Cape Peninsula
University of Technology

IMPACT OF MOBILE MONEY SERVICES ON FINANCIAL PERFORMANCE OF SMEs: THE CASE OF DOUALA, CAMEROON

by

FRANK SYLVIO GAHAPA TALOM

Thesis submitted in fulfilment of the requirements for the degree

Master of Technology: Business Administration (Entrepreneurship)

in the Faculty of Business and Management Sciences

at the Cape Peninsula University of Technology

Supervisor: Prof Robertson K. Tengeh

Cape Town

February 2020

DECLARATION

I, Frank Sylvio Gahapa Talom, declare that the contents of this thesis represent my own unaided work and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

Signed **Date**

ABSTRACT

Often effectively excluded by formal financial systems, small and medium-sized enterprises (SMEs) in developing countries have found in Mobile Money services an efficient and cost effective means of availing themselves of financial services without holding bank accounts. In order to provide meaningful recommendations to the stakeholders of the banking sector of Cameroon, small and medium-sized enterprises, Mobile Money service providers, and relevant state organs, this study was conducted to investigate the influence of Mobile Money services on the financial performance of SMEs in two markets in Douala in Cameroon. A mixed methods research design was employed to conduct the study. The quantitative data was collected through the administration of a survey questionnaire and the qualitative data from one-on-one in-depth interviews. By means of snowball sampling, a sample of 285 SMEs was obtained to respond to the survey questionnaire, while the researcher used purposive sampling to select the owners or managing directors of twelve of the respondents to participate in the interviews.

Version 25 of the Statistical Package for the Social Sciences software was used to analyse the quantitative data, while the qualitative data was subjected to thematic analysis. Correlation and regression analyses yielded that independent variables pertaining to the adoption of Mobile Money services by the respondents to the questionnaire predicted of the order of 73 percent of variance with respect to increased sales turnover. Most of the twelve interviewees perceived that their business operations had improved significantly after they had begun making and receiving payments in the form of Mobile Money transactions. The participants in the study used Mobile Money mainly to receive money, send money, and buy airtime and a significant majority perceived that Mobile Money services were more cost effective than those of banks. Convenience, safety, and accessibility were the attributes of Mobile Money which the participants cited as having provided their principal motivations for electing to register as users of Mobile Money services. It could be concluded that Mobile Money services exerted a significant positive influence on the financial performance of the SMEs of the participants in the study. On the basis of the conclusions which were drawn from the findings, recommendations were made to the owners of SMEs in Douala, the Ministry of Small and Medium-sized Enterprises, Social Economy, and Handicrafts and Mobile Money service providers. The findings of the study underscore the role of Mobile Money services as an effective means of increasing financial inclusion and financial performance and could be useful to academics, owners and managers of SMEs, financial institutions in Cameroon and elsewhere, and also relevant policy makers.

Key words: Mobile Money, SMEs, financial performance, payments and receipts, Douala, Cameroon.

ACKNOWLEDGEMENTS

I wish to thank:

- The almighty God for his grace upon me. I owe the Lord everything.
- My Supervisor, Prof Tengeh for the generous and continuous support he gave me academically and financially.
- Dr Corrie Uys and Babatunde Abiola, for statistical assistance.
- Mr Christal Kengne Talom, Mr Guy Dwuinge Dzepa, and Miss Marie Longo, for their assistance with the collecting of data.
- Prof Chux Gervase Iwu and Dr Michael Twum-Darko, for their invaluable contributions and assistance.
- Mrs Ingrid Caris, Mrs Michelle Malan, Miss Jade Mathew, and Miss Jennifer Cunningham, for editing and proofreading my work.
- Myself, for all of the sacrifices which I made in order to complete this thesis.
- My soulmate, Elizabeth, for giving me the space to research and write, for tolerating my long periods of being preoccupied with my thesis, and for assuming the sole responsibility for acting as a parent to our hyperactive son. Truly, thank you.
- My family, for all of the support which they have given me throughout this period.
- The following members of staff at CPUT: Dr Lynn Kleinveldt, Mr Siseko Mtetwa, Mrs Sipokazi Bukani, and Mrs Nicole Arendse, for their assistance and advice.
- The Cape Peninsula University of Technology, for offering me the opportunity to study there.
- Everyone who has in some way been influential or supportive during the course of conducting this research study.

DEDICATION

This thesis is dedicated to Mrs Mandy Pistorius.

For giving me an opportunity and believing in me

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

GLOSSARY

FCFA	Financial Cooperation in Central Africa franc
SMEs	Small and medium-sized enterprises
MM	Mobile Money
MMS	Mobile Money services
MNOs	Mobile Network Operators
BEAC	Bank of Central African States
COBAC	Central African Banking Commission
CEMAC	Central African Economic and Monetary Community
CCIMA	Chambers of Commerce, Industry, Mines, and Crafts
SMS	Short Message Service
OECD	Organisation for Economic Cooperation and Development
GDP	Gross Domestic Product
HDC	Higher Degree Committee
CPUT	Cape Peninsula University of Technology
SPSS	Statistical Package for the Social Sciences
NMC	National Monetary Committee
IMF	International Monetary Fund
USSD	Unstructured Supplementary Service Data
ATMs	Automatic Teller Machines
TAM	Technology Acceptance Model
UTAUT	Unified Theory of Acceptance and Use of Technology
REC	Research Ethics Committee
SD	Standard Deviation
YE	Years of existence
BA	Business bank account
AY	Year of adoption
MMSCETB	MMS more cost effective than traditional banking services
MMSIT	MMS has an impact on the turnover
TBA	Monthly turnover before the adoption of the MMS
TAA	Monthly turnover after the adoption of the MMS
NOPDS	Number of payments per day using MM to suppliers
EDU	Education
BS	Business Sector

TONTINE / DJANGUI Another name for informal financial institutions

CHAPTER ONE
INTRODUCTION AND BACKGROUND

1.1 Introduction

Small and medium-sized enterprises (SMEs) make significant contributions to driving the economies of a great many countries. They play a crucial role in socioeconomic development by contributing to the creation of wealth, economic growth, and employment (OECD, 2017; Fiseha & Oyelana, 2015). Consequently, the promotion of SME sectors has become integral to economic policies and the creation of employment. According to the Banking Association South Africa (2019), SMEs provide employment to of the order of 60 percent of the labour force of South Africa and account for an estimated 34 percent of the Gross Domestic Product (GDP).

The role of SMEs is even greater in the economy of Cameroon, as it is estimated that some 90 percent of the business enterprises in the country are SMEs (National Institute of Statistics, 2011). Although they employ an estimated 48.7 percent of the workforce and contribute approximately 34 percent of the GDP (Afriland First Bank, 2015), according to the Chambers of Commerce, Industry, Mines, and Crafts (CCIMA) (2015) of Cameroon, very few are structurally and financially strong. The SME sector of Cameroon comprises mainly family businesses, which tend to be highly cash-dependent (Ngaruiya, Bosire & Kamau, 2014). Consequently, they are usually obliged to transact business with suppliers to buy or pay for goods by travelling to their offices, which can entail a considerable risk of theft or losing money. In the case of SMEs which have bank accounts, apart from the disadvantages of costs which are incurred by high bank charges, documentation, and transport, owners are frequently required to queue for lengthy periods before they are able to obtain access to funds, which makes it very difficult to exploit any unexpected opportunities which may arise for which funds are required. Because the owners of many of the businesses are sole traders who operate in a very informal manner and the businesses are often staffed only by their owners and possibly one or two members of their families, they are obliged to close for several hours when the owners are away. As a consequence, sales are lost and their prospects for survival are severely compromised.

As it has become abundantly evident that in order to survive and achieve growth, SMEs in Cameroon need to streamline their procedures and eliminate unnecessary loss of time, the advent of the phenomenon of Mobile Money could not have been more fortuitous (Comninos, Esselaar, Ndiwalana & Stork, 2008). The system enables the SMEs to receive payments directly from customers and also to make payments directly to suppliers by means of mobile telephones (Shukla, Tyagi, & Raddi, 2009), without being obliged to leave or close their

premises for lengthy periods. Accordingly, it provides a viable means for people who do not have access to bank accounts to make financial transactions with ease, have access to funds when they are needed, and significantly improve the performance of their businesses as a consequence.

1.2 Problem statement

According to Ngaruiya *et al*. (2014), obstacles are inherent in the nature of the operations of many SMEs. In the case of SMEs in Cameroon, their needs with respect to financial liquidity and banking services are not sufficiently met by commercial banks for several reasons, including a lack of collateral, inadequate bookkeeping systems, and their often questionable viability in the eyes of financial institutions. In addition, for many SMEs bank accounts are not cost effective, owing to high bank charges and the transport costs which are incurred by travelling to banks in order to make transactions. These unwieldy procedures have contributed to the performance of many SMEs in Cameroon stagnating, with low economic growth being but one of a host of adverse consequences. As SMEs comprise the majority of the businesses in the country and in the light of the disastrous effects which cumbersome banking procedures have on their performance, a strong case could be made for the use of Mobile Money as a means of enabling SMEs to streamline their operations.

Although Mobile Money does not provide a panacea for all of the financial problems with which SMEs are faced, the benefits far exceed the disadvantages which are associated with adopting the system. Irrespective of whether the system is used in isolation or in conjunction with a bank account, it stands to increase the sales of SMEs and reduce their operating costs, with both factors making positive contributions to improving their financial performance (Ngaruiya *et al*., 2014). Although a considerable amount of research has been conducted concerning the effects which Mobile Money has had upon the performance of SMEs in Africa, particularly in Kenya, little or none appears to have been conducted in Cameroon. Consequently, this study represents an attempt to begin to provide relevant data with respect to Cameroon.

1.3 Rationale and significance of the study

In the light of the factors which militate against the performance of SMEs, the crucial role which they play in emerging economies such as that of Cameroon, and the equally crucial role which the adoption of financial technology can play in increasing the performance of SMEs, the findings of this study could be invaluable to the SME sector in Cameroon and also to those who are tasked with formulating appropriate policies to ensure the growth of the national economy. In addition, the researcher hopes to achieve the following objectives as a result of conducting this study:

- To make a significant contribution to the available literature concerning the role of Mobile Money, specifically with respect to the influence which it exerts upon the financial performance of SMEs in Cameroon.

- To educate the owners of SMEs concerning the benefits of Mobile Money as an effective means of achieving financial inclusivity and an innovation which will enable them to improve both their managerial skills and the performance of their businesses.

1.4 Aim and objectives of the study

The principal objective of this study is to evaluate the influence of the use of Mobile Money services upon the financial performance of SMEs in Douala in Cameroon.

1.4.1 Sub-objectives

The following sub-objectives were formulated in order to guide the conducting of the study in a manner which would ensure the accomplishment of the main objective:

- To assess the extent to which the use of Mobile Money services improves the financial performance of SMEs in Douala.

- To determine which Mobile Money services are predominantly used by SMEs in Douala.

- To determine the extent to which SMEs in Douala use Mobile Money services to perform their business transactions with respect to buying and selling.

- To determine how cost effective it is for SMEs in Douala to use Mobile Money services by comparison with using traditional banking services.

- To determine the factors which encourage SMEs in Douala to choose to use Mobile Money services.

1.5 Research questions

The core research question is:

- What are the discernible results of using Mobile Money services in relation to the financial performance of SMEs in Douala?

1.5.1 Research sub-questions

The following sub-questions were formulated to enable the researcher to answer the main research question:

- To what extent do using Mobile Money services contribute to improving the financial performance of SMEs in Douala?

- Which Mobile Money services are predominantly used by SMEs in Douala?

- To what extent do SMEs use Mobile Money Services for making payments to suppliers and receiving payments from customers?

- How cost effective is using Mobile Money services for SMEs by comparison with using traditional banking services?

- What are the factors which encourage SMEs to choose to use Mobile Money services in Douala?

1.6 Hypotheses

The following hypotheses are tested in the quantitative phase of the study:

H_0: The use of Mobile Money services does not influence the financial performance of SMEs in Douala.

H_2: The use of Mobile Money services significantly influences the financial performance of SMEs in Douala.

1.7 Research paradigms and methodologies

1.7.1 Research paradigm

According to Kuyini and Kivunja (2017), paradigms are sets of concepts which guide the ways in which particular phenomena are investigated. Accordingly, they inform not only choices pertaining to the research methods which are used to conduct particular studies, but also the ontological and epistemological assumptions which are inherent in approaches to conducting research. The study upon which this thesis is based represents an attempt to assess the efficacy of a potential means of overcoming the effects of the factors which impede the financial performance of SMEs. The researcher advances the adoption of Mobile Money services as a change in the practices of SMEs which entails knowledge creation. Subjecting the data which is gathered through the administration of the survey questionnaire to a statistical analysis represents an objective endeavour to evaluate the influence of the adoption of Mobile Money services on the financial performance of SMEs. By contrast, the qualitative data which is gathered from the in-depth interviews is intended to enable the researcher to assess the findings of the quantitative study in relation to the subjective perceptions, beliefs, and opinions of the interviewees. The nature of the research problem inclined the researcher to adopt both positivist and interpretivist research paradigms, which could be resolved through synthesis into a single pragmatic paradigm (Dudovskiy, 2018).

1.7.2 Research methods

The researcher elected to use both quantitative and qualitative research methods to conduct this study. A mixed methods approach was considered to be optimal because the ostensibly objective data which is obtained from the administration of the survey questionnaire would be derived from responses which are informed by the subjective perceptions, beliefs, and

opinions of individual respondents. From this standpoint, irrespective of the procedures which are followed to calculate an appropriate sample size, it is impossible to establish whether or not the research sample is truly representative of the research population as a whole. Consequently, the findings of the qualitative study should enable the researcher to evaluate those of the quantitative one from a realistic perspective. There is a broad general consensus among researchers and theorists that one of the principal advantages of mixed methods research lies in the strengths of one set of methods compensating for the weaknesses of the other (Greene, Caracelli & Graham, 1989).

1.7.3 Research design

As turnover constitutes one of the most crucial criteria for assessing the financial performance of business organisations, it represents one of the principal means of assessing the influence of making and receiving payments through Mobile Money services upon the financial performance of SMEs in the conducting of this study. The collecting of quantitative data precedes the conducting of the in-depth interviews, in order both to corroborate the data which is generated by the administration of the survey questionnaire and to interpret the findings which emerge from it. Measuring the influence of the use of Mobile Money services by SMEs upon their economic performance is premised upon their payments and receipts which are facilitated through Mobile Money services function as independent variables and their turnover from volumes of sales as the dependent variable. According to Dudovskiy (2017:83), causal studies are concerned with particular sets of circumstances or problems and conducted in order to explain the patterns of relationships among variables. The explanatory intent behind the conducting of causal studies and their emphasis upon relationships among variables served to convince the researcher that a causal research design would be most appropriate for the purposes of this study.

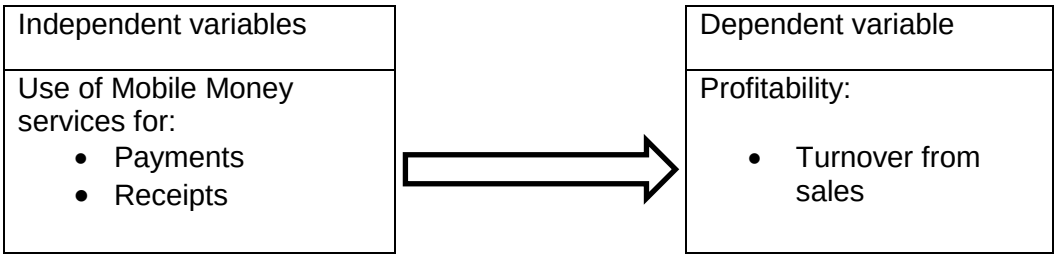


Figure 1: Flowchart to illustrate the research design (Source: author)

1.7.4 Delimitation of the study

As the research sample is to be drawn from the ranks of owners and general managers of SMEs in the Mboppi Market, the Douala Central market, and their surroundings which make use of Mobile Money services in their transactions with suppliers and customers, it may not be possible to generalise the findings to other populations. The participants are to be drawn

from SMEs which have a minimum of two employees, a maximum of one hundred, and which have been operating for at least 2 years.

1.7.5 Research methodology

1.7.5.1 Research population

A research population refers to a complete set of individual people, animals, or objects which possess characteristics or attributes in which particular researchers are interested for the purposes of their research studies (Polit & Beck, 2003:50). Conversely, in social research, a research sample can also be defined as a collection of people from which a representative group is selected to take part in a study (Brynard & Hanekom, 2006:55). Accordingly, the research population for this study comprises all of the owners and general managers of SMEs which operate in the Mboppi Market, the Douala Central Market, and their surroundings which make use of Mobile Money services to conduct their transactions with suppliers and customers, which have a minimum of two and a maximum of one hundred employees, and which have been operating for at least 2 years. The upper limit was imposed in order to filter out large companies from the research population, while the lower limit was set to avoid including freelancers or solo entrepreneurs in the research sample. Freelancers are economic agents who add little value to national economies. Their sole objective is usually to employ themselves and the revenue which they earn tends to be erratic (Freelancers Union and Upwork, 2017; Leventhal, 2009). The Douala Central Market and Mboppi Market serve most of the inhabitants of Douala and other major cities of Cameroon and are comprised of a vast number of SMEs.

1.7.5.2 Sampling techniques and sample size

According to Dudovskiy (2018:114), sampling can be described as a methodical procedure for selecting members of a population to participate in a research study when it is not practicable to collect data from each individual member. Sampling enables researchers to collect data from a small portion of a population and reach conclusions which can be generalised to the population as a whole, thereby enabling studies to be cost effective and practicable with respect to the amount of time which conducting them entails and the amount of data which needs to be managed and processed.

Simple random sampling or probability sampling entails the random selection of members of a population in a manner in which each member of the population as a whole has an equal probability of being selected to participate in a study. By contrast, researchers also have a range of non-probability sampling techniques at their disposal when it not feasible to use probability sampling. As not all of the SMEs which operate in the Douala Central Market and the Mboppi Market make use of Mobile Money services and those which do so are not easily identifiable or even accessible, it would be expensive and time-consuming to use probability

sampling to select the research sample. Some types of non-probability sampling enable researchers to include an element of their personal judgement to select participants whom they believe will be able to provide them with the information which they require. When a few participants who have been purposively selected introduce researchers to others whose profiles are similar to their own in the respects in which particular researchers are interested and these participants, in turn, introduce other potential participants, the technique is known as snowball sampling. It can be a highly effective means of enabling researchers to locate participants who also meet the criteria for inclusion in their studies by drawing on the knowledge and experience of members of their research populations (Tengeh, 2011:169). The participants in the one-on-one interviews from which the qualitative data will be obtained will be selected from among the respondents to the survey questionnaire whose responses revealed that the turnover of their businesses fell into either the quarter of the sample with the highest figures with respect to turnover or the quarter whose figures were lowest.

As a sample comprises a small fraction of a population, its size needs to be appropriate if sampling error, which is the selection of an unrepresentative sample, is to be avoided. According to the findings of a study which the FinMark Trust conducted in Cameroon from October to December of 2017, more than 14 million Cameroonians are older than 15 years of age, of whom 2.9 million reside in Douala and only 29 percent of whom are registered users of Mobile Money services with one of the mobile network operators (MNOs) in the country. It emerged from the findings of another study, which was conducted by Media Intelligence MI (2016: 2), that only 22 percent or 187,763 were active users. It needs to be emphasised that this figure comprises all active users, including individual users, large companies, and SMEs. The findings of the most recent general census which was conducted by the National Statistical Institute (2011) reveal that 51 percent of all Cameroonian SMEs are to be found in Douala, which amounts to in the region of 43,130 SMEs. It also needs to be taken into consideration that the number of SMEs in Douala is lower than that of active users of Mobile Money services, because users, irrespective of whether they are individual users or businesses, can hold more than one Mobile Money account.

Because no official figures are available for the numbers of SMEs which are registered users of Mobile Money services in the Doula Central Markets and the Mboppi, the researcher is obliged to make use of the formula which Cochran (1963) developed to calculate sample sizes (Israel, 2003), namely:

$n_0 = \frac{Z^2 pq}{e^2}$, where

- n_0 = the sample size
- Z^2 = the abcissa of the normal (It can also be found in the Z table)
- e = the margin of error

- p = the projected percentage of a characteristic which is to be found in a population
- q = 1 - p

The researcher elected to use a confidence level of 95 percent, a margin error of 5 percent, and a standard deviation of 50 percent. As the Z table yields a Z-value of 1.96, the sample size is calculated as follows: $n_0 = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2} = 384$

The researcher determined from the formula of Cochran (1963) that a sample size of 384 respondents would be required for the quantitative survey. Similar studies have been conducted previously in African countries, particularly in Kenya, where the rate of penetration by Mobile Money services is fairly high. The average sample size for the studies which were conducted by Ngaruiya *et al*. (2014), Nyaga and Okonga (2014), Mararo and Ngahu (2017), and Higgins, Kendall, and Lyon (2012) was 228 respondents.

By taking into consideration the average sample size which had been used in the similar studies which had been conducted in Kenya, the constraints with which the researcher was faced with respect to time and expense, and the numbers of SMEs which had been operating for at least 2 years in the Mboppi Market and the Douala Central Market, the researcher settled upon a final sample size of 250 respondents for the quantitative study. By following the advice of Dudovskiy (2018:134) concerning a sample size which would be sufficiently large for a qualitative study in which the participants were members of a homogenous population, the reseacher elected to conduct one-on-one in-depth interviews with twelve participants.

1.7.5.3 Research instruments

Gathering data is a procedure which entails collecting information from a variety of sources. Although data can be collected in many ways, in this study the researcher gathered primary data from the administration of a survey questionnaire and the conducting of in-depth interviews. Not only does the researcher considered them to be the most appropriate methods for collecting the data for this study, but they are well-established research methods in the social sciences for the efficient collecting of accurate data and they enabled the researcher to conduct the study in accordance with the constraints with which he faced with respect to cost and time. As French and English are nominally the official languages of Cameroon, the questionnaire was administered and the interviews were conducted in either French or English. An English and French version of the questionnaire and interview questions was submitted to the supervisor of the researcher and the Higher Degrees Committee (HDC) of the University of the Cape Peninsula for approval. Once the survey questionnaire and the interview guideline were approved by the HDC, the researcher began the process of gathering the data.

When allowed to do so, the researcher was present while the respondents completed the questionnaires, in order to assist them by explaining questions which they found difficult to understand (Asoba, 2014). The strategy also provided the researcher with an opportunity to ensure that the questionnaires had been correctly completed and minimised the number of unusable questionnaires. Once all of the quantitative data has been collected, the researcher began to conduct the structured interviews (Dudovskiy, 2018:108). The interviews were recorded by means of an audio recorder, with the prior permission of the interviewees. The researcher anticipated that the responses of the interviewees will help to answer the 'why' and 'how' questions which are usually difficult to answer from quantitative data alone (Yin, 2006). The researcher also supplemented the primary data with secondary data, from journals, articles, books, unpublished master's and PhD theses, internet sources, electronic databases, government publications, and conference papers.

1.7.5.4 Sequence to be followed while conducting fieldwork to collect data

The findings which emerged from the quantitative study, at least in part, informed the designing of the qualitative study. During the conducting of the quantitative study, the researcher identified a small group of SMEs which met the criteria for inclusion in the sample, by approaching their owners or managing directors in person in the Mboppi Market and the Douala Central Market. The researcher introduced himself and explained the nature of his study to particularly promising candidates. Once they completed the questionnaire, the researcher requested from them to recommend others whom they may have known who also meet the criteria for inclusion in the research sample for the quantitative study. Although the researcher was assisted by the Mobile Money agents in both markets in identifying SMEs which make use of Mobile Money services, he needed to establish with each SME which was approached to complete the questionnaire whether or not the business has been operating for at least 2 years.

1.7.5.5 Coding and analysis of the data

The researcher used different procedures to analyse the two sets of data. The quantitative data was coded with the assistance of a statistician before be analysed by means of either Version 25 of the Statistical Package for the Social Sciences (SPSS) or the Microsoft Excel Spreadsheet 2016 software packages. After the qualitative data has been sorted, the researcher analysed and interpreted it in the light of the findings which emerged from the quantitative study. (Asoba, 2014:8). The researcher used correlation analysis to assess the influence of Mobile Money payments and receipts upon the turnover of selected SMEs in Douala and triangulated the findings with those of the qualitative study, in order to provide a more nuanced understanding of the phenomenon under investigation than would have been possible if either quantitative or qualitative research methods had been used in isolation.

1.8 Ethical considerations

Although the ethical standards which apply to all professional social research, to which the researcher will adhere scrupulously at all times during the conducting of this study, are covered in greater detail in Chapter 3, this section serves as an introduction to the topic. As Polit and Beck (2003:717) explain, ethics in research are the moral values which inform the standards to which social researchers are required to adhere in order to uphold the human rights and ensure the safety of those who participate in their studies. One of the core requirements is that potential participants should be informed that the decision to participate in a study is theirs alone to make and that they have the right to withdraw their participation at any time, without incurring penalties of any sort whatsoever by doing so (Asoba, 2014:8).

1.9 Outline of the dissertation

The dissertation comprises the following five chapters:

Chapter 1: The introductory chapter provides an overview of the research topic, an elucidation of the research problem, and an articulation of the aims and objectives and the research questions which were formulated to guide the conducting of the study. It is also provides a discussion of the significance of the study and an introductory discussion of the research methodology which was adopted in order to conduct the study.

Chapter 2: The second chapter takes the form of a comprehensive review of the relevant available literature pertaining to the research topic, in order to place the study in a meaningful context in relation to the research which has preceded it.

Chapter 3: The third chapter is devoted to an in-depth discussion of the research methodology and covers the research design, the research methods which the researcher considered to be optimal for conducting the study, and the methods which were used to analyse and interpret the data, in order to generate the findings of the study. It concludes with a discussion of the ethical standards which apply to all social research in the social sciences.

Chapter 4: In the fourth chapter the findings of the study are presented and discussed. The quantitative data is summarised by means of descriptive statistics and presented in the form of tables, bar graphs, and pie charts. The data is analysed, interpreted, and triangulated with the findings of the qualitative study.

Chapter 5: In the final chapter, the findings are summarised, the conclusions which were drawn from them are presented, and appropriate recommendations are made on the basis of the conclusions.

1.10 Limitations of the research

This study represents an endeavour to evaluate the increased financial performance of SMEs as a consequence of making use of Mobile Money services and will rely on the subjective assessments of individual respondents and interviewees of their financial performance before they adopted Mobile Money as an optimal means of making payments to suppliers and receiving payments from customers. Although objective assessments of their financial performance before and after the adoption of Mobile Money would undoubtedly yield more decisive findings, the constraints which time and financial resources imposed effectively precluded the possibility of conducting a longitudinal study. Although having access to the financial records of the SMEs would enable the researcher to make a more accurate assessment of their increased financial performance than would be possible by relying on the subjective assessments of respondents and interviewees, it is highly unlikely that owners or managers of SMEs would be prepared to make their private records available. In addition, it may not be possible to obtain information from all of the respondents who are selected, which could compromise the sample size.

1.11 Conclusion

This chapter has served to introduce the research topic by providing a broad overview of the background to it and the form which the dissertation which is based upon the study is to take. The following chapter is devoted to an in-depth discussion of the literature which the researcher consulted in order to plan the study in a manner which enabled it to be informed by relevant research which has been conducted to date.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

According to Winchester and Salji (2016), a literature review is a critical appraisal of the relevant available literature concerning a research topic. They also maintain that a comprehensive understanding of the research which has been conducted in the particular fields in which individual researchers are interested enables them to make valuable contributions to existing bodies of knowledge by avoiding duplicating studies which have already been conducted. In the case of this study, the literature review serves to confirm that the choice of research topic was justified, as the existing literature pertaining to the influence of Mobile Money services upon the financial performance of SMEs in Cameroon tends to be limited and inconclusive. In this chapter, the available literature pertaining to the influence of Mobile Money services upon the financial performance of SMEs is discussed and evaluated under the following headings:

- An overview of the financial system in Cameroon
- The concept of Mobile Money
- SMEs in Cameroon
- Determinants of the financial performance of SMEs
- Mobile Money services and SMEs
- Theories which underpin the study

2.2 An overview of the financial system in Cameroon

As it is widely acknowledged, financial sectors are the most rigorously regulated sectors of the economies of many countries. Consequently, banks are among the most rigorously regulated of financial institutions, owing to the crucial role which they play as catalysts of growth in the economies of countries (Akon, 2012). The banking system in a particular currency area is comprised of banks, other financial institutions, and a central bank. The institutions of which a banking system is comprised maintain financial relations in relation to receivables and payables among themselves and with non-financial agents.

The financial environment of Cameroon consists of a formal sector and an informal sector. Tontines play a predominant role in the informal financial sector and in recent times the sector has entered the internet age, following the invention of the ‘Djangui’ online application to manage tontines. The formal financial sector, over which the banking system presides, comprises four categories of institutions:

- The Central Bank, or Bank of Central African States (BEAC), whose role is to issue money, manage loans and international reserves, set the official interest rate to

manage inflation and the exchange rate, and oversee the monetary system in Cameroon, the Central African Republic, Chad, Equatorial Guinea, Gabon, and the Republic of Congo. The Central Bank is assisted in these tasks by the Banking Commission of Central Africa (COBAC) and the National Monetary Committee (NMC). The COBAC was established during the restructuring of the banking system after the economic crises of the 1990s in Central African countries, particularly in Cameroon (Koumetio, 2016). It regulates the activities of banks and ensures that they operate within the framework of the regulations. The NMC is a department of the Ministry of Finance of Cameroon. It evaluates the financial needs of the Cameroonian economy and the resources which need to be allocated to them.

- Money-producing banks, which are commercial banks which accept short-term deposits which can be transferred by means of cheques. Funds can be withdrawn by depositors at any time, without providing banks with any advance notice.

- Other banking institutions which do not accept short-term deposits which are transferred through cheques.

- Financial institutions which are not banks and do not receive deposits from the public, but participate in the financing of the economy by granting finances or carrying out financial operations which have implications for the monetary sector (National Institute of Statistics, 2015:388).

The present structure of the Cameroonian banking system is controlled and regulated mainly by regional institutions, in the form of the BEAC and COBAC. They dominate the financial sectors in the entire region and national bodies such as the NMC do not have sufficient power to effect changes or even reverse decisions which it considers are likely to have negative consequences for the growth of the Cameroonian economy. At present Cameroon is served by fourteen commercial banks (Mbella & Magloire, 2017). The majority of these banks are foreign-owned, in that they are either branches of foreign groups or their capital is predominantly foreign (European Investment Bank, 2016). This state of affairs does not favour the development of the Cameroonian economy, because these banks have, as their main purpose, to repatriate as much profit as they can from Cameroon and to promote the growth of the economies of their own countries (Akon, 2012).

