphase or embedded.

For qualitative studies, Creswell (2003) prescribes two case study options: a single or multiple case. Case study research designs focus on describing, predicting, understanding, and/or controlling the individual (Woodside, 2010). Case studies came to the fore through the Harvard Business School, which highlighted the value of the case study in explaining an entity, company, organization, a program, process, activity, one or more individuals; case studies can also be exploratory, explanatory or descriptive and the data could be collected through interviews, documents, observation and audio-visuals (Sauro, 2015; Creswell, 2014; Yin, 2009).

This study adopts the multiple case study approach (Padula & Miller, 1999; Kos, 1991) because each of the twenty SMEs selected was considered as a single case, taking into account the fact that, each of them had their own unique experiences and stories. Being an exploratory case study would also afford the researcher the opportunity to explore deeper for insightful, subjective views of the participants on whether mobile money plays any role in the performance of their businesses.

### **4.3 Research Approach**

Once a researcher settles on a title for a study, they must choose an appropriate approach to investigate it. The choice of an appropriate research approach is influenced by procedures of inquiry (also called research designs); the philosophical assumptions of the study, as well

as the specific research methods for data collection, analysis and interpretation. Besides the research question, other elements that impact the choice of a research approach include: the issue being addressed or the nature of the problem being researched, as well as the personal experiences of the researcher and the participants for the study (Creswell, 2014; Vanderstoep & Johnston, 2009). Generally, there are three key approaches to research, viz qualitative, quantitative and mixed methods. Qualitative and quantitative approaches usually vary in focus, method, purpose, and criteria for truth (Vanderstoep & Johnston, 2009).

#### **4.3.1 Quantitative approach**

Quantitative research is an approach used for testing objective models through the exploration of relationships among variables (Creswell, 2014). According to Vanderstoep & Johnston (2009), quantitative research adopts a numerical description and analysis of data, comprising inferential and descriptive statistics. Also, the scope of inquiry spans hypotheses or precise questions. Vanderstoep & Johnston (2009) also spelt out some advantages of quantitative research comprising statistical validity, a large sample, and findings which truly reflect the population. However, there is a superficial comprehension of the feelings and thoughts of participants. Vanderstoep & Johnston (2009) also added that, the epistemological assumptions in quantitative research indicated that, there was knowledge out there, waiting to be discovered and a physical, knowable reality that could be visible to a skilled researcher; to the extent that, this reality could be ripped to pieces and its parts widely scrutinized.

#### **4.3.2 Qualitative approach**

Creswell (2014, P. 32) defines qualitative research as “an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem”. It is also described as a process to gain a perspective of issues from investigating them in their

peculiar specific contexts, considering the personal meanings individuals bring to the issues (Denzin & Lincoln, 2005). Qualitative research is also defined as natural (Lincoln & Guba, 1985); meaning, researchers use approaches that correspond to the way people behave in the course of their everyday lives, characteristically engaging informants in a naturalistic, unobtrusive way (Rossman & Rallis, 2012). Typically, qualitative research involves describing, decoding and translating phenomena relative to its meaning rather than its frequency (Maanen, 1983); mainly tapping into people's interpretations of their experiences, to understand exhaustively their viewpoints, which are analyzed through the identification of key themes (Vanderstoep & Johnston, 2009). Creswell (2013) outlines five dimensions to qualitative inquiry: narrative study, grounded theory, phenomenology, case study and ethnography. One key disadvantage of qualitative approach is the small sample which makes it ungeneralizable to the population as a whole. The epistemological perspective of qualitative research presumes that, "knowledge is constructed through communication and interaction", hence, knowledge is not out there, but inside the interpretations and perceptions of individuals (Vanderstoep & Johnston, 2009, pp. 166-167). In the light of the aforementioned, qualitative approach is deemed appropriate for this study, as it would help elicit the kind of insightful and exhaustive required.

#### **4.3.3 Mixed methods research**

Mixed methods research is an approach to inquiry comprising the collection of both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks, with a principal assumption that, the fusion of both approaches offer better comprehension of a research problem, than the adoption of one method alone (Creswell, 2014).



#### **4.4 Sources and Types of Data**

The quality and type of data source for a study is dependent on the type of research being undertaken, which may be primary or secondary (Belk, 2006). Primary data is defined as “data collected for the specific research problem at hand, using procedures that fit the research problem best”; while secondary data is also defined “data originally collected for a different purpose and re-used for another research question” (Hox & Boeije, 2005, p. 593).

Both secondary and primary data have their place in research. However, they both have merits and demerits. In the view of Surbhi (2016), the process for collecting secondary data is fast and easy. Secondary data is quickly available and relatively inexpensive. Besides, secondary data relates to the past; is collected for other purposes; lacks reliability and accuracy; and neither has the researcher’s control over the data nor is the data specific to the researcher’s need.

Kumar (2013) shares that, although primary data is not published data, it is still reliable, authentic and objective. He adds that, primary data is original data without any alteration by human beings; its validity is therefore deemed to be greater. Kumar (2013) further stresses that, with primary data, interpretation is better; research issues of interest are addressed; there is decency of data; greater control and proprietary issues are taken care of. In spite of all these advantages, he highlights the high resource requirements; inaccurate feedback; high cost and time constraints as some of the disadvantages of primary data.

This study collected data through a primary source. Considering the study’s objectives, original, narrative data is required in order to unearth firsthand, the true experiences and interpretations of the participants regarding mobile money payments, and how these payments have practically enhanced their business performance.

#### **4.5 Study Population**

Population refers to the universe of people to which the research could be generalized (Vanderstoep & Johnston, 2009). The population for this study comprised micro and small enterprises located in the Greater Accra region of Ghana, engaged in any sector of the economy; and who satisfy the NBSSI (1990) definition of SMEs, in terms of the number of employees: Micro  $\leq 5$ , Small 6-29. SMEs in Greater Accra were selected because, being the capital city of Ghana, Accra has become a busy business hub especially for SMEs, in the face of the country's economic challenges. Again, SMEs in Greater Accra were chosen because they have often had the privilege of experiencing events like product launches, piloting of projects and product updates first hand before the events are diffused to other regions, giving them the advantage of having deep intercourse with products and services. This is particularly true with respect to the Telecommunications Companies (Telcos). For instance, MTN, the leading telecommunications service provider in Ghana, launched its Mobile Money Service at the International Conference Centre in Accra (Oluniyi, 2009); the merger of Airtel Money and Tigo Cash was announced at a news conference in Accra (Ghana Web Business News, 2018); and the launch of Ghana's Mobile Money Interoperability (MMI) service was also held in Accra.

Again, some telcos in Ghana have made an effort to consciously design packages for SMEs with mobile money components, the recent one being the "Flexi business" package from AirtelTigo (AirtelTigo, 2019). Besides the limited resources and time constraints, immense opportunity exists for SMEs in Greater Accra to use mobile money payment systems effectively to their benefit significantly.

##### **4.5.1 Background of target population**

The target population for the study was drawn from three institutions, namely, National Board for Small Scale Industries (NBSSI); ATAG Craft Network Association of Ghana

(ACNAG) and ‘all Moms in Leadership’ (aML). Below are the profiles of these three institutions:

- **National Board for Small Scale Industries (NBSSI)**

NBSSI (n.d.) gives the following background of NBSSI. Established by Act 434 of 1981, NBSSI became operational in 1985. This was as a result of the Government of Ghana’s strong perception that, the SME sector possessed the potential to play a substantial role in reducing the high rate of unemployment, and contributing to the economic growth of Ghana. Similarly, since SMEs form a significant part of the activities of the Ghanaian economy, they play an important role in the achievement of the country’s developmental objectives for production. Again, SMEs seek to maximize their contribution to the country’s social and economic development, through production, employment and income distribution, while promoting better integration of the women and people in rural communities for an improved economy.

NBSSI has these objectives to guide their operations: To contribute to the formation of a conducive environment for the development of small enterprises; the advancement of an enterprise culture through the provision of assistance in accessing credit as well as first-class, substantial services to boost the business development efforts of SMEs.

- **ATAG Craft Network Association of Ghana (ACNAG)**

ACNAG (2014) gives the following background of ACNAG: ACNAG provides craft producers, exporters, retailers, designers, export agents and stakeholders the opportunity to exchange business ideas, network and pursue mutual interests to enhance their businesses. From very modest beginnings, ACNAG is progressively budding into a formidable association of crafters, with the goal of addressing the challenges encountered by its members via deliberations and dialogue. Through its activities, the association hopes to

influence policy aimed at developing the Ghanaian crafts sector and also partner other craft groups and organizations globally.

- **All Moms in Leadership (aML)**

Ethel (2019) gives the following profile of “all Moms in Leadership”: aML is a duly registered organization that seeks to inspire and upgrade the leadership skills of mothers who are entrepreneurs. aML seeks to become the most reliable support system for Women in Africa juggling active motherhood and leadership across sectors, who contribute significantly to healthy family growth and economic advancement. The mission of aML is to train and support mothers to rise above their challenges, build sustainable generational legacies and excel in various leadership capacities through mentoring, soft skills mastery, family enrichment & social impact. The core values of aML are: value-driven, legacy-driven and tenacious. In order to sustain networking and trade among each other, the organization has an online support network of women known as the ‘aML Community for Women’ which comprise entrepreneurs, ‘mompreneurs’, heads of private & public institutions, professionals and consultants. aML Community provides a platform for leadership growth, inspiration, advancement, opportunities and collaborations among the members.

#### **4.6 Sample Size**

There is no consensus in literature guiding the selection of the sample size for qualitative study. In the view of Patton (2002, p.12), “There are no rules for sample size in qualitative inquiry”; rather, sample size is dependent on the purpose of inquiry; what the problem is; what the inquirer seeks to know; what information will be valuable and credible and what can be achieved with existing resources and time.