The principal resources of commercial banks in Cameroon are the deposits of individual people who head households, business enterprises or the state, and the resources are used mainly to extend credit to economic agents or the state (Etudier, 2015). Consequently, the commercial banks position themselves as intermediaries between depositors and the

borrowers, with the commissions which they receive being strictly regulated by the BEAC. This intermediation is predicated upon the contradictory objectives of depositors and borrowers. While depositors seek short-term investments which entail minimal risk, the motivations of borrowers are diametrically opposed, in that they wish to obtain long-term loans which entail high risks which depositors are unwilling to take. The system entails banks offering low rates of interest for funds which are deposited, while charging high rates of interest to borrowers of the same funds and profiting handsomely from the differences between the amounts which they pay to depositors and those which they receive from borrowers. The conditions, which are rigidly imposed, severely limit the granting of loans and include high minimum deposits for opening accounts or obtaining credit and high administration fees for opening accounts or applying for loans. In some instances, sureties are required, which applicants complain generally amount to more than the loans themselves (International Monetary Fund, 2016).

The COBAC has established a set of prudential ratios which govern the financial sector, to which each bank is required to adhere strictly, with failure to do so resulting in fines or even having their licenses withdrawn. The ratios are comprised of five solvency and two liquidity ratios, which are designed to protect the depositors of funds and ensure the stability of the financial sector (Ngafi, 2006). The prudential measures which accompany the granting of loans by banks have yielded no appreciable benefits for the economies of the Central African states in general, or for Cameroon in particular, as most of the assistance which is granted by banks is extended to large companies, usually multinational companies, which are far more able to meet the requirements of banks than SMEs. As SMEs predominate in the Cameroonian economy, it appears to be evident that the banking system is not designed to promote economic growth for the country.

According to a report of the European Investment Bank (2016:113), Central Africa is among the regions in which the proportion of adults who hold bank accounts with formal financial institutions is the lowest in the world, standing at 11.8 percent in 2014. Many obstacles continue to prevent people from having access to affordable financial services, including irregular and inadequate incomes, the remoteness of financial institutions from the homes of potential account holders, and the high cost of banking services in relation to incomes. The penetration rate for bank accounts is only 12 percent in Cameroon. Against this background, the International Monetary Fund (IMF) has encouraged relevant authorities to promote financial inclusion, particularly by extending the banking network to rural areas and encouraging the development of mobile financial services (European Investment Bank, 2016).

Owing to the terms which are imposed by regulatory bodies and the risk-averse nature of banks, Cameroonian banks are often reluctant to grant loans. As the figures for the first half of 2018 reveal, more than 80 percent of bank loans were granted to large companies, leaving SMEs and households with 14.54 and 4.52 percent shares respectively (Business in Cameroon, 2018b). According the Ministry of Finance of Cameroon, the banking sector of the country granted loans to the value of FCFA[1] 3.321 billion during 2017. Although this figure represents an increase of 10 percent by comparison with the previous year, the Ministry announced in February of 2018 that despite the substantial increase in the granting of loans in 2017, none of the credit portfolios of the banks had met the required rating of 60 percent (Business in Cameroon, 2018a). Although the underutilisation by the banks of the resources which they had accumulated through deposits stemmed from a stringent regulatory environment, during the same period the deposits which the institutions held amounted to FCFA 4.012 trillion, a figure which approaches that of the Cameroonian budget of FCFA 4.513 trillion for 2018 (Business in Cameroon, 2018a).

As Gwendoline Abunaw, the director of Ecobank Cameroon explained at the 10th edition of the Africa Banking Forum (ABF), which was held in Douala from June 28 to 29 of 2018: 'The regulatory environment does not allow banks to take certain risks with SMEs. SMEs need to know that banks cannot finance structures that do not have a certain number of guarantees. Very often, these companies evolve in the informal sector, which makes it difficult to be financed by a bank' (Investir au Cameroun, 2018b). From a similar standpoint, The IMF (2016: 29) maintained in its Country Report No.16/106 that although relatively little reliable information was available, the financing of SMEs by the banks appeared to be stagnant, because the amount of credit which was extended to SMEs was negligible and increasing only slowly. As a consequence of these conditions, which are not conducive to the financing of SMEs, the informal financial sector is gaining momentum through the collection and distribution of funds in the form of credit which is extended by village or urban associations. Although the funds which are available in the informal sector are limited and tontines entail risk for all of their members, they constitute a viable alternative to the banks for many aspiring Cameroonian entrepreneurs, owing to the relative ease with which they are able to obtain access to funds. Whether the banking system in Cameroon has the capacity to modify its regulatory organs sufficiently to effect a paradigm shift which enables it to adapt to the rapid changes of continuously evolving methods of making and receiving payments is a topic for another dissertation.

In response to the limitations and shortcomings of the formal banking system at present, the Cameroon-based mobile phone companies MTN and Orange Cameroon, in partnership with

[1] The FCFA is the denomination of the common currency of 14 African countries which are members of the Franc Zone

some financial institutions, officially launched a concept in 2012 to enable clients to make financial transactions and avail themselves of banking services by means of their mobile telephones. The concept was launched as Mobile Money and had been developed from M-Pesa, the successful Kenyan application.

2.3 Mobile Money

After centuries of having to contend with the rigid and often cumbersome limitations which traditional banking methods have imposed, the cellular or mobile telephone has played a decisive role in revolutionising and streamlining methods for making financial transactions. It is now possible to obtain access to almost all banking services easily, safely, anywhere, and at any time by means of a cellular device, an innovation which has probably shaped modern lifestyles to a greater extent than any other.

2.3.1 Definition of Mobile Money

Mobile Money is a service which permits customers to obtain access to financial services by means of cellular devices (Shrier, Canale, & Pentland, 2016), by dialling Unstructured Supplementary Service Data (USSD) codes. USSD is a communications protocol for mobile communication technology which is used to send text between mobile telephones and an application programme in the mobile network, which does not require users to have access to the internet. The technology is a boon for developing countries which have very low internet penetration rates, as it can be used with all mobile phones and not only with smartphones.

Although the technological innovation is now available in many countries, its use is particularly popular in countries in which it is difficult for many citizens to open bank accounts. It enables users to store, send, and receive money without the transactions entailing the use of bank accounts (BEAC, 2017). According to Must and Ludewig (2010), Mobile Money allows users to send money in the time which is taken by sending a text message, thus avoiding the inconvenience which is entailed by travelling to banks to make transactions and the high transfer fees which are levied on them. Users open Mobile Money accounts at registered Mobile Money agents and start their Mobile Money funds by making cash payments to agents. They then receive their personal USSD codes, which they forward to their Mobile Money service providers, who credit their accounts with the payments which they have made, minus a small commission (Must & Ludewig, 2010). The fees which are deducted take the form of either percentages of payments or a fixed amount, depending on the brackets into which individual customers fall. Once they have funds their accounts, they are able to transfer funds to other registered users, who are required to go to registered outlets in order to withdraw them. The registration procedure has been greatly simplified by

comparison with those of traditional banking, which usually entail a great deal of paperwork and time. In most cases, applicants are required only to produce a national identity card.

2.3.2 A history of Mobile Money

Since the use of the first known early coins in the Kingdom of Lydia in about 600 BCE, the forms which money has taken remained relatively static until 1946, when the first credit cards were issued (Shrier, Canale, & Pentland, 2016). Instead of carrying cash, people were then able to use the cards to pay for purchases. The introduction of Automatic Teller Machines (ATMs) during the 1960s provided customers with an option which did not compel them to go to banks to make certain transactions (Rubini, 2017:20). Although mobile banking was introduced by European banks in 1999, it performed a different function from that which Mobile Money was later to perform. According to Appiah (2014), Mobile Money had its origins in 2002, when Ugandan and Ghanaian citizens began to use airtime as a proxy for money transfers. The airtime which people received from relatives or friends outside of Uganda or Ghana was exchanged for cash. After relevant research had been conducted and with the assistance of MCel in Mozambique, the first authorised airtime credit swapping system in Kenya was launched in 2004. After the system had been adequately piloted and appropriate changes had been made to the design of the initial system, M-Pesa was launched in Kenya by Safaricom in 2007. M-Pesa allows users to deposit money into their accounts and to send and receive money for a small fee. Owing to the originality of the concept, M-Pesa became extremely successful and had over 17 million registered accounts by 2012. Many developing countries whose citizens had been subjected to similar degrees of financial exclusion also began to implement systems to enable people to make financial transactions by means of cellular devices. Mobile Money services were officially launched in 2012, with MTN and Orange becoming the leading MNOs in the country. The industry has been growing exponentially throughout the world, with more than 136 million new accounts being registered during 2017. With 690 million registered accounts throughout the world, Mobile Money has become the leading payment platform for the digital economies of many developing markets. To date it has generated direct revenues of more than $2.4 billion (GSMA, 2017) (Figure 2.1).

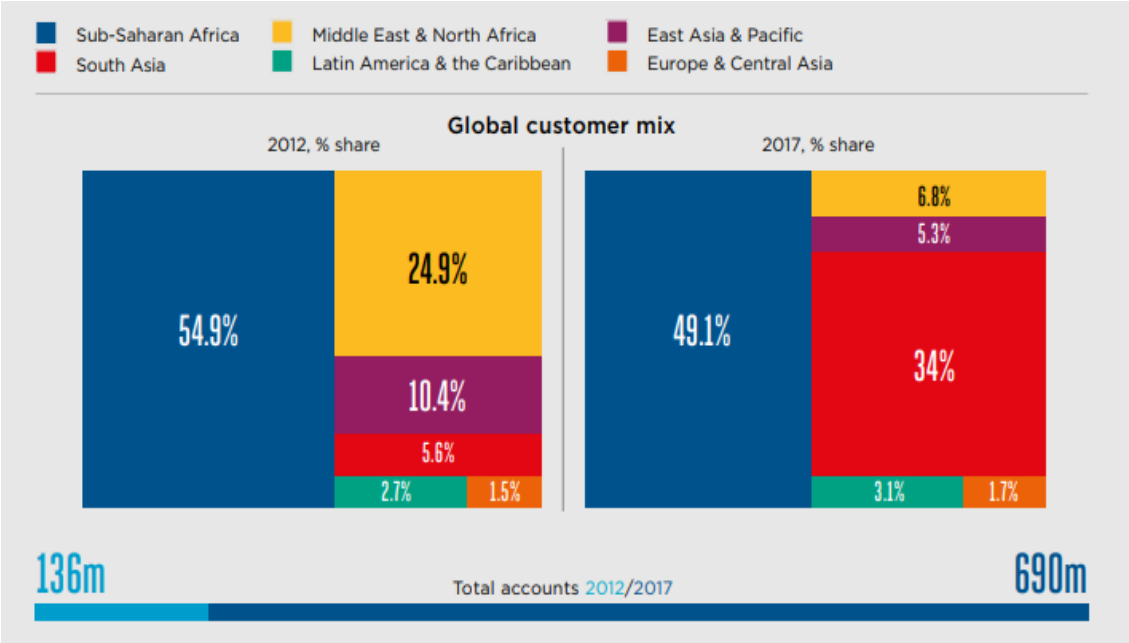


Figure 2.1: Global distributions of registered Mobile Money users from 2012 to 2017 (GSMA, 2017)

Although for several years the most significant growth in the global Mobile Money market occurred in Africa, particularly eastern Africa, in 2017, for the first time most of the growth in the industry occurred in southern Asia. Western and Central Africa were the fastest growing areas of sub-Saharan Africa, whose growth was spearheaded by immense growth in numbers of registered accounts in countries such as Ghana, Côte d'Ivoire, and Cameroon (Figure 2.2).

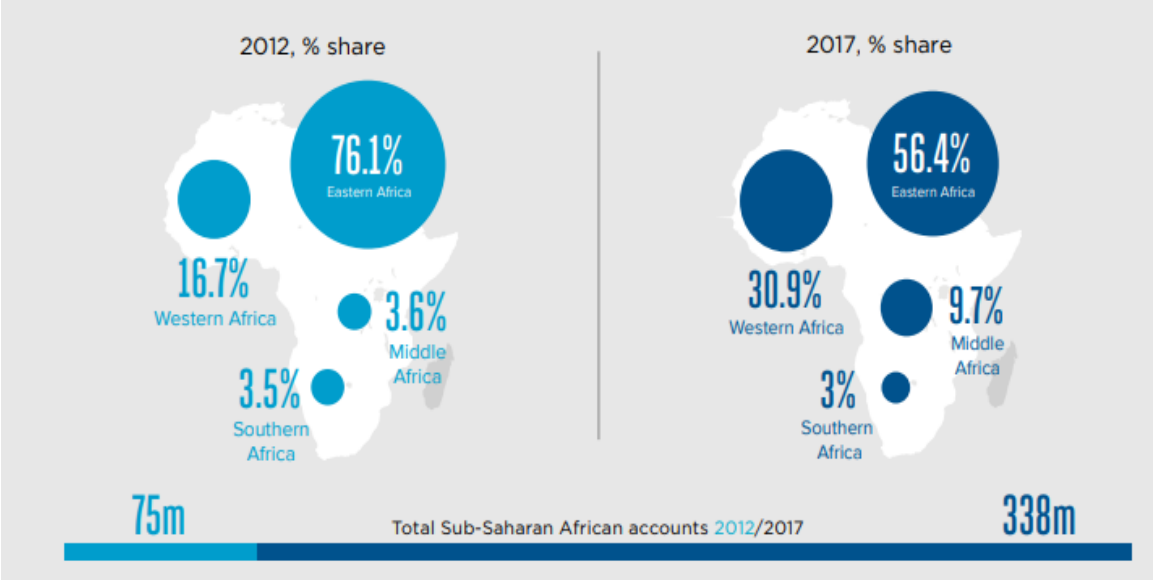


Figure 2.2: Sub-Saharan Africa: Customer mix from 2012 to 2017 (GSMA, 2017)

Steady and significant growth from 2012 to 2017 demonstrates that Mobile Money has a bright future and that Africa continues to play a leading role in the global market. Unlike their counterparts in East and West Africa, the countries of Central Africa need to formulate and

implement policies and protocols which promote and favour the adoption and integration of Mobile Money into their economies, because it is a proven catalyst for economic development in developing countries. In Ghana alone it provided direct employment for 107,415 people in 2016, from 20,722 in 2014, which represents a rate of growth of over 418 percent (Code for Ghana, 2017). In addition, it is estimated that 47 percent of the gross domestic product (GDP) of Tanzania was transferred through Mobile Money in 2017, with a financial inclusion rate of 86 percent from 16 percent in only 8 years (The Citizen, 2017).

2.3.3 Mobile Money in developing countries

Mobile Money has rapidly become a vital driver of economic growth, owing to the numbers of transactions, positions in direct employment, and direct revenue which it generates (GSMA, 2017). According to The Economist (2014), in Kenya, the country in which Mobile Money has flourished more than in any other; there are more active Mobile Money accounts than adults in the population. According to the Central Bank of Kenya, the total value of transactions during 2017 was of the order of $57 billion (ICT Works, 2018), almost three-quarters of the GDP of the country, from $24 billion in 2013. In at least eight countries, more people have registered Mobile Money accounts than traditional bank accounts (The Economist, 2014). The dramatic proliferation of Mobile Money accounts was made possible only by the swift formulation and implementation of regulations which are conducive to enabling people to use the system and the formation of sound partnerships among relevant stakeholders.

In Ghana, since 2015 telecommunications companies have been allowed to apply directly to the Central Bank for licenses to provide Mobile Money services, rather than through its partner banks. This regulation and several others have contributed to increasing the value of Mobile Money transactions to $34.6 billion in 2017 (Bloomberg, 2018), from $8 billion in 2015 (Amponsah, 2018). The service now enables the population to accumulate savings, pay bills, buy airtime, buy insurance-related products, transfer money to and from bank accounts, and send and receive money. Although the types of services which are available to users may differ from one country to another, all registered users of Mobile Money have access to almost all of the services which are offered by traditional banks, without needing to hold bank accounts. In countries such as Kenya, Ghana, and Tanzania, SMEs are able to overcome the obstacles which had previously hindered their endeavours to obtain financing owing to the lack of a credit history (Njabu, 2016). Now transactional histories which they are able to store in cellular devices can be used to increase their creditworthiness. They are also able to earn interest on their Mobile Money funds and even take loans against them.

The economies of developing countries are highly dependent upon the contributions of SMEs, which need financial assistance in order to achieve growth (Tengeh, 2011:7), which they cannot easily obtain from traditional banks. The services which Mobile Money provides

to individual people and SMEs have untapped potential for reducing poverty by increasing financial inclusivity (Must & Ludewig, 2010). Mobile Money has enabled 194, 000 Kenyan households to break free of poverty and has helped families to accumulate savings (World Bank, 2018). It has also improved the living conditions of many women by enabling them to move away from agricultural employment into entrepreneurial and retail fields. According to a report of 2016 of the international consulting group McKinsey and Company, Mobile Money could account for up to $3.7 trillion in the GDPs of emerging markets by 2025, a figure which approximates to the size of the economy of Germany. According to the report of the Global System for Mobile Communications Association (GSMA) (2017), although East Africa remains the global leader in the Mobile Money industry with over 37.38 million Mobile Money accounts in 2017, the best year-over-year growth in the industry was achieved by southern Asia (46.9%), followed by Central Africa (39.8%). In the Economic and Monetary Community of Central Africa (CEMAC) region, which is heavily regulated, Mobile Money is still at an embryonic stage. Mobile Money Services providers are bound to work with their partner banks in order to provide their services. The regulation number 01/11-CEMAC/UMAC/CM, which applies to Mobile Money, states unequivocally that only commercial banks are permitted to issue electronic money (BEAC, 2017). These partnerships impose an additional cost on the service. Although the services are more expensive than they are in several other countries as a consequence, the charges are still lower than those of traditional banks or providers of financial services. In addition, the services which are provided are limited by comparison with those which are available in East and West African countries. In Cameroon, Mobile Money is used mainly to make purchases and send and receive money.

2.3.4 Mobile Money in Cameroon

Mobile Money was first launched in Cameroon in 2011. The Cameroonian subsidiaries of telecommunication leaders MTN and Orange pioneered the concept and officially launched it in 2012 (Business in Cameroon, 2015). The circumstances which prompted its launching were similar to those of most developing countries, particularly with respect to the small numbers of members of the population who held bank accounts. As had been the case in the other countries in which the concept had been launched, many households and SMEs in Cameroon had been effectively excluded from the traditional banking system and without access to funding in the formal sector. Although the services which Mobile Money provides in Cameroon do not yet include financing, its introduction had significantly increased the financial inclusion rate (29%) by 2017 (FinMark Trust, 2017:36). As a direct consequence, many citizens have been able to ply trades and launch startup enterprises, which have resulted in direct employment for of the order of 5,000 people (Media Intelligence, 2016). The Mobile Money transactions which have accompanied this surge amount to in the region of FCFA 3,500 billion, a figure which represents 17.5 percent of the GDP of Cameroon. The introduction of Mobile Money has enabled Cameroonian households to incur reduced costs

by saving and reduce the risk of loss and theft which had accompanied saving in the past. As the mobile telephone penetration rate was 71 percent in 2014 (Business in Cameroon, 2015) and that of holding bank accounts had been one of the lowest in the world at 12 percent (European Investment Bank, 2016), it is abundantly evident that Mobile Money could not have arrived in Cameroon at a more propitious time.

Although the fees which MTN and Orange Cameroon levy for money transfers are relatively low by comparison with those of banks, microfinance institutions, and other financial institutions, their revenues have sent and continue to send shock waves through the money transfer industry while they help families to save. The government also stands to benefit from the revolution, as using Mobile Money services to recover tax should help to save an estimated FCFA 6 billion each year in property tax (Business in Cameroon, 2015).

In Cameroon there are four platforms for Mobile Money services, namely, MTN Mobile Money, Orange Mobile Money, Express Union Mobile Money, and the recently launched Nexttel Possa. By contrast, there are only two service providers, namely, MTN and Orange Cameroon, which dominate the Cameroonian Mobile Money market and together account for 5.4 million registered users (Business in Cameroon, 2017). Orange, which has 2.8 million registered users, offers the following services: money deposits, money withdrawals, the sending and receiving of money transfers, a Visa card facility, the purchasing of insurance-related products, the transferring of funds between bank accounts and Mobile Money accounts, the purchasing of airtime, and the payment of bills, university fees, transport tickets, and school fees (Orange Cameroon, 2016). MTN, which has 2.6 million users, offers a similar range of services, with the exception of the Visa card facility, the purchasing of insurance-related products, and the transferring of funds between bank accounts and Mobile Money accounts (MTN Cameroon, 2018).

In order to offer additional services, MTN and Orange have partnered with a range of different categories of institutions and enterprises, such as commercial banks, insurance companies, universities, and retail companies. Although the range of services has diversified considerably, the role of the Mobile Money industry in the Cameroonian economy has not yet reached its full potential, as a consequence of an unfavourable regulatory environment, which both limits the range of services which can be offered and confines their use to inside of the country. International money transfers and remittances are not permitted. According to FinMark Trust (2017), the Cameroonian population comprised more than 14 million people who were 15 years of age or older in 2017. From the figure of 12 percent which has been cited for citizens who hold bank accounts and the average population growth of 2.8% in Cameroon, it appears that in the region of 1.7 million people held bank accounts, which amounts to only one third of the 5.4 million registered users of Mobile Money during the

same period. As Mobile Money is a relatively new phenomenon in Cameroon, it is highly significant that three times more Cameroonians have opened Mobile Money accounts than hold bank accounts.

2.3.5 Factors which encourage the adoption of Mobile Money

Over the past decade, Mobile Money has played a crucial role in improving financial inclusion in several developing countries. According to the GSMA (2017), sub-Saharan Africa had close to 338.4 million registered users at the end of December of 2017, an increase of 18.4 percent from 2016. At the same time, the number of registered users throughout the world has increased from 136 million in 2012 to 690 million in 2017, an increase of nearly 410 percent in just 5 years. The principal factors which have contributed to the recent surge in the adoption of Mobile Money are summarised as follows:

Large unbanked populations: In most developing countries, the percentages of citizens who hold bank accounts tend to be low. As the percentage for the CEMAC region was of the order of 12 percent in 2017, effectively only 11.8 percent of the population of the region had access to banking services. Consequently, the remaining 88.2 percent, the unbanked population, became potential customers who were able to register, save, and make financial transactions without needing to hold bank accounts (Rubini, 2017).

Convenience: Many transactions which are made through traditional banks require account holders to go in person to branches or ATMs, which can entail waiting in long queues. For account holders in rural areas, the inconvenience is far greater, owing to the distances which are entailed by travelling to banks or ATMs. Registered users of Mobile Money do not have to contend with these obstacles, because they are able to send money from their homes or collect money from nearby local agents.

Ease of registration: It can be difficult to open bank accounts in many developing countries. Some of the documents which are required can be extremely difficult to obtain, particularly for people who have no means of providing formal documentation to confirm their residential addresses. Obtaining some documents can also entail costs. While applicants for bank accounts in Cameroon are required to submit two passport photographs (Ecobank, 2019), the registration of a SIM Card with an MNO for Mobile Money requires only the presentation of a national identity card and is free.

Low fees: The fees for Mobile Money services are relatively low by comparison with those of traditional banks. Many players in the money transfer industry have been obliged to reduce their fees still further in order to compete with MTN and Orange Cameroon.

Quick transactions: To send or receive money through Mobile Money entails transactions which are less than 3 minutes in duration, while purchasing airtime is accomplished in even less time. Unlike transactions with traditional banks, no paperwork is entailed.

Accessibility: Mobile Money agents or partners can be found anywhere in the countries in which the services are available. In 2016, there were 107,415 agents spread throughout Ghana, which made the services highly accessible for all Ghanaians. Some agents have extended hours or offer Mobile Money services at night. In Cameroon users are able to send or receive money or withdraw cash from an agent at any time of the day or night, on any day of the week.

Access to finance: In developing countries, few loans are granted to either individual people or businesses and in those instances in which they are granted, they usually benefit only large companies. In some developing countries such as Ghana, Tanzania, and Kenya, credit systems have been developed which are based upon transactional histories of Mobile Money, which make it possible to grant microloans to SMEs (Njabu, 2016).

Cost-effectiveness: Owners of businesses are no longer required to close; travel considerable distances to make deposits, pay suppliers, or withdraw cash. In the past, doing so resulted in higher operating costs, lost business, and a high risk of theft or loss. The adoption of Mobile Money services for their daily transactions has enabled owners to reduce their operating costs by significant margins.

Safety: Mobile Money transactions are very safe, owing to the absence of third parties. As all agents are registered with MNOs or service providers, they can be easily traced should they contravene any regulations or operating procedures.

Opportunities for employment: Even users who do not own mobile telephones are able to send or receive money by patronising the services of authorised Mobile Money merchants (Amponsah, 2018). Orange claims to have registered 160,000 merchants to date (Orange, 2018), thereby creating employment and sources of income for 160, 000 families.

Appropriate regulation: The protection which regulators provide has enabled users of Mobile Money to register and make transactions with confidence. As only banks are permitted to issue electronic money in most developing countries, governments have implemented national and international policies which are conducive to the widespread adoption of Mobile Money. MNOs have also played a crucial role by entering into partnerships with banks and relevant companies in their own countries and abroad. These

partnerships have increased the standing of MNOs with the general public in their countries and also reinforced the trust of registered users in the system.

Although many factors have encouraged the rapid proliferation of registered users of mobile Money services, it needs to be emphasised that there are also factors which militate against the success of the industry.

2.3.6 Factors which militate against the adoption of Mobile Money

The factors which stand to impede the success of MNOs are summarised as follows:

Excessive regulation: Extreme protectionism inevitably hinders endeavours to reach unbanked segments of the populations of countries and to facilitate the integration of the Mobile Money Services, specifically into the operations of traditional banks, but also into those of the banking sector as a whole in individual countries. The successful integration would facilitate the fostering of cultures of saving, thereby significantly improving the financial circumstances of families and households. Accordingly, MNOs need to be able to apply directly to the Central Bank for licenses to issue electronic money. At present, the requirement for MNOs to enter into partnerships with banks represents a perennial obstacle. Obtaining their own licenses would enable MNOs to operate with increased freedom and reduce their operating costs, thereby enabling them to offer users significantly reduced fees. The move by the Central Bank of Ghana in 2015 to permit MNOs to apply for licenses (Amponsah, 2018) resulted in an immense surge in the value of the transactions which were made by means of Mobile Money services and resulted in Ghana being accorded the status of a giant in the industry. It is imperative that regulators should permit MNOs to enable their registered users to transact international money transfers and receive remittances, in order to create a competitive environment in the industry, which facilitates the lowering of fees. Payments between different service providers could also be made possible by a proper integration with respect to the implementation of policies for the formation of partnerships.

Low mobile telephone coverage: Although mobile telephones are the means by which Mobile Money transactions are made, coverage in many developing countries remains relatively low, particularly in rural areas. In order to improve rates of financial inclusion, MNOs need to prioritise the construction of telecommunication facilities, with particular priority being given to rural areas, in which the highest per capita rates for unbanked populations are likely to be found.

Negative perceptions: Many members of the populations of developing countries tend to have an inherent distrust of modern technology, a perception which is ably supported by the large numbers of fraudulent activities which are perpetrated by means of the internet or the

social media. In Pakistan, the financial inclusion rate stood at an abysmal 9 percent in 2016 (Financial Inclusion, 2017), because most of the population still prefer to keep their money at home. It will take some time for some populations to overcome their fears and avail themselves of the advantages which Mobile Money services can provide.

Training and customer service: A lack of adequate training undermines the versatility of Mobile Money services, as many agents limit their functions to enabling their customers to send and receive money and to make payments. They tend to be ignorant concerning insurance-related products or other services which their service providers offer. In addition, relations between agents and customers are not always cordial, as customers sometimes are required to wait to be served in order to receive payments, only to be told, when they are eventually served, that the agent has no more cash. Proper training and strategies for ensuring that customers are not denied access to cash are needed to improve customer service and increase sales and the value of transactions in the industry.

Insufficient incentives: As the providing of incentives has a proven record in relation to increasing sales and agents are motivated by bonuses, MNOs need to ensure that their agents receive adequate and consistent bonuses for increasing sales.

Insufficient agents in some areas: In order to prevent excessive congestion at the premises of particular agents during peak hours, additional agents need to be appointed. Failure to do so is likely to result in the long queues which tend to discourage many people from holding accounts with traditional banks.

2.4 Small and medium-sized enterprises in Cameroon

As it is widely acknowledged throughout the world that small and medium-sized enterprises (SMEs) represent the backbone of the economies of a great many developed and developing countries, it is necessary to advance an appropriate working definition of SMEs for the purposes of this study.

2.4.1 Towards a definition of small and medium-sized enterprises

The term ‘small and medium-sized enterprises’ is a broad one and the specific defining attributes tend to vary among individual countries. The categorisation of enterprises with respect to their size on the basis of the numbers of workers which they employ, their annual turnover, or capital assets entails fairly arbitrary assessments, which are often influenced by the prevailing business values of individual countries (Ngaruiya, Bosire, & Kamau, 2014). To cite an internationally accepted criterion, the Organisation for Economic Cooperation and Development classifies SMEs as businesses which do not employ more than 249 employees

(OECD, 2017). For practical purposes, having the number of employees as a defining criterion provides a useful comparative measure for assessing the sizes of businesses. In Cameroon, the official definition is derived from the law N ° 2010/001 of 13 April 2010 for the promotion of small and medium-sized enterprises. It holds that any company with an annual turnover, excluding tax, which does not exceed FCFA 1 billion and employs a permanent workforce of not more than 100 employees is considered to be an SME (Afriland First Bank, 2015).

2.4.2 The economic significance of SMEs

As they do in a great many other countries, SMEs play a crucial role in achieving economic growth in Cameroon. According to the Ministry of Small and Medium–sized Enterprises, Social Economy and Handicrafts (2016a), and the National Institute of Statistics (2011), SMEs account for more than 90 percent of an estimated 93,969 enterprises in Cameroon and 85 percent of SMEs operate in the tertiary sector of the economy. In addition, they employ almost 50 percent of the workforce and contribute of the order of 34 percent to the GDP (Afriland First Bank, 2015). They represent a significant portion of the private sector and make a correspondingly significant contribution in terms of overall investment, the production of goods and the providing of services, taking risks, and identifying and utilising new economic opportunities. Consequently, as SMEs play a vital role in creating employment and generating incomes, entrepreneurs who start SMEs should receive adequate support. A particularly disturbing finding emerged from the development forum for SMEs in Cameroon which the Centre for the Development of Enterprises (CDE) convened in November of 2015. It was estimated that in the region of 80 percent of SMEs in Cameroon are obliged to close before they have been in operation for 10 years (CCIMA, 2015). In response, the government of Cameroon launched a bank to support SMEs with a capital investment of 10 billion FCFA on 20 July 2015 (Ministry of Small and Medium-sized Enterprises, Social Economy, and Handicrafts, 2016b). Although the initiative in itself cannot be expected to create an economic environment which is conducive to the success of SMEs, it nonetheless represents a sincere attempt to overcome the difficulties which many SMEs encounter with respect to funding. Owing to the informal nature of many SMEs, their inability to provide guarantees against loans, the precarious viability of their enterprises, and their tendency to suffer from poor management, SMEs in Cameroon are subjected to constraints which prevent them from achieving economic growth and attaining viable economies of scale.