Nonetheless, Gonzalez (2009) recommends small samples of less than twenty (20); Bertaux (1981) also endorses fifteen (15) as the least acceptable sample size in qualitative study;

Creswell (2011) advocates to study “a few individuals or a few cases”, but specifically proposes a sample size of between five (5) to twenty-five (25) interviews. Although Morse (1994, pp.147, 225) observed that “saturation is the key to excellent qualitative work,” he recommends at least 6 participants. Similarly, Guest et al. (2006) indicates that, data saturation is likely to happen within the first twelve interviews, beyond which most of the data will be variants of the data already captured.

Hence, based on the recommendations of Guest et al. (2006) and Creswell (1998), twenty (20) participants were chosen for this study: eight (8) from NBSSI; five (5) from ACNAG; and seven (7) from aML. The various samples from each institution were chosen based on availability and willingness to partake in the study.

#### **4.7 Sampling Technique**

Researchers select specific techniques based on a myriad of reasons, some of which are availability, convenience and characteristics. For instance, in selecting the sampling technique, if the goal of the researcher is to select a representative sample, a random sample may be the best technique; However, If the goal of the researcher is to know as much about a particular subgroup or organization, in - depth interviews of a non - random sample will be the best technique.

Sampling techniques are categorized into random sampling and non-random sampling techniques (Vanderstoep & Johnston, 2009). The authors further advise that, the best methodology in research is the one that minimizes costs and maximizes benefits for that particular study. Hence, with respect to sampling, researchers must endeavor to select participants who are best suited for their study and who will facilitate the accomplishment of the goal of the research (Vanderstoep & Johnston, 2009).

In line with this proposal, this study adopts purposive random sampling technique, one of the sixteen types of purposive samples outlined by Patton (2002), to facilitate the choice of the best participants who fit the criteria for the study (Hays & Wood, 2013).

#### **4.8 Research Instrumentation**

The study aims to explore whether mobile money payments play any role in the performance of Ghanaian SMEs. The data collection instrument for the study was a semi-structured interview guide, containing predominantly open-ended descriptive questions. The guide was useful in collecting highly in-depth qualitative data regarding each case within the study

The use of interviews was suitable for this study as it helped the inquirer to ensure that, key topics were explored with a greater number of the participants (Hennink et al., 2011; Kvale, 1996); it also served exclusively to remind the inquirer about certain things to ask while diverse ways of getting people to talk were explored, which again offered an the opportunity to expand or revise the guide to extract the needed information (Taylor et al., 2016).

The interview guide was designed to have four parts: Part I had eight structured questions which covered the demographic and business profiles, educational backgrounds and mobile money usage profiles of the owners of the selected SMEs; whereas part II contained three open-ended questions used to gather data on how the SMEs measured their business performance. Part III had five open-ended questions and was used to collect data on the impact of the use of payment systems on the performance of the SMEs, namely financial, operational and service performance, and the final part, part IV had five open-ended questions on the type of payment systems used by the businesses. Together, the questions were 21, although the number dropped to 20 after the piloting phase of the study. These questions were not exhaustive as other follow-up questions came up during the interviews.

#### **4.9 Data Collection Methods**

Data serves as the basis for a research study (Yin, 2011). Yin outlined four data collection procedures: interviewing; observing; collecting and examining; and feeling. He also categorized “interviewing” into structured and qualitative interviews. For this study, qualitative interviews were adopted predominantly to acquire the data because qualitative interviews adopt open-ended questions, hence, there is no end to the quantity and depth of information the researcher can acquire; there is also flexibility in how the interview is organized and it is interactive. In the view of Brenner (2006), qualitative interviews seek to understand participants on how they individually perceived their lives, cognitive processes and experiences. All these advantages make qualitative interviews very apt for this explorative study which seeks to pick participants experiences and perceptions on the extent to which mobile money payments have impacted their business performance.

#### **4.10 Data Collection Procedures**

The procedures for data collection comprise setting the limits for the research and the collection of information through semi-structured or unstructured interviews, observations, visual materials, documents and setting the protocols for information recording (Creswell, 2009).

To kick-start the process for data collection, informal discussions were initiated with the contact persons for NBSSI, ACNAG and aML, who agreed to mobilize their members to partake in the study. This was followed up with letters from the department of Marketing and Entrepreneurship of the University of Ghana introducing the researcher to all the three organizations who were purposively selected because they satisfied the basic criteria required for the study. Creswell submits that, the reason for undertaking qualitative research is to “purposefully select” participants or sites (or visual material or documents) that will best facilitate the researcher’s understanding of the problem as well as the research question.

In the view of Yin (2011), the goal for choosing precise study units is to “have those that will yield the most relevant and plentiful data, given your topic of study”. The selection of multiple cases also helped provide multiple views of the phenomenon through their varied interpretations (Creswell, 2009), enriching the data and minimizing the incidence of bias in favour of any one particular organization. This study collected data through face-to-face semi-structured interviews (Creswell, 2007).

NBSSI provided a customized database of a section of their registered SMEs for the Greater Accra region, as requested by the researcher during the application process for the data acquisition. What they could not guarantee was whether all the SMEs on that list used the mobile money payment service. Hence, the researcher had to contact each member on the list to find out if they satisfied the two main conditions for sampling: whether they were using mobile money for their businesses at all, and if so, whether they have used the service for at least two years. The data presented the researcher with a number of challenges because it was quite outdated. Unfortunately, some of the contact numbers provided were no longer in use, other numbers had changed ownership, while some were reported to be non-existent or wrong numbers. Yet still, some of the calls went through but there were no responses; some SMEs were no longer operating their businesses; a number of them were not using the mobile money service at all, and others could not be reached. Under the circumstances, the researcher managed to get ten (10) people, through a simple random sampling technique, which offered each member on the list an equal probability of being picked. The SMEs were selected as and when it got to their turn on the list, subject to satisfying all the two sampling requirements. However, because of the limited sample required, only 50% of the members on the list were contacted.

With respect to ACNAG, the contact person first agreed to participate in the interview and further recommended five (5) other people she specifically knew had used mobile money



payment systems for their businesses for a long while, making a total of six (6). This was very helpful because it saved the researcher from the challenges encountered with the NBSSI member data. Similarly, the leader of aML readily agreed to partake in the interview and also mobilized the members to partake voluntarily. The two key conditions to be met in order to qualify to be part of the study were communicated to all the members of the group. None of them was coerced in any way to partake in the interview. At this point, the researcher needed only nine members from aML to make up the sample size of twenty-five (25) (Five for the pilot study and 20 for the actual study). The first nine members who voluntarily submitted their names to be part of the study were selected. These 25 members have educational and professional backgrounds in different areas including chartered accountancy, clinical dietician capacity, engineering, lecturing, project management, journalism and economics. All the twenty-five (25) participants individually confirmed a convenient date, time and venue and for the interviews to be conducted.

The main data collection proceeded with semi-structured interviews (Belk, 2006), similar to what Zaltman and Coulter (1995) refer to as ‘guided conversation’, in a pilot study using five (5) of the participants. On the set days for the interviews, the researcher arrived at the specified venues on time with a pen, a recorder and a notepad for taking manual notes as a backup to what was recorded electronically, which was to ensure a near-perfect transcription

#### **4.10.1 Pilot study**

The pilot study for five (5) of the participants revealed that, two questions in the interview guide returned similar answers. One therefore had to be taken out, leaving 20 probing questions. Again, the researcher noticed that, she had to find immense innovative ways in addition to her probing capability in order to get exhaustive narratives from the participants. In the light of this, the line of questioning was re-defined so as to elicit the quality of data required to help provide relevant answers to the study questions.

All the other twenty (20) interviews were preceded with the memories of the participants being refreshed on the reason and objectives for the study. This exercise indeed relaxed the participants who could readily relate to the phenomenon under study. Every participant had their own response sheet with the title of the study, the name of the business, the date and venue (Creswell, 2009) for easy identification, reconciliation and coding. The interviews took between 25-30 minutes and were duly recorded electronically with manual notes also taken. The researcher expressed gratitude to the participants at the end of their individual interviews (Creswell, 2007).

#### **4.11 Data Analysis**

Data analysis involves the interpretation image data and text; it also comprises the preparation of the data for analysis; undertaking diverse analyses; gaining deeper insights into the data; representing the data, and interpreting the data meaningfully (Creswell, 2009).

All the interviews were done primarily in English, but intermittently interspersed with the “Twi” (a Ghanaian language) for clarity and emphasis, but responses were instantly translated into English in the notes being taken. The interviews were transcribed manually and harmonized with the notes recorded to capture the interviews in detail. Five (5) of the transcribed interviews were returned to the participants for comments or a confirmation that, it was a true reflection of their interviews.

The data analysis instrument adopted for the study was “Thematic Analysis” (Maanen, 1990). Emergent themes are significant, in that, they could address the research questions or lead to new insights (Yin, 2011; Tracy, 2013). Thematic analyses also serve as the bases for understanding, composing and interpreting the narrative and conclusions for a study.

#### **4.12 Data Reliability and Validity**

Qualitative research does not employ replication or statistics as standards of proof but presumes that, the analysis of a text is personal to the researcher doing the analysis, and to the culture, time and situation in which the analysis is undertaken, hence, true replication is impossible (Vanderstoep & Johnston, 2009). However, to test for data validity and reliability in qualitative research, the generally acceptable test is to use the “Criterion for truth” also known as the “Aha criterion” or “Phenomenological Validity”, which is deemed realistic and adequate. This criterion taps into a true and accurate approximation of the experience of individuals. Phenomenological validity is attained when the interpretation of the data voices out the lived experiences of the participants and other people who can relate to them (Vanderstoep & Johnston, 2009). In this regard, all the five participants who were contacted for a confirmation of their transcriptions or otherwise, confirmed their transcriptions as a true reflection of their interviews.

The interview protocols for this study were adhered to, through the circulation of the same basic questions to all the participants to ensure reliability and validity though the follow up questions were varied depending on the participant and how the interview turned out.

Validity in qualitative research also denotes the ability of a research instrument to collect the data it is intended to collect. As per the analysis and findings of this study, this was achieved in the form of the insightful data collected.