2.4.3 Factors which militate against the success of SMEs

The factors which impede the success of SMEs in Cameroon are summarised as follows:

A lack of access to finance: In order to achieve economic growth, all businesses need to develop and expand their operations, which require capital, to which many SMEs in

Cameroon do not have access in their daily operations. In 2017, only 18 percent of the bank loans which were made specifically to finance the development of the economy of the country were made to SMEs (La Tribune Afrique, 2018), by comparison with 20 percent in 2015 (Koumetio, 2016). Both figures could be considered as derisory against the contribution which SMEs make to the GDP and providing employment. As interest rates are not regulated by the government in Cameroon, the banks are free to adjust rates according to the market. The discriminatory structure of interest rates does not appear to reflect a desire to stimulate investment or to contribute indirectly to economic growth (Koumetio, 2016).

Owing to their remote locations, many SMEs in Cameroon do not have access to financial services in the formal sector. In addition, irrespective of the potential of a vibrant SME sector to contribute to economic growth, many financial institutions tend to regard SMEs as risky propositions for loans and often do not consider them to be viable or even profitable (Tengeh, 2011), owing to the informal managerial practices and the irregular keeping of business records which characterise many. Taking refuge behind prudential standards, the banks require securities in the knowledge that the vast majority of SMEs would be unable to produce them, thereby obliging owners to try to finance their businesses without assistance or to rely on friends or relatives to lend them capital for their businesses (Muiruri, 2017).

Cash flow: As Ngaruiya, Bosire, and Kamau (2014) explain, SMEs are often highly cash dependent. Although their sizes, the nature of their activities, and fierce competition often oblige them to extend credit to customers, most suppliers usually require immediate payment. In a business environment which is characterised by very little access to formal banking services, the need to be reliant upon cash results in high operating costs and risks of loss or theft. In order to manage their working capital effectively, SMEs need either adequate resources of ready cash or a system which enables them to make payments, purchase stock, sell goods, and receive payments in a timely manner (Ngaruiya, Bosire, & Kamau, 2014) and permits them to move cash efficiently and meet their short-term liabilities. An appropriate system would also facilitate the collection of receivables, because SMEs frequently encounter difficulty in collecting money which is owed to them. Debtors who extend the terms of credit which SMEs permit them compound the difficulty which SMEs experience in meeting their obligations. According to Investir au Cameroun (2018a), the debt which local businesses incur with the state is so immense that neither the government nor the businesses are able to quantify it with any acceptable degree of exactitude. In recognition of the extent of the problem, the public treasury paid 14 billion FCFA to local SMEs in order to oxygenate their flows of capital.

Poor management and organisational structure: Mismanagement plagues many SMEs throughout the world. It is the inevitable consequence of owners of SMEs lacking managerial

skills (Tengeh, 2011). Although in many instances they launch businesses with no prior knowledge of how they need to be run in order to survive, they are often reluctant to acquire formal business skills. Many would-be entrepreneurs labour under the delusion that they have been born with business acumen and attempt to muddle through by improvising and responding to gut feelings. They are frequently motivated mainly by short-term gain and sometimes have little or no intention of engaging in any long-term planning, setting goals for their businesses, or developing coherent visions. Although they may be knowledgeable concerning their chosen fields, they often lack the managerial skills which are needed to enable them to harness their knowledge of their fields in the running of successful businesses. Specific skills and training in management are essential to sound business practices and the survival and growth of SMEs (Le Gicam, 2018; Muiruri, 2017). Sound management entails owners of SMEs developing expertise with respect to planning, organising, leadership, and maintaining control (Kamunge, Njeru, & Tirimba, 2014). The organisational structure of many SMEs is often predicated upon the roles of members of the families of the owners, who usually assume the central responsibility for the making of all decisions. As the organisational structure of the SMEs is often not characterised by any significant degree of decentralisation, all transactions and payments usually require the signatures of their owners. Cashier functions are very often performed by members of their families or close relatives, for reasons of trust. Many small businesses often close when their owners need to be absent, as the owners frequently do not judge any of their employees to be sufficiently capable or honest to deputise for them.

A lack of access to electricity: An adequate supply of electrical power is crucial to any developmental initiative. It represents an equally crucial factor for the viability and capacity of SMEs. A lack of adequate electrical infrastructure is a perennial hindrance to the development of business sectors and economic growth in Africa (Muiruri, 2017). According to the African Development Bank Group (2017), access to electricity increased in Cameroon from 46 percent in 2005 to 53.7 percent in 2015. A rate of progress of only 7.7 percent in 10 years is extremely low, particularly if the hydroelectric potential is taken into consideration. The inefficiency of the units which generate electricity and the obsolete equipment for transmitting it preclude Cameroon from being able to meet its domestic demand and to cater adequately for industry.

Support from the government: The government has a crucial role to play in providing support to SMEs in Cameroon (Muiruri, 2017). As states perform the principal regulatory roles in the economies of their countries, it is incumbent upon them to create favourable environments which are conducive to the growth of SME sectors. Kamunge, Njeru, and Tirimba (2014) maintain that if governments do not actively support the SME sectors of the

economies of their countries, economic growth is likely to be stifled, owing to the crucial role which they play in the economies of many countries. Consequently, it is imperative that governments should facilitate the launching and sustaining of viable SMEs through the formulation and implementation of appropriate policies. Accordingly, governments need to encourage banks to provide financial assistance to SMEs, even if it becomes necessary to stand surety for them. One of the principal intentions behind the launching of the bank to assist SMEs by the government of Cameroon in July of 2015 was to ease the constraints which cash flow imposes upon SMEs during their first years of operation (Ministry of Small and Medium-sized Enterprises, Social Economy, and Handicrafts, 2016b). Tax credits for new businesses during their first two or three years of operation would undoubtedly increase their viability as they endeavour to become established. At present, SMEs are heavily taxed in Cameroon, as they are required to pay taxes from their first days of operating, before they have made their first sales. Even small businesses in the informal sector, such as street vendors, are not exempt, as they are required by municipal tax collectors to pay a tax for temporary occupation of public roads (OTVP). As it has been emphasised, responsible support for SMEs by governments represents a sound investment in the national economies of countries (Le Gicam, 2018; Tengeh, 2011).

2.5 Determinants of the financial performance of SMEs

Waśniewsk (2017) explains that measuring the performance of companies represents one of the principal means of assessing their ability to create value. Although it also enables companies to maintain or improve their long-term performance (Harash, Al-Timimi, & Alsaadi, 2014), owners and managers of SMEs do not always appreciate the need to measure the performance of their businesses or the benefits in relation to their economic potential which can be derived from doing so. Although there are both financial and non-financial measures of performance, only the latter are of significance for the purposes of this study, as they are objective and can be made independently and corroborated (Harash *et al*., 2014:164). It needs to be emphasised that measures of financial performance can vary from one sector to another. They are easily quantified, calculated, and compared from data which has been collected. Among some of the principal criteria against which assessments can be made of the financial performance of SMEs are sales growth, productivity, market share, assets, and profits.

Sales growth is a ratio which is used to measure percentage increases in sales over a period of time (Pinem & Dwi, 2016). It is calculated by means of the formula: Sales revenue$_{t+1}$ – Sales Revenue$_t$, where sales revenue refers to the nominal value of the total sales which have been generated for the period from t to t+1. The higher the percentage, the greater is the increase in performance. Owing to its accuracy, it is considered by Barbera and Hasso

(2013:276) to be the most significant measure of performance for SMEs, irrespective of the industrial sectors or the countries in which they operate.

The market share can be defined as the portion of the market which is commanded by a particular business or product, while productivity is measured in terms of output per unit of input (Cambridge Advanced Learner's Dictionary, 2015). Unlike sales growth, the market share and productivity of SMEs tend to fluctuate, which can make it difficult to make accurate comparisons (Nthenya, 2014). Although both tangible and intangible assets can influence the performance of enterprises, they do not necessarily determine it to the same extent as the criteria which have been cited previously do. Manufacturing businesses tend to have more assets than some others owing to the nature of the industries in which they operate, although their performance is not necessarily better.

The Cambridge Advanced Learner's Dictionary (2015) defines profit as the revenue which is left after all expenses which have been incurred over a period of time have been deducted. The operating income measures profit after all operating expenses such as wages, depreciation and the cost of the goods which have been sold have been paid, while the operating profit is the figure which is yielded by deducting all operating expenses from the gross profit, before the deduction of interest and taxes. Poor or ineffective control of the procurement system or high operating expenses would inevitably erode profit, while increased profit margins or interest on investments would have the converse effect. If all of the external factors which influence the net profit which is calculated are adequately taken into consideration, it becomes evident that sales growth represents the optimal criterion for evaluating the economic performance of SMEs, rather than sales alone or assets. Consequently, the researcher has endeavoured to evaluate the opportunities which the adoption of Mobile Money services provides to SMEs and the obstacles which they encounter as a consequence of doing so, in relation to sales growth as the most accurate criterion for assessing their economic performance.

2.6 Mobile Money services and SMEs

Although the factors which encourage and discourage the adoption of Mobile Money services and those which militate against the success of SMEs have been covered in separate sections, the sections which follow are devoted to a discussion of the opportunities which the adoption of Mobile Money services present to SMEs and the obstacles which they can encounter as a consequence of doing so.

2.6.1 Opportunities

Apart from the role which the system has played in significantly increasing rates of financial inclusion, businesses which adopt Mobile Money services benefit from a wide range of

different advantages and opportunities. Among the many other advantages which it provides is the ability to transfer money at a low cost within a branchless bank (Ngaruiya *et al*., 2014). It is abundantly evident, from the literature which the researcher consulted, that users of Mobile Money services in Kenya and Ghana are no longer confronted with obstacles pertaining to making cash available at short notice, because the system has made financial transactions easier, safer, and cashless (Ngaruiya *et al*., 2014; Amponsah, 2018). The concept of a cashless economy is being enthusiastically promoted by many central banks throughout Africa (Amponsah, 2018; Chimaobi & Chizoba, 2014). Ngaruiya *et al*. (2014) point out that the adoption of the system has facilitated decision making and the exchange of information, improved the ability of businesses to network successfully, and increased the competitiveness of SMEs. The findings of a study which was conducted by Chimaobi and Chizoba (2014) revealed that SMEs in Nigeria which traded by means of mobile systems were able to shorten their delivery times significantly. Both Ngange and Beng (2017) and Chimaobi and Chizoba (2014) maintain that using Mobile Money services facilitates communication between users and improves relationships between buyers and sellers. Effective communication has also significantly reduced the effects of the phenomenon which is known as asymmetric information or information failure between users, which results from one user in a transaction having significantly more information pertaining to it than the other. Amponsah (2018) recommends that MNOs should strive to offer innovative services, as opposed to the ranges of products which they offer, in order to increase the appeal of the services to users. In Cameroon this recommendation could be put into effect by offering interest on money which is stored in Mobile Money accounts or offering microloans to users who make regular transactions. Increasing the range of opportunities which are available to users would create added value for SMEs and enable them to reduce their operational expenses and, indirectly, improve their performance.

Ngaruiya *et al*. (2014) conducted a survey to determine the effect of Mobile Money transactions on the financial performance of more than 120 businesses in the central business district (CBD) of Nakuru in Kenya and found that they exerted a positive influence upon the financial performance of the SMEs. The findings of a similar study which was conducted by Higgins *et al*. (2012), in which the research sample comprised more than 865 SMEs in Kenya, revealed that financial transactions which were made by means of mobile telephones had significantly reduced their operating costs and increased their financial performance. In addition, Mbogo (2010) arrived at a similar conclusion after surveying 409 micro businesses and found a positive correlation between behavioural intentions to use mobile payment services and decisions to do so. Masocha and Dzomonda (2018), Chale and Mbamba (2014), and Nyaga and Okonga (2014) all obtained similar findings from their investigations, namely, that Mobile Money transactions increased the numbers of sales which SMEs transacted and resulted in increased financial performance and growth. Despite

the immense opportunities which Mobile Money services provide to users, groups of factors continue to militate against their universal adoption.

2.6.2 Factors which discourage the adoption of Mobile Money services

The principal categories of factors which tend to discourage the universal adoption of Mobile Money services are mainly regulatory, infrastructural, and those which arise from traditional perceptions. Mobile Money remains heavily regulated in many countries. In some instances, stakeholders in the traditional banking sector tend to perceive the new system as a threat to the hegemony which they have maintained and not to welcome the prospect of their services being superseded or supplanted by innovative contemporary ones (Amponsah, 2018). The pressure which commercial banks are placing upon the central banks of their countries leave them with two possible courses of action: continue with the status quo and retard economic growth as a consequence of stifling the growth of SME sectors or liberalise and permit newcomers to the financial sectors of their countries to boost national economies by providing services which significantly increase the financial performance of SMEs.

Owing to a lack of infrastructure, it has not been possible to make Mobile Money services available to all of the members of the populations of some countries. As it has already been noted, cellular coverage tends to be low in many developing countries. As it is particularly low in rural areas, many people are effectively denied access to the advantages which cellular technology provides. Unstable networks and interrupted transmission oblige some users of Mobile Money services to travel to locations in which their networks are functioning normally in order to make transactions, thereby incurring additional costs and suffering considerable inconvenience (John, Gwahula, & Msemwa, 2018). According to Chimaobi and Chizoba (2014), erratic transmissions by the national power supplier (ENEO) also affect users of Mobile Money services adversely. During blackouts (electricity and mobile signals), it is impossible to make transactions and, in some instances, cellular devices are damaged beyond repair.

Significant numbers of members of the populations of developing countries tend not to trust modern technology and prefer to carry cash with them, owing to the degree of control over their transactions which they perceive that doing so provides (John, Gwahula, & Msemwa, 2018). To provide a simple example, it is not possible to request a refund or to stop a transaction which has already been validated in a Mobile Money transaction, while it is easy to do so in the case of a cash payment in a supermarket. Although all of these types of factors could potentially discourage the adoption of Mobile Money services, they nonetheless cannot prevent its widespread adoption, as several relevant theoretical models are able to explain.

2.7 Theories which underpin the study

It has been concluded from many investigations that Mobile Money services, which are essentially procedures which entail the use of information technology, exert a positive influence on the financial performance and growth of SMEs. From a slightly different standpoint, Mbogo (2010) postulates that the perceptions that the use of the technology will increase performance (factor 1) and be easy to use (factor 2) precede decisions to make use of it. The factors which influence the adoption of Mobile Money services by SMEs can be determined by applying the technology acceptance model (TAM). The TAM, which was developed by Davis (1989), is considered to be the most widely used model in research into the acceptance by users of new information technology. Davis (1989) concluded that although many variables could potentially contribute to whether people either accept or reject information technology, two were most significant.

The first is perceived usefulness, which is the subjective probability of people either making use or not making use of a technological innovation, solely on the basis of the perception that doing so would increase their performance. The second is perceived ease of use, which requires that although potential users may concede that particular technological innovations would increase their performance, in order to ensure their adoption, they must also be perceived to be easy to use. Perceived ease of use directly affects perceived usefulness and both determine the attitudes of potential users towards the use of particular technological innovations and their eventual decisions to use them (Mbogo, 2010). The two principal factors are also influenced by social, political, and cultural external variables (Surendran, 2012). The model has attracted criticism, as the perceptions of people can be influenced by irrational responses, individual perceptions of a single notion or concept can differ significantly, and individual people can also have widely differing subjective experiences of the same technological innovation. In response, Venkatesh, Morris, and Davis (2003) developed a theory to supersede the TAM, the unified theory of acceptance and use of technology (UTAUT). The theory holds that two factors directly influence behaviour with respect to decisions to make use of new technology, namely, intention to use and the facilitating conditions (Venkatesh, Morris, & Davis, 2003). The effort expectancy determinant concerns the subjective perceptions of potential users of the ease with which technological innovations can be used, while the performance expectancy determinant can be influenced by additional factors such as extrinsic motivation and expectations in relation to the suitability of innovations for the tasks which individual people are required to perform and the improved performance which is likely to result from using them (Lai, 2017). Extrinsic motivation is provided by the external variables which could influence the perceptions or beliefs of individual people with respect to appreciating the benefits which could be derived from making use of a new technological innovation (Njabu, 2016).

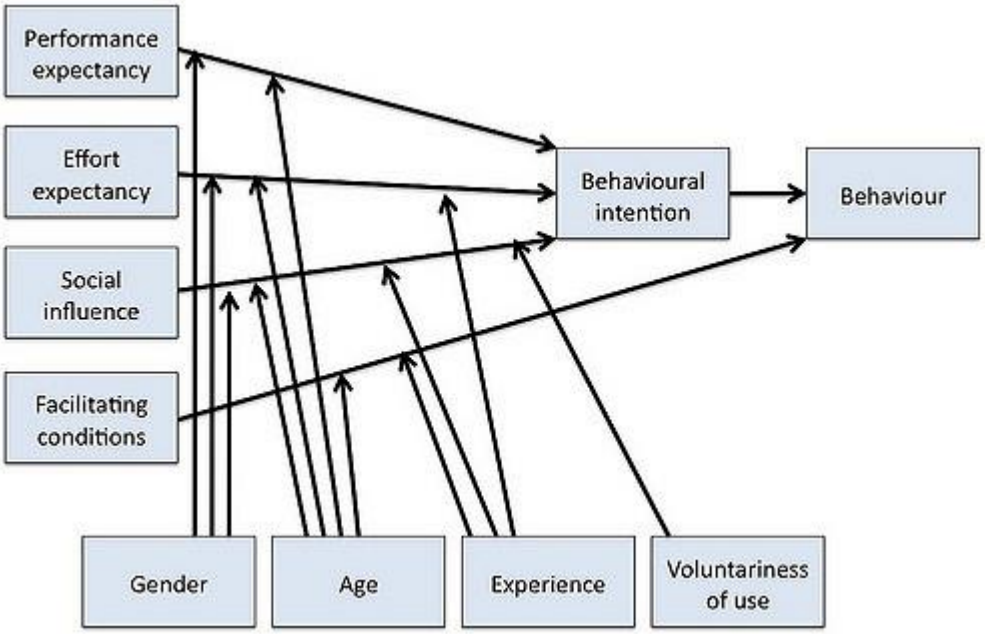


Figure 2.3: Unified Theory of Acceptance and Use of Technology (Venkatesh, Morris, Davis, & Davis, 2003).

2.8 Significance of the study

Although previous studies have been concerned with the services which Mobile Money service providers provide to users in countries such as Kenya and Ghana, which cover payments, receipts, loans, and savings, relatively little research has been conducted concerning the comparatively limited role which Mobile Money services have played in Cameroon to date. This study is concerned solely with Mobile Money services as a means of making and receiving payments, in order to evaluate the influence which the introduction of the system has had upon the financial performance of SMEs in Cameroon. The findings should be of great value to Cameroonian SMEs and also to officials who are responsible for regulating the providing of Mobile Money services to users. In addition, the study should make a significant contribution to the existing literature pertaining to the use of Mobile Money services in Cameroon and provide valuable insights into how the system could further be exploited to make an even greater contribution to the growth of the national economy than has been possible to date.

2.9 Conclusion

This chapter represents an endeavour to provide an appropriate overview of the economic environment in which SMEs are required to operate in Cameroon by means of a comprehensive review of the relevant available literature pertaining to the research topic. The following chapter is devoted to a detailed discussion of the research methodology which was developed in order to conduct the study.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

A research methodology is a set of procedures which researchers follow in order to conduct their research studies, which are guided by the research questions which they have formulated. By contrast, Asoba (2014) defines a research methodology as a set of methods which enables data to be systematically collected and analysed. In this chapter, the research methodology is described and discussed under the following headings:

- Research paradigm
- Research design and demarcation of the study
- The choice of research methods
- Target population
- Sampling frame
- Sampling techniques
- Sample size
- Research instruments.
- Procedures followed to collect the data
- Coding, analysis, and interpretation of the data
- Credibility of the findings
- Ethical considerations
- Delineation of the study

3.2 Research paradigm

A research paradigm is an approach to conducting research studies which has gained acceptance over time in the disciplines in which they are conducted. A paradigm is essentially a set of beliefs which are based upon a great deal of experience concerning the optimal manner in which data concerning the phenomena which researchers intend to investigate should be gathered, analysed and used (Dudovskiy, 2018:33). A review of the relevant available literature enabled the researcher to establish that there was a relative paucity of data pertaining to the research topic with respect to Cameroon and to formulate appropriate research questions to guide the conducting of the study. By answering the research questions which they formulate prior to conducting their research studies, researchers are able to generate new knowledge and insights and to make meaningful contributions to their chosen fields of research. All paradigms have an epistemological basis, in that they are derived from specific theories of knowledge, with respect to its origins, nature, and development. Two main schools of thought have dominated research in the social sciences, namely, positivism and interpretivism (Sage Research Methods, 2018).

Positivism is also sometimes known as objectivism and is based upon the assumption that knowledge is universal and that it can be acquired only by empirical measurement or observation, in order to establish the truth within the context of an objective reality. Proponents of positivism do not take external factors into consideration during the conducting of research and rely entirely upon quantifiable observations which are subjected to statistical analysis. Positivist reasoning is inherently deductive and positivist paradigms in research entail the formulation and testing of hypotheses, often by means of mathematical equations, to arrive at conclusions (Dudovskiy, 2018; Kuyuni & Kivunja, 2017). Quantitative data is usually gathered from the administration of survey questionnaires, the making of empirical observations, and experiments and tests which yield numerical information.

Conversely, the interpretivist paradigm is concerned mainly with endeavouring to obtain an understanding of particular events, occurrences, or phenomena from the subjective beliefs, opinions, and perceptions of the people who experience them. Owing to the wide diversity which is to be found among groups of people with respect to their social and cultural backgrounds, the beliefs, opinions, and perceptions of particular groups of people will inevitably differ considerably from those of others and difference will also be found among the members of groups. According to Kuyini and Kivunja (2017), the adoption of an interpretivist paradigm entails endeavouring to understand mainly how people construct their social realities. As the paradigm rests upon the assumption that knowledge is socially constructed, it is sometimes referred to as the constructivist paradigm. Research studies which are based upon interpretivist paradigms yield qualitative data, in the form of the words of individual participants. Qualitative researchers observe and interact with the participants in their studies and gather data by making use of audio recorders, diaries, photographs, and relevant documents.

Owing to the inherent limitations which making use of a single research paradigm entails, the researcher gave due consideration to the pragmatic paradigm, which emphasises the need to adopt a functional approach to research and to assess findings in terms of consistency, rather than to cling rigidly to specific criteria for establishing the absolute truth or reality pertaining to particular events, occurrences, or phenomena. As Dudovskiy (2018) explains, the pragmatic paradigm combines both positivism and interpretivism within the scope of a single research study. For pragmatic researchers, there are many ways to carry out research and no single orientation can ever yield a definitive appraisal of any event, occurrence, or phenomenon (Saunders, Lewis, & Thornhill, 2012). The mediating viewpoint which the pragmatic paradigm provided enabled the researcher to elect to collect quantitative data through the administration of survey questionnaires in the Mboppi and Central markets

of Douala and qualitative data by conducting in-depth interviews with managing directors or owners of SMEs in the markets.

3.3 Research design and demarcation of the study

3.3.1 Research design

Definitions of research designs tend to vary according to the orientations and priorities of the researchers who advance them. While some definitions concern the choice between the qualitative and quantitative approaches, others emphasise the methods which are to be used to collect and analyse data. For the purposes of this study, the research design is defined as a broad strategy which the researcher adopted to conduct the research study (Saunders *et al*., 2012). As all research designs have specific advantages and disadvantages, they need to be adopted or developed in accordance with the specific requirements of each individual research study.

As the principal objective of this study is to evaluate the extent to which the adoption of Mobile Money services increases the financial performance of SMEs in Douala in Cameroon, payments and receipts through Mobile Money represent the independent variable, while the financial performance of SMEs, specifically with respect to turnover, represents the dependent variable. If the influence which the independent variable exerts upon the dependent variable, financial performance, is positive, it will result in increased financial performance. Conversely, if it is negative, financial performance will suffer accordingly. The quantitative data which is yielded by the administration of the questionnaire will be triangulated with the qualitative data which is obtained from the responses of the interviewees, to enable the researcher to evaluate the cause-and-effect relationship between the variables. According to Dudovskiy (2018), cause-and-effect studies accord well with conclusive research designs. Because the ultimate goal of the study is to obtain a conclusive answer concerning the effect of the adoption of Mobile Money services upon the financial performance of SMEs in Douala, a causal or explanatory research design was considered to be more appropriate than an exploratory one for the purposes of this investigation.

3.3.2 Demarcation of the study

This study concerns Cameroonian SMEs, specifically those which are located in the city of Douala. Douala is the economic capital of Cameroon and more than 50 percent of the SMEs in Cameroon are based in the city. As it has the largest port in Central Africa, it is the hub for exports from the entire sub-region (Mbongo, 2012). The research sample comprised owners or managers of SMEs which are located in either the Central or Mboppi markets of the city. The two markets were chosen owing to the high profiles which they have with respect to trade in both Cameroon and the sub-region as a whole. The Mboppi market is the largest

wholesale market for manufactured products in Cameroon (Hatcheu, n.d). In order to generate consistent and objective findings, the researcher stipulated that SMEs whose owners or managers participated in the study needed to have been operating for at least two years, in order to enable him to perform an adequately accurate and objective evaluation of their growth in relation to their turnover. The SMEs were also required to have workforces which comprised at least two but not more than one hundred employees. The upper limit was imposed in order to filter out large companies from the research population, while the lower limit was set to avoid including freelancers or solo entrepreneurs in the research sample. Freelancers are economic agents who add little value to national economies by creating permanent employment for others. Their sole objective is usually to employ themselves and the revenue which they earn tends to be erratic (Freelancers Union and Upwork, 2017; Leventhal, 2009).

3.4 The choice of research methods

Although quantitative research is intended to yield objective data and qualitative research subjective data (MacDonald & Headlam, 2009), the choice with respect to the types of methods which are to be used to conduct a particular research study is usually determined by the research paradigm which has been adopted, which, in turn, is usually determined by the nature of the research problem. While the adoption of positivist paradigms entails the use of quantitative methods and an interpretivist paradigm requires qualitative methods (Saunders, Lewis, & Thornhill, 2012), some studies can benefit from the inherent weaknesses of one approach being compensated by the strengths of the other and vice versa. In addition, qualitative findings can also be used to corroborate quantitative ones.

3.4.1 Quantitative research methodologies

Quantitative research does not differentiate between social observations and physical phenomena, as both are treated as entities (Johnson & Onwuegbuzie, 2004). As quantitative research methodologies are used to test objective theories, demonstrate relationships between variables, and predict outcomes by using applications of statistical techniques, they usually entail the use of deductive techniques (Creswell, 2014). Quantitative information which is collected through the use of methods such as the administration of survey questionnaires is measurable and can be sorted and classified in order to subject it to statistical analysis. In order to ensure the objectivity of their findings, researchers are required to remain emotionally detached and concern themselves only with the facts which emerge from them, in order to preclude the possibility of bias and enable their findings to be replicated and generalised to other populations. Quantitative research is conducted to enable researchers to answer questions such as ‘How long?’, ‘How many?’, or ‘How often?’ (MacDonald & Headlam, 2009), while qualitative researchers endeavour to answer questions

concerning particular events, occurrences, or phenomena which begin with interrogatives such as ‘How?’ or ‘Why?’ (Yin, 2006).

3.4.2 Qualitative research methodologies

Qualitative researchers endeavour to obtain a proper understanding of the reasons and motivations which underlie the events, occurrences, or phenomena in which they are interested (Creswell, 2014; McDonald & Headlam, 2009). Consequently, they seek the deep meanings which lie behind the responses of those who participate in their studies. For purely qualitative researchers, social observations cannot be treated as observations of physical phenomena only, because they contend that social realities are comprised of the socially constructed realities of each member of the group which is being investigated and cannot necessarily be generalised to other groups or populations (Johnson & Onwuegbuzie, 2004). Consequently, the same question which is posed by a researcher can elicit a range of different responses from individual participants, each with its own underlying motivations. Although several different methods can be used to collect qualitative data, in-depth interviews are particularly favoured by qualitative researchers, who usually use inductive techniques to analyse their data (Creswell, 2014).

3.4.3 Mixed methods research methodologies

As Johnson and Onwuegbuzie (2004:17) explain, mixed methods research entails the combining of quantitative and qualitative research methods to conduct a single research study. A mixed methods approach allows researchers to obtain a deeper and more complete understanding of research problems, yields converging evidence, and provides a more effective means of obtaining useful answers than might have been possible from the application of a single approach (Kuyuni & Kivunja, 2017:35; Creswell, 2014:32; Yin, 2006:41; Johnson & Onwuegbuzie, 2004:18). The researcher elected to make use of both quantitative and qualitative research methods in this study in order to obtain as complete an understanding as possible of the research problem and to make effective use of any converging information which the quantitative and qualitative studies generated. The strategy also enabled the researcher to perform a rigorous evaluation of the reliability of the findings by using the qualitative findings to corroborate the findings which the survey questionnaire generated through triangulation.

3.5 Target population

According to Nkem (2017) and Polit and Beck (2003), the target population for a particular research study is a specific group which can be comprised of people, animals, or objects, whose members possess characteristics or sets of characteristics in which a particular researcher is interested for the purposes of his or her study. Brynard & Hanekom (2006)

provide a similar definition, but also explain that individual researchers deliberately select the target populations for their studies. The target population for this study comprised all of the owners and managing directors of SMEs which operated in the Mboppi and Central markets of Douala in Cameroon. The researcher confined the research sample to owners or managing directors of the SMEs because he considered that they would be most qualified to provide relevant information concerning the financial performance of the SMEs which they either owned or managed. The target population was further restricted to SMEs which operated in the Mboppi and Central markets because they are the largest markets in both the city and the CEMAC sub-region in terms of both size and the value of the business transactions which are made.

According to the most recent census which was carried out by the National Institute of Statistics (2011), there are of the order of 43,000 SMEs in Douala, although the researcher was unable to determine the numbers which were located in the markets. The census also revealed that there were 93,969 enterprises in the country, of which 75 percent were located in Douala and Yaoundé. The economic landscape of Cameroon is constituted and dominated by SMEs. Doula is a port city, the economic capital of Cameroon, its leading business centre, with an estimated population of 2.9 million residents (National Institute of Statistics, 2010). The city accounts for approximately 51 percent of all Cameroonian SMEs. Although Douala is the economic centre of Cameroon, a large percentage of its population lives below the poverty line, which represents a growing socioeconomic problem for the city.

3.6 Sampling frame

As target populations are often large, it is usually too time-consuming, expensive, and difficult to attempt to survey an entire population (Hair, Bush, & Ortinau, 2000). Consequently, an appropriate sampling frame needs to be compiled in order to select a research sample. Polit and Beck (2003:741) define a sampling frame as a list of the members of a population from which a sample is to be drawn. From this definition, it follows that researchers need to compile their sampling frames from all of the members of their target populations who possess the specific attributes in which they are interested for the purposes of their studies, in order to be able to select appropriate research samples. Consequently, the sampling frame for this investigation comprised all of the SMEs in the Mboppi and Central markets of Douala which had been operating for at least two years.

3.7 Sampling techniques

According to Fox, Hunn and Mathers (2007), the objective of most quantitative studies is to generate findings which can be generalised. They maintain that in order to be able to claim that the findings of a study can be generalised to other populations, it is essential that the

researchers who conducted it should be convinced that the sample which they selected had been truly representative of their target population. The difficulty which is entailed in selecting a representative research sample can be compounded by the ready availability of some potential participants and the inaccessibility of others. In this study, the researcher was unable to determine, with any acceptable degree of exactitude, how many of the SMEs which qualified for selection in the two markets were using Mobile Money services to make and receive payments. In addition, the criteria concerning the periods for which the SMEs had been operating and the numbers of employees which they had, made it even more difficult to identify and obtain access to potential participants. Using simple random sampling would have entailed an unacceptable degree of difficulty, have been excessively time-consuming, and entailed expense which the researcher could not afford.

Polit and Beck (2003) explain that sampling is a method of choosing a portion of a target population to represent the population as a whole in the respects in which particular researchers are interested for the purposes of their studies. The researcher elected to use non-probability sampling to select participants who were readily identifiable as fulfilling the criteria for inclusion in the research sample and drew upon their knowledge of local SMEs to locate other potential participants by means of snowball sampling (Tengeh, 2011; Polit & Beck, 2003). The participants for the in-depth interviews were purposively selected from among the respondents to the questionnaire on the basis of their sales turnover, in order to obtain a research sample whose members represented SMEs whose turnover ranged from the minimum to the maximum levels and also adequately represented those with intermediary levels of turnover. Once the target population had been identified and the sampling methods had been determined, the researcher embarked upon calculating a sample size which was sufficiently representative of the population in order to ensure the credibility of the findings of the study.

3.8 Sample sizes

As Kothari (2004:56) explains, the optimal size of a research sample is determined in accordance with the criteria of representativeness, reliability, efficiency, and flexibility. As Dudovskiy (2018:134) maintains that a sample size of twelve is sufficiently large for a qualitative study of a homogeneous population, the researcher selected to conduct twelve in-depth interviews.

To recapitulate section 1.7.5.2 of Chapter 1, the researcher encountered a considerable amount of difficulty in determining an optimal sample size for the administration of the survey questionnaire, in the absence of official statistics concerning the numbers of the SMEs which were making use of Mobile Money services in the two markets, and even more difficulty in

identifying SMEs which had been operating for two years or more. Consequently, the researcher elected to use the formula which Cochran (1963) developed to calculate the size of the research sample for the quantitative study:

$n_0 = \frac{Z^2 pq}{e^2}$, where

n_0 = the sample size

Z^2 = the abscissa of the normal (It can also be found in the Z table),

e = the margin of error,

p = the projected percentage of the characteristic which is to be found in the population

q = 1- p.

The confidence level was set at 95 percent, the margin error at 5 percent, and the standard deviation at 50 percent, because the researcher did not have access to figures for the distributions of SMEs which made use of Mobile Money services and those which did not do so. The researcher obtained a Z-value of 1.96 from the Z table and calculated the size of the sample as follows: $n_0 = \frac{(1.96)^2 \times 0.5 \times (1-0.5)}{(0.05)^2} = 384$

The sample size of 384 was considerably greater than those which had been used in similar studies which have been conducted in countries in which the use of Mobile Money services is widespread. The researcher calculated an average sample size of 228 by consulting the literature pertaining to the studies which had been conducted by Ngaruiya *et al*. (2014), Nyaga and Okonga (2014), Mararo and Ngahu (2017), and Higgins *et al*. (2012). After having given due consideration to the relatively new status of the Mobile Money industry in Cameroon, the relatively limited adoption of Money Market services in Cameroon by comparison with Kenya, the relatively short lifespans of many SMEs in Cameroon (CCIMA, 2015), and the constraints which time and financial considerations imposed, the researcher decided upon a sample size of 250 for the quantitative study. To compensate for any unusable questionnaires and in order to ensure that the final sample size was as close to 250 as possible, the researcher distributed a total of 300 questionnaires evenly among potential respondents in both markets. After he had collected and sorted the completed questionnaires, it emerged that 285 were usable, of which 142 had been completed by respondents in the Central Market and the remaining 143 by respondents in the Mboppi market. As the 285 completed questionnaires significantly exceeded the initial target figure of 250, it was likely that the credibility of the findings would be substantially increased.

3.9 Research instruments

As it has been explained, the quantitative data was collected through the administration of a survey questionnaire and the qualitative data from one-on-one in-depth interviews with twelve of the participants who had completed the survey questionnaire.

3.9.1 Design, composition, and pilot-testing of the survey questionnaire

The survey questionnaire represents one of the most widely used research instruments by novice researchers in the social sciences (Rowley, 2014). The design of the questionnaire for this study and the questions of which it was comprised were intended to enable the researcher to answer the research questions upon which the study was based.

3.9.1.1 Design and composition of the questionnaire

As Saunders *et al*. (2012) explain, a questionnaire is a research instrument which enables researchers to gather information from large numbers of respondents in a quick and cost-effective manner. Although they can be used in either qualitative or quantitative research, in this study, a survey questionnaire has been used solely to collect quantitative data. Although a questionnaire which generates the type of information which is needed by a researcher is not easy to design, when it is properly designed, it is likely to be rewarded with adequate response rates (Rowley, 2014).

The researcher found it necessary to include both open-ended and closed-ended questions in the survey questionnaire. The 4-page questionnaire in Appendices C and D contains 36 questions, which the researcher adapted from questionnaires which had been administered in other similar studies. When the researcher was permitted to remain while the participants completed the questionnaires, in order to provide explanations and assistance to individual respondents, it took an average of 25 minutes to complete a single questionnaire. Owing to their relatively low levels of educational attainment, some respondents needed a great deal of assistance and took more time than others to complete the questionnaire. The questionnaire was made available in both English and French, the official languages of Cameroon. The French version was produced by a Sworn Translator. The first page comprised an introduction and a consent letter. The introduction introduced the researcher, explained the nature of the study, and informed the respondents of their right to withdraw from the study at any time, without incurring penalties of any sort whatsoever. The questionnaire itself, which comprised the remaining three pages, was divided into sections A, B, and C.

Section A: The first section comprised questions which had been formulated to obtain demographic information from the respondents, such as their names, genders, age groups, levels of educational attainment, and their marital status. The first question was optional,

because the researcher had anticipated that some of the respondents would not wish to disclose their names.

Section B: The second section comprised questions concerning the business profiles and operations of the SMEs which the respondents represented. The respondents were asked for the names of their businesses, the sectors in which they operated, the numbers of years for which they had operated, the numbers of employees who were on their staffs, their sources of capital, whether or not their businesses held bank accounts and the reasons for either holding or not holding an account, the methods which customers used to make payments, the methods which the SMEs used to make payments to suppliers, and the types of difficulties which they encountered in the running of their businesses. The question concerning the names of the businesses of the respondents was also optional. The researcher had framed question 10 in order to obtain insights into the range of sources of financing which the SMEs had available to them and the difficulties which they encountered, particularly in relation to obtaining financial assistance from traditional banks. Questions 11 and 12 were intended to enable the researcher to establish how many of the SMEs held formal bank accounts and the rate of financial inclusion among the SMEs. The researcher also endeavoured to determine the reasons, for which some of the SMEs did not hold bank accounts, in order to determine whether the services which traditional banks offer could be superseded by Mobile Money services. Questions 13 and 14 were intended to enable the researcher to identify the means of payment which customers preferred, taking into consideration that the SMEs themselves were customers in relation to their suppliers. The final question in the section was intended to enable the researcher to identify the most significant obstacles which the SMEs encountered in their daily operations.

Section C: The questions in the third section had been framed to collect information concerning the Mobile Money Services in Cameroon and the effect which making use of the services had on the financial performance of the SMEs. The first priority was to identify which of the businesses used Mobile Money services to make their transactions and to establish how many transactions they made each day, how long they had been using the services, which MNOs they patronised most, and the services which they used most. The second was to assess the reasons for which they had elected to make use of Mobile Money services. The researcher endeavoured to enumerate a number of likely factors which could have influenced the decisions of the respondents, without depriving them of the opportunity to state personal reasons. The non-exhaustive list of possible reasons included safety, the ease of opening a Mobile Money account, accessibility, convenience, reduced fees, cost-effectiveness, and reliability. The questions in the next portion of the section were intended to enable the researcher to gauge the effect which making use of Mobile Money services had on the financial performance of the SMEs. Questions 23 and 24 were intended to assess the

extent to which the SMEs depended on maintaining a steady level of cash flow, while questions 25 and 26 were intended to establish whether the sales volumes of the SMEs had increased as a result of making use of Mobile Money services. Questions 27 to 36 required the respondents to record their responses in accordance with a 5-point Likert-scale, namely, strongly disagree, disagree, neutral, agree, or strongly agree. The objective of Section C of the questionnaire was to enable the researcher to answer the research questions.

3.9.1.2 Submission of the questionnaire to the supervisor

The researcher submitted the initial draft of the questionnaire to his supervisor for advice and recommendations. The changes which the supervisor recommended were duly incorporated into the final version.

3.9.1.3 The pilot testing of the questionnaire

In order to ensure that the questionnaire was understandable to potential respondents, the researcher pilot tested thirty questionnaires at the Bonamoussadi market by requesting the owners or managing directors of the SMEs which operated there to complete them. The market is located in the 5th district of Douala and caters for both retail and wholesale businesses. The respondents who were selected were asked to express their opinions of the questionnaire, to determine whether they felt that the questions were sufficiently clear or if they felt that some additions or deletions were needed. From their feedback, some of the questions were split up and expressions were changed to make questions more understandable and less ambiguous than they had been. Most of the respondents appeared to be reluctant to complete the survey questionnaire and some were willing to do so only if they knew the researcher or if he had been referred to them by other businesses with which they worked collaboratively, thereby obliging the researcher to make use of snowball sampling. The researcher also discovered that the optimal times for administering the questionnaire were on Tuesdays and Thursdays, before 9am and from approximately 1pm to 2pm. Once the questionnaire had been pilot tested and amended on the basis of the feedback which the researcher received from the respondents, it was resubmitted to the supervisor for final advice and approval before it was to be submitted to the Higher Degrees Committee (HDC) of the Cape Peninsula University of Technology (CPUT).

3.9.1.4 Submission of the questionnaire to the Higher Degrees Committee of CPUT

The questionnaire was duly approved by the HDC and cleared for administration to potential respondents.

3.9.1.5 Obtaining ethical clearance to conduct the study

Before the researcher was able to commence conducting the study, it was necessary to obtain approval in the form of an ethical clearance certificate from the Research Ethics Committee (REC) of the university. An approval letter was granted to the researcher after he

had fulfilled the conditions and submitted the required documents to the REC. The documents which the committee required were proof of registration, the research proposal, the similarity report, the REC5 forms, the consent letter in English and French (Appendices A and B), the survey questionnaire in English and French (Appendices C and D), the interview guide in both official languages (Appendices E and F). Once the ethical clearance certificate (Appendix G) had been granted, the researcher had fulfilled all of the academic, ethical, and legal requirements for collecting data in social research.

3.9.2 Design, composition and pilot testing of the interview guide

As Turner (2010) explains, interviews are able to provide in-depth information pertaining to the subjective experiences, perceptions, beliefs, and opinions of interviewees concerning the events, occurrences, or phenomena in which researchers are interested. Like questionnaires, interview guides are also designed and composed in order to enable researchers to answer the research questions upon which their studies have been based, although their principal purpose is to enable researchers to discern the motivations which underlie particular social phenomena, such as the adoption of the Mobile Money services. Interviews can also be used in mixed methods research to corroborate quantitative findings (Tengeh, 2011).

3.9.2.1 Design and composition of the interview guide

In social research, an interview can be defined as a method of collecting data which entails an interviewer posing questions to an interviewee. Interviews can be conducted either in face-to-face situations or by telephone (Cambridge Advanced Learner's Dictionary, 2015; Polit & Beck, 2003). Researchers need to take a number of questions into consideration when they contemplate using interviews as a research method in their studies, such as the people who should be interviewed and when the interviews should take place, the sample size in relation to the number of interviewees, the type of interviews which need to be conducted, and how the data which is collected should be interpreted and analysed (Qu & Dumay, 2011).

The ultimate goal of the researcher in the designing of the interview guide (please see Appendices E and F) was to discern the motivations which had underlain the decisions of owners and managing directors of SMEs in Douala to become registered users of Mobile Money services. Questions 5, 7, 9, 10, and 12 were framed to enable the interviewees to explain their reasons for electing to make use of Mobile Money services and the effects which they perceived that doing so had had on their turnover in terms of sales. The researcher commenced the interviews with a few preliminary questions (1, 2, and 4) to ensure he was interviewing SMEs that met the criteria for inclusion in the research sample. Question 8 had been framed in order to enable the owners or managing directors of SMEs to

explain what they perceived to represent the principal obstacles which they encountered in the running of their businesses, which could be at variance with the likely ones which the researcher had listed. Question 11 was intended to afford them an opportunity to explain any problems which they had encountered while making use of Mobile Money services. The interviewees were selected on the basis of a preliminary analysis of the quantitative data which the survey questionnaire had generated. The interviews were scheduled to be conducted either at the premises of the SMEs which the interviewees either owned or managed or any other convenient locations at which the interviewees would feel sufficiently comfortable to speak freely. The guide enabled the researcher to minimise the duration of the interviews by adhering to the predetermined topics for discussion. The interviews had an average duration of 35 minutes and were recorded by means of an audio recorder with the permission of the interviewees.

3.9.2.2 Submission of the interview guide to the supervisor

The researcher submitted the initial draft of the interview guide to his supervisor for suggestions and recommendations, which were incorporated into the final version.

3.9.2.3 The pilot testing of the interview guide

The pilot test enabled the researcher to determine whether there were any inherent weaknesses or limitations in the interview guide and to make appropriate changes before the commencement of the study (Turner, 2010). The researcher pilot tested the interview guide by conducting interviews with the owners or managing directors of three SMEs which operated at the Bonamoussadi market. The feedback which they provided enabled the researcher to refine the interview guide. It also emerged from the interviews that some of the interviewees preferred the researcher make audio recordings of the interviews while others expressed a preference for the researcher to take notes instead.

3.10 Collecting the quantitative and qualitative data

The success of a researcher study does not depend solely on the ability of researchers to design suitable research instruments. As researchers need to use them effectively in order to gather the information which they need to generate credible and reliable findings, they need to be skilled in respects such as planning, communication, the management of time, flexibility, and patience.

3.10.1 The quantitative study

After the researcher had obtained ethical clearance to conduct the study, he approached the owners or managing directors of a few of the SMEs at the markets in order to explain the purpose of the study, although most were reluctant to participate and expressed doubts concerning the objective of the study. The researcher commenced the conducting of the study undeterred and administered the questionnaire to the few owners or managing

directors who were willing to participate. Once again, snowball sampling came to his rescue, as they introduced him to other potential participants who met the criteria for inclusion in the research sample, although after two weeks, only eighteen questionnaires had been satisfactorily completed. Although the sampling technique proved to be effective, it was evident that the respondents were unwilling to take the researcher sufficiently into their confidence to disclose information pertaining to sensitive topics such as their sales turnover. It is possible that they may have become more cooperative over time, but at a rate of nine completed questionnaires per week, it would have taken of the order of twenty-eight weeks to administer 250 questionnaires.

At this juncture, the researcher elected to enlist the services of sales representatives. The work of a sales representative entails travelling throughout designated areas to sell the merchandise or services of the companies which they represent (Macmillan Dictionary, n.d.). As the sales representatives with whom the researcher struck up an acquaintance supplied goods to many of the SMEs at the two markets, they had closer relationships with their owners and managing directors than the researcher could cultivate in a short time. The researcher reasoned that the owners or managing directors of the SMEs would have fewer reservations concerning the study and be more inclined to participate if the nature of the study were to be explained to them either by the sales representatives or in their presence. Three sales representatives were hired and comprehensively trained. With their help, the collecting of the quantitative data was completed in twelve weeks, from November of 2018 to January of 2019. The representatives knew of some of the SMEs which made use of Mobile Money services and talked to the owners or managing directors about the study while they made their daily deliveries. As a result, many of the owners or managing directors expressed interest in participating in the study. The representatives provided them with questionnaires to complete, which they collected when they returned to make subsequent deliveries or to collect payments. When the respondents required assistance, they either used their training to assist them or else contacted the researcher for recommendations. When it was possible to do so, the researcher travelled to render assistance in person if the sales representatives were far from the markets. Of the 300 questionnaires which were administered, 142 questionnaires from the Central Market and 143 from Mboppi Market were deemed to be usable. The remaining fifteen questionnaires were rejected for a number of different reasons, such as incomplete sections in which respondents had failed to answer some questions, respondents who had not met the criteria for inclusion in the research sample, or contradictory and inconsistent answers, such as claims of having used Mobile Money services for the past four years by respondents whose businesses had been operating for only two years. The next step was to capture the raw data.

3.10.1.1 Procedures followed to capture the quantitative data

It is not possible to analyse quantitative data in its raw form. First it needs to be transferred to an appropriate computer application. The change of format facilitates the analysis and interpretation of the data. The researcher made use of the Version 25 of the Statistical Package for the Social Sciences (SPSS) to capture the data after editing it. With the assistance of a statistician who was employed by the CPUT, each question and the answers which it generated from the respondents were coded. The coded SPSS file was sent to the statistician for verification before the data could be captured. Data was captured for each question and for each of the usable questionnaires. The data was organised into frequencies and presented by means of descriptive statistics in tables, bar graphs, and a pie chart.

3.10.2 The qualitative study

From the database which the researcher was able to compile during the administration of the survey questionnaire and by using a set of statistical techniques, he carefully selected twelve SMEs from among the respondents who returned the 285 usable questionnaires. Using the criterion of sales turnover, he selected a few SMEs who had the highest turnover figures, some which had the lowest, a few others whose levels of turnover represented a median, and few others to represent intermediary higher and lower levels. Once the SMEs had been identified with the assistance of a sales representative, the researcher approached each potential interviewee once again, to explain the purpose of the study and the reasons for conducting the interviews. He also explained why they had been selected, the anticipated duration of the interviews, and the different means which he could use to record them. In addition, although they were already aware of their right to withdraw their participation at any time if they wished to do so, without incurring penalties of any sort, the researcher took care to remind them once again and to explain that the information which they provided would be treated as strictly confidential and be used for academic purposes only. Once the representatives of the SMEs had consented to be interviewed, the researcher made appointments for the conducting of each interview.

On the days of the interviews, each of the interviewees gave their consent for the interviews to be recorded on an audio recorder. The interviews were not rushed and the researcher asked one question at a time. The recorder was tested at the beginning of each interview and during the interviews the researcher would occasionally verify that it was continuing to function. It was also tested at the close of each interview, in order to confirm that it had been recorded in its entirety. In some instances, the researcher needed to pause interviews to redirect the interviewees, in order not to lose control of the interviews or to allow the discussions to wander off topic. The researcher took notes to record some observations, as reminders to request interviewees either to confirm particular points which they had made or

to elaborate further upon them. It was also necessary, in some instances, for the researcher to clarify particular questions to enable interviewees to provide appropriate answers to them.

3.10.2.1 Procedures followed to capture the qualitative data

Once the interviews had been completed, the researcher transcribed the audio recordings of each by means of word-processing document software. The transcribed data would later be grouped according to the themes which emerged from the interviews, analysed, and interpreted.

3.10.3 The collecting of secondary data

According to Kothari (2004:111), the term 'secondary data' refers to relevant data which has been collected by other researchers. Although it can take the form of either published or unpublished material, it needs to be relevant to the studies of the researchers who make use of it, in order to increase the validity and reliability of their findings (Dudovskiy, 2018). The researcher gathered secondary data from sources such as:

- Articles in relevant journals
- Unpublished master's and PhD theses
- Books
- Internet sources
- Electronic databases
- Conference papers
- Government publications

3.11 Coding, analysis, and interpretation of the quantitative data

Once quantitative data has been adequately transcribed, researchers set about coding, analysing, and interpreting it, in order to ensure that analyses and interpretations accord with the meanings which the participants in their studies had ascribed to the events, occurrences, or phenomena which they had endeavoured to investigate.

3.11.1 Procedures followed to code the data

Coding data usually entails allocating numbers or other symbols to the responses of participants (Kothari, 2004). After editing the responses to the questionnaire and enlisting the assistance of a statistician, the researcher coded the survey questionnaires by means of the following steps:

- Each questionnaire was assigned a number.
- Answers to questions 1 and 6 were omitted for reasons of confidentiality.

- Each question which required a written response classified as a string variable type, while a response which needed to be selected was categorised as a numeric variable type.

- Questions which required a single response to be selected from a set of options were assigned numbers in ascending order from 1. For example, for question 2 in the survey questionnaire, the response ‘male’ was assigned the number 1, while ‘female’ was assigned 2. This coding method was used for responses to questions 3, 4, 5, 11, 16, 17, 18, 21, and from 23 to 36.

- Responses to the remaining questions which permitted respondents to choose more than one response were coded differently. Each of the possible responses was recorded as a question and, if it was selected, the response was assigned the code 1 only, because it was then regarded as a question for which there was only one possible response.

3.11.2 Analysis of the data

As it has been explained, Version 25 of the SPSS software package was used to analyse the data which the survey questionnaire yielded. Pearson correlation and regression analyses were performed on the data which had been captured from the survey questionnaire. The findings were also subsequently triangulated with those which emerged from the qualitative data, in order to complement and validate each set of findings.

3.11.2.1 Correlation analysis

To recapitulate, as the study was conducted to assess the effect of the adoption of Mobile Money services on the financial performance of SMEs at the two markets in Douala, payments and receipts by means of Mobile Money services constituted the independent variable, while the financial performance in terms of sales turnover constituted the dependent variable. The objectives of the analysis were to determine both whether there was a positive correlation between the variables and, if there was one, how strong it was. Although there are many different methods of determining the correlations between variables, the researcher elected to begin the analysis by performing a Pearson correlation analysis, as it is the most widely used technique for assessing the degree of correlation between two variables (Dudovskiy, 2018; Kothari, 2004). The strength of correlations varies from zero for no correlation to 1 for perfect correlation. For the purposes of this study, if the value of Pearson’s correlation coefficient r were to be found to be closer to 1 than zero, it would indicate that the use of Mobile Money services for payments and receipts exerts an influence upon the financial performance of the SMEs. If the sign which precedes the value of r is positive, it indicates a positive correlation, in that the dependent variable increases as the

independent variable increases. Conversely, a negative r- value is indicative of a negative correlation and entails the dependent variable decreasing as the independent variable increases.

3.11.2.2 Regression analysis

A correlation analysis determines only the strength of the correlation between the two variables. This study was intended to enable the researcher also to investigate the contribution which the independent variable made to the dependent variable in a cause and effect relationship, with respect to the proportion of the dependent variable, the level of turnover after the adoption of Mobile Money services, which has been generated by the independent variable (Kothari, 2004). A regression analysis assesses the individual contribution which each independent variable makes to the dependent variable. The performing of a regression analysis entails calculating a value for the coefficient r^2 which can be interpreted as the proportion of variance in one variable which is accounted for by the other variable. Consequently, a value of .0.625 (6.25%) indicates that 6.25 percent of the variance in the dependent variable is explained by the contribution of the independent variable. The higher the coefficient, the stronger the causation effect is.

3.11.2.3 Triangulation

Triangulation can be defined as the use of two or more independent approaches to collecting data or types of research instruments to collect data for a single study. The use of triangulation enables researchers to confirm or refute their initial interpretations of data which they have collected (Creswell, 2014; Saunders *et al*., 2012:602). Qualitative data which is collected from the use of research methods such as structured interviews could be used to triangulate the findings which emerge from quantitative data which is gathered from the use of quantitative research instruments such as survey questionnaires. The findings which emerge from the use of one set of research methods or instruments are used to validate or corroborate those which are obtained by using a complementary set of methods. Accordingly, triangulation enables researchers to investigate phenomena from different perspectives and to increase the validity of their findings (Creswell, 2014). Denzin (1989), cited by Polit & Beck (2003), explains that it is possible to employ triangulation in four different contexts, namely, in the triangulation of data, methodologies, investigators, and theories. In this study, the researcher elected to triangulate the findings from the administration of the survey questionnaire and the conducting of one-on-one structured interviews and to use the findings from the interviews to corroborate those which were obtained from the administration of the survey questionnaire.

3.12 Measures taken to ensure the credibility of the findings of the study

Although it is not possible to eliminate the possibility of the findings of research studies lacking credibility, researchers need to take all reasonable measures to do so (Dudovskiy, 2018). Credibility refers to the extent to which accounts which are provided by researchers are plausible and appropriate, particularly in relation to the degree to which their findings accord with the perceptions of the participants in their studies (Polit & Beck, 2003:430). Credibility is predicated upon the criteria of reliability and validity to evaluate the quality of research.

3.12.1 Reliability

According to Dudovskiy (2018) and Asoba (2014), reliability refers to the consistency with which particular research instruments generate data. Consequently, the reliability of the findings of a study is assessed in accordance with the likelihood that other researchers would be able to generate similar findings under the same conditions and using the same research techniques. The researcher took care to ensure the reliability of the findings by pilot testing both the survey questionnaire and the interview guide and by subsequently corroborating the findings of the quantitative study with those which were obtained from the face-to-face in-depth interviews.

3.12.2 Validity

According to Polit & Beck (2003), validity can be defined as the degree to which a research instrument measures what it is intended to measure. From a slightly different standpoint, Dudovskiy (2018:152) evaluates the validity of findings as a measure of the degree to which the requirements of a particular scientific research methodology have been adhered to during the process of generating research findings. In both instances, it is evident that validity is a measure of accuracy. Creswell (2014) explains that in mixed methods research, the findings from quantitative studies are used to validate those of qualitative studies and vice versa. As this study employed a mixed methods research design, the findings from the administration of the survey questionnaire were validated against those which the in-depth interviews generated.

3.13 Ethical considerations

Ethical considerations in social research have assumed greatly increased significance in recent times, with the formalising of codes of acceptable professional conduct (Creswell, 2014). Saunders *et al*. (2012) explain that professional ethics denote the correctness of the actions of researchers in relation to the rights of those who agree to participate in their studies. In order to comply with the ethical standards for professional conduct in the social sciences during the conducting of this study, the researcher took the following measures:

- He did not try to compel anyone to participate in the study and all potential participants were informed that their decision to participate would be strictly voluntary. They were also informed that they would be free to withdraw their participation at any stage if they wished to do so.

- All of the participants were informed of the objectives of the study and freely consented to participate, aware that no incentives were offered to them. They were also informed that the information which they provided would be treated as strictly confidential and that the data which it generated would be used for academic purposes only. The researcher honoured this commitment by confining use of the data to the research project which he carried out under the auspices of the CPUT.

- All of the participants were informed that the findings of the investigation would be available on the CPUT website.

- Before he commenced the conducting of the study, the researcher obtained a consent letter from the relevant municipal authorities at Douala (please see Appendix A) and an ethical clearance certificate from the REC of the CPUT (please see Appendix G).

- No offensive, discriminatory, or insulting language was used in the wording of the survey questionnaire or the interview guide. Both research instruments were scrutinised and approved by the researcher's supervisor and the REC.

- The work of other writers or researchers which the researcher consulted in order to conduct this study has been acknowledged and appropriately referenced.

- The researcher strove to maintain the highest possible level of objectivity in analyses of data and relevant discussions throughout the conducting of the research study.

3.14 Delineation of the study

The potential limitations of the study and the obstacles which the researcher encountered are summarised as follows:

- The researcher did not have sufficient time and financial resources to collect data from a larger research sample. The initial sample size of 384 which was calculated by means of Cochran's (1963) formula was adjusted to 285, as is explained in section 3.8.

- The responses concerning turnover to questions 25 and 26 in the survey questionnaire did not necessarily reflect any official business records, but rather the subjective assessments of the respondents. The findings would have been significantly credible if the researcher had had access even to informal records, in order to gauge the positive or negative influence of making and receiving payments by means of Mobile Money services on the financial performance of the SMEs whose representatives participated in the study.

- The use of snowball sampling, a non-probability sampling technique, could have compromised the degree to which the research sample could be said to be representative of the target population as a whole. This possibility was mitigated by the assistance which the researcher received from three independent sales representatives in the administering of the survey questionnaire in the two markets.

- In the cases of some of the respondents, the researcher elected to wait to collect the completed questionnaires. This strategy was necessitated by problems which the researcher had encountered during the early stages of the conducting of the study, when several questionnaires had been lost, misplaced, or left at home by respondents (Asoba, 2014).

3.15 Conclusion

This chapter has provided a comprehensive overview of the research methodology which the researcher developed in order to conduct the study, a discussion of the measures which he took to ensure the credibility of the findings, and an enumeration of the ethical standards for social research which he endeavoured to maintain at all times throughout the conducting of the study. The chapter which follows is devoted to a presentation, discussion, and analysis of the findings of the study.

CHAPTER FOUR

PRESENTATION, DISCUSSION, AND ANALYSIS OF THE FINDINGS

4.1 Introduction

The findings which emerged from the data which was collected from the administration of the survey questionnaire and the in-depth interviews are presented, analysed, and discussed in this chapter for the purposes of assessing whether the objectives of the study have been achieved, answering the research questions, and confirming or refuting the two hypotheses which the researcher endeavoured to test by conducting the study. The quantitative data is presented in the forms of frequency tables, graphs, and a pie chart and the qualitative findings are evaluated in relation to those which emerged from the statistical analysis of the quantitative data. The findings from the quantitative and qualitative studies are then triangulated in order to provide definitive answers to the research questions.