#### **4.13 Ethical Considerations**

Quite a number of authors into qualitative research underscore the significance of ethical considerations (Marshall & Rossman, 1989). In every academic study which includes the human population, ethical consideration is essential to guide the inquirer and shield the participants (Moustakas, 1994). For such, guidelines exist (Lundin, 2011).

Since the need for ethical consideration is very critical in qualitative research (Marshall & Rossman, 2011), the researcher carefully elucidated the reason for the study as well as the objectives the study sought to achieve. A good number of the participants granted the researcher interviews within the first three days of contacting them, attesting to the fact that the explanation was likely to have gone down well with them.

Prior to the face-to-face in-depth interviews, each participant was briefed on the entire interview process, an overview of the areas to expect the questions from, how long the interview would take, and also information about the manual and electronic recording of the interviews. Beyond all these, the researcher explained to them that, participation was completely voluntary. When all their questions regarding the study had been answered and they were satisfied with the briefing, they each confirmed their participation.

Since the privacy of the participants is of also of paramount interest, they were made to understand that, their identities would not be disclosed, hence only their business names were recorded and not their individual names. Codes were employed for identification of participants to facilitate anonymity during the data transcription and analysis process. The participants were also promised that, the data collected would not be shared with any other researcher aside the interviewer. Some of the participants were also made to review their transcribed interviews and all the necessary corrections effected to mitigate research bias (Harper & Cole, 2012) and also ensure transparency and trust.

#### **4.14 Limitations of the Study**

The study had a few limitations. Due to inadequate resources, data was collected from only three SME institutions in spite of the many others that could have been contacted. Another scopic challenge was the location and spread of the selected SMEs who were all based in the Greater Accra region of Ghana. This limited the opportunity to fetch the experiences

and insights of other equally eligible SMEs, making the findings applicable to the participants only.

#### **4.15 Chapter Summary**

This chapter presents a comprehensive framework of the process used in conducting the research in an attempt to find answers to the research questions. The three key paradigms were discussed, namely, the positivist, the critical enquiry and interpretivist paradigms; but the one underpropping this study is the interpretivist paradigm. This chapter also highlighted the research approach, research design and sources and types of data. The other components comprise the sample size, study population, research instrumentation, sampling technique, data collection method and data collection procedure. Further, the chapter highlighted the data analysis procedure, data validity and reliability, ethical considerations, limitations of the study and chapter summary.

## CHAPTER FIVE

### DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

#### 5.0 Introduction

The chapter analyses data collected using themes identified from the data. Findings from the study are categorized around these emergent major themes in narrative and descriptive format, which serves to describe the variation in a phenomenon, event, situation, or episode without making an attempt to quantify the variation (Kumar, 2011). The emergent themes from the analysis are meant to provide an exhaustive summary of the data (Marshall & Rossman (1999). Thematic analysis is employed for the study for the reason that, themes depict meaningful patterns, postures of the participants, or concerns (Benner, 2008). In this chapter, the findings from the thematic analysis are also discussed in the light of existing literature, in order to have them contextualized. The emergent themes are indicated below:

1. SMEs' perceptions of performance measurement
2. SMEs and drivers for the use of mobile money payments
3. Mobile money transactions performed by SMEs
4. Mobile money payments and SME performance
5. SMEs and payment systems
6. SMEs perspectives on challenges and solutions of mobile money payments

#### 5.1 Data Analysis and Presentation of Findings

In their view, Marshall and Rossman (1999) explain data analysis instils structure, order, and interpretation to the amount of data collected; It also facilitates the identification of content and general statements about associations amongst classes of data. In this section, the data collected for the study is analyzed based on the emergent themes.

### 5.1.1 Profile of respondents

Data analyzed in this chapter include demographic profiles such as gender, profession, occupation and educational background, as well as business profiles which cover the form of business, type of business, employee status, how long the business has been in operation and used mobile money payments and the mobile money network used by the business.

**Table 5.1a: Profile of Respondents**

<b>Profile</b>	<b>Measurement</b>	<b>Percentage</b>
Gender	Female	85%
	Male	15%
Educational background	First degree	45%
	Other	30%
	Second degree	15%
	SHS	10%
Form of business	Sole proprietorship	80%
	Limited Liability Company	15%
	Partnership	5%
Type of business	Manufacturing	60%
	Service	20%
	Retailing	15%
	Wholesaling	5%
Years of operation	2-5	55%
	6-9	25%
	10 & above	20%
Number of Employees	0-5	80%
	6-29	20%
Years for mobile money payments use	2-5	75%
	6-9	20%
	10 & above	5%
Mobile money network	MTN	100%
	Vodafone	0%
	Airtel-Tigo	0%

**Source: Field Data, May 2019**

**Table 5.1b Profile of Respondents (Profession and Occupation of Business Owner)**

	<b>Profession</b>	<b>Occupation</b>
R1	Economist	Job recruiter and trainer
R2	Industrial & organizational psychologist	Social entrepreneur, researcher
R3	Lecturer	Fabrics retailer
R4	Engineer	Paper craft designer
R5	Accountant	Cakes & pastries expert
R6	PR & marketing practitioner	Social entrepreneur
R7	Human resource practitioner	Professional photographer
R8	Journalist	Kids educational materials
R9	Biological scientist	Clinical dietician
R10	Human resource practitioner	Beaded jeweller
R11	Business administration	Industrialist
R12	Business administration practitioner	Beading & event décor expert
R13	Fashion designer	Fashion designer
R14	Caterer	Caterer, fabrics & FMCG retailer
R15	Building & construction professional	Building & tiling professional
R16	Seamstress	Fabrics & clothing designer
R17	Entrepreneur	Multi-faceted entrepreneur
R18	Professional teacher	Social entrepreneur
R19	Project management professional	Honey producer
R20	Caterer	Caterer and catering supplies retailer

**Source: Field Data, May 2019**

The data collected on the gender of the respondents indicated an 85% female composition with 15% being male. This suggests that, females are more likely to venture into business activities than men. Women are generally deemed to be better managers of resources than men. As great planners too, they also likely to seek resources that would help organize their businesses effectively especially, financial resources. It is therefore not surprising that, of the twenty (20) respondents who all use mobile money payments, over 80% are female.



In respect of the educational backgrounds of the respondents, 45% are first degree holders, 15% have second degrees, 10% are SHS graduates while 30% hold other miscellaneous qualifications. Together, 60% are university graduates. Before, SMEs were deemed to be managed by school dropouts; but today, the story is different. A good number of highly educated people have ventured into entrepreneurship and so far, seem to be doing well. The educational backgrounds of business owners have been found to be great determinants of business performance (Abor & Biekpe, 2007), because, it is believed that, educated entrepreneurs are enlightened and also possess the knowledge to make discerning choices like using appropriate payment systems for their businesses, including mobile money payments; all in an attempt to enhance their business performance.

Moreover, the data denotes a different crop of SME business owners who are pursuing careers entirely different from their professions. For instance, an Engineer who is currently into paper craft; a Chartered Accountant who is at present into cakes and pastries; a Human Resource practitioner whose occupation is now professional photography; and an economist who is pursuing a Human-Resource related venture. A total of fourteen (14) out of the twenty (20) respondents, constituting 70% were found to have occupations different from their professions. Interestingly, majority of them are part of the 60% of respondents who have acquired university education. This also suggests that, our university education in Ghana, does not fuel entrepreneurial passions within the university's course structure, since graduates pursue their entrepreneurial desires outside the university's curriculum. To pursue ventures entirely different from what they studied at the university also shows that, the SME business owners are dynamic and not risk averse.

The twenty (20) respondents were found to belong to three (3) key forms of businesses namely: Sole Proprietorship (80%); Partnership (5%) and Limited Liability Company

(15%). These echo earlier findings which hold that, most SMEs operate businesses with single proprietors (Odoom et al., 2017).

SMEs were also found to operate across all four types of businesses. These are: Service (25%), manufacturing (60%), wholesaling (5%) and retailing (15%). This suggests that, the mobile money payment service is used across the four key sectors of the economy, particularly, manufacturing, which garnered a 60% majority. Although SMEs form the unit of analysis for the study, it was still imperative to categorize them into small or medium enterprises in order to identify clearly the sizes of the SMEs in the study. However, it turned out that, 80% of the SMES used for this study were micro enterprises, while 20% were small enterprises. This categorization was done in accordance with the NBSSI (1990) definition of SMEs.

To qualify to be part of this study, the SMEs were expected to have been in business and also used mobile money payments for their business transactions for at least 2 years. In all, 55% were found to have operated their businesses for between two (2) to five (5) years; 25% for between six (6) to nine (9) years and 20% for ten (10) years and above. While three-quarters of the respondents were reported to have used mobile money payments for 2-5 years, one-fifth fell between 6-9 years with the remaining 5% falling within the ten (10) years and above category.

SMEs are known to often opt for choices that would maximize their resources since their resources are usually limited. Therefore, in choosing a network for their mobile money payments, there was no doubt they would pick the most efficient. As it turned out, the data reported a 100% subscription to the MTN mobile money payment service, with Vodafone, and AirtelTigo, having no subscriptions. This is indicative of the value the MTN mobile money service provides them.

Below is a presentation of the thematic analysis for the study. A great number of studies have established the effect of varied factors on SME performance. However, it is still unclear the influence of mobile money payments on SME performance in Ghana. In view of this, the study has been undertaken in a bid to explore the impact of mobile money payments on the business performance of Ghanaian SMEs. The data is analyzed under six different themes:

### **5.1.2 SMEs' perceptions of business performance measurement**

One of the key things the researcher did at the beginning of the interviews was to pick the thoughts of the respondents on their understanding of business performance. This was to facilitate a good understanding of the concept so as to elicit the desired discourse. Performance has been generally defined in many ways, particularly, in terms of achievement, effectiveness, efficiency, productiveness, execution, and etcetera. Some of the respondents conceptualized performance as the achievement of mission and vision.