4.2 Recapitulation of the objectives of the study

The researcher formulated the following sub-objectives in order to achieve the principal objective of the study, namely, to determine the influence of the adoption of Mobile Money services by SMEs in Douala on their financial performance:

- To assess the extent to which the use of Mobile Money services improves the financial performance of SMEs in Douala.
- To determine which Mobile Money services are predominantly used by SMEs in Douala.
- To determine the extent to which SMEs in Douala use Mobile Money services to perform their business transactions with respect to buying and selling.
- To determine how cost effective it is for SMEs in Douala to use Mobile Money services by comparison with using traditional banking services.
- To determine the factors which encourage SMEs in Douala to choose to use Mobile Money services.

4.3 Presentation and analysis of the quantitative data

The quantitative data is presented and analysed in accordance with the structure of the survey questionnaire.

4.3.1 Section A: Demographic information provided by the respondents

In the first section of the questionnaire, the respondents were requested to provide information concerning their genders, ages, levels of educational attainment, and marital status.

4.3.1.1 Genders of the respondents

As it can be seen in Table 4.1, males constituted the predominant gender of the research sample for the quantitative study, as 173 of the 285 respondents or almost 61 percent were male, while 112 or 39 percent were female. The composition of the research sample with respect to gender was significantly different from that of the study of Nyaga and Okonga (2014), of which 67 percent had been female.

Table 4.1: Genders of the respondents

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Male	173	60.7	60.7	60.7
	Female	112	39.3	39.3	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

4.3.1.2 Age groups of the respondents

Table 4.2 illustrates the distribution of age groups among the respondents. The majority fell into the age groups of from 18 to 38 and from 39 to 59 years of age. The age groups comprised 44.5 and 48.4 percent of the research sample, respectively. A tiny minority of two or 0.7 percent were younger than 18 years of age and eighteen or 6.4 percent were older than 60 years of age. The research sample for the similar study which Mbogo (2010) conducted in Kenya was significantly younger, as 82 percent were fairly evenly distributed among age groups whose overall range was from 18 to 35 years.

Table 4.2: Age groups of the respondents

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Younger than 18 years	2	.7	.7	.7
	18 – 38 years	125	43.9	44.5	45.2
	39 – 59 years	136	47.7	48.4	93.6
	60 years or older	18	6.3	6.4	100.0
	Total	281	98.6	100.0	
Missing	System	4	1.4		
Total		285	100.0		

Source: survey data (2018-2019)

4.3.1.3 Levels of educational attainment of the respondents

As it can be seen in Table 4.3, a small minority of 2.8 percent of the respondents had received no education at all, 31.3 percent had received primary education, 54.4 percent secondary education, 10.7 percent tertiary education, and 0.7% claimed that they were self-educated. Consequently, it can be concluded that of the order of 65 percent of the owners or managing directors of the SMEs who completed the questionnaire had received sufficient education to run or manage their businesses.

Table 4.3: Levels of educational attainment of the respondents

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	None	8	2.8	2.8	2.8
	Primary	88	30.9	31.3	34.2
	Secondary	153	53.7	54.4	88.6
	Tertiary	30	10.5	10.7	99.3
	Self-educated	2	.7	.7	100.0
	Total	281	98.6	100.0	
Missing	System	4	1.4		
Total		285	100.0		

Source: survey data (2018-2019)

4.3.1.4 Marital status of the respondents

Table 4.4 demonstrates that from the 280 responses which were obtained, 166 (59.3%) of the respondents were married, sixty-four (22.9%) were single, twenty-one (11.1%) were cohabiting with partners, twelve (4.3%) were divorced, and seven (2.5%) had been widowed.

Table 4.4: Marital status of the respondents

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Single	64	22.5	22.9	22.9
	Married	166	58.2	59.3	82.1
	Divorced	12	4.2	4.3	86.4
	Widowed	7	2.5	2.5	88.9
	Cohabiting	31	10.9	11.1	100.0
	Total	280	98.2	100.0	
Missing	System	5	1.8		
Total		285	100.0		

Source: survey data (2018-2019)

4.3.2 Summary of the demographic information which the respondents provided

- The majority of respondents in the research sample were male.
- Almost 93 percent of the respondents were found to be either from 18 to 38 (44.5%) or from 39 to 59 (48.4%) years of age.
- Most of the respondents had received either secondary (54.4%) or primary (31.3%) education.
- Most of the respondents were either married (59.3%) or single (22.9%).

4.3.3 Section B: Information pertaining to the businesses of the respondents

The information pertaining to the businesses of the respondents which the administration of the survey questionnaire generated concerned the business sectors in which their SMEs operated, the periods for which they had been operating, the numbers of employees which they employed, their sources of capital, the principal obstacles which they encountered in the running of their businesses, and the means which they used most frequently to make and receive payments in their daily operations.

4.3.3.1 Business sectors in which the SMEs of the respondents operated

As it can be seen in Table 4.5, more than three-quarters of the SMEs of the respondents operated in the trading sector. A further 17.5 percent operated in the service sector, while small minorities of 4.6 and 1.4 percent, respectively operated in more than one sector and the manufacturing sector. This high percentage of traders in the research sample could be explained by the relative ease with which people are able to start and run profitable businesses in the sector.

Table 4.5: Business sectors in which the SMEs of the respondents operated

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Trading	218	76.5	76.5	76.5
	Service	50	17.5	17.5	94.0
	Manufacturing	4	1.4	1.4	95.4
	Mixed	13	4.6	4.6	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

4.3.3.2 Periods for which the SMEs of the respondents had been operating

Table 4.6 reveals that 40 percent of the SMEs of the respondents had been operating for from 2 to 3 years, 31.6 percent from 4 to 5 years, 13.3 percent from 6 to 7 years, and 15.1 percent for 8 or more years. This finding suggests that the SMEs of the majority of the respondents were young and still in their formative stages of growth. As at least 85 percent of the SMEs had been operating for less than 10 years, the contention of the CCIMA (2015) that the lifespans of SMEs tend to be short if they are not adequately managed and financed deserves to be accorded due significance.

Table 4.6: Periods for which the SMEs of the respondents had been operating

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	2 – 3 years	114	40.0	40.0	40.0
	4 – 5 years	90	31.6	31.6	71.6
	6 – 7 years	38	13.3	13.3	84.9
	8 or more years	43	15.1	15.1	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

4.3.3.3 Numbers of employees in the SMEs

The findings which are summarised in Table 4.7 reveal that 89.5 percent of the SMEs employed from two to five people, while 8.1 percent from six to ten, 2.1 percent from eleven to fifteen, and 0.4 percent more than fifteen. This finding accorded closely with that of Nyaga and Okonga (2014), who found that 98 percent of the members of their research sample employed from one to five employees.

Table 4.7: Numbers of employees in the SMEs

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	2 - 5	255	89.5	89.5	89.5
	6 - 10	23	8.1	8.1	97.5
	11 - 15	6	2.1	2.1	99.6
	More than 15	1	.4	.4	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

4.3.3.4 Sources of capital

The sources of capital which the respondents used to finance their businesses are summarised in Table 4.8 and depicted in the form of a bar graph in Figure 4.1. From the 377 responses which the administration of the survey questionnaire generated, it emerged that

161 (42.7%) had used their own savings to finance the starting of their businesses, 117 (31%) had borrowed from informal financial institutions, fifty-four (14.3%) had received assistance from members of their families or friends, and a small minority of forty-five (11.9%) had obtained loans from financial institutions in the formal sector. These findings provide ample evidence that access to finance from traditional financial institutions for SMEs continues to be limited and obliges most to endeavour to obtain capital from other sources. The findings also accord with those of Nkem (2017) and Tengeh (2011), who both found from their studies that the majority of entrepreneurs used their personal savings to finance the starting of their SMEs.

Table 4.8: Sources of capital

	Personal savings	Financial institutions	Members of families or friends	Informal financial institutions	Total
N	161	45	54	117	377
Percentage	42.7%	11.9%	14.3%	31.0%	100%
Percentage of cases	56.7%	15.8%	19.0%	41.2%	[2]132.7%

Source: survey data (2018-2019)

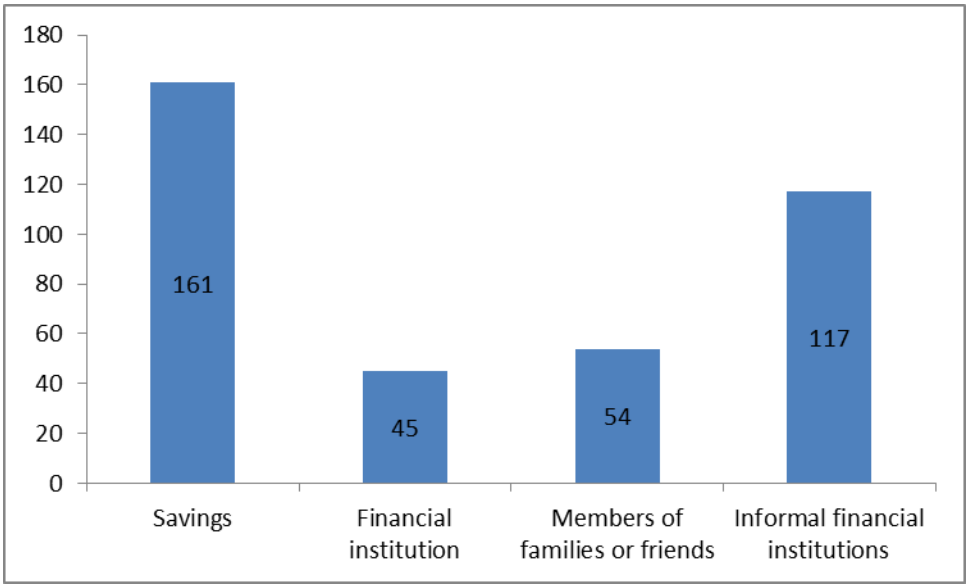


Figure 4.1: Sources of capital (Source: author)

4.3.3.5 Respondents whose SMEs held formal bank accounts

The findings which are summarised in Table 4.9 reveal that 54.4 percent of the SMEs of the respondents held formal bank accounts, a figure which is significantly higher than the 12

[2] The total is greater than 100 percent because the respondents were allowed to cite more than one source, each of which was treated as a separate response.

percent for the population of Cameroon as a whole which was published in a report by the European Investment Bank in 2016.

Table 4.9: Respondents whose SMEs held formal bank accounts

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Yes	155	54.4	54.4	54.4
	No	130	45.6	45.6	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

The reasons which 45.6 percent of the respondents cited for not holding bank accounts in the names of their businesses are depicted graphically in Figure 4.2. It emerged from the 151 responses that thirty-one of the respondents indicated that the SMEs which they represented used the bank accounts of the owners, while seventy-three cited high bank charges as constituting the reason for which they did not hold bank accounts. A further twenty-five claimed that banks did not meet their specific needs and twenty-two indicated that transactions with banks in Cameroon were excessively time-consuming.

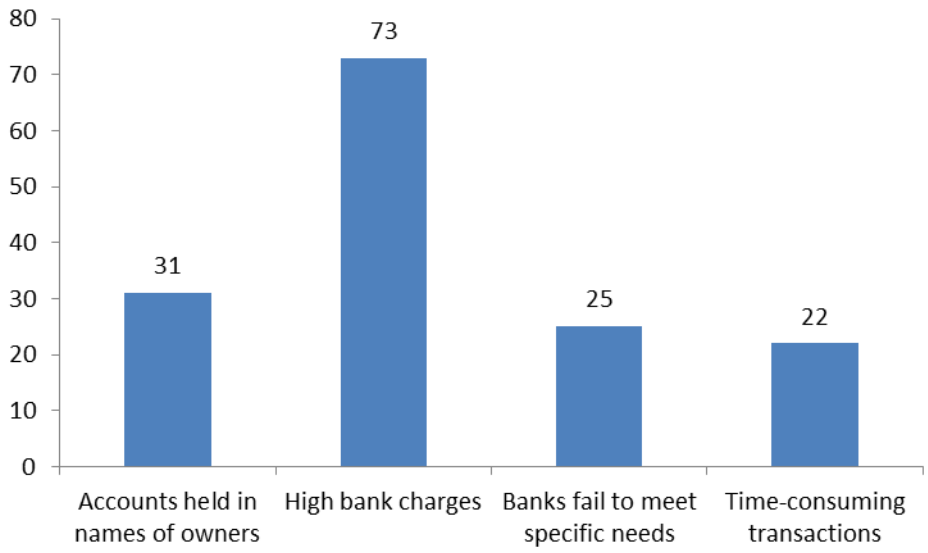


Figure 4.2: Reasons cited by the respondents for not holding bank accounts (Source: author)

4.3.3.6 Means used by the respondents to make and receive payments

Any commercial activity which entails purchasing goods from suppliers and selling them to customers requires payments to be made to suppliers and received from customers. Figure 4.3 depicts the distributions of the methods which the respondents used to receive payments from customers and to make payments to suppliers. Although individual respondents could have indicated that they used permutations of all of the options to make their transactions, as it can be seen in Figure 4.3, cash continued to remain the principal means of both making

and receiving payments for the respondents. It could be considered significant that the respondents used Mobile Money services almost to the same extent as they used cash, particularly with respect to making payments to suppliers. Although bank deposits and cheques appeared to be the least frequently used, significantly more respondents made payments to suppliers by means of bank deposits than those who received payments from customers in the form of deposits.

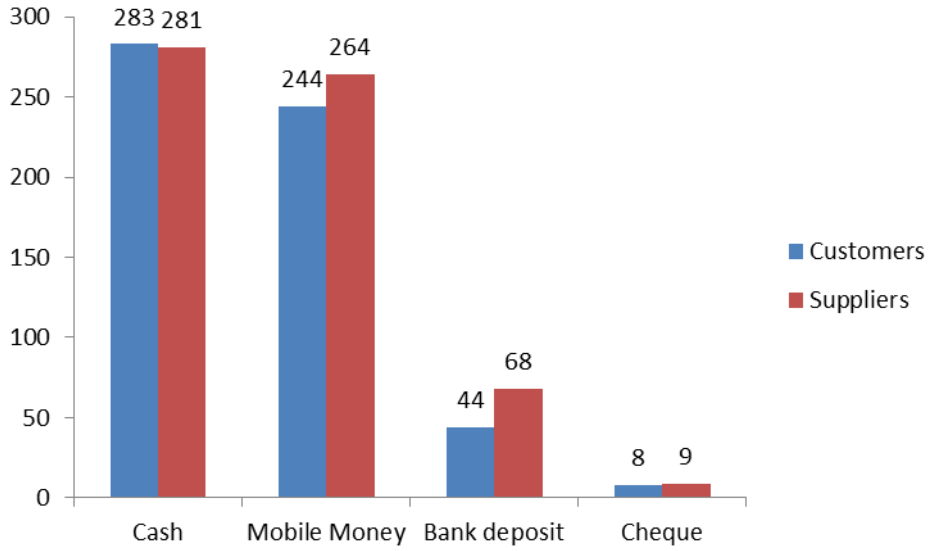


Figure 4.3: Means used by the respondents to make and receive payments (Source: author)

4.3.3.7 Principal factors which the respondents perceived to militate against the viability of their SMEs

Figure 4.4 provides a summary in the form of a bar graph of the principal factors which the respondents identified as militating against the viability of their SMEs. The respondents were permitted to give more than one response. A majority of 129 responses of 382 or 33.8 percent cited obtaining access to credit, a finding which accords with the findings which are summarised in Table 4.8. Other significant sources of difficulty in descending order were unfavourable cash flows (63 responses), insufficient support from local authorities (62 responses), inability to maintain cash flows at acceptable levels (54 responses), high levels of taxation (40 responses), and rising operating costs (34 responses).

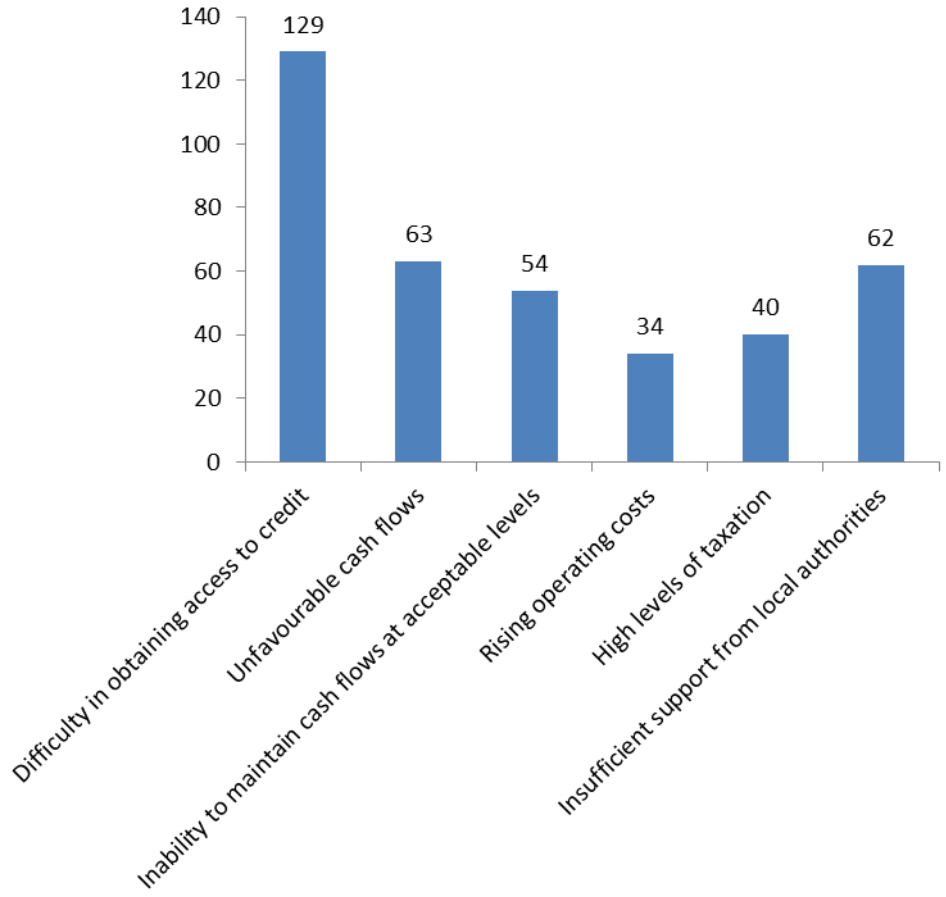


Figure 4.4: Principal factors which the respondents perceived to militate against the viability of their SMEs (Source: author)

4.3.4 Summary of the information which the respondents provided pertaining to their businesses

- The large majority (76.5%) of the SMEs of the respondents operated in the trading sector.
- At least 85 percent of the SMEs were still in their formative stages.
- A large majority of 89.5 percent of the SMEs of the respondents employed from two to five employees.
- Personal savings (42.7%) and loans from informal financial institutions (31.0%) accounted for the main sources of capital which the respondents used to launch their businesses.
- A significant proportion of 54 percent of the SMEs which the respondents represented held business bank accounts.
- High bank charges were cited by the majority (48.3%) of the respondents whose SMEs did not hold bank accounts for electing not to do so.

- Cash and Mobile Money services were the two principal means which the respondents used to make and receive payments.

- Significantly more respondents cited difficulty in obtaining access to credit as a factor which militated against the viability of their SMEs than any other.

4.3.5 Section C: Mobile Money services and the influence which they exert upon the financial performance of SMEs

The third section of the questionnaire contained questions concerning the use which the respondents made of Mobile Money services and the influence which they perceived that doing so exerted upon the financial performance of their businesses. It comprised open-ended and closed-ended questions and questions which required respondents to record their responses in accordance with a 5-point Likert scale. The questions had been framed in order to establish whether respondents had opened Mobile Money accounts, the factors and considerations which had motivated their decisions to do so, the service providers which they patronised, the numbers of years for which they had been using the services to make financial transactions, the Mobile Money services which they used most, the frequency with which they used the services, the turnover of their businesses before and after they started to use the services, the ease with which they had been able to become registered users, the safety with which they were able to use the services, the reliability of the Mobile Money service providers, the influence which making use of the services had on the turnover and operating costs of their businesses, and the cost effectiveness of Mobile Money services by comparison with those which traditional banks provide.

4.3.5.1 The proportion of respondents who had opened Mobile Money accounts

Although all of the respondents made use of Mobile Money services in their business transactions, they were not all registered users. The findings which are summarised in Table 4.10 demonstrate that of the 285 respondents to the question in the questionnaire, 212 (74.4%) held Mobile Money Business accounts. As it can be seen in Table 4.11, of the remaining seventy-three (25.6%), eighteen used the accounts of the Mobile Money agents or operators, six those of employees, and forty-nine those of the owners of the SMEs in which they were employed to make transactions. The relatively high proportion of SMEs which used the Mobile Money accounts of the owners could be explained by the customary practices of businesses which are owned by sole traders, which often entail business bank accounts being the personal accounts of their owners. Owners who are sole traders often do not make distinctions between their personal assets and those of their businesses. In some instances, owners use the assets or resources of their businesses for personal expenditures,

which reflects poor managerial practice and precludes making accurate evaluations of the financial performance of the businesses.

Table 4.10: Respondents who held Mobile Money accounts

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Yes	212	74.4	74.4	74.4
	No	73	25.6	25.6	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

Table 4.11: Holders of the Mobile Money accounts used by SMEs which did not hold their own accounts

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Mobile Money agent	18	6.3	24.7	24.7
	Employee(s)	6	2.1	8.2	32.9
	Owner	49	17.2	67.1	100.0
	Total	73	25.6	100.0	
Missing	System	212	74.4		
Total		285	100.0		

Source: survey data (2018-2019)

4.3.5.2 Motivations of the respondents for electing to make use of Mobile Money services

As it can be seen in Table 4.12, the respondents were permitted to cite more than one motivation for electing to make use of Mobile Money technology. Of the 471 responses which the question generated, in descending order, 127 (27%) cited cost effectiveness, 124 (23.6%) accessibility, 112 (23.8%) safety, forty-nine (10.4%) convenience, forty-three (9.1%) the low cost of Mobile Money services by comparison with those of banks in the formal sector, eight (1.7%) the ease of registration, and a further eight (1.7%) competitive charges. These findings accord with those of Mbogo (2010) and Ngaruiya *et al*. (2014), who found in their respective investigations that these considerations were prominent in both the positive perceptions and the behavioural intentions of the participants in their studies with respect to making use of Mobile Money services to improve the financial performance of their businesses. These motivations also emphasise the difficulties which the owners and managing directors of the SMEs encounter in their operations. They are obliged to monitor their operating costs to ensure that their businesses are profitable. As it is demonstrated in Figure 4.4, their high dependence upon available cash is manifested in an acute need to manage their cash flows effectively and Mobile Money is widely perceived as an invaluable aid to managing cash flow.

Table 4.12: Motivations of the respondents for electing to make use of Mobile Money services

		Responses		Percentage of Cases
		N	Percentage	
Motivations in adopting MM[a]	Convenience	49	10.4%	17.2%
	Cost effectiveness	127	27.0%	44.6%
	Safety	112	23.8%	39.3%
	Less expensive than bank accounts	43	9.1%	15.1%
	Ease of registration	8	1.7%	2.8%
	Competitive charges	8	1.7%	2.8%
	Accessibility	124	26.3%	43.5%
Total		471	100.0%	165.3%

a. The respondents were permitted to give more than one response.

Source: survey data (2018-2019)

4.3.5.3 Mobile Money service providers patronised by the respondents

The findings which are summarised in Table 4.13 reveal that some respondents used more than one Mobile Money account to make transactions. The percentages for those who held accounts with MTN Cameroon and those who patronised Orange Cameroon were very similar at 46.3 and 47.3 percent respectively, while 5.8 percent had accounts with Express Union, and only two respondents (0.6%) had opened accounts with Yup. The two multinational corporations which control the Mobile Money market in Cameroon accounted for more than 93 percent of the accounts of the respondents. Figure 4.5 depicts the respective market shares of the Mobile Money service providers among the respondents to the survey questionnaire. It needs to be emphasised that the market shares are expressed in terms of the numbers of accounts which were held by the respondents, rather than of the value of the transactions which they made.

Table 4.13: Mobile Money service providers patronised by the respondents

		Responses		Percentage of cases
		N	Percentage	
MM service providers[a]	MTN Cameroon	152	46.3%	53.3%
	Orange Cameroon	155	47.3%	54.4%
	Express Union	19	5.8%	6.7%
	Other providers	2	0.6%	0.7%
Total		328	100.0%	115.1%

a. The respondents were permitted to give more than one response.

Source: survey data (2018-2019)

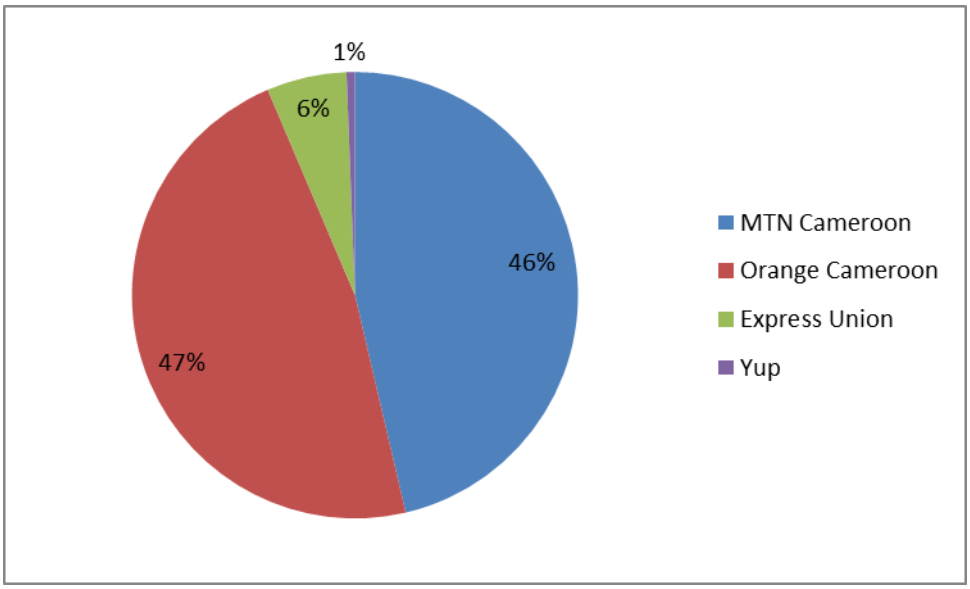


Figure 4.5: Market shares commanded by individual Mobile Money service providers (Source: author)

4.3.5.4 Periods for which the respondents had been using Mobile Money services

As it can be seen in Table 4.14, 52.3 percent of the SMEs had been using Mobile Money service for 3 to 4 years, 41.1 percent from 1 to 2 years, a small minority of 3.5 percent had been using the services for from 5 to 6 years, and a similar small minority of 3.2 percent had been using them for less than a year. The overall finding was that as more than 96 percent of the respondents had been using the services for from 1 to 4 years, it had taken most of the respondents at least 3 years to elect to use the services after the official launching of Mobile Money in Cameroon in 2012, 7 years previously. Possible explanations for the relatively slow uptake could be provided by inadequate advertising and a general reluctance among some segments of the populations of developing countries to adopt new practices.

Table 4.14: Periods for which the respondents had been using Mobile Money services

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Less than 1 year	9	3.2	3.2	3.2
	1 to 2 years	117	41.1	41.1	44.2
	3 to 4 years	149	52.3	52.3	96.5
	5 to 6 years	10	3.5	3.5	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

4.3.5.5 Types of Mobile Money services most frequently used by the respondents

As it is recorded in Table 4.15, this question generated 576 responses, because the respondents were permitted to give more than one response. The 36.1 percent of the responses which cited receipts from customers as constituting the most frequently used services accounted for 208 of the 576 responses, while the 33.2 percent which cited making payments to suppliers accounted for 191. A further ninety-four responses (16.3%) cited buying airtime, forty-eight (8.3%) cited digital money storage, and thirty-five (6.1%) cited paying utility bills. Receiving money from customers, making payments to suppliers, and buying airtime together accounted for more than 85 percent of the responses. Similar results were reached on payments and receipts functions by Nyaga and Okonga (2014) and Ngaruiya *et al*. (2014) obtained similar findings concerning the use of Mobile Money services by SMEs to make and receive payments from the studies which they conducted in Naivasha and Nakuru in Kenya respectively. The predominant use which the respondents in this study made of Mobile Money services to make and receive payments further underscores their acknowledgement of the need to manage their cash flows, a point which originally emerged from the discussion pertaining to Figure 4.4.

Table 4.15: Types of Mobile Money services most frequently used by the respondents

		Responses		Percentage
		N	Percentage	of cases
Most frequently used Mobile Money services[a]	Payments to suppliers	191	33.2%	67.0%
	Payments from customers	208	36.1%	73.0%
	Buying airtime	94	16.3%	33.0%
	Digital money storage	48	8.3%	16.8%
	Paying utility bills	35	6.1%	12.3%
Total		576	100.0%	202.1%

a. The respondents were permitted to give more than one response.

Source: survey data (2018-2019)

4.3.5.6 Numbers of Mobile Money payments and receipts per day

The data which is depicted in Figure 4.6 and summarised in Tables 4.16, 4.17, and 4.18 provides information pertaining to the numbers of payments which the respondents made by means of Mobile Money to suppliers each day and the numbers of payments which they received from customers. Although it is evident from the figures in Table 4.18 that the average numbers of receipts each day exceeded those of payments, it can be seen in Tables 4.16 and 4.17 that respondents who made from one to ten Mobile Money transactions each day made more payments to suppliers than they received from customers. In the case of respondents whose businesses made five or less Mobile Money transactions each day, 46.7 percent made the transactions to pay suppliers, as opposed to 32.6 percent for receipts. By contrast, more receipts than payments were recorded by the respondents whose SMEs made eleven or more transactions each day. The contrast was even more marked for the

respondents whose SMEs made more than fifteen Mobile Money transactions each day, with 7.7 percent doing to receive payments from customers and only 0.4 percent doing so to pay suppliers.