Majority of the respondents associated business performance with growth, operations, and positive results, which could be in the form of impact and largely, progress or how well a business is doing or otherwise. Depending on the type of business the SMEs were involved in, their owners saw business performance from different perspectives. Achievement of sales targets, customer retention and brand awareness were thought by some respondents to be akin to business performance. Others argued that, business performance was about how your business has executed its plans over the years. Some also expressed their perceptions to include the achievement of goals in broad areas such as quality of products, customer relationship management and constant evaluation through feedback from customers to improve the operations of the business and attain customer growth. Some of these views are voiced out in the following quotes:

*“Business performance is about meeting the mission and vision you have set for your business. Client satisfaction first and foremost; meeting the need of your clients and reaching your financial target; as well as having new goals to achieve for the upcoming year.” - R9*

*“Business performance is the evaluation of how your operations work to achieve whatever goals have been set, whether it’s financial or operational or in some cases compliance. How your activities are progressing in line with whatever target you set for yourself.” - R1*

*“Business performance is when a business is growing and showing positive results in whatever problem they seek to solve, or whatever product they are offering to the public. ‘Positive results’ is not only when a business is making money, but also, the impact the business is making which may consequently result in good revenue simply because people are interested in what you are doing.” - R4*

Further, other respondents articulated their views in similar interesting ways. They perceived business performance in the light of a business fulfilling their mission and vision, achieving their financial goals and making their clients satisfied. A couple of these are highlighted in the comments below:

*“Performance is broad, it starts with having the right structures in place to facilitate the expected performance. In this regard, I need to get my staffing right; I need to get my marketing right and I need to identify my ‘why’ of being in business. If I achieve these, the results will follow.” - R6*

*“Business performance hinges on three shoulders: Quality of products, how you treat your customers and feedback from your customers to help review the activities of the business.” - R2*

With this deep understanding of business performance expressed by the respondents, the researcher also wanted to find out how the SMEs measured their performance. But before then, their thoughts were picked on their understanding of performance measurement. A respondent explained that, businesses needed to set targets for their operations so they could do periodic reviews to find out the extent to which those targets have been met. Another

respondent explained that, performance measurement is the process of ascertaining how much a business has been able to produce or sell as a sign of growth. Through feedback from customers, a business is also able to measure its performance. Interestingly, another respondent submitted that, performance measurement involved an assessment of activities that led to performance; for instance, undertaking intermittent appraisals for employees in order to establish whether they are performing as anticipated. Based on the feedback from the appraisal, employees could then be guided to do better. Simply put, performance measurement is the process of establishing how well the business is doing in terms of its operations, explained another respondent; it is basically a comparative analysis of previous and current performance. Some of the respondents also explained performance measurement as the use of certain indicators to ascertain how much a business has achieved or how far a business has come. Some of the views of the respondents are captured as follows:

*“Performance measurement is when you calculate the progress of your business on a scale of say zero to hundred or from ten to hundred to establish exactly where you stand.” - R13*

*“Performance measurement is when as a business, you start from nowhere, put in your best and after a while, check how far you have come.” - R11*

*“As a business owner, you need to set targets for your business operations; after a while, in assessing those targets to learn whether they have been met, you are measuring performance.” - R1*

*“Performance measurement is when you evaluate certain things that lead to performance. Undertaking quarterly staff appraisals to know if everybody is performing as expected and then guiding them as to what they need to do in order to perform better.” - R6*

*“Performance measurement is comparing previous and current performance”. - R15*

The SME owners were further entreated to share their individual experiences on how each of them practically measured the performances of their businesses. Majority of the respondents clearly employed performance measures that were both financial and non-financial. Below is a tabulation of the measurement indicators carefully gleaned from the responses:

### 5.1.3 Indicators for SME performance measurement

The performance measurement indicators provided by the respondents fell into two categories: Financial and Non-Financial

**Table 5.2a: Financial Indicators**

<b>Indicator</b>	<b>Percentage</b>
Sales volume	70%
Profitability	50%
Cashflow	35%
Income	5%
Revenue	5%

**Source: Field Data, May 2019**

**Table 5.2b Non-Financial Indicators**

<b>Indicator</b>	<b>Measurement</b>
Customer growth	70%
Customer satisfaction	50%
Customer retention	40%
Achievement of business goals	30%
Customer feedback	20%
Customer relationship management	20%
Innovation	20%
Referrals	15%
Employee retention	15%
Order frequency / repeat purchase	15%
Work plan	10%
Online and Social media visibility	10%
Brand awareness	5%
Sponsors	5%
Production volumes	5%

**Source: Field Data, May 2019**

Following from the indicators in the tables, the values for the top two financial indicators for SME performance measurement, sales volumes and profitability, were rather significant, having the same values as the top two non-financial measures, customer growth and customer satisfaction. Both indicators for each side had 70% and 50% of respondents respectively acceding to using those indicators to measure their performance. This implies that, SMEs strive very hard to meet their sales objectives, which also serve as the basis for profitability. This also underscores the fact that, for the respondents, customer satisfaction is as important as achieving sales targets. For any serious business that pursues their performance objectives, the customer must be the focus of all their operations, with the ultimate aim of identifying the needs of the customer and satisfying those needs efficiently and profitably. This concept lies at the heart of marketing. Without the customer, businesses will cease to exist. It is therefore not surprising that, customer growth found its way to the top of the placements for the non-financial measures for measuring the performance of SMEs, closely followed by customer satisfaction. It is known that, a customer who experiences a bad service will tell others about it. This could be debilitating for a business, hence the need for customer satisfaction to be key to the operations of every serious business that has its eyes on performance.

The third financial indicator was cashflow with 35% of respondents endorsing its use to measure their business performance. This was followed by 5% of respondents agreeing to using income and revenue as performance measures. The third to sixth non-financial indicators were achievement of business goals (30%); customer feedback (20%); and customer relationship management (20%). Of the top six (6) non-financial measures of SME performance, five (5) of them were “customer-focused”. This further emphasizes the very critical role customer service plays in business performance. Notably, the least used

financial indicators for measuring their performance were income (5%) and revenue (5%).

The responses in support of these findings are as follows:

*“I look at the sales volumes, retention of my customers, profitability, customer growth, and customer satisfaction. I also see employee retention as a performance measure as well as achievement of business goals.” - R5*

*“I measure my performance through sales and the membership base, whether it has dropped or not, because I would like to know for example why performance has dropped - through low impact numbers.” - R6*

*“I look more at sales volume and customer satisfaction. With that, you get repeat orders which are very likely to culminate into profit. I look at how much I put into the business and what I am getting back”, that is, cash flow”. - R8*

*“Profit is number one. I also use sales volume and how many new things I create. Customer satisfaction is one of my core values. I want people to have value for their money.” - R18*

Some of the customer-related responses were obviously unequivocal. Here are a few:

*“Customer satisfaction is very critical to our business, and customer retention too because when my customers keep coming back, it is a good indication of the quality of my products.” - R2*

*“Customer satisfaction as a performance indicator is a very big one for us because we rely a lot of referrals and recommendations. We also solicit feedback from clients during our Annual Performance assessment review.” - R1*

*“I measure the performance of my business using the number of customers I have acquired overtime and my ability to keep old clients coming back. I also like to measure the performance through the eyes of customer feedback, referrals, communication and relationship building.” - R7*

#### **5.1.4 SMEs and drivers for the use of mobile money payments**

The Mobile money service has brought a big relief for many in respect of their personal financial transactions. SMEs have also been great beneficiaries since its inception in Ghana.



Interestingly, the reasons why people decide to use the service vary. This is no different with SMEs. Although data gathered indicated that, all the SME owners interviewed use the MTN mobile money payments service, there must be peculiar reasons why each of them decided to use mobile money payments for their businesses in the first place. The study therefore sought to delve deeper into these reasons, which for some SME owners undeniably form the basis for assessing how impactful the service has been on their business performance. The reasons provided by the respondents in the interviews have been tabled below:

**Table 5.3: Reasons for the Use of Mobile Money Payments by SMEs**

<b>Reason</b>	<b>Percentage</b>
Convenience	60%
Easy accessibility (to the service, vendors, cash)	35%
Easy to use	30%
Fast	25%
Facilitates efficient financial transactions	25%
Time-saving	25%
Wide coverage	20%
Reliability	20%
Good alternative payment system for customers	20%
Provides dependable reporting/tracking system	10%
Safe	10%
Cashless society	10%
Instant notification	10%
Affordability (fees)	10%
Makes business more interesting	5%
Form of instant receipt	5%
Efficiency	5%
Bonuses and interest	5%

**Source: Field Data, May 2019**

The reasons assigned to the use of mobile money payments by the respondents were diverse, but quite a number of the respondents shared some level of convergence in respect of some of the reasons. Of all the eighteen (18) reasons provided, a 60% majority of respondents explained that, they perceived the service as being very convenient and therefore decided to adopt it. Next, 35% mentioned easy accessibility, particularly to the service, the vendors

and to their deposits. A 30% of the respondents found the service easy to use, which formed the basis of their decision to use mobile money payments. Similarly, others decided to use mobile money payments because they found it to be fast (25%), efficient (25%) and time-saving (25%). The least number of respondents (5%) thought mobile money payments were efficient, also giving them bonuses and interest, hence their decision to use the service. Others also contended that, going to the bank to queue was time-wasting and inconveniencing, hence, their preference for mobile money. Some of the responses highlighting these views are outlined below:

*“I decided to use mobile money payment because, it is convenience, easy to access, quite reliable and fast.” - R2*

*“I just think ‘MoMo’ is God-sent. It’s convenient. I work late into the night so it makes my financial transactions easier and faster. I work with suppliers from the hinterland so it makes the payment easier.” - R11*

*“Reduces the cost of doing business, time saving, very fast and convenient. When I wasn’t using mobile money, I had to drive around to offices to collect payments but mobile money has resolved this issue which helps me save fuel; I also pay my suppliers and service my investments using the service.” - R14*

*“Instead of going to queue in a bank and spending time which I don’t have to go and withdraw, I use ‘MoMo’ for convenience, easy accessibility, easy financial transactions, and I can do business across the regions at the comfort of my home; I am also given bonuses and interest.” - R3*

*“Because it’s easy. For us, it is the ease of accessibility. Almost everybody has mobile money so we wanted a reliable reporting system. Looking at what we do, there are cases where we have to refund so if we can’t trace the transaction, it will be difficult to do the refund.” - R1*

SMEs face real challenges that require simple, convenient and affordable solutions. They need solutions that are efficient and can be accessed just by the click of a button. In the

views of these respondents, these are the reasons why they decided to use the mobile money payment service.