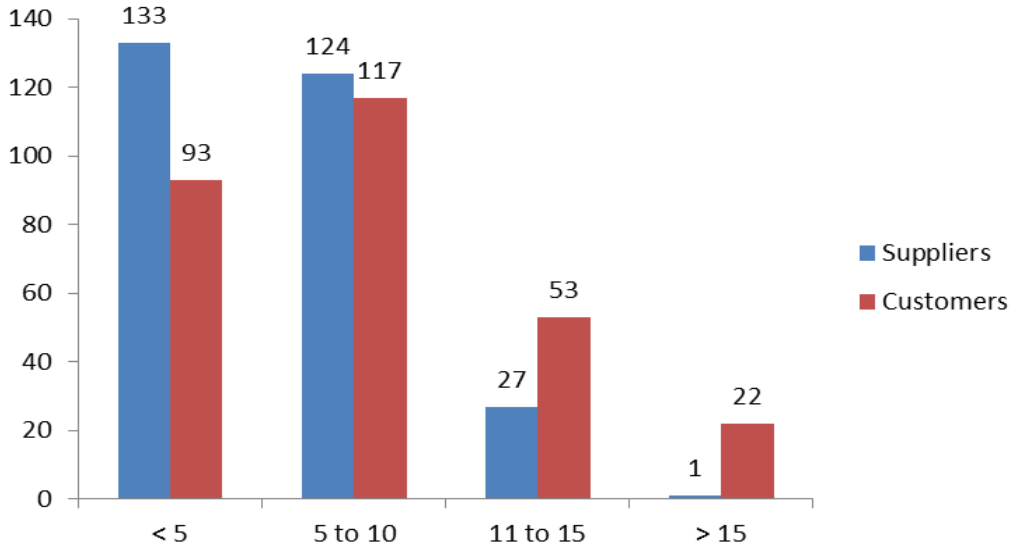


Figure 4.6: Numbers of payments to suppliers and receipts from customers per day (Source: author)

Table 4.16: Numbers of payments made to suppliers per day

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Less than 5	133	46.7	46.7	46.7
	5 to 10	124	43.5	43.5	90.2
	11 to 15	27	9.5	9.5	99.6
	More than 15	1	.4	.4	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

Table 4.17: Numbers of payments received from customers per day

		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Less than 5	93	32.6	32.6	32.6
	5 to 10	117	41.1	41.1	73.7
	11 to 15	53	18.6	18.6	92.3
	More than 15	22	7.7	7.7	100.0
	Total	285	100.0	100.0	

Source: survey data (2018-2019)

Table 4.18: Averages for payments and receipts per day

		Numbers of payments made per day by means of Mobile Money	Numbers of receipts per day by means of Mobile Money
N	Valid	285	285
	Missing	0	0
Mean		1.64	2.01

Source: survey data (2018-2019)

4.3.5.7 Monthly levels of turnover in FCFA before and after the adoption of Mobile Money services

Figure 4.7 depicts the levels of monthly turnover which the respondents claimed on behalf of their SMEs before and after they had elected to make use of Mobile Money services. The ranges into which their respective levels of turnover fell are summarised in Table 4.19. It can be seen in Figure 4.7 that although before they elected to make use of Mobile Money services, sixty-nine or 24.2 percent of the SMEs had achieved monthly turnovers of from FCFA 200,001 to FCFA 500,000, the figures rose to seventy-five or 26.3 percent after they had done so. In addition, the numbers of SMEs which achieved monthly turnovers of more than FCFA 1 million rose from forty, before the adoption of Mobile Money, to sixty after having done so, which represents an increase of 50 percent. The findings of a similar study which was conducted by Ngaruiya *et al*. (2014) in Kenya were essentially similar to those of this study in these respects.

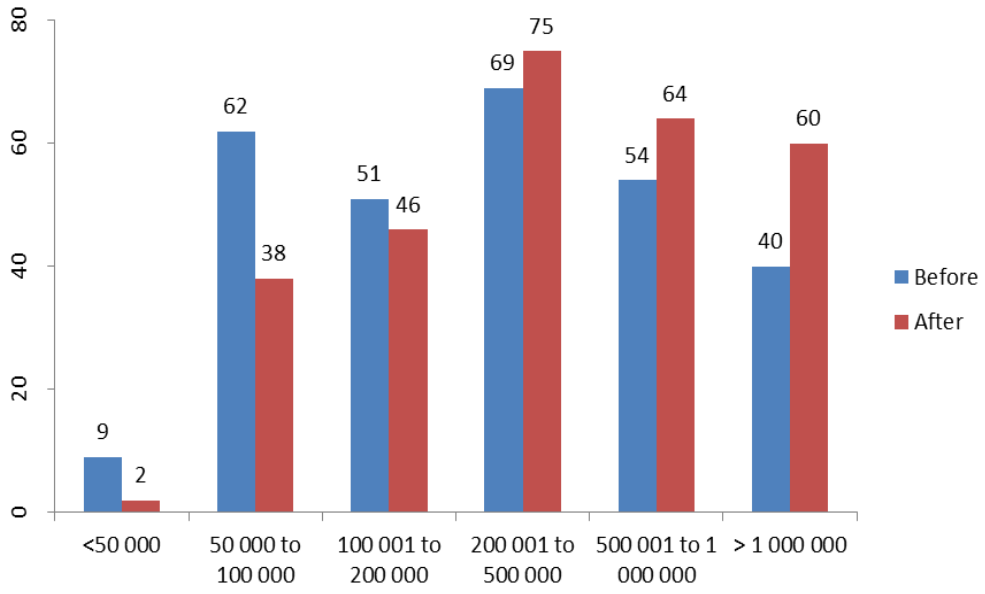


Figure 4.7: Monthly turnover figures in FCFA before and after the adoption of Mobile Money services (Source: author)

Table 4.19: Average levels of monthly turnover before and after the adoption of Mobile Money services

		Monthly turnover in FCFA before the adoption of Mobile Money services	Monthly turnover in FCFA after the adoption of Mobile Money services
N	Valid	285	285
	Missing	0	0
Mean		3.76	4.20

Source: survey data (2018-2019)

4.3.5.8 Perceptions of the respondents of Mobile Money and Mobile Money services according to a 5-point Likert scale

Figure 4.8 depicts the distributions of the responses of the respondents according to a 5-point Likert scale concerning their perceptions of Mobile Money and Mobile Money services. A significant majority of 191 of 285 respondents either agreed or strongly agreed that it was simple and affordable to register a Mobile Money account. A similar majority of 186 either agreed or strongly agreed that Mobile Money transactions were safe, while 154 either agreed or strongly agreed that Mobile Money service providers were reliable. By contrast, a majority of 130 either disagreed or strongly disagreed that using Mobile Money services to make and receive payments had significantly influenced the turnover of their businesses, while a large group of ninety-two respondents chose to record neutral responses, by comparison with a total of sixty-three who either agreed or strongly agreed with the statement.

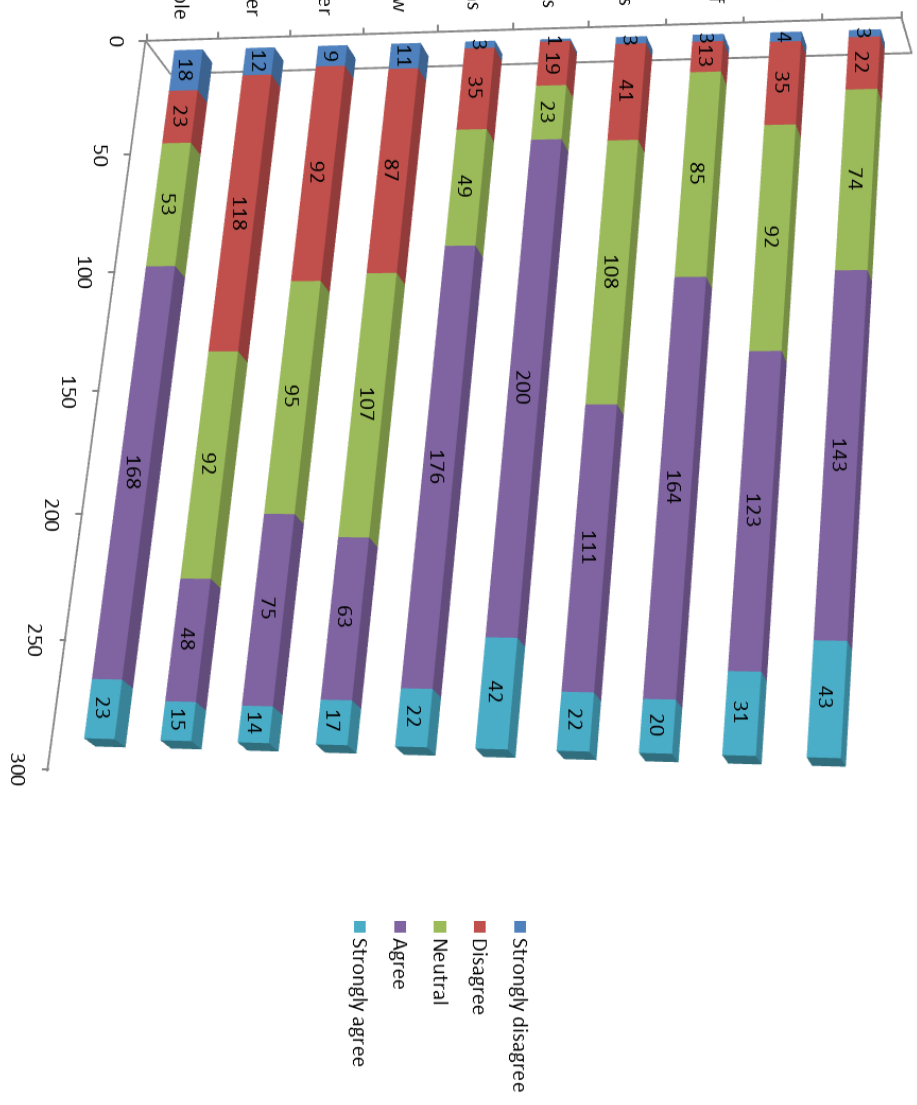


Figure 4.8: Perceptions of the respondents of Mobile Money and Mobile Money services (Source: author)

The perceptions of the respondents were significantly skewed towards either negative or neutral responses to the statement that their sales had increased after they had begun to make and receive payments by means of Mobile Money, as they accounted for 196 of 285 responses. The spread of responses to the statement that the adoption of Mobile Money services to make and receive payments had improved their cash flow was similar, although an even larger group of 107 recorded neutral responses. There was a significant consensus of 242 respondents who either agreed or strongly agreed that Mobile Money payments and receipts reduced transport costs, while 198 either agreed or strongly agreed that they reduced the cost of transactions. A further 133 either agreed or strongly agreed that they reduced opportunity costs, while 184 either agreed or strongly agreed that they were more cost effective than the services of banks.

4.3.5.9 Evaluation of the perceived influence of Mobile Money payments and receipts on the financial performance of the SMEs of the respondents

Reliability analysis

The researcher identified nine variables from the data to form a reliable scale against which to assess the influence of Mobile Money and Mobile Money services upon the financial performance of the SMEs whose representatives responded to the survey questionnaire. The researcher assessed their reliability by using the SPSS software to determine a Cronbach alpha score for each before commencing with the analysis to test the hypotheses upon which the study had been based. The nine variables, along with their respective Cronbach alpha scores, are summarised in Appendix J. As Goforth (2015) explains, Cronbach's alpha (α) scores need to be at least from 0.65 to 0.8 if they are to denote significance. The alpha coefficient which can be seen in Table 4.20 is 0.659, which suggests that the items exhibit a reasonable degree of internal consistency with respect to their reliability.

Table 4.20: Reliability analysis

Cronbach's alpha	Cronbach's alpha coefficient for standardised items	No. of items
.659	.646	9

Source: survey data (2018-2019)

Evaluation of perceptions of the influence of MM and MMS by means of descriptive statistics

The researcher sought to quantify the perceptions of the respondents in accordance with the variables which he had identified and to use the mean and standard deviation (SD) scores in order to make inferences. As it can be seen in Table 4.21, the respondents agreed that their

monthly turnovers had increased after their businesses had begun to make use of Mobile Money services. The findings revealed that the average turnovers of individual SMEs had ranged from FCFA 200,001 to 500, 000 (Mean = 3.76, SD = 1.426) before the adoption of Mobile Money services and subsequently increased to from FCFA 500,001 and 1 million (Mean = 4.20, SD = 1.339). The researcher considered it to be significant that the SMEs of the respondents had been making use of Mobile Money services to make and receive payments for an average of from 3 to 4 years (Mean = 2.56, SD = 0.617). The finding suggested relative inexperience, which, in turn, could suggest that many of the owners or managing directors may have been unable to optimise the benefits which using Mobile Money services to make and receive payments could provide. It was also evident that a significant number of the respondents were unsure whether using Mobile Money services exerted any influence at all upon their turnover (Mean = 2.78, SD = 0.956). By contrast, there appeared to be a fairly general consensus that Mobile Money services were more cost effective than those of traditional banks (Mean = 3.65, SD = 0.724). The findings confirmed that the respondents made an average of ten Mobile Money transactions per day (Mean = 1.64, SD = 0.666). In addition, the findings revealed that the SMEs of the respondents were relatively young and in their formative stages, as they had been operating for an average of from 5 to 6 years (Mean = 3.04, SD = 1.068).

Table 4.21: Descriptive statistics for perceptions of the influence of MM and MMS

	Mean	SD	N
Monthly turnover in FCFA after the adoption of MMS	4.20	1.339	285
Monthly turnover in FCFA before the adoption of MMS	3.76	1.426	285
Number of years since the adoption of MMS	2.56	.617	285
MMS influence turnover	2.78	.956	285
MMS more cost effective than services of traditional banking	3.65	.724	285
Number of payments per day using Mobile Money?	1.64	.666	285
Years of operation	3.04	1.068	285
Does your business hold a bank account?	1.46	.499	285

Source: survey data (2018-2019)

Owing to the large number of respondents who fell into the group which had been using Mobile Money services to make and receive payments for from 1 to 2 years (please see Table 4.14), the researcher elected to split the variable ‘Number of years since the adoption of MMS’ into two large groups: the respondents whose SMEs had been using Mobile Money services for 2 years or less (<= 2), who numbered 126 (44.2%), and those who had been using the services for 3 years or more (>= 3), who accounted for 159 (55.8%) of the

respondents. The trends which emerged from the formation of the two new groups are summarised in Table 4.22. For the group which had been making use of Mobile Money services for 2 years or less, the average turnover after the adoption of the system (Mean = 3.94, SD = 1.364) was significantly greater than it had been before the adoption (Mean = 3.40, SD = 1.465). The same trend was observed for the group which had been using the system for 3 years or more, with after and before scores being (Mean = 4.40, SD = 1.288) and (Mean = 4.05, SD = 1.330) respectively. The average increase in turnover was greater for SMEs which had been using Mobile Money services for 2 years or less was greater (3.94 – 3.40 = 0.54) than it was for SMEs which had been doing so for 3 years or more (4.40 – 4.05 = 0.35).

Consequently, it could be concluded that the turnover of SMEs which had been using Mobile Money to make and receive payments for 2 years or less, a group which comprised 126 respondents or 44.2 percent of the research sample, had increased by a significantly higher margin than those which had been doing so for 3 years or more (Difference of Mean before and after adoption $_{2 \text{ or less}}$ 0.54 > Difference of Mean before and after adoption $_{3 \text{ or more}}$ 0.35). Conversely, the average number of payments per day which were made by the SMEs which had been using the system for 3 years or more was significantly higher than that of the SMEs which had been doing so for 2 years or less (Mean $_{3 \text{ or more}}$ 1.75 > Mean $_{2 \text{ or less}}$ 1.49). This finding suggests that as the respondents became increasingly familiar with the system through experience, they would be likely to increase the amount of use which they made of it. Although both groups of respondents agreed that Mobile Money services were more cost effective than those of traditional banks, the respondents whose SMEs had been using them for 3 years or more agreed with the statement to a lesser extent than those whose SMEs had been using them for 2 years or less (N = 126, Mean = 3.66, SD = 0.792; N = 159, Mean = 3.64, SD = 0.668). In addition, there was no significant difference between the perceptions of either group (Mean = 2.77, SD = 0.914; Mean = 2.78, SD = 0.991) concerning the perceptions of the two groups of respondents of whether using Mobile Money to make and receive payments influenced turnover and significant numbers of both groups recorded neutral responses.

Table 4.22: Trends concerning the perceptions of the two groups of Mobile Money and Mobile Money services (extract)

			N	Mean	Standard deviation	Std. error	95% confidence interval for mean		Minimum	Maximum	Between-component variance
							Lower bound	Upper bound			
Mobile Money services influence turnover	2 years or less		126	2.77	.914	.081	2.61	2.93	1	5	
	3 years or more		159	2.78	.991	.079	2.62	2.94	1	5	
	Total		285	2.78	.956	.057	2.66	2.89	1	5	
	Model	Fixed effects			.958	.057	2.66	2.89			
		Random effects				.057[a]	2.05[a]	3.50[a]			-.006
MMS more cost effective than services of traditional banks	2 years or less		126	3.66	.792	.071	3.52	3.80	1	5	
	3 years or more		159	3.64	.668	.053	3.54	3.75	1	5	
	Total		285	3.65	.724	.043	3.56	3.73	1	5	
	Model	Fixed effects			.725	.043	3.56	3.73			
		Random effects				.043[a]	3.10[a]	4.20[a]			-.004
Monthly turnover in FCFA before adoption of MMS	2 years or less		126	3.40	1.465	.130	3.14	3.66	1	6	
	3 years or more		159	4.05	1.330	.105	3.84	4.26	1	6	
	Total		285	3.76	1.426	.084	3.60	3.93	1	6	
	Model	Fixed effects			1.391	.082	3.60	3.92			
		Random effects				.329	-.41	7.94			.200
Monthly turnover in FCFA after adoption of MMS	2 years or less		126	3.94	1.364	.122	3.70	4.18	1	6	
	3 years or more		159	4.40	1.288	.102	4.19	4.60	1	6	
	Total		285	4.20	1.339	.079	4.04	4.35	1	6	
	Model	Fixed effects			1.322	.078	4.04	4.35			
		Random effects				.227	1.31	7.08			.090
Number of payments per day using Mobile Money?	2 years or less		126	1.49	.562	.050	1.39	1.59	1	4	
	3 years or more		159	1.75	.720	.057	1.64	1.86	1	3	
	Total		285	1.64	.666	.039	1.56	1.71	1	4	
	Model	Fixed effects			.655	.039	1.56	1.71			
		Random effects				.129	.00	3.27			.030

a. Please note: As the between-component variance was negative, it was replaced by 0.0 to compute this random effects measure.

Source: survey data (2018-2019)

After comparing the means and standard deviations of the two groups with respect to the variables which had been measured, the researcher performed an analysis of variance (ANOVA) on the differences.

Evaluation of perceptions of the influence of MM and MMS by means of inferential statistics

ANOVA Test

An analysis of variance (ANOVA) is used to test three or more groups for mean differences in relation to continuous variables. It is used to assess whether or not the differences which have been found among groups are statistically significant ($P - value < 5\%$). As it can be seen in Table 4.23, the differences with respect to the following variables were found to be significant: monthly turnover before the adoption of Mobile Money services (p = .000), monthly turnover after the adoption of Mobile Money services (p = .004), the number of payments per day using Mobile Money (p = .001), the numbers of years for which the SMEs of the respondents had been operating (p = .000), and levels of educational attainment (p = .040).

Table 4.23: ANOVA test

		Sum of squares	df	Mean square	F	Sig.
Mobile Money services influence turnover	Between groups	.007	1	.007	.008	.930
	Within groups	259.621	283	.917		
	Total	259.628	284			
MMS more cost effective than services of traditional banks	Between groups	.021	1	.021	.040	.842
	Within groups	148.891	283	.526		
	Total	148.912	284			
Monthly turnover in FCFA before adoption of MMS	Between groups	30.019	1	30.019	15.510	.000
	Within groups	547.756	283	1.936		
	Total	577.775	284			
Monthly turnover in FCFA after adoption of MMS	Between groups	14.348	1	14.348	8.209	.004
	Within groups	494.649	283	1.748		
	Total	508.996	284			
Number of payments per day using Mobile Money?	Between groups	4.620	1	4.620	10.767	.001
	Within groups	121.429	283	.429		
	Total	126.049	284			
Does your business hold a bank account?	Between groups	.177	1	.177	.710	.400
	Within groups	70.525	283	.249		
	Total	70.702	284			

Years of operation	Between groups	17.848	1	17.848	16.518	.000
	Within groups	305.801	283	1.081		
	Total	323.649	284			
Numbers of employees	Between groups	.009	1	.009	.051	.822
	Within groups	50.924	283	.180		
	Total	50.933	284			
Levels of educational attainment	Between groups	2.123	1	2.123	4.279	.040
	Within groups	138.439	279	.496		
	Total	140.562	280			
Business sector	Between groups	.064	1	.064	.120	.729
	Within groups	149.922	283	.530		
	Total	149.986	284			

Source: survey data (2018-2019)

It needs to be emphasised that an ANOVA test explains the variances which result from differences within individual groups, as each sample is considered in isolation. Although the differences are not caused by independent variables, if the same mean differences are tested against a dependent variable, as they are in the regression analysis which was performed subsequently, their significance will differ from those which are recorded in Table 4.23. In accordance with the aim of the study, the researcher sought first to determine the correlations between the continuous variables and then to evaluate the contributions of the use of Mobile Money services, as the independent variable, to the financial performance, as the dependent variable, of the SMEs of the respondents.

Correlation analysis

The sign and the value of Pearson's correlation coefficient denote whether a correlation between variables is positive or negative and how strong it is. The researcher sought to establish the correlations which existed between each of the variables and the financial performance of the SMEs of the respondents with respect to turnover. For the purposes of performing the analysis, the variables have been recoded as follows:

- YE = Years for which the SMEs of the respondents had been in existence
- BA = Does your business hold a bank account?
- AY = Years since the adoption of MMS
- MMSCETB = MMS are more cost effective than the services of traditional banks
- MMSIT = Using Mobile Money services influences turnover
- TBA = Monthly turnover before the adoption of MMS
- TAA = Monthly turnover after the adoption of MMS
- NOPDS = Number of Mobile Money payments per day to suppliers
- EDU = Levels of educational attainment
- BS = Business sectors in which the SMEs of the respondents operated

As it can be seen in Table 4.24, the values of the correlation coefficient (r) for correlations between the variables which were regressed ranged from 0.149 to 0.834. The values reveal that there were correlations between all variables and turnover, with the exceptions of BA, EDU, and BS. It can also be seen in the table that there was a strong and significant correlation at the 1 percent level between monthly turnover before the adoption of Mobile Money services and afterwards. Although there were correlations with all of the other significant variables, they were fairly weak. It was significant to note that the strong positive correlation between the variables TBA and MMSETB which was reflected in the value of 0.191 at the 1 percent level dropped sharply after the adoption of Mobile Money services. This finding suggests that although many of the respondents may have believed, before they started to use Mobile Money to make and receive payments, that the availability of a more cost effective system would increase their turnover, their perceptions changed after they started to use the system. It is also significant that the strength of correlations increased after the adoption of Mobile Money services for the variables YE, MMSIT, and NOPDS. It is possible to infer from them that as the turnover of the SMEs increased over time, their increasing numbers of payments to suppliers per day also increased their turnover, thereby contributing to perceptions of Mobile Money transactions increasing turnover. This scenario also emerged from the findings of earlier studies which were conducted by researchers such as Higgins *et al*. (2012), Nyaga and Okonga (2014), and Ngaruiya *et al*. (2014). By contrast, although there is evidence to suggest that the periods for which SMEs have been making extensive use of Mobile Money transactions are reflected in increased turnover, the declining influence on turnover over time for longer periods of using the system suggests that a ceiling is likely to be reached, after which the elapsing of more years since the adoption of Mobile Money ceases to have any further appreciable influence on turnover.

Table 4.24: Correlation analysis

		YE	BA	AY	MMS CETB	MMSIT	TBA	TAA	NOPDS	EDU	BS
YE	Pearson correlation	1	.023	.237**	.048	-.130*	.149*	.173**	-.012	-.159**	-.133*
BA	Pearson correlation	.023	1	-.080	.055	-.095	-.039	-.108	-.154**	-.052	.066
AY	Pearson correlation	.237**	-.080	1	.001	-.012	.189**	.143*	.243**	-.141*	-.011
MMSCETB	Pearson correlation	.048	.055	.001	1	.059	.191**	.064	-.135*	-.006	.047
MMSIT	Pearson correlation	-.130*	-.095	-.012	.059	1	.232**	.285**	.053	.083	.075

TBA	Pearson correlation	.149*	-.039	.189**	.191**	.232**	1	.834**	.179**	.100	.048
TAA	Pearson correlation	.173**	-.108	.143*	.064	.285**	.834**	1	.266**	.113	.040
NOPDS	Pearson correlation	-.012	-.154**	.243**	-.135*	.053	.179**	.266**	1	-.005	.061
EDU	Pearson correlation	-.159**	-.052	-.141*	-.006	.083	.100	.113	-.005	1	.165**
BS	Pearson correlation	-.133*	.066	-.011	.047	.075	.048	.040	.061	.165**	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: survey data (2018-2019)

Once the correlations had been determined between the independent and dependent variables, the researcher elected to investigate the proportion of variance in the dependent variable accounted for by the independent variables.

Regression analysis

The researcher performed a regression analysis to determine how the independent variables YE, AY, MMSCETB, MMSIT, TBA, and NOPDS could be used to predict the total variance in the turnover of the SMEs in Douala after they started to use Mobile Money to make and receive payments. From the findings, as they are summarised in Table 4.25 and on the basis of the F-statistic **($P-value<5\%$)**, the alternative hypothesis, namely, the use of Mobile Money services influences the financial performance of the SMEs in Douala, was accepted, owing to the joint significance of the variables at the 5 percent level of significance. This conclusion indicated that variations in years of existence, years for which SMEs made use of Mobile Money services, the perceptions that Mobile Money services are more cost effective than those of traditional banks and using Mobile Money services influences turnover, monthly turnover before the adoption of Mobile Money services, and numbers of Mobile Money payments to suppliers per day all influenced the turnover of SMEs in Douala after the adoption of Mobile Money services.

The R-square value of 0.733 in the model summary in Table 4.25 suggests that taken together, the independent variables explained of the order of 73 percent of the total variance in the turnover of SMEs in Douala after the adoption of Mobile Money services. From this finding it would appear that the independent variables which have been cited collectively constitute a credible predictor of financial performance for SMEs in Douala. As the other variables which have not been considered in this study should enable almost 27 percent of the financial performance of SMEs in Douala, they could be investigated in future research.

Table 4.25: Model summary of the regression analysis

Model	R	R-square	Adjusted R-square	Std. error of the estimate	Change statistics					Durbin-Watson
					R-square change	F-change	df1	df2	Sig. F-change	
1	.856[a]	.733	.727	.699	.733	127.113	6	278	.000	1.995

a. Predictors (Constant): Number of payments per day using Mobile Money (NOPDS), Years in existence (YE), MMS influence (MMSIT), MMS more cost effective than services of traditional banks (MMSCETB), Years since adoption of MMS (AY), monthly turnover in FCFA before adoption of MMS (TBA)

b. Dependent variable: Monthly turnover in FCFA after adoption of MMS (TAA)

Source: survey data (2018-2019)

From the regression findings which appear in Table 4.26 and after substitution of coefficients ($\beta \ldots$) and variables ($Y \ and \ X \ldots$) onto the generic regression equation ($Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + \beta 6X6$), the researcher obtained the following function:

$$Y = 1.098 + 0.108\,X1 - 0.123\,X2 - 0.154\,X3 + 0.152\,X4 + 0.752\,X5 + 0.243\,X6$$

where Y is the dependent variable (turnover after adoption of Mobile Money), X1 the independent variable 1 (years of existence), X2 the independent variable 2 (years since adoption of MMS), X3 the independent variable 3 (Mobile Money services more cost effective than services of traditional banks), X4 the independent variable 4 (MMS influence turnover), X5 the independent variable 5 (monthly turnover before adoption of Mobile Money), and X6 the independent variable 6 (number of payments to suppliers per day using Mobile Money).

Table 4.26: Regression coefficients table

Model		Unstandardised coefficients		Standardised coefficients	t	Sig.	Correlations		
		B	Std. error	Beta			Zero-order	Partial	Part
1	(Constant)	1.098	.320		3.427	.001*			
	Years of existence	.108	.041	.086	2.638	.009*	.173	.156	.082
	Years since adoption of MMS	-.123	.072	-.057	-1.702	.090	.143	-.102	-.053
	MMS more cost effective than services of traditional banks	-.154	.059	-.083	-2.598	.010*	.064	-.154	-.081
	MMS influence turnover	.152	.045	.108	3.345	.001*	.285	.197	.104

	Monthly turnover in FCFA before adoption of MMS	.752	.032	.801	23.639	.000*	.834	.817	.733
	Number of Payments per day using Mobile Money	.243	.066	.121	3.676	.000*	.266	.215	.114
a. Dependent variable: monthly turnover in FCFA after the adoption of MMS									

Source: survey data (2018-2019)

The findings which are summarised in Table 4.26 confirm those which appear in Table 4.24, in that all of the independent variables apart from MMSCETB correlate positively with the turnover after the adoption of Mobile Money. All of the independent variables, apart from years since adoption, are significant at the 5 percent level. It needs to be emphasised that the findings suggest that a unit increase in the monthly turnover of SMEs in Douala before the adoption of Mobile Money to make and receive payments should result in a 75 percent increase in their financial performance after the adoption of the system, ceteris paribus. They also reveal that unit increases in the numbers of payments to suppliers per day and the perception that Mobile Money services are more cost effective than those of traditional banks result in an increased coefficient value of 0.243 and a decreased one of – 0.154 respectively for the independent variables if the coefficients for other variables are kept constant.

4.3.6 Summary of the evaluation of the perceived influence of Mobile Money payments and receipts on the financial performance of the SMEs of the respondents

- A significant majority of 74.4 percent of the SMEs of the respondents had Mobile Money business accounts and of the 25.6 percent which did not, almost 67 percent used the personal account of their owners to make Mobile Money transactions.

- Cost effectiveness (27%), accessibility (26.3%), and safety (23.8%) emerged as the principal motivations which had prompted the respondents to elect to use Mobile Money services to make financial transactions.

- Orange (47.3%) and MTN (46.3%) were the Mobile Money service providers which were patronised most by the respondents.

- Most of the SMEs of the respondents had been using Mobile Money services for less than 5 years.

- The Mobile Money services which the respondents used most were those which enabled them to receive money (36.1%), send money (33.2%), and buy airtime (16.3%).

- The respondents made more Mobile Money transactions to receive payments each day, with averages ranging from eleven to fifteen transactions, than they did to make payments to suppliers, for which the averages ranged from five to ten transactions.

- The monthly turnover of the SMEs increased significantly after they began to use Mobile Money to make and receive payments.

- A significant majority of the respondents perceived Mobile Money transactions to be safe and more cost effective than the services of traditional banks.

- There was general consensus among the respondents that using Mobile Money services reduced operating costs by reducing expenses which were incurred by travelling to banks and the cost of transactions.

- The majority of the respondents agreed that the procedures for registering a Mobile Money service were simple and affordable and that the Mobile Money service providers were reliable.

- The financial performance of the SMEs of the respondents which had been making and receiving Mobile Money payments for 2 years or less had increased by a significantly greater margin than that of those which had been doing so for 3 years or more.

- It emerged from the findings that the variables ‘years of existence’, ‘years since adoption’, ‘Mobile Money services are more cost effective than those of traditional banks’, ‘Mobile Money services influence turnover’, ‘monthly turnover before the adoption of MMS’, ‘number of payments per day to suppliers' collectively accounted for 73 percent of the increased turnover which was predicted for the SMEs of the respondents after the adoption of Mobile Money services, on the basis of the statistical analysis of the data which was obtained from the administration of the survey questionnaire.

4.4 Presentation and analysis of the qualitative data

In this section the responses of the twelve interviewees are analysed in accordance with the themes which emerged from the data which they provided and in relation to the objectives of this investigation.

Question 1: How long has your business been operating?

It was evident from the responses of the interviewees to the first question, which are summarised in Table 4.27 that more than half of their SMEs were relatively young, having been in existence for not more than 5 years. The SMEs of interviewees B, D, and G had been operating for 2 to 3 years, those of interviewees E, H, I, and K for from 4 to 5 years, while those of interviewees A, C, F, J, and L had been operating for 8 years or more.

Table 4.27: Numbers of years for which the SMEs of the interviewees had been in existence

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum_i$
2-3		✔		✔			✔						3
4-5					✔			✔	✔		✔		4
6-7													0
≥ 8	✔		✔			✔				✔		✔	5
$\sum_i$													12

Source: survey data (2019)

Question 2: In which sector does your business operate? List your main activities.

As it can be seen in Table 4.28, the businesses of nine of the interviewees operated in the trading sector while those of the remaining three operated in the service sector. The significant majority who operated in the trading sector could be explained by factors such as the relative ease of starting trading enterprises in thriving markets, the possibility of doing so without necessarily having acquired any formal entrepreneurial skills, and the generally perceived profitability of trading enterprises.

Table 4.28: Business sectors in which the SMEs of the interviewees operated

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum_i$
Trading	✔	✔	✔	✔	✔	✔	✔	✔			✔		9
Service									✔	✔		✔	3
Manufacturing													0
Mixed													0
$\sum_i$													12

Source: survey data (2019)

Question 3: How did you become aware of mobile money?

The responses of the interviewees to the question of how they had become aware of the availability of Mobile Money services included by word of mouth, advertising through media such as radio, television, and SMS messaging, from customers, and through the active marketing of the services. It can be seen in Table 4.29 that eight of the twelve interviewees had become aware of Mobile Money services either through exposure to the advertising campaigns of service providers or the active marketing of the services, while small minorities of two each cited word of mouth sources and learning of the availability of the services from customers.

Table 4.29: Sources of information concerning Mobile Money services

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum i$
Word of mouth sources										✔	✔		2
Advertisements	✔						✔		✔			✔	4
Customers		✔	✔										2
Active marketing				✔	✔	✔		✔					4
$\sum i$													12

Source: survey data (2019)

Question 4: For approximately how many years have you been using Mobile Money services in your business?

From the responses which are summarised in Table 4.30, nine of the twelve interviewees had been using Mobile Money services for from 1 to 4 years. The finding suggests that relative inexperience could have precluded many from optimising the benefits which can be derived from the services.

Table 4.30: Numbers of years for which the interviewees had been using Mobile Money services

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum i$
<1													0
1-2				✔			✔			✔			3
3-4		✔	✔		✔			✔	✔		✔		6
5-6						✔							1
≥ 7	✔											✔	2
$\sum i$													12

Source: survey data (2019)

Question 5: What motivated your decision to use Mobile Money services in your business?

One of the objectives of this study was to determine the perceived benefits which motivated the owners and managing directors of SMEs in Douala to elect to use Mobile Money to make and receive payments. Question 19 of the survey questionnaire was framed in order to enable the researcher to obtain an understanding of the perceptions which had motivated the respondents to do so. Question 5 of the interview guide permitted the researcher to corroborate the findings which the question in the questionnaire generated and to obtain more detailed responses from the interviewees.

The researcher obtained twenty responses to the question from the twelve interviewees, as some cited more than one benefit from electing to make and receive payments by means of Mobile Money. It can be seen in Table 4.31 that six of the interviewees cited convenience, five safety, three accessibility and fast transactions; two the convenience of their customers and one the low charges which Mobile Money transactions entailed by comparison with those of banks. These motivations underscore both the advantages which the participants in the study derived from making transactions by means of Mobile Money by comparison with making them through banks and also the benefits which Mobile Money confers on people who are unable to open bank accounts.

Table 4.31: Motivations for using Mobile Money to make and receive payments

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum_i$
Convenience	✔	✔				✔	✔			✔	✔		6
Safety			✔		✔	✔		✔		✔			5
Accessibility				✔		✔						✔	3
Fast transactions						✔					✔	✔	3
The convenience of customers									✔		✔		2
Lower charges than those of banks											✔		1
$\sum_i$													20

Source: survey data (2019)

Question 6: How long have you been using Mobile Money in your business to make payments to suppliers and receive payments from customers?

As this study was conducted primarily to assess the influence of using Mobile Money services to make and receive payments and receipts on the turnover of SMEs in Douala, it was necessary to repeat question 4 of the interview guide, specifically in relation to using the system for making and receiving payments. The findings which are summarised in Table

4.32 confirm that the majority of the interviewees had been making and receiving payments by means of Mobile Money for relatively short periods. Nine had been doing so for from 1 to 4 years, two for from 5 to 6 years, while only one had been making and receiving payments by means of Mobile Money for 7 years or more.

Table 4.32: Numbers of years for which the interviewees had been using Mobile Money to make and receive payments

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum i$
<1													0
1-2				✔			✔	✔		✔			4
3-4		✔	✔		✔				✔		✔		5
5-6	✔					✔							2
≥ 7											✔		1
$\sum i$													12

Source: survey data (2019)

Question 7: Why did you decide to use Mobile Money to pay suppliers and receive payments from customers?

After determining the periods for which the interviewees had been using Mobile Money specifically to make and receive payments, the researcher endeavoured to discern the reasons for which they preferred to pay their suppliers and to receive payments from customers by means of Mobile Money. The twenty-five responses which the question elicited emphasised convenience (32%), fast transactions (20%), and accessibility (16%) as the main benefits which the interviewees perceived that using the system provided, while a few also cited the safety of transactions (12%) and the convenience of their customers (12%). As interviewee C explained:

'With the Mobile Money services for payments and receipts, I can pay my suppliers and receive payments from my customers without leaving my shop. It is also safe for me and my customers because the application now makes it unnecessary for us to walk around with cash.'

In the words of interviewee K:

'As soon as you deposit the money into the Mobile Money account, the receiver can collect. I used to send money via Express Union and it was a nightmare, so when I heard of Mobile Money and how quickly it allows you to transfer money, I was so happy and I started to use it.'

Table 4.33 summarises the main benefits which the interviewees perceived that making and receiving payments by means of Mobile Money provided to them. Convenience was the most cited benefit, while the speed with which transactions could be made and the accessibility of

the services through the vast network of Mobile Money were also cited by several interviewees.

Table 4.33: Perceived benefits of making and receiving Mobile Money payments

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum_i$	%
Convenience	✔	✔	✔	✔		✔	✔	✔	✔				8	32
Safety			✔							✔		✔	3	12
Accessibility			✔	✔							✔	✔	4	16
Fast transactions					✔	✔			✔		✔	✔	5	20
The convenience of customers	✔								✔	✔			3	12
Lower charges than those of banks													0	0
Reliability			✔						✔				2	8
$\sum_i$													25	100

Source: survey data (2019)

Question 8: What are the main sources of difficulty which you encounter as the owner or managing director of a small or medium-sized enterprise (SME)?

This question was included in the interview guide in order to corroborate and expand upon the responses which the corresponding question in the survey questionnaire generated. In the words of two of the interviewees:

'Times are getting difficult. People are broke. There is no money out there. The market, especially our zone, is congested, so customers cannot even come in. It is really difficult. The government should assist us' (Interviewee G).

'The purchasing power of our customers is very low; they cannot afford most of the items we sell. They are always complaining. The taxman is also killing us. Because of the nature of our business, we are supposed to display our merchandise, but because our shops are so small and the market is so congested, we cannot really display and customers sometimes do not get to see all our products. It is also for safety reasons, because there are so many thieves walking around' (Interviewee I).

The problems which the interviewees cited were categorised into the following themes: a lack of space and congestion (SAC), a lack of safety inside of the markets (SIM), difficult economic conditions, people are broke and unable to pay for purchases (TEC), no support from the government (NGS), taxes (TAX), difficulty in obtaining access to finance (DAF), and shortages of stock (STO).The twenty-six responses which the question elicited are summarised in Table 4.34. High rates of taxation (34.6%) and difficult economic conditions (27.9%) were the most cited sources of difficulty by the interviewees. Some interviewees also cited a lack of space and the congestion which resulted from it as the reasons for which they were unable to display a great deal of their merchandise to prospective customers, apart from the high risk of theft. Three or 11.5 percent of the responses complained of a lack of support from the government, a finding which squares with the widely acknowledged contention that it is essential for the governments of countries to develop their SME sectors in order to promote economic development (Le Gicam, 2018; Muiruri, 2017).

Table 4.34: Main sources of difficulty encountered by the SMEs of the interviewees

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum i$	%
SAC	✔						✔		✔				3	11.5
SIM	✔								✔				2	7.7
TEC		✔				✔	✔	✔	✔	✔	✔		7	27.9
NGS		✔					✔		✔				3	11.5
TAX		✔	✔		✔	✔		✔	✔	✔	✔	✔	9	34.6
DAF			✔										1	3.4
STO				✔									1	3.4
$\sum i$													26	100

Source: survey data (2019)

Question 9: Has the adoption of mobile money services to make and receive payments improved your business operations?

The question of whether the adoption of Mobile Money to make and receive payments had improved the operations of the interviewees drew mixed responses, with 58 percent perceiving an improvement while the remaining 42 percent did not. In the words of interviewee A:

'There is no change, I am still making more or less around the same turnover. The only advantage I may really acknowledge is that it makes it unnecessary for me to leave my business premises.'

This response confirmed that convenience was the principal motivating perception for the adoption of Mobile Money to make and receive payments, as is summarised in Tables 4.31 and 4.33. As interviewee D explained,

'The majority of my customers use the Mobile Money services, especially those outside of Douala. The Mobile Money services have improved my operation and made it very fluid. Now, people can pay for goods from wherever they are in Cameroon and receive them.'

It needs to be emphasised that improved business operations are likely to result in increased sales turnover, a definitive indicator of both growth and financial performance. The overall finding was that the acknowledgement of seven of the twelve interviewees that the adoption of Mobile Money for payments and receipts had improved their business operations represented an acknowledgement that doing so had improved the financial performance of their businesses.

Question 10: Would you say that mobile money services are more cost effective than the services of traditional banks?

The assessment of interviewee D of the cost effectiveness of Mobile Money services by comparison with those of traditional banks was:
'Mobile Money is fast. As soon as you receive the message, you can go and cash up. With the bank, it's longer, because you first queue and then with all the checking and admin when you are lucky enough to reach the cashier. The prices with the MMS are cheaper than those charged by banks for the same service. There are many hidden fees you pay with banks.'

The assessment of interviewee I was fairly similar:
'I used Express Union for more than a year and it was a nightmare. Besides being expensive, they closed at exactly 6pm and after that time you had no access to your money and had to wait until the following day. With Mobile Money you can cash up even at 1am and they are way cheaper than Express Union.'

Although the opinions of interviewees D and I were shared by six of the twelve interviewees, the remaining four were uncertain whether Mobile Money services were more cost effective than those of traditional banks. In the words of interviewee C:
'I think they are both good and bad. I cannot really quantify which one is better. For instance, with Mobile Money there is a limit for payments and receipts per day, but there is no such limit with the bank, so for some transactions, we are obliged to transact with the bank.'

Only two of the interviewees did not perceive Mobile Money services to be more cost effective than those of traditional banks.

Question 11: Have you ever encountered any problems while using Mobile Money services? Please elaborate.

The problems which the interviewees had encountered are summarised in Table 4.35. In descending order, with respect to the numbers of interviewees who reported that they had encountered them, the problems consisted of network problems (NET), cash regularly running out at some distribution points (CER), PIN expiry dates (PED), fraudulent activities which are colloquially known as scams (SCA), and difficulty in having money which has been transferred in error to incorrect accounts refunded (DGR). Network problems were the most frequently cited problems by the interviewees in relation to using Mobile Money services, because interruptions affected their business operations adversely and could even result in the cancellation of prospective sales. Some of the interviewees expressed the hope that Mobile Money service providers would be able to resolve the problem of interruptions in the network, to enable them to maximise the benefits which the system can provide. The problem of cash running out regularly at some distribution points was another frequently cited problem because, as Ngaruiya *et al*. (2014) point out, SMEs are by their very nature highly dependent upon having sufficient readily available cash on hand, which necessitates the careful management of cash flows. All of the interviewees, with the exception of interviewee D, maintained that they had encountered problems during the course of making use of Mobile Money to make and receive payments.

Table 4.35: Problems encountered by the interviewees while using Mobile Money services

	A	B	C	D	E	F	G	H	I	J	K	L	$\sum i$	%
NET		✔	✔		✔	✔		✔			✔	✔	7	46
CER			✔		✔		✔				✔	✔	5	33
PED	✔												1	7
DGR										✔			1	7
SCA									✔				1	7
$\sum i$													15	100

Source: survey data (2019)

Question 12: Do you regret adopting Mobile Money services for your business operations? Why or why not?

Only three of the interviewees regretted having adopted Mobile Money services for their business operations. The reasons which they cited were the tendency for agents to run out of cash frequently, a problem which was assigned the code CER for the summary of responses in Table 4.35, and high transfer fees for effecting transfers between Mobile Money accounts and bank accounts. Although it is usually highly beneficial for businesses to make and receive Mobile Money payments, it is evident that the system can still be frustrating to use in Cameroon. In order to resolve the problems which plague some users at present, Mobile Money service providers could introduce measures to ensure that agents always have sufficient cash available to meet the needs of users. They could also enter into partnerships with financial institutions to decrease the transfer fees for making transfers from Mobile Money accounts to bank accounts and vice versa. The satisfaction of users is closely related to the perceptions which motivate them to adopt Mobile Money as their preferred means of making and receiving payments.

4.4.1 Summary of the qualitative data

The researcher recorded the following observations concerning the qualitative findings:

- From the responses of the interviewees, the SMEs of a majority of seven of the twelve were relatively young.
- A significant majority of the SMEs of the interviewees operated in the trading sector.
- Most of the interviewees had become aware of Mobile Money and the services which it offers through either advertising or active marketing.
- A large majority of nine of the twelve interviewees had been making Mobile Money transactions for less than 5 years.
- The main considerations which had motivated the interviewees to elect to use Mobile Money to make and receive payments were convenience, safety, accessibility, fast transactions, and the convenience of customers.
- The main sources of difficulty which the interviewees encountered in the running of their businesses were high levels of taxation and adverse economic conditions.
- Most of the interviewees perceived that their business operations had improved as a result of electing to use Mobile Money to make and receive payments.
- Most of the interviewees perceived that it was more cost effective to use Mobile Money services than those of traditional banks.

- The most frequently encountered problems which the interviewees cited with respect to using Mobile Money concerned interruptions in the functioning of the network and the poorly managed cash flows at some distribution points.

- Three-quarters of the interviewees did not regret having adopted Mobile Money to make and receive payments.

4.5 Triangulation of the principal quantitative and qualitative findings

As it has been explained, triangulating data which has been obtained from diverse relevant sources and by using more than one set of research methods helps to confirm the interpretations which researchers have made of their data (Creswell, 2014; Saunders *et al*., 2012:602). The findings which were obtained from the personal interviews in the qualitative study were used to validate those which emerged from the administration of the survey questionnaire in the quantitative study. Figure 4.9 is a schematic representation of the procedures which the researcher followed in order to triangulate the principal findings of the quantitative and qualitative studies.

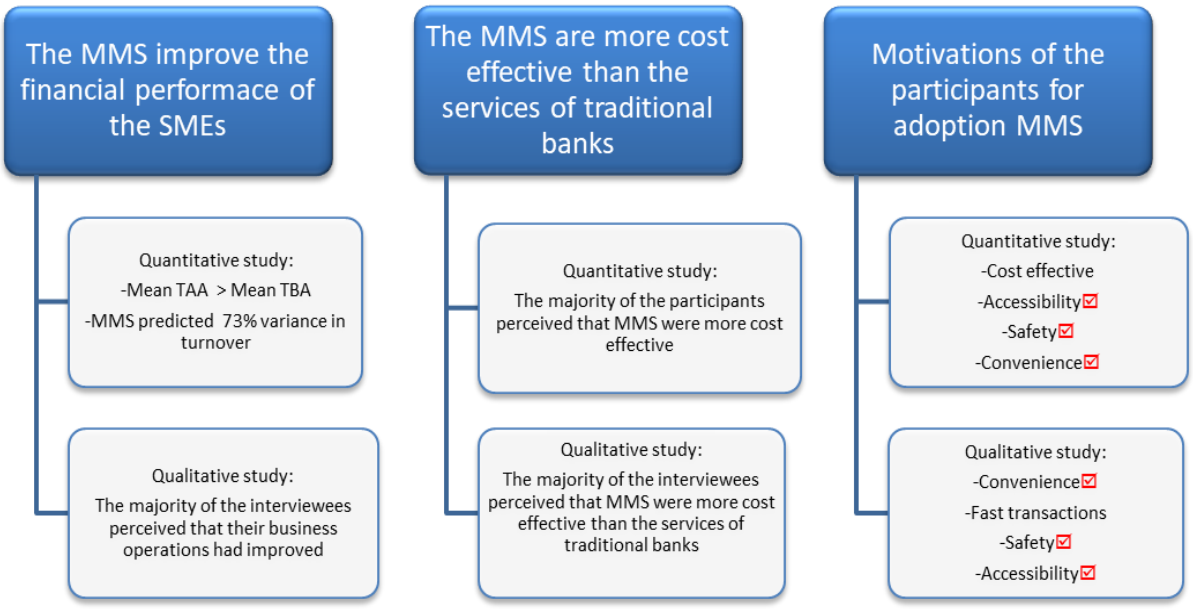


Figure 4.9: Triangulation of the quantitative and qualitative findings (Source: author)

4.6 Conclusion

This chapter has provided a detailed presentation and analysis of data which was collected from both studies. The two sets of findings were subsequently triangulated to establish the extent to which they converged, a measure which the researcher took in order to maximise their reliability and validity. The rigour which the researcher exercised enabled him to arrive at credible and reliable conclusions, which are presented in Chapter 5.

CHAPTER FIVE
CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The conclusions at which the researcher arrived from the findings of this study and the relevant available literature which was reviewed prior to conducting the study form the basis of the recommendations which are made in this chapter to SMEs in Douala, Mobile Money service providers, and the Ministry of Small and Medium-sized Enterprises, Social Economy, and Handicrafts. The chapter commences with an evaluation of the findings in relation to the objectives of the study, before proceeding to discussions of the significance and limitations of the study. It concludes with recommendations for relevant stakeholders and suggestions for future investigations.

5.2 The findings in relation to the objectives of the study

The principal objective of the study was to evaluate the influence of Mobile Money services on the financial performance of SMEs in two markets in Douala. The researcher formulated five sub-objectives in order to achieve this objective and to answer the research questions which guided the conducting of the study.

5.2.1 Sub-objective one

To assess the extent to which the use of Mobile Money services improves the financial performance of SMEs in Douala. The findings with respect to this sub-objective are summarised as follows:

- The adoption of Mobile Money services predicted in the region of 73 percent of the variance in the turnovers of the SMEs of the respondents to the survey questionnaire.

- The average turnovers from sales of the 285 SMEs whose representatives completed the survey questionnaire were higher after than before the adoption of Mobile Money services. The researcher considered it to be significant that the average increase for those SMEs which had been using Mobile Money to make and receive payments for 2 years or less was greater than that of the SMEs which had been doing so for 3 years or more.

- A significant majority of the twelve owners or managing directors of SMEs who were interviewed perceived that their business operations had improved after they had begun to make and receive Mobile Money payments.

5.2.2 Sub-objective two

To determine which Mobile Money services are predominantly used by SMEs in Douala. The respondents to the survey questionnaire were permitted to give more than one response. The most used services, in descending order with the percentages of the responses which they generated, were as follows:

- Receiving money (36.1%), sending money (33.2%), and buying airtime (16.3%).

5.2.3 Sub-objective three

To determine the extent to which SMEs in Douala use Mobile Money services to perform their business transactions with respect to buying and selling. The findings from the questionnaire revealed that:

- While the SMEs received an average of from eleven to fifteen Mobile Money payments from customers each day, the daily average for making Mobile Money payments to suppliers was from five to ten.

- A significant majority of 74.4 percent of the 285 SMEs had Mobile Money business accounts.

5.2.4 Sub-objective four

To determine how cost effective it is for SMEs in Douala to use Mobile Money services for SMEs by comparison with using traditional banking services. The findings of both the quantitative and qualitative studies revealed that:

- A significant majority of the participants in both studies perceived that Mobile Money services were more cost effective than those of traditional banks.

5.2.5 Sub-objective five

To determine the factors which encourage SMEs in Douala to choose to use Mobile Money services. It emerged from the findings of both the quantitative and the qualitative studies that the most cited reasons for choosing to make Mobile Money transactions were:

- Convenience, safety, and accessibility.

5.2.6 Other findings

- Of the order of three-quarters of the participants in both the quantitative and the qualitative studies either owned or managed SMEs which operated in the trading sector.

- Most of the SMEs of the participants in both the quantitative and the qualitative studies were still in their formative stages.

- The principal sources of difficulty for the business operations of the participants in both studies were difficulty in obtaining access to finance, adverse economic conditions, insufficient support or a complete lack of support from the government, high rates of taxation, and difficulty in managing cash flow sufficiently effectively to ensure viability.

- Almost all of the respondents to the survey questionnaire had Mobile Money accounts with either Orange Cameroon (47.3%) or MTN Cameroon (46.3%), the two main Mobile Money service providers in Cameroon.

- Most of the SMEs of the participants in both the quantitative and the qualitative study had been making and receiving Mobile Money payments for less than 5 years.

- Most of the respondents to the survey questionnaire believed that using Mobile Money services had reduced their operating costs.

- Interruptions in the network and a lack of cash as a consequence of poor cash flow management at some distribution points were the principal problems which the participants in the interviews had encountered while using Mobile Money services.

- Although most of the interviewees did not regret having elected to open Mobile Money accounts, the few who did express regrets cited the high transfer fees which were entailed in transferring money from Mobile Money accounts to bank accounts or vice versa, rising transaction fees, and shortages of cash at some distribution points as their reasons for doing so.

5.3 Significance of the study

If due consideration is given to the precarious circumstances which prevail in the SME sectors of many developing countries, the crucial role which SMEs play in ensuring economic growth in emerging economies such as that of Cameroon, and the equally crucial role which making optimal use of financial technology can play in influencing the financial performance of SMEs, the potential contributions which a study of this nature could make should be immediately apparent. As it has been pointed out, at present there appears to be a relative dearth of comprehensive data pertaining to the adoption of Mobile Money services and the influence which the new technology has exerted on the financial performance of SMEs in Cameroon, particularly by comparison with the role which it has played in other African countries such as Kenya. The findings of this study could be used to educate the owners of

Cameroonian SMEs concerning the benefits of Mobile Money as a means of increasing financial inclusion and an innovation which has great potential for assisting them to improve their business operations and the management of their businesses. The findings could also assist other relevant stakeholders, such as the government and Mobile Money service providers, to tailor the services which Mobile Money is able to provide to meet the specific needs of SMEs, in an overall strategy to encourage the growth of the SME sector as a crucial driver of economic growth in the country as a whole.

5.4 Limitations of the study

One of the principal limitations concerned the researcher being obliged to rely upon the subjective assessments of the respondents to the survey questionnaire and interviewees on the influence of Mobile Money on their turnover. The accuracy of the findings could have been significantly improved if the researcher had been able to obtain access to even informal financial records and to observe the levels of turnover from the numbers of sales which were transacted before and after the adoption of Mobile Money in a longitudinal study. In addition, it needs to be conceded that reducing the initial sample size of 384, which had been calculated by means of the formula of Cochran (1963), to 285, could have altered the findings. The sample size was further compromised by the inability of the researcher to obtain information from all of the potential respondents to the questionnaire who had been identified.

In some instances, the researcher was required to remain with the respondents to the questionnaire to assist them to answer all of the questions. During the first week of the conducting of the study, a considerable amount of time was lost because many questionnaires were returned incomplete. As a consequence, the researcher was obliged to make unplanned additional trips to call on the respondents to assist them to complete the questionnaires. A lack of time and resources precluded the researcher from collecting data from a larger research sample. As it has been acknowledged, the use of snowball sampling could have contributed to the selection of a research sample which was not truly representative of the target populations at the two markets. This potential limitation was mitigated by the assistance which the researcher received from three independent sales representatives who were intimately acquainted with businesses practices in the markets. Their familiarity with potential respondents also facilitated the administration of the survey questionnaire.

Using growth with respect to turnover as the sole determinant of the increased financial performance of the SMEs without investigating the influence of other factors could have constituted another limitation. The statistical analysis of the data did not include a normality

test and only significant variables were used in the inferential analysis. The degree to which the findings could be generalised to other target populations could also be limited, unless the business practices of the SMEs concerned are very similar to those in the two markets in Douala.

5.5 Recommendations

On the basis of the conclusions which have been drawn from the findings, the recommendations in the sections which follow are offered to specific groups of stakeholders.

5.5.1 Recommendations for the owners of SMEs

In the light of the conclusions which have been drawn in relation to the main objective of the study and the principal sources of difficulty which the participants identified with respect to the effective running of their businesses, the researcher recommends that owners and managing directors of SMEs in Douala should make full use of Mobile Money services in their businesses, as the system has almost unlimited potential to improve their financial performance. The findings revealed that the participants considered Mobile Money transactions to be convenient, safe, and accessible and enabled them to improve the management of their businesses.

5.5.2 Recommendations for the government and the Ministry of Small and Medium-sized Enterprises, Social Economy, and Handicrafts

These recommendations are informed by both the crucial contributions which SMEs make to economic growth in developing countries and the principal obstacles which the representatives of SMEs in Douala who participated in the study enabled the researcher to identify, namely, difficulty in obtaining access to finance, high levels of taxation, and either no support at all or insufficient support from the government. Accordingly, the researcher recommends that the government, through the Ministry of Small and Medium-sized Enterprises, Social Economy, and Handicrafts as one of its chief regulators, should provide support to the SME sector in the form of formulating and implementing appropriate strategies for creating an environment which is highly conducive to economic growth. It is imperative that commercial banks should be encouraged to provide financial assistance to SMEs, even if doing so necessitates the government assuming responsibility for loans which are made to SMEs which have been assessed as being viable. It is also vital that the government should consider offering tax credits to new businesses during their first 2 or 3 years of operating and reduce the heavy taxes which are levied at present for those which have been operating for more than 3 years.

The researcher also recommends that the government should investigate the feasibility of formulating regulations which enable Mobile Money service providers to become licensed

financial institutions. The partnerships which they have with commercial banks at present entail considerable expense and prevent them from making their services more affordable. Being able to obtain their own licenses would significantly reduce their operating costs and enable them to make their services more affordable for users. Autonomy would also enable them to extend financial assistance to SMEs which are registered users on the basis of their transaction histories. As it has been demonstrated that the adoption of Mobile Money has great potential to improve the financial performance of SMEs, whose crucial role in the economy has been emphasised, the researcher recommends that the government should encourage SMEs to make Mobile Money transactions through appropriate tax incentives.

5.5.3 Recommendations for Mobile Money service providers

The principal problems which the participants encountered while using Mobile Money services in Douala resulted from network interruptions, a lack of cash at some distribution points owing to poorly managed cash flows, and high transfer fees for transfers between Mobile Money accounts and bank accounts. The researcher contends that network interruptions could be effectively minimised through the optimal maintenance of physical infrastructure and the permanent availability of technical teams to respond immediately to resolve any problems or malfunctions which may arise.

The problems which have resulted from the poor management of cash flows at some distribution points could be prevented through the efficient monitoring of the availability of cash at each distribution point by service providers. Priority could be given to distribution points which have been identified as running out of cash frequently as users could be provided with hourly updates concerning the distribution points which are able to make cash payments to customers. If present trends continue and users are obliged to go to two or three distribution points before they are able to obtain access to their own money, users are highly likely to perceive that using Mobile Money entails great inconvenience.

The researcher recommends that Mobile Money service providers should develop their partnerships with financial institutions in order to reduce the high transfer fees for transfers between Mobile Money accounts and bank accounts and their own rising service fees. He also recommends that Mobile Money service providers should enter into partnerships with Bank for Small and Medium-size Enterprises of Cameroon in order to facilitate access to finance for SMEs on the basis of their transaction histories with respect to Mobile Money payments and receipts.

In order to promote the adoption of a cashless economy, it is incumbent upon Mobile Money service providers to enter into partnerships with relevant businesses and financial institutions by popularising the use of Mobile Money. Finally, the researcher recommends that Mobile

Money service providers should regularly publish statistics which are easily accessible concerning the Mobile Money services which are available in each region of Cameroon, in order to increase public awareness of the services and facilitate future research.

5.6 Suggestions for future research

In order to increase the generalisability of the findings, it is recommended that further investigations of the influence of Mobile Money on the financial performance of SMEs in Cameroon give due consideration to the following criteria:

- Prioritising the use of quantitative methodologies in order to limit the effects of potential bias and imprecise responses by respondents.

- Turnover which is measured according to sales should be based upon recorded sales, even if the methods which are used to record sales are informal.

- The financial performance of SMEs should be assessed both before and after they begin to use Mobile Money to make and receive payments.

Most of the SMEs of the participants had been using Mobile Money for less than 5 years. Although the finding that the financial performance of the SMEs which had been using the system for 2 years or less had improved by an average which was greater than that of those which had been doing so for 3 years or more appeared to be anomalous, the finding could have benefited from the context which a survey of experienced users could have provided.

Further studies could make use of factor analysis, Chi-Square tests, and time series analyses to assess the influence of the Mobile Money services on the financial performance of SMEs to obtain a more detailed statistical analysis of the contributions which independent variables make to dependent variables in cause and effect relationships. As the independent variables which were identified as contributing to variance in sales turnover were found to predict of the order of 73 percent of variance, those which could predict the remaining 27 percent could be investigated in future studies. In addition, as this study was concerned only with SMEs which were already using Mobile Money services, further research could be conducted to assess the influence of Mobile Money services on financial performance with one group of SMEs using the system and another group not doing so.