*“Because MTN is reliable, widely used, and convenient in terms of payments. Especially with my orders, people have to make deposits first, so it’s easier for them to use mobile money to pay instead of coming all the way to make payment and having to come back to pick up the cake. I had the option to let them pay into my bank account but that was not too convenient. I have tried collecting cheques before but going to the bank to cash the cheque wasn’t pleasant. The mobile money transfer is very convenient, it’s safe and reliable with instant notification. It’s easy to withdraw and vendors are easily accessible.” - R5*

*“To bring more efficiency to my payment systems because I realized that parents would come and tell me they don’t have cash on them during the weekend so it turned out to be a more efficient payment method for them and it’s been fruitful because people used to get away with my money and they will tell me that I don’t have cash on me so I will pay you later and it becomes a hell of a time chasing my money. So, when they ask if there is any other form of payment and I suggest mobile money, they pay me on the spot. It has brought profitability to my business because when people are owing you cash, it makes the running of your business difficult. It’s a reliable form of payment. I can count on it all the time. It has given me an option for payments. It’s a form of instant receipt. I don’t have to issue a hard copy receipt any more these days because when you pay, the payer and the receiver both have evidence. So, with the salon, I am now insisting that they encourage the clients to pay with mobile money if they have because I can verify; the transactions are more evidence-based, an advantage the use of cash doesn’t possess. Sometimes the staff can swerve you a little bit, and it also helps build trust with the staff which cash doesn’t offer. With the social enterprise, now I don’t lose out.” - R6*

### **5.1.5 Mobile money transactions performed by SMEs**

The study also sought to investigate the exact transactions the respondents used the mobile money service for. Based on this, the study wanted to know how these transactions impacted their business performance. The question posed to elicit this information was: “Tell me what business transactions you use mobile money for.” Granted that, the mobile money service

has many functions, this study is focused on the “payments” aspect, which impact it seeks to establish. This section therefore aimed to find out whether the mobile money payment function was significant to the SMEs. The data collected for this purpose is categorized below:

**Table 5.4: Business Transactions SMEs use the Mobile Money Service for**

<b>Transaction</b>	<b>Percentage</b>
Payments from customers	100%
Payments to suppliers	95%
Savings	45%
Payment for salaries and allowances	35%
Interoperability	30%
Payment for bills	25%
Access to loan facility	20%
Petty cash	15%
Payment for airtime top-up	10%
Payment for data	10%

**Source: Field data, May 2019**

The mobile money payment service has many functions. The respondents shared how they used the service. Usually, the customers of the respondents paid the respondents through the mobile money payment service when they bought products and services from them. The respondents also transferred money from their mobile money wallets to pay for raw materials sourced from their suppliers. The act of keeping money in their mobile money wallets over an extensive period of time without spending it, provided a means of saving for the respondents. In respect of the interoperability function, respondents transferred the salaries and allowances of their workers from the respondents’ wallets to the various wallets of the workers who were on mobile networks different from the mobile networks of the respondents. Using the same interoperability function, the respondents transferred monies

from their mobile money wallets into their bank accounts, and vice-versa, which was so convenient and saved them the time of going to the bank physically.

There were also short codes the respondents dialed to access the platforms of utility providers, to facilitate the payment of bills, for instance, DSTV bills. MTN has a loan facility on its mobile money network where respondents dialed the appropriate short codes to access the service. MTN subsequently deducted the loan from the respondents' mobile money wallets based on a repayment schedule. Instead of keeping physical cash as petty cash, respondents also kept a specific amount of electronic cash in their mobile money wallets and withdrew the cash as and when they needed it to run their operations. The respondents again bought airtime or topped up their airtime with the mobile money service to facilitate communication with their clients. Considering the fact that some of the respondents marketed their products on social media, they often required data to undertake their activities. They therefore bought data by transferring money from their mobile money wallets to the service provider in return for the required data.

The data in the table above indicate that, 100% and 95% of the SMEs used the mobile money service primarily to make payments to their suppliers for raw materials and other services and to receive payments from their customers, respectively. However, airtime top-up and data were the least mobile money transactions undertaken by a tenth of the respondents. Besides, of the ten (10) stated mobile money transactions usually undertaken by the SMEs for their businesses, six (6) of them were for payments. For the SMEs, mobile money payments constituted the bulk of their transactions on the mobile money service. These findings are revealing and significant as they emphasize the place of mobile money payments in the business transactions, and subsequently the performance of the SMEs. The following responses support the findings:

*“It’s my number one payment method for goods and services, payments from Customers and T & T allowances. I have however not registered for Interoperability.” - R6*

*“I use it mostly for payments from customers, payments for goods, payments for allowances. It’s a form of savings now that they give a little interest. It’s more like a petty cash savings for me.” - R4*

*“We use the mobile money service for the payment of goods and services. We receive payments from customers and pay my workers’ allowances through the service. We also use it for airtime top-up. We do use it for savings because since we started, we have actually not withdrawn our revenue. We just keep it there till we are closing our books. It’s a savings. When you move the money to the bank, because it’s a company account, there are all these charges, so we keep it on the mobile money wallet and take it out all at once. We also get interest when we move it to the central account.” - R1*

*“I use the service to deposit money into my bank account (interoperability), receive payments from customers, payment for goods and services and payment of bills. When I go and do a job, I let the customer transfer the money into my ‘MoMo’ account. It’s easier for me to then transfer the money into my bank account and I don’t need to go to the bank. I used to see it as a savings tool because of the interest but because of the activities of some fraudsters who threatened me, I just went to withdraw all my money and I was wondering how they knew I had money in my ‘MoMo’ account.” - R7*

### **5.1.6 Mobile money payments and SME performance**

In an attempt to learn how mobile money payments have influenced the business performance of the SMEs, the researcher sought to know how much payments each SME made in a month, for both ‘Payment transfers’ and ‘Receipts’. There were two non-disclosures. At a 90% response rate, which includes an outlier, the study found that, on a monthly basis, payment transfers from the SMEs ranged between GHC200 - GHC8000 and payment receipts from their customers, between GHC700 - GHC12,000. The outlier had values for payment transfers at GHC50,000 and payment receipts at GHC20,000. At 85%

response rate (without the outlier) the average monthly values were GHC2,965 (payment transfers) to GHC3,694 (payment receipts). These values may not be much; but to the SMEs, it makes a lot of difference.

Similarly, the SMEs were asked to share their experiences on what mobile money payments had done for their businesses. From the interviews, it was gathered that, mobile money payments had enhanced their business operations. They reported that, in the past, there were instances where dispatch riders who had been sent to customers to collect monies reported the loss of the cash in transit. Although one respondent thought that mobile money payments have not really helped her to sanitize her financial transactions, a majority of them believed mobile money payments had helped them manage their cash better because the monies were transferred to where they belonged as soon as they were received.

They added that, having cash in their wallets was not as tempting as having physical cash, so they were able to starve their distractions, which saved them from unnecessary spending. Mobile money payments also helped infuse efficiency into their business transactions. The cost of doing business had also reduced considerably. With the availability of mobile money payments, transportation and fuel costs were out of the picture, precious time was also saved and channeled into other productive pursuits.

Generally, the mobile money payment service was seen to have improved the service experience of the SMEs and their customers alike; sanitizing their payment transactions and spurring efficiency in their financial transactions. To the respondents, the service also promoted customer growth, albeit to a lesser extent and afforded easier access to their customers who otherwise would not be available to do business physically with the SMEs. Overall, mobile money payments have made the running of the businesses and the lives of the business owners very easy but competitive, to the extent of enriching their businesses.

The respondents again attested largely to a thorough overhaul of their financial transactions through the use of the mobile money payment service. First, it enhanced their profitability and cashflow, because this time around, there were no excuses for customers who would otherwise have found nice ways of refusing to settle their bills, sometimes with the excuse that they had no cash on them. The service also created better opportunities for them to get the customers to buy more, thereby increasing their ability to make more sales.

*“I think it has enriched my business. It has brought profitability to my business because when people are owing you cash, it makes the running of your business difficult. It has helped with better cash management: I collect my monies for specific reasons so I transfer right after. It has reduced the cost and time of doing business and made life easy and efficient.” - R6*

*“It makes it easier to access my customers, because without that, it would make it difficult for them to come around and do business with me. It has made the running of the business easier too because I could just pay to suppliers for delivery. It has enhanced profitability and cashflow. I am very cautious about my expenditure and with ‘MoMo’ I can always go back and check or request for a statement, I like ‘MoMo’ for petty cash. It has reduced the cost of doing business and provided better cash management:” - R4*

*“It has helped me manage time and made me more efficient in terms of payment from clients. Initially, there were instances where we had to go to offices to chase people for money. But now customers can make payment whiles the dispatch is on the way to deliver. To prevent the loss of cash in transit by dispatch, reduction in cost of doing business and delivering personally. It cuts down time which brings about efficiency so it’s really helpful. With cash, when I have the money in my hand, I just buy things but with the ‘MoMo’, it’s difficult using it. When the money comes into the wallet, I immediately move it somewhere else.” - R7*

*“Faster delivery (customers and suppliers). “The other time, I had decided to buy some cake boxes but realized my time was catching up on me and I really needed the cake boxes but I couldn’t go, so the seller offered to get the boxes delivered when I made payment. So instead of driving all the way there and back, I just paid her*



*through ‘MoMo’ and got the boxes delivered .....efficient payment transactions, enhanced customer service, and customer growth although not directly.” - R5*

### 5.1.7 SMEs and payment systems

The researcher also posed the question: “Apart from mobile money payments, which other payment systems in Ghana do you use for your business transactions and why?”. This question was to understand better the place of mobile money payments in the financial transactions of SMEs. The responses gathered from the interviews are tabulated below:

**Table 5.5: Alternative Payment Systems for SMEs**

Payment system	Percentage
Cash	95%
Cheque	55%
Bank transfer	35%
Credit card (visa)	15%

**Source: Field data, May 2019**

One of the respondents confessed to operating a cashless system in her business. Nobody sighted money and nobody touched money. This she said, worked very fine for them. Apart from her, the remaining 95% of the respondents revealed that, at some point, they all accepted cash for payments aside mobile money. Only 55% accepted cheques as an alternative form of payment for their businesses. Credit card garnered just 15% usage rate from the respondents. A few of the statements reflecting these findings are as follows:

*“I don’t accept cash at all; it’s all mobile money. I am totally cashless.” - R1*

*“Apart from cash, the business accepts cheques, bank transfers and visa but to a lesser extent.” - R5*

*“Aside ‘MoMo’, I accept cash. I am not too comfortable with cheque because it can bounce.” - R8*

*“Sometimes I do bank transfers, and also use wave.com, so they send it through my MTN mobile money account.” - R16*

With the alternative payment systems enumerated above, it suggests that, the SMEs use 4 types of payment systems, vis-à-vis, mobile money payments, cash, cheque and visa. Beyond this, the researcher went ahead to further probe to establish which one of those payment systems was employed often by the SMEs. The responses are found in the table below:

**Table 5.6: Payment System Often Used by the SMEs**

<b>Payment system</b>	<b>Percentage</b>
Mobile money payments	80%
Cash	10%
Mobile money payments & Cash	5%
Cheque	5%

**Source: Field data, May 2019**

From the analysis, it was found that, an 80% majority used mobile money rather consistently, while 10% accepted cash often. Only 5% agreed to using both mobile money payments and cash often. Another 5% admitted to using cheques often when it came to payments.

Using something often does not necessarily give it preference over other alternatives. The researcher therefore asked the respondents which of the payment systems in Ghana they preferred to use for their businesses considering all the merits and demerits. The analysis and findings are presented as follows:

**Table 5.7: Payment System Preference**

<b>Payment system</b>	<b>Percentage</b>
Mobile money payments	95%
Cash	5%

**Source: Field data, May 2019**

The findings indicated that, an overwhelming 95% of the respondents preferred to use mobile money payments for their businesses because they thought it was safe, instant, and convenient. Only one respondent, representing 5% indicated otherwise because to her, if she had cash on her, she could take it wherever she wanted without any limits on how much she could carry along. To augment these findings, the respondents had these to say:

*“I prefer mobile money payments because I can be kidnapped or my bag snatched and the cash taken away but ‘MoMo’ is safer if I keep my pin number well.” - R20*

*“Mobile money. I don’t like cash because I misplace money. When I have cash on me, I begin to remember all the things I need. But when the money is on ‘MoMo’, I am able to starve my distractions.” - R6*

*“Cash. I prefer cash to ‘MoMo’ because I can easily take it to wherever I want. With MTN, there are limits to how much I can withdraw but with the bank there are no such limits. Asking for a bank account statement by the network provider as a requirement for upgrading my threshold doesn’t sit well with me.” - R16*

*“I prefer ‘MoMo’ because to me, cash is temptation in terms of the likelihood to spend.” - R5*

### 5.1.8 SMEs’ perspectives on challenges and solutions of mobile money payments

As much as mobile money payments have brought an immense relief to the respondents, they also shared some challenges they had encountered with the service. Six key challenges emerged.

**Table 5.8: Challenges Associated with Using mobile money payments**

<b>Challenge</b>	<b>Percentage</b>
Network	55%
Transaction fees	20%
Fraudsters/security	15%
Withdrawal limits & documentation	15%
Non-receipt of notification	5%
Customer complaint handling	5%

**Source: Field data, May 2019**

The analysis brought to the fore network challenges as the topmost concern of the respondents with 55%; followed by transaction fees (20%). The respondents were not enthused about how the network sometimes fluctuated at will and interrupted their operations. At the bottom of the table was non-receipt of notification and customer complaint handling with 5% each. The respondents expressed their sentiments as follows:

*“Sometimes, on the day I have to withdraw money, the network is down.” - R7*

*“Charges eat into your profit. The service providers should factor in different charges for businesses and individuals.” - R12*

*“No challenges yet, but one time, I mistakenly transferred a huge sum as air time instead of money transfer and the way MTN addressed the issue wasn’t good enough.” - R6*

*“My challenges are the two thousand Ghana cedis transfer threshold and the documentation required for increasing the threshold. Also, fraud, security and the response of MTN to fraud issues.” - R3*

*“I have issues with MTN, they don’t tell you the rules regarding the service when opening the mtn account, for instance transfer limits. There was a day I desperately needed money and they said I have exceeded my limit.” - R16*

The respondents however, preferred some solutions to the challenges. They believed that, there was no way the fraudsters would have information about a customer’s account details except they have accomplices from within the organization who provide such information to them. MTN should therefore address the issue of security and especially fraud from within the organization. The attitude of MTN towards customer complaints should also be improved and their transaction charges be revised in favour of heavy users of the mobile money payments service. Customers were also advised to be more vigilant regarding fraudulent activities. To communicate these recommendations, the respondents made the following statements:

*“Notify customers when the network is down.” - R19*

*“Check security from within because how could someone have your full details except, he has help from within.” - R3*

*“Mtn needs to be more responsive to customer complaints.” - R6*

*“If it’s possible for the charges to be taken out, especially the double deduction.” - R8*

## **5.2 Discussion of Findings**

The discussion areas are segmented under each research question in a bid to demonstrate from the study, what the answers to the research questions are.

Exciting discoveries were made about the profile of the respondents. Incidentally, all respondents were found to be subscribers of the MTN mobile money network in Ghana, hence, their patronage of the mobile money payment service operated by the network. Also, Ayyagari et al. (2014) revealed that, SMEs in developing countries like Ghana were deemed be sole proprietorships. This is corroborated by Odoom et al. (2017) in his study which reported 70.3% of the Ghanaian enterprises sampled as sole proprietorships. This study found evidence in support of this assertion. Interestingly, in respect of the form of business these SMEs run, 80% were found to run sole proprietorships. Furthermore, most start-ups in developing countries have been confirmed to be Micro and Small Enterprises (MSEs) employing less than five workers (Franck, 2012).

In spite of the fact that 85% of the respondents were female, manufacturing was found to be the predominant type of business with 60% responses. This is very significant as it demonstrates a positive departure from the findings of Tambunan (2009) who found that, within the Indonesian manufacturing industry, only close to 29% of total SMEs within the sector are operated by women. Again, Anna et al. (1999) also found that, ownership of female business mainly concentrated in the retail and service sectors.

It was also discovered that, the respondents run young businesses with 55% of the enterprises being in operation for between two (2) to five (5) years. In her study, Anambane (2017), found that, majority of the women entrepreneurs either had no formal education or had low levels of formal education which presupposed that, entrepreneurship was meant for uneducated women. In contrast to the above, the study reported a significant finding: 60% of the respondents had first degrees, second degrees or both in very prestigious fields like engineering, journalism, accounting and biological sciences, which the researcher found interesting and impressive. This outcome suggests that, the days when entrepreneurship was perceived to be the preserve of the uneducated are fast passing by. Most of the respondents appeared to be achieving a lot in their businesses, probably due to their high levels of education. Again, this finding is supported by Delmar & Davidsson (2004) who argued that, higher rates of education led to higher rates of entrepreneurship.

The following discussions provide answers to research question 1: How do Ghanaian SMEs measure the performance of their businesses?

### **5.2.1 SMEs conceptualize business performance as growth and achievement**

Performance in business circles has been found to have multiple perspectives cutting across all industries. Interestingly, the conceptualizations are convergent. The respondents explained business performance as the achievement of the vision, mission and goals, as well as the growth of a business. This is in line with the observation of Lusthaus et al. (2002), who argued that, organizational performance focuses on the achievement of the mission, goals and objectives of the company. According to the respondents, business performance depicts the proper management of the operations of a business to achieve what it plans to do. This finding emphasizes the stance of Gopalakrishnan (2000) that, organizational performance focuses first, on measures related to efficiency, that is, the connection between input and output; and then measures related to effectiveness, viz-a-viz, business growth and

employee satisfaction. The SMEs also associated business performance with the achievement of brand awareness. However, Mohan & Sequeira (2016) have a contrary view. They found that, focusing on building brand awareness alone for Fast Moving Consumer Goods (FMCG) does not drive business performance. The respondents also perceived the attainment of sales targets as business performance. Similarly, Olhager & Selldin (2007) revealed that, operations planning and sales played a substantial and optimistic mediating role in improving operational performance. The ability to retain customers was also equated to business performance by the respondents. In line with this, Towler, Lezotte & Burke (2011) hypothesized the mediating influence of customer retention in respect of the relationship between firm performance and customer satisfaction in their study. Some respondents also explained that, business performance hinged on how a business had successfully implemented their plans over the years. This echoes the findings in a study by Hahn & Powers (2010) which discovered that, when strategic banking groups were re-grouped according to the strength of the quality of their strategic plans and execution ability initiatives, banks with high execution ability and plan quality chalked impressive degrees of performance.

### **5.2.2 SMEs use both financial and non-financial indicators to measure performance**

A good number of studies have been undertaken on performance measurement (Franco-Santos et al., 2012; Sillanpaa, 2011; Perera & Baker, 2007). Like this study, the scholars also unearthed some findings. The respondents equated business performance to operations and positive results, which could be in the form of impact and the achievement of goals in broad areas such as quality of products and customer relationship management. This finding reflects that of Lönnqvist (2004) who proposed that, performance be evaluated in terms of actual results of activities or the process of carrying out an activity or even the ability of an organization to achieve outcomes in the future.

Throughout performance literature, SMEs have been found to measure their performance in one way or the other. The performance indicators used are seen to vary based on whether the manager of the business is an owner manager or not. Perera & Baker (2007) investigated the features of organizational performance and how they were measured by SMEs. They found that, SMEs in general relied greatly on financial measures of performance, while SMEs whose managers did not own the businesses used multiple performance measures, as opposed to those with owner managers. This study however, does not support this assertion. Rather, it observed that, owner-managers used multiple performance measures, that is, both financial and non-financial measures and relied more on non-financial measures of performance which are principally customer-focused. The use of cash did not also feature strongly as a financial measure in this study. These findings of the study are similar to the study by Jarvis et al. (2000) which revealed that, since cash as a measure of performance seemed too financially leaned, owner-managers intermittently adopted non-financial indicators which were believed to be more responsive and suited than cash indicators in the measurement of business performance.

In respect of the financial indicators, the respondents employed, 'sales volume', followed not too closely by 'profitability'. This does not resonate with the discovery of Jarvis et al. (2000), that, profit was largely regarded as the key measure of business performance. They also mentioned that, both the financial and non-financial measures came together to create a dynamic recipe for measuring business performance. This endorsed the stance of the respondents in using a mix of financial and non-financial measures to measure their business performance. This also underscores the claim of Gopalakrishnan (2000) which established that, organizational performance was characterized by financial and non-financial measures, from both objective and subjective perspectives.



The following discussions provide answers to research question 2: What performance benefits do Ghanaian SMES derive from mobile money payments?

### **5.2.3 Mobile money payments impact SMEs' performance positively**

This study revealed that, functions and benefits of mobile money payments influenced their adoption. Mobile money payments possessed certain features that attracted people to the service. The respondents perceived the service as principally convenient, aside being easily accessible, safe and time-saving, hence, their decision to adopt it. Likewise, GSMA, (2017); Dolan (2009), argue that, the convenience, reach and privacy characteristics of mobile money, make it a predominantly attractive remittance network for rural households and women, besides being a safer option than cash, saving travel time and reducing the risk of theft. This study also revealed that, SMEs patronized mobile money principally for its payments function. They reported significant impact of mobile money payments on several aspects of their businesses, categorized into service, financial and operational performance, which investigation the conceptual framework sought to direct. This revelation stressed the conceptualization of SME performance in literature using different classifications including operational performance, financial performance and environmental performance (Negrão et al., 2017; Masakure et al., 2009; St-Pierre & Delisle, 2006).

Undeniably, the study confirmed the positive impact of mobile money payments on the overall business performance of the respondents. Specifically, the analysis indicated that, mobile money payments enhanced operational performance through the operational efficiency of SMEs, that is, improvements in respect of processes and systems; including productivity, time management, reduced cost of operations and better cash management. This accentuates the study of Atristain & Rajagopal (2010) who shared the evidence of a substantial impact of a company's vital resources and internal capabilities on SME's operational efficiency, to improve performance and earn competitive advantage. With the

interoperability function, SMEs can now transfer money from their mobile money wallets to their bank accounts and vice versa without any stress. This justifies the opinion of Lyman (2009) that, the benefits of interoperability include enhancing value to customers by increasing the means and places mobile money could be used.

Indeed, the efficiency mobile money has infused into the business transactions of the respondents is clearly reflected in the considerable drop in the cost of doing business, which includes transportation and fuel costs. In line with this, (GSMA, 2017) discovered that, the move from cash to digital payments has yet again resulted in a surge in cost savings, revenue collection, while improving operations of government ministries, departments in addition to agencies as seen in the case of the government services and the National Transportation Safety Authority of Kenya. The respondents who perceived the receipt of mobile money payments into their wallet as a savings tool, were happy with the interest they earned on their savings; hence, the assertion that customers are also responding to the opportunity to earn interest by keeping more money in their mobile money accounts while performing more digital transactions (GSMA, 2017). The study further revealed that, mobile money payments made the delivery of products to customers and from suppliers faster without any delays because payments were made promptly. This resonances with the experiences of some small businesses who confessed that, using the service for digital salary payments helped parents' make more timely school fees payments; and form informal savings groups (Kendall et al., 2013; GSMA, 2017).

The following discussions provide answers to research question 3: What are the perspectives of Ghanaian SMES on payment systems?

#### **5.2.4 SMEs prefer mobile money payments to cash**

Before the era of mobile money payments, goods and services were being paid for, using the traditional means of payment such as: cash, credit cards and cheque (Oliveira, T. et al., 2016). But the landscape for payments has changed in recent time. Mobile money payments have emerged as the “game changer” and the “new normal” for the payments ecosystem which includes businesses (Hedman & Henningsen, 2015). This is true of this study which also found mobile money payments as the foremost payment system among SMEs. Mobile money payments are often used by the SMEs not out of necessity but rather, the benefits derived from the service. The study found evidence in favour of this observation. Maslavecckas (2018) revealed that, customers are not bothered financial products; rather, they are concerned about what products do for them.

A comparative analysis between cash and mobile money payments by the respondents found mobile money payments being preferred to cash. This echoes the findings of Oliveira, et al., (2016), which revealed that, payments have been improved through technological innovation, ushering in the era of enhanced mobile money payments, a preferred choice by both merchants and customers alike. The finding also resonates with that of GSMA (2017), which revealed that, having 690 million registered mobile money subscribers globally, placed mobile money as the top payment platform for the digital economy in several developing markets. The study also demonstrated the displacement of cash, from its first position to being the second option in terms of payments among Ghanaian SMEs. However, this finding is not in agreement with the general conclusion of the study by Dzokoto & Mensah (2011), which demonstrated that, in Ghana, cash is still king.

### **5.2.5 Unstable network is the key challenge of SMEs who use the mobile money service**

In spite of the overwhelming evidence which confirmed mobile money payments as the leading payment platform (GSMA, 2017), and the findings from this study which confirm this finding and, some challenges still exist with the use of the service. These challenges are in respect of the network, transaction fees, fraud and security issues, as well as withdrawal limits and documentation. The others are: non-receipt of notification and customer complaint handling challenges. The SMEs complained that, sometimes the network went down without any notice, which interrupted the service and their work. The nature of their businesses and their constant use of the service required the network to be stable and available every time. Also, they maintain that, there were times when notifications were not received for certain transactions made, causing uncertainties and displeasure sometimes. Again, double deductions were usually made by the service provider in respect of payments: although the sender was made to pay a transaction fee when making a transfer, the receiver was also charged a fee for withdrawal. They complained that, the charges eroded their profits causing them to lose revenue. Again, the respondents felt threatened by the activities of fraudsters which ultimately affected the security of the service. Besides, withdrawal and transfer limits, as well as the documentation required in order to increase the threshold were huge challenges to them as well. Lastly, occasionally, the way customer complaints were handled really leaves much to be desired. Of all these complaints however, the network issues remained their biggest challenge.

### **5.2.6 The extended TAM Model**

It is also evident that, the findings aptly confirm the phenomenon the extended TAM model (conceptual framework) sought to describe, thus, beyond the SMEs acceptance of the mobile

money payments system, there was a positive impact on their business performance, depicting the positive role the system plays in the performance of Ghanaian SMEs.

### **5.3 Chapter Summary**

The chapter contextualized the findings of the study in existing literature based on the themes extracted from the data collected. The discussions were done in the light of the research questions. There were six themes, namely: SMEs' perceptions of performance measurement, SMEs and drivers for the use mobile money payments, Mobile money transactions performed by SMEs, mobile money payments and SME performance, SMEs and payment systems and SMEs perspectives on challenges and solutions of mobile money payments. The analysis unearthed key findings which indicated that, SMEs were primarily into manufacturing. Most of the owner managers were highly educated which increased their success potentials. Also, SMEs conceptualized business performance as growth and achievement. They also used both financial and non-financial indicators to measure performance. They further revealed that, mobile money payments have indeed impacted their performance positively. Moreover, in respect of payment systems, they preferred mobile money payments to cash, in spite of the network challenges they faced with the service.

## CHAPTER SIX

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 6.0 Introduction

The chapter presents a summary of the findings of the study, the conclusions and recommendations as well as the future direction of the study.

#### 6.1 Summary of the Study

While some studies have established the impact of varied factors on SME performance, the impact of mobile money payments on SME performance is still uncertain. The study therefore sought to investigate whether mobile money payments had any influence on the business performance of Ghanaian SMEs. The background of the study discussed performance in general, spelling out the dimensions as well as the factors that affected performance, particularly SME performance. The background also covered discussions on mobile money payments with the view of unearthing the gaps in the literature which gave the impetus for this study to be carried out. The scope of the study covered SMEs in Greater Accra, operating in any sector of the economy who have used mobile money payments for their businesses for at least two years.

Literature was reviewed on SMEs, mobile money payments and Financial technology, as well as SME performance. The study employed the interpretivist research paradigm and a multiple case study research design, used a qualitative research approach and in-depth interviews as the data collection method. The data collected were duly transcribed and analyzed based on the emergent themes. Finally, the findings were presented and discussed in line with existing literature.

## **6.2 Summary of Key Findings**

This section highlights the key findings on the objectives of the study comprising the impact of mobile money systems on the business performance (operational, financial, service) of the respondents; their perception of performance and performance measurement and their use of payment systems.

Mobile money payments were found to impact the performance of Ghanaian SMEs' positively. In terms of operational performance, the respondents indicated that mobile money payments had enhanced their day-to-day interactions with their customers and ultimately enhanced their business operations, through key features like convenience, which forms the basis for their adoption of mobile money payments. With regards financial performance, the respondents specified that their payment transactions had simply been sanitized, helping them manage their cash better, thus, spurring efficiency in their financial transactions. In terms of service performance, the respondents stated that, mobile money payments had greatly improved their overall service experience with their customers.

Also, the respondents conceptualized business performance as achievement and growth in terms of a business achieving its vision, mission and goals; as well as recording a visible progression or development.

The study also found that, Ghanaian SMEs used both financial and non-financial indicators to measure performance. Respondents also demonstrated a good understanding of performance and performance measurement. Sales volume and customer growth were the top financial and non-financial measurement indicators employed by the respondents respectively.

The findings also revealed that, a great number of Ghanaian SMEs preferred mobile money payments to cash payments which they placed second, because they thought the former was safer, instant and more convenient.

Challenges reported by the respondents also included unstable network, high transaction fees, fraud and security issues, among others; but the unstable network was their key challenge.

One key finding of the study which also contributes significantly to knowledge was the high academic qualifications in very prestigious professions, possessed by more than half of the respondents, majority of who were women.

Manufacturing was also found to be the predominant type of business among a significant number of the women respondents. This is noteworthy as it is usually not the norm.

Interestingly, in terms of the personal and business profiles of the respondents, majority of them run young businesses and were sole proprietors operating micro enterprises, predominantly in the manufacturing sector, hence, constantly seeking innovative solutions like mobile money payments to enhance their business operations.

From the findings above, it is evident that, the study has achieved its overall purpose of ascertaining whether mobile money payments had any influence on the business performance of Ghanaian SMEs.

### **6.3 Conclusions of the Study**

To conclude, the study reveals that, the overall performance of Ghanaian SMEs is of paramount interest to them since it impacts the sustainability and growth of their businesses. They would therefore seek innovative, contemporary and profitable ways of getting their businesses to succeed. Specific conclusions, including those from the objectives are as follows:



Ghanaian SMEs have a good appreciation of business performance measurement, and what it entails, which knowledge is critical for assessing the progress of businesses. The key performance indicator adopted by the SMEs is profitability. This addresses the first objective of the study “To explore the performance measurement indicators adopted by SMEs”

In an attempt to assess the impact of mobile money payments on the business performance (service, financial, operational) of Ghanaian SMEs, the study concludes that, mobile money payments impact the business operations of SMEs positively.

The study also sought to examine the types of payment systems used by Ghanaian SMEs and to determine which is the most preferred and concludes that, ‘mobile money payment’ is the obvious choice for most SMEs when it comes to payment systems for their businesses, which preference stems from its peculiar functions and benefits over cash.

Additionally, SMEs tend to carefully adopt systems they can use with ease, save time, and deliver exactly what it promises to deliver. Likewise, payment issues are central to their businesses since they are aware that, poor cash management can cripple their businesses badly. Hence, the SMEs augment their use of mobile money payments with other forms of payment systems especially cash. This reveals their commitment to adopting versatile financial systems for sustained financial operations and enhanced business performance.

In another vein, the study concludes that, SMEs usually run sole proprietorships and are more likely to be found in the manufacturing sector. The SMEs are also sales and customer oriented, seeking the satisfaction of the customer efficiently and profitably.

#### **6.4 Implications**

The study found that there a positive impact of Mobile money payments on the performance of Ghanaian SMEs’. This has implications for SMEs in that, SMEs who do not use Mobile money payments are likely to be underperforming in their businesses. When the mobile

telecom companies, financial institutions and fintech companies create attractive mobile money payment platforms and products that take cognizance of the peculiar needs of SMEs, they are likely to subscribe to the service.

The fact that more women are venturing into the manufacturing sector implies that the sector is becoming more attractive with time and as such, the numbers are likely to increase. Hence Government policy needs to focus on creating more avenues to equip the women in the sector with the knowledge and skills to surmount the challenges inherent in the sector to enhance business sustainability.

Because the SMEs demonstrated a clear understanding of the concept of business performance and performance measurement and practically adopted both financial and non-financial indicators to measure performance, they are likely to be more focused in achieving their performance goals being clear in their minds what exactly they seek to achieve, hence, adopting the right indicators to measure their output as well.

The study also discovered that, Ghanaian SMEs largely preferred the use of mobile money payments to cash payments. This has a positive implication on the government's agenda of a cashless economy. A state which will lead to a better adoption of the government's policy on financial inclusion and digitization.

Another finding relates to lack of adequate cyber security, unstable network, high transaction cost and fraud security which creates the need for industry regulators, telecom companies, fintechs and SMEs to cooperate to deliver solutions to these issues, in order to avoid the loss of interest in the adoption of the mobile money payment system as a preferred payment option.

The researcher found the venturing of highly educated women into business, unique and impressive. This outcome suggests that, the days when entrepreneurship was perceived to be

the preserve of the uneducated were fast passing by, ushering in a new era of very well-educated crop of entrepreneurs. It also implies a new dawn of reduced graduate unemployment and an enhanced economy

When government supports SMEs with favourable policies on tax incentives and exemptions, custom waivers, funding schemes and the removal of all forms of stumbling blocks that impede their business progression, it will improve significantly the growth of the SME sector which largely comprises microbusinesses operated by women who happen to be well educated. This will create more job opportunities, further reduce poverty and impact positively on the GDP growth of the economy.

### **6.5 Recommendations**

In view of the findings, below are some proposals:

The findings of the study imply that, a lot of SMEs have not made a conscious effort to measure how certain operations and activities like mobile money payments they undertake impact the overall performance of the businesses. SMEs should therefore should make a conscious effort to acquire analytical skills and adopt scientific means of measuring their business performance and other operations.

The study also depicts that, entrepreneurship has become such an essential and attractive alternative to formal employment for young educated people in Ghana because of the poor economic conditions existing in the country. As such, the academic community and the government should institute programmes and policies to enhance the growth and sustainability of entrepreneurial activity for young graduates and other young people alike.

Generally, sales volume has not been found to be too good enough an indicator for measuring business performance; rather, profitability is seen as a better option. SMEs should therefore use more of profitability as a measure of performance. Again, SMEs must be resourced with

capital by partner financial and non-financial institutions and through government's financial interventions, so they can become more economically viable. This could be in the form grants or loans with low interest rates and flexible payment terms. Also, regulators of Telecommunication Companies must insist on getting the latter to deliver nothing but value to their subscribers and must be sanctioned when they fall short of this.

From the study, MTN has been found to be the preferred choice for SMEs when it comes to mobile money payment systems, making SMEs an increasingly vital part of their business. Hence, MTN needs to get more customer focused by instituting an SME unit solely for handling SME issues. It is again recommended that, a special fee plan be developed for SMEs to replace the double fees charged for every payment transaction in order to safeguard the revenue of the SMEs. Occasional disruption in the network, which is a major issue for the SMEs must also be addressed. Also, customers have the right to be informed when the network is down to avoid being frustrated when performing transactions.

Security on the MTN network must also be beefed up to weed out all the fraudsters plaguing the system. Internal checks and controls must be established to curtail the activities of the informants and conspirators from within the organization who assist the fraudsters to threaten and defraud customers. Very stiff punishment must be meted out to them or even withdrawal from the organization. With regards to the withdrawal limits and documentation for mobile payments registration, minimum documentation should apply as well as a special threshold for withdrawals and transfers for SMEs.

## **6.6 Future Research Directions**

For further research on this study, the scope of the research could be stretched by including more SMEs who use mobile money through a quantitative study, which could add a different twist considering the numbers that would be involved. The study could also be replicated

using SMEs who are heavy users of the mobile money payments service, in terms of the values transacted since their experiences are likely to be different.

### **6.7 Chapter Summary**

This chapter presented a summary of the study in respect of the research gap, the purpose of the study and principally, the steps taken to undertake the study. A synopsis of the key findings of the study was also highlighted. Inferences were made to serve as conclusions for the study. Recommendations were again made for the SMEs, MTN, Government and other stakeholders of the mobile money industry. To effectively advance knowledge in research, it is advisable that researchers pick up from the recommendations made in previous studies, especially when the areas researched are of interest to them. Hence, further research guidelines were proposed to serve as a guide for future study.

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**APPENDIX: RESEARCH INTERVIEW GUIDE**

**UNIVERSITY OF GHANA BUSINESS SCHOOL**

**MASTER OF PHILOSOPHY IN MARKETING**

**TITLE: PERFORMANCE OF SMEs IN GHANA: DO MOBILE PAYMENTS  
MATTER?**

**PART I: DEMOGRAPHIC AND BUSINESS PROFILE**

1. Gender of business owner

a. Male  b. Female

2. Form of business

a. Sole proprietorship  b. Limited Liability Company  c. Partnership

3. Type of business

a. Services  b. Manufacturing  c. Wholesaling  d. Retailing

4. For how long has your business been in operation?

a. 2-5  b. 6-9  c. 10 & above

5. Number of Employees

a. 0-5  b. 6-29

6. Educational Background of business owner

a. SHS  b. First degree  c. Second degree  d. Other .....

7. Profession and Occupation.....

8. For how long have you used mobile money payments for business transactions?

a. 2-5  b. 6-9  c. 10 & above

b. What network is your MoMo on?.....

**PART II: BUSINESS PERFORMANCE MEASUREMENT**

9. How do you understand business performance?

10. What is performance measurement?

11. How do you measure the performance of your business?

**PART III: PAYMENT SYSTEMS AND BUSINESS PERFORMANCE**

12. Why did you decide to use mobile money for your business?

13. Tell me what business transactions you use mobile money for.

14. Share with me what mobile money payment has done for your business.

15. What is the value of your monthly mobile money payments?

a) Transfers out:

b) Receipts:

**PART IV: TYPES OF PAYMENT SYSTEMS USED AND THE TYPE PREFERRED**

16. Apart from mobile money payments, which other payment system in Ghana do you use for your business transactions and why?

17. Which of the payment systems in Ghana does your business use often and why?

18. Which of the payment systems in Ghana is preferred by your business and why?

19. What challenges have you encountered in using mobile money for your business?

20. Can you suggest measures to address this?

**Thank you so much for your time and for the information provided.**