5.7 Conclusion

It emerged from the findings of the study that the independent variables

- Years for which SMEs had been operating
- Years since the adoption of Mobile Money services
- Mobile Money services are more cost effective than those of traditional banks

- Mobile Money services influence turnover
- Monthly turnover before the adoption of Mobile Money services
- Numbers of payments to suppliers per day

together predicted in the region of 73 percent of variance in the sales turnover of the SMEs of the participants in the study after they had begun to use Mobile Money services. As the review of the relevant available literature enabled the researcher to identify sales growth as a metric which enables financial performance to be assessed with respect to increased revenue over a particular period of time, it can be concluded that the adoption of Mobile Money services exerted a significantly positive influence upon the financial performance of the SMEs of the participants of this study, a finding which could plausibly be generalised at least to the two markets in Douala in Cameroon in which the study was conducted.

BIBLIOGRAPHY

African Development Bank Group. (2017). *Country results brief 2017 Cameroon.* Abidjan: African Development Bank Group.

Afriland First Bank. (2015, March 23). *Le defis du financement des pme - IMF.* Retrieved January 3, 2019, from IMF: https://www.imf.org/external/french/np/seminars/2015/brazzaville/pdf/AfrilandFR.pdf

Akon, G. A. (2012). *A Critical look at banking sector regulations in Cameroon.* Retrieved December 2018, from econrsa.org: https://econrsa.org/system/files/workshops/papers/2012/akon-banking-sector.pdf

Amponsah, E. O. (2018). The advantages and disadvantages of Mobile Money on the profitability of the Ghanaian banking industry. *Texila International Journal of Management, 4*(2), 1-8.

Appiah, O. D. (2014, September 29). *Africa's Mobile Money evolution*. Retrieved December 28, 2018, from modernghana: https://www.modernghana.com/news/571561/africas-mobile-money-evolution.html

Asoba, S. N. (2014). Factors influencing the growth of African immigrant-owned business in selected craft markets in the cape metropolitan area of South Africa. Unpublished MTech thesis, Cape Peninsula University of Technology, Cape Town, South Africa. ETD Repository Home. Retrieved 2018 from Cape Peninsula University of Technology: http://etd.cput.ac.za/

Barbera, F., & Hasso, T. (2013). Do we need to use an accountant? The sales growth and survival benefits to family SMEs. *Family Business Review, 26*(3), 271-292.

BEAC. (2017). *Etat des systemes de paiement par monnaie electronique dans la CEMAC.* Retrieved December 2018, from Direction des systemes et moyens de paiement: https://docplayer.fr/88945930-Etat-des-systemes-de-paiement-par-monnaie-electronique-dans-la-cemac.html

Bloomberg. (2018, February 5). *Ghana's Mobile Money transactions double to $35 billion*. Retrieved December 31, 2018, from Bloomberg: Technology: https://www.bloomberg.com/news/articles/2018-02-05/ghana-2017-mobile-money-deals-almost-double-to-35-billion

Brynard, P., & Hanekom, S. X. (2006). *Introduction to research in management-related fields* (2nd ed.). Pretoria, Gauteng, South Africa: Van Schaik.

Business in Cameroon. (2015, June). *Mobile Money ready for take-off in Cameroon*. (28). Genevia, Switzerland: Mediamania Sarl. Retrieved Janvier 23, 2018, from http://www.businessincameroon.com/pdf/BC28.pdf

Business in Cameroon. (2017, February 2). *In Cameroon, MTN and Orange wage a fierce commercial war on the Mobile Money market*. Retrieved from Business in Cameroon: https://www.businessincameroon.com/telecom/0202-6860-in-cameroon-mtn-and-orange-wage-a-fierce-commercial-war-on-the-mobile-money-market

Business in Cameroon. (2018a, April 27). *The Cameroonian banking sector granted CFA3,321 billion loan in 2017.* Yaounde, Centre, Cameroon. Retrieved December 26, 2018, from https://www.businessincameroon.com/bank/2704-7999-the-cameroonian-banking-sector-granted-cfa3-321-billion-loan-in-2017

Business in Cameroon. (2018b, December 14). *Cameroon provided 75% of loans granted in CEMAC zone, in H1 2018.* Yaoundé, Centre, Cameroon. Retrieved December 26, 2018, from https://www.businessincameroon.com/bank/1412-8689-cameroon-provided-75-of-loans-granted-in-cemac-zone-in-h1-2018?utm_source=newsletter_7171&utm_medium=email&utm_campaign=business-in-cameroon-21-12-2018-mag-n-69

Cambridge advanced learner's dictionary. (2015). Cambridge: Cambridge University Press.

CCIMA. (2015, September 15). Un apercu synthetisé de l'actualité economique. (CCIMA, Ed.) *CCIMA: La semaine economique en bref* (51-11), pp. 1-2.

Chale, P. R., & Mbamba, U. (2014, December). The role of Mobile Money Services on growth of SMES in Tanzania: Evidence from Kinondoni district in DAR ES SALAAM region. *Business Management Review, 17*, 81-96.

Chimaobi, O. V., & Chizoba, O. (2014). Boosting small and medium enterprises performance in Nigeria through mobile commerce. *European Journal of Business and Management, 6*(9), 134-141.

Cochran, W. G. (1963). *Sampling techniques* (2nd ed.). New York: John Wiley and Sons.

Code for Ghana. (2017, February 20). *Mobile Money statistics and opportunities in Ghana*. Retrieved December 31, 2018, from Code for Ghana: http://www.codeforghana.org/2017/02/20/mobile-money-statistics-in-ghana.html

Comninos, A., Esselaar, S., Ndiwalana, A., & Stork, C. (2008, July 21). M-Banking the unbanked. *Research ICT Africa, 1*, pp. 1-15.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). California: Sage Publications.

Davis, F. D. (1989, September). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), pp. 319-340.

Denzin, N. K. (1989). The research act: a theoretical introduction to sociological methods (3rd ed.). Englewood Cliffs, New Jersey, United States of America: Prentice Hall.

Dudovskiy, J. (2018). *The ultimate guide to writing a dissertation in business studies: A step-by-step assistance* (January 2018 ed.). UK: Research-methodology.net.

Ecobank. (2019, January). *Classic current account*. Retrieved January 2, 2019, from Ecobank: https://ecobank.com/cm/personal-banking/everyday-banking/current-accounts/classic

Etudier. (2015, April 30). *Le march des capitaux.* Retrieved December 26, 2018, from Etudier/dissertations: https://www.etudier.com/dissertations/Le-March-Des-Capitaux/72257008.html

European Investment Bank. (2016). *Le secteur bancaire en Afrique subsaharienne: Evolutions récentes et inclusion financière numérique.* Luxembourg: European Investment Bank.

Financial Inclusion. (2017). *Pakistan wave 4 report FII tracker survey.* Washington D.C: InterMedia.

FINMARK Trust. (2017). *Cameroon pocket guide.* Johannesburg: FINMARK Trust.

Fiseha, G. G., & Oyelana, A. A. (2015). An assessment of the roles of small and medium enterprises (SMEs) in the local economic development (LED) in South Africa. *Journal of Economics, 6*(3), 280-290.

Fox, N., Hunn, A., & Mathers, N. (2007). Sampling and sample size calculation. *The NIHR RDS for the East Midlands / Yorkshire & the Humber*, 1-41.

Freelancers Union, & Upwork. (2017). *Freelancing in America.* Freelancers Union & Upwork.

Goforth, C. (2015, November 16). *University of Virginia Library*. Retrieved May 19, 2019, from University of Virginia: https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/

Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989, September). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis, 11*(3), 255-274.

GSMA. (2017). *State of the industry report on Mobile Money.* London: GSMA.

Hair, J. F., Bush, R. P., & Ortinau, D. J. (2000). *Marketing research: A practical approach for the new millennium.* Singapore: Irwin/McGraw-Hill.

Harash, E., Al-Timimi, S., & Alsaadi, J. (2014, September). The influence of finance on performance of small and medium enterprises (SMES). *International Journal of Engineering and Innovative Technology, 4*(3), 161-167.

Hatcheu, E. T. (n.d). *Colloque international de Douala auf-ud-cud.* Retrieved January 25, 2019, from jaga.afrique-gouvernance.net: http://jaga.afrique-gouvernance.net/_docs/hatcheu_emil_tchawe.pdf

Higgins, D., Kendall, J., & Lyon, B. (2012). Mobile Money usage patterns of Kenyan small and medium enterprises. *Innovations, 7*(2), pp. 67-81.

ICT Works. (2018, May 16). *Wow! Mobile Money transactions are now larger than Kenya's GDP*. Retrieved December 31, 2018, from ICTWorks: https://www.ictworks.org/mobile-money-larger-kenya-gdp/#.XCnhjVwzbIW

International Monetary Fund. (2016). *Central African Economic and Monetary Community: Financial system stability assessment.* Washington D.C: International Monetary Fund.

Investir au Cameroun. (2018a, February 6). *En 2017, l'Etat camerounais a oxygéné la trésorerie des PME, à hauteur de 14 milliards de francs CFA*. Retrieved January 6, 2019, from Investir au Cameroun: https://www.investiraucameroun.com/entreprises/0602-10223-en-2017-l-etat-camerounais-a-oxygene-la-tresorerie-des-pme-a-hauteur-de-14-milliards-de-francs-cfa

Investir au Cameroun. (2018b, July 2). *Le secteur bancaire explique pourquoi les PME camerounaises ont du mal à trouver des financements.* Centre, Cameroon. Retrieved December 26, 2018, from https://www.investiraucameroun.com/economie/0207-11045-le-secteur-bancaire-explique-pourquoi-les-pme-camerounaises-ont-du-mal-a-trouver-des-financements

Israel, G. D. (2003, June). Determining sample size. *IFAS Extention*, pp. 1-5.

John, E. K., Gwahula, R., & Msemwa, F. M. (2018, September). The influence of perceived risk on the uptake of Mobile Money Services by SMEs operations in Karagwe district,

Tanzania. *International Journal of Advanced Engineering, Management and Science, 4*(9), 703-712.

Johnson, B. R., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *American Educational Research Association, 33*(7), 14-26.

Kamunge, M. S., Njeru, A., & Tirimba, O. I. (2014). Factors affecting the performance of small and macro enterprises in Limuru town market of Kiambu county, Kenya. *International Journal of Scientific and Research Publications, 4*(12), 1-20.

Kothari, C. R. (2004). *Research methodology: Researchs and techniques.* New Delhi: New Age International (P) Ltd., Publishers.

Koumetio, M. K. (2016). L'obtention du crédit bancaire par les PME au Cameroun. *Afrique et Développement, 41*(1), 121-158.

Kuyini, A. B., & Kivunja, C. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of Higher Education, 6*(5), 26-41.

La Tribune Afrique. (2018, January 28). *Cameroun : Des mesures annoncées pour accroître l'accès des PME aux crédits*. Retrieved January 03, 2019, from La Tribune Afrique: https://afrique.latribune.fr/afrique-centrale/cameroun/2018-01-28/cameroun-des-mesures-annoncees-pour-accroitre-l-acces-des-pme-aux-credits-766381.html

Lai, P. C. (2017). The literature review of technology adoption models and theories for the novelty technology. *Journal of Information Systems and Technology Management, 14*(1), 21-38.

Le Gicam. (2018, April 17). *Accompagnement: Les PME au coeur de la stratégie du GICAM*. Retrieved January 6, 2019, from Le Gicam: https://www.legicam.cm/index.php/p/les-pme-au-coeur-de-la-strategie-du-gicam

Leventhal, P. S. (2009). Freelance or employee: Which is better? *The Journal of the European Medical Writers Association, 18*(2), 137-138.

MacDonald, S., & Headlam, N. (2009). *Research methods handbook: Introductory guide to research methods for social research.* Manchester: Center for Local Economic Strategies.

Macmillan Education. (n.d.). *Sales representative*. Retrieved February 4, 2019, from macmillandictionary: https://www.macmillandictionary.com/dictionary/british/sales-representative

Mararo, M. W., & Ngahu, S. (2017, October). Influence of Mobile Money Services on the growth of sme in Nakuru town Kenya. *IOSR Journal of Humanities and Social Science, 22*(10), 64-72.

Masocha, R., & Dzomonda, O. (2018). Adoption of Mobile Money Services and the performance of small and medium enterprises in Zimbabwe. *Academy of Accounting and Financial Studies Journal, 22*(3), 1-11.

Mbella, M. E., & Magloire, A. A. (2017). The effect of bank specific factors on the performance of Afriland First Bank in Cameroon. *Journal of Business & Financial Affairs*, 1-7.

Mbogo, M. (2010). The impact of mobile payments on the success and growth of micro-business: The case of M-Pesa in Kenya. *The Journal of Language, Technology & Entrepreneurship in Africa*, 182-203.

Mbongo, E. L. (2012). *Renforcement du positionnement du port autonome de Douala face à la concurrence sous-régionale CEMAC. Yaounde, Cameroon*. Retrieved from http://www.academia.edu/26219420/Renforcement_du_positionnement_du_port_autonome_de_Douala_face_%C3%A0_la_concurrence_sous-r%C3%A9gionale_CEMAC_SECTION_III_Linfluence_du_Port_de_Douala_dans_la_sous-r%C3%A9gion_CEMAC

Media Intelligence. (2016). *Assessing the active use of Mobile Money Services in Cameroon.* Yaoundé: Media Intelligence.

Ministry of Small and Medium Enterprises, Social Economy and Crafts. (2016a). *Statistical directory on the PMEESA.* Yaounde: Ministry of Small and Medium Enterprises, Social Economy and Crafts.

Ministry of Small and Medium Enterprises, Social Economy and Crafts. (2016b). *Banque des PME*. Retrieved January 3, 2019, from http://www.minpmeesa.gov.cm: http://www.minpmeesa.gov.cm/fr/features/banque-des-pme

MTN Cameroon. (2018). *MTN MoMo*. Retrieved December 31, 2018, from MTN Cameroon: https://www.mtn.cm/en/mtn-mobile-money/

Muiruri, S. M. (2017). African small and medium enterprises (SMEs): Contributions, challenges and solutions. *European Journal of Research and Reflection in Management Sciences, 5*(1), 36-48.

Must, B., & Ludewig, K. (2010). Mobile Money: Cell phone banking in developping countries. (J. Erickson, Ed.) *Policy Matters Journal*, 27-33.

National Institute of Statistics. (2010). *3e RGPH: La population du Cameroun en 2010.* Yaoundé: National Institute of Statistics. Retrieved February 28, 2018, from http://www.statistics-cameroon.org/downloads/La_population_du_Cameroun_2010.pdf

National Institute of Statistics. (2011). *Annuaire statistique du Cameroun.* Yaoundé: National Institute of Statistics. Retrieved February 18, 2018, from http://www.stat.cm/downloads/annuaire/2012/Annuaire-2012-complet.pdf

National Institute of Statistics. (2015). *Annuaire statistique du Cameroun.* National Institute of Statistics. Yaounde: National Institute of Statistics.

Ngafi, O. D. (2006). *Etat des lieux de la microfinance et du système bancaire Camerounais.* Retrieved December 26, 2018, from Memoire Online: https://www.memoireonline.com/07/09/2205/Etat-des-lieux-de-la-microfinance-et-du-systeme-bancaire-camerounais.html#_Toc167658107

Ngange, K. L., & Beng, P. (2017, June). Use of mobile phones for economic development in Cameroon. *Advances in Journalism and Communication, 5*, 145-161.

Ngaruiya, B., Bosire, M., & Kamau, S. M. (2014). Effect of Mobile Money transactions on financial performance of small and medium entreprises in Nakuru central business district. *Research Journal of Finance and Accounting, 5*(12), 53-58.

Njabu, I. T. (2016). The impact of the Mobile Money Services on the growth of micro, small and medium enterprises in Nkasi district council. Nkasi, Tanzania. Unpublished Master thesis, Mzumbe University, Nkasi, Tanzania. Retrieved December 26, 2018, from Mzumbe University: http://scholar.mzumbe.ac.tz/bitstream/handle/11192/1999/MSc_%20Economics_Israel%20Njabu%20T_2016.pdf?sequence=1

Nkem, L. C. (2017). Assesing the role of stokvels in the start-up and growth of Cameroonian owned businesses in the Cape metropole.Unpublished MTech thesis, Cape Peninsula University of Technology, Cape Town, South Africa . ETD Repository Home. Retrieved June 4, 2018, from Cape Peninsula University of Technology: http://etd.cput.ac.za/

Nthenya, A. M. (2014). The effect of mobile phone based money transfers on the financial performance of SMEs Nairobi county, Kenya. Unpublished MTech thesis, University of Nairobi, Nairobi, Kenya. Retrieved January 2, 2019, from University of Nairobi: http://erepository.uonbi.ac.ke/handle/11295/74968

Nyaga, K., M., & Okonga, B. M. (2014, October 25). Does Mobile Money Services have any impact on SMEs performance in Naivasha? *International Journal of Current Research*, 9394-9398.

OECD. (2017). *Enhancing the contributions of SMEs in a global and digitalised economy*. *OECD* (pp. 1-21). Paris: OECD.

Orange. (2018, Septembre). *Une décennie d'innovation financière en Afrique.* Retrieved January 2, 2019, from Orange: https://www.orange.com/fr/content/download/48478/1387302/version/2/file/Dossier%20de%20Presse%20Orange%20Money.pdf

Orange Cameroon. (2016). *Orange Money*. Retrieved December 31, 2018, from Orange: https://www.orange.cm/en

Pinem, D., & Dwi, B. (2016, May). The analysis of company performance and sales growth to the dividend policy at the company Go Public in Indonesia stock exchange. *International Journal of Business and Commerce, 5*(6), 105-116.

Polit, D. F., & Beck, C. T. (2003). *Nursing research: Principles and methods* (7th ed.). Philadelphia: Lippincott Williams & Wilkins.

Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management, 8*(3), 238-264.

Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review*, 308-330.

Rubini, A. (2017). *Fintech in a flash.* London: Createspace 2017.

Republic of Cameroon. (2010, April 13). *Loi N° 2010/001 du 13 Avril 2010 portant promotion des petites et moyennes entreprises au Cameroun*. Yaoundé, Centre, Cameroon.

Sage Research Methods. (2018). *Social science research paradigms: Positivism and interpretivism*. Retrieved January 18, 2019, from Sage Research Methods: http://methods.sagepub.com/video/social-science-research-paradigms-positivism-and-interpretivism

Saunders, M. N., Lewis, P., & Thornhill, A. (2012). *Research methods for business students.* Pearson Education Limited.

Shrier, D., Canale, G., & Pentland, A. (2016). *Mobile Money & payments:Technology trends.* Massachusetts: Massachusetts Institute of Technology: Connection Science & Engineering.

Shukla, A., Tyagi, R., & Raddi, S. (2009). Mobile payment 2.0:The next-generation model. *HSBC's guide to cash supply chain and treasury management in Asia pacific*, pp. 178-184. Retrieved February 18, 2018

Surendran, P. (2012, August). Technology acceptance model: A survey of literature. *International Journal of Business and Social Research, 2*(4), 175-178.

Tengeh, R. K. (2011). A business framework for the effective start-up and operation of African immigrant-owned businesses in the Cape Town metropolitan area, South Africa. Unpublished DTech thesis, Cape Peninsula University of Technology, Cape Town, South Africa. Retrieved May 2018, from Cape Peninsula University of Technology: www.cput.ac.za

The Banking Association South Africa. (2019). *SME enterprise*. Retrieved July 12, 2019, from The Banking Association South Africa: https://www.banking.org.za/what-we-do/sme/sme-enterprise

The Citizen. (2017, April 16). *Tanzania: 47% of GDP transferred in Mobile Money revolution*. Retrieved December 31, 2018, from The Citizen: https://allafrica.com/stories/201704170135.html

The Economist. (2014, September). *Mobile Money in developing countries*. Retrieved December 29, 2018, from The Economist: https://www.economist.com/economic-and-financial-indicators/2014/09/20/mobile-money-in-developing-countries

Turner III, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report, 15*(3), 754-760.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003, September). User Acceptance of Information Technology: Towards a Unified View. *MIS Quaterly, 27*(3), 425-478.

Waśniewski, P. (2017). A performance measurement system for small enterprises – a case study. *Stowarzyszenie Księgowych*, 211-233.

Winchester, C. L., & Salji, M. (2016, April). Writing a literature review. *Journal of Clinical Urology, 9*(5), 308-3012.

World Bank. (2018, June 29). *Five ways Nigeria can realize mobile technology's potential for the unbanked*. Retrieved December 31, 2018, from World Bank: https://blogs.worldbank.org/africacan/five-ways-nigeria-can-realize-mobile-technologys-potential-for-the-unbanked

Yin, R. K. (2006, Spring). Mixed methods research: Are the methods genuinely integrated or merely parallel? *Research in the School, 13*(1), pp. 41-47.

APPENDICES

APPENDIX A: CONSENT LETTER FROM DOUALA CITY COUNCIL (FRENCH)

VILLE DE DOUALA

C.U.D.

COMMUNAUTE URBAINE DE DOUALA
Douala City Council
SECRETARIAT GENERAL
DIRECTION DES ETUDES, DE LA PLANIFICATION,
DES INVESTISSEMENTS DU DEVELOPPEMENT DURABLE

République du Cameroun
Republic of Cameroon
Paix - Travail - Patrie
Peace - Work - Fatherland

AUTORISATION DE RECHERCHE ET DE COLLECTE DE DONNEES

Je soussigné, Dr Fritz NTONE NTONE, Délégué du Gouvernement auprès de la Communauté Urbaine de Douala, agissant en ma qualité de premier magistrat municipal,

Autorise **M. GAHAPA TALOM Franck Sylvio**, étudiant inscrite au cycle de **Master de Technologie** à l'Université Technologique de la Péninsule du Cap en Afrique du Sud, à mener des recherches et à collecter des données dans la Ville de Douala dans le cadre de la préparation d'un Mémoire sur le sujet ***« L'impact du Mobile Money Services sur la performance financière des Petites et Moyennes Entreprises (PMEs) dans la Ville de Douala ».***

Cette étude qui se déroulera sur un période de six (06) mois allant du **05 Novembre au 30 Avril 2019**, s'inscrit dans le cadre du processus de mise en œuvre des recommandations de la Stratégie de Développement de la Ville de Douala et son aire métropolitaine à l'horizon 2025, notamment son Objectif 2 visant à ***« Améliorer la compétitivité économique de la Ville »***.

Aussi, je vous saurais gré de bien vouloir lui réserver un bon accueil, de mettre à sa disposition toutes les informations, données, renseignements et documentations dont elle aura besoin et de lui faciliter le travail sur le terrain pour la bonne conduite de cette étude.

En foi de quoi, cette Autorisation lui est délivrée pour servir et valoir ce que de droit.

Fait à Douala, le 03 SEPT 2018

RÉPUBLIQUE DU CAMEROUN
REPUBLIC OF CAMEROON
COMMUNAUTE URBAINE DE DOUALA
Le Délégué
The Delegate
DOUALA URBAN COUNCIL
WOURI DIVISION
DEPARTEMENT DU WOURI

Dr. Fritz NTONE NTONE

BP : 43 Douala – Cameroun – Tél. : (237) 243 422 939 – Fax. : (237) 243 433 090
Site Internet : www.douala.cm

APPENDIX B: CONSENT LETTER FROM DOUALA CITY COUNCIL (ENGLISH)

CITY OF DOUALA

[Logo]

C.U.D
Douala City Council
GENERAL SECRETARIAT
DIRECTORATE OF SURVEYS, PLANNING,
SUSTAINABLE DEVELOPMENT INVESTMENTS

Republic of Cameroon
Peace - Work - Fatherland

RESEARCH AND DATA COLLECTION AUTHORISATION

I, the undersigned, Dr Fritz NTONE NTONE, Government Delegate to the Douala City Council, acting in my capacity as the first municipal magistrate,

Authorise **Mr. GAHAPA TALOM Franck Sylvio**, a student enrolled in the Master of Technology at the Cape Peninsula University of Technology in South Africa, to conduct research and data collection in the City of Douala as part of the preparation of a thesis on "***The impact of Mobile Money Services on the financial performance of Small and Medium-sized Enterprises (SMEs) in the City of Douala***".

The study which will take place over a period of six (06) months from **November 05 to April 30, 2019**, is part of the process to implement the recommendations of the Development Strategy of the City of Douala and its metropolitan area by 2025, particularly its Objective 2 aimed at ***"Improving the City's Economic Competitiveness"***.

Also, I would be grateful if you would grant him a warm welcome, make available all the information, data, details and documentation which he will need and facilitate the field study for the proper conduct of this study.

In witness whereof, this Authorisation is issued to him to serve the purpose for which it is intended.

Issued in Douala, on 03 SEP 2018

[Signature]

[Council Stamp] Dr Fritz NTONE NTONE

P.O Box: 43 Douala - Cameroon - Tel. : (237) 243 422 939 - Fax. : (237) 243 433 090
Website: www.douala.cm

Certified a true translation of the document provided.

2018 - 09 - 21

Bernard Kengni
Sworn Translator of the High Court of South Africa
Case N° 9863/10
Traducteur Assermenté

APPENDIX C: QUESTIONNAIRE (ENGLISH)

QUESTIONNAIRE

Faculty of Business and Management Science

Dear Respondent,

This is a research survey which is being conducted in order to establish **the Impact of Mobile Money Services on the financial performance of SMEs in Douala, Cameroon**, in fulfilment of the requirements for the degree of Master of Technology (MTech) in Entrepreneurship in the Faculty of Business at the Cape Peninsula University of Technology. My name is **Frank Sylvio Gahapa Talom** and my student number is **212021850**.

This research will focus on assessing the impact of Mobile Money Services on the financial performance of small and medium enterprises (SMEs) in Douala, Cameroon. By evaluating the impact of mobile money services on the financial performance of SMEs, this research could inform owners on the benefits of Mobile Money as a solution for financial inclusion and an innovation which will help them to improve, better manage and grow their businesses. By responding to this questionnaire, you will already be contributing towards a positive intervention in the field of entrepreneurship, mobile money for SMEs and business management.

The information obtained from the questionnaire will be used strictly for academic purposes and, please be assured that all of the information provided will be treated as strictly confidential. In addition, participation in this study is voluntary and you have the right to opt out anytime if you wish to do so.

SECTION A: DEMOGRAPHIC INFORMATION

Please tick with an X where applicable. Some questions allow more than one X.

1) Name of the respondent (optional): _____
2) Gender : Male ☐ Female ☐
3) Age in years: Below 18 ☐; 18 – 38 ☐; 39 – 59 ☐; 60 and above ☐
4) Education: None ☐; Primary ☐; Secondary ☐; Tertiary ☐; Self-educated ☐
5) Civil Status: Single ☐; Married ☐; Divorced ☐; Widowed ☐; Concubinage ☐

SECTION B: BUSINESS INFORMATION

6) Name of the business (optional):_____
7) Business Sector: Trading ☐; Service ☐; Manufacturing ☐; Mixed ☐
8) Years of existence: Below 2 ☐; 2 – 3 ☐; 4 – 5 ☐; 6 – 7 ☐; above 8 ☐
9) Employees: Below 2 ☐; 2 – 5 ☐; 6 – 10 ☐; 11 – 15 ☐; above 15 ☐
10) Source of Capital: Savings ☐; Financial institution ☐; Family and Friends ☐; Informal financial institutions (Djangui-Tontine) ☐; Others ☐ (please, specify)
11) Does your business have a bank account? Yes ☐; No ☐
If your answer to Q.11 was yes, please skip this question 12, otherwise continue.
12 Why does your business not have a bank account?
Use owner's bank account ☐; Bank fees too high ☐; Banks do not service our needs ☐; Time consuming ☐; Others ☐ (please, specify)
13 How do your customers pay their receivables?
Cash in hand ☐; Mobile Money ☐; Bank deposit ☐; Cheque ☐;
Others ☐(please, specify)
14 How do you pay your payables to suppliers?
Cash in hand ☐; Mobile Money ☐; Bank deposit ☐; Cheque ☐;
Others ☐(please, specify)
15 What describes best your main challenge(s) as a small and medium enterprise (SME)?
Difficulty to access credit ☐, Need for cash float ☐, Maintaining sufficient cash float ☐, Rising operating cost ☐, High level of taxation ☐, Insufficient support from local authorities ☐, Others ☐ (please, specify)

SECTION C: MOBILE MONEY SERVICES AND IMPACT

16 Does your business use mobile money services to transact? Yes ☐; No ☐

If your answer to Q.16 was no, please stop filling the questionnaire, otherwise continue.

17 Does your business own mobile money account (s)? Yes ☐; No ☐

If your answer to Q.17 was yes, skip this question 18, otherwise continue

18 Whose account from the following list does your business use to transact?

Mobile Money agent ☐, Employee(s) ☐, Owner ☐

19 Which of the following describes best your motivation(s) in adopting mobile money?

Convenience ☐, Cost effective ☐, Safety ☐, Cheaper than bank account ☐, Easy registration, Competitions ☐, Accessibility ☐, Others ☐(please, specify)

20 Which of the following mobile money providers do you mainly transact with?

MTN Cameroon ☐; Orange Cameroon ☐; Express Union ☐; Others ☐(please, specify)

21 For how many years has your business been using mobile money services to transact (pay suppliers, receive payments from customers and others)?
Less than 1 ☐; 1 – 2 ☐; 3 – 4 ☐; 5 – 6 ☐; Above 7 ☐

22 Which mobile money service (MMS) does your business use the most?
Sending money (to suppliers) ☐; Receiving money (from customers) ☐; Buying airtime ☐; Storage ☐; Utilities Bills Payments ☐; Others ☐ (please, specify)

23 How often per day does your business use mobile money to pay suppliers?
Less than 5 ☐; 5 – 10 ☐; 11 – 15 ☐; above 15 ☐

24 How often per day does your business use mobile money to receive money from customers? Less than 5 ☐; 5 – 10 ☐; 11 – 15 ☐; above 15 ☐

25 Which of the following best describes your estimated monthly turnover in FCFA before the adoption of the MMS?

Less than 50 000 ☐; 50 000 – 100 000 ☐; 100 001 – 200 000 ☐;

200 001 – 500 000 ☐; 500 001 – 1 000 000 ☐; above 1000 000 ☐

26 Which of the following is the best estimate of your current monthly turnover in FCFA?

Less than 50 000 ☐; 50 000 – 100 000 ☐; 100 001 – 200 000 ☐;

200 001 – 500 000 ☐; 500 001 – 1 000 000 ☐; above 1000 000☐

Please indicate with an "X", the extent to which you agree or disagree with the following statements about Mobile Money (MM) and Mobile Money Services (MMS):

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
27	The registration process is simple and affordable					
28	The adoption of MMS for payments and receipts has an impact on my business turnover					
29	Mobile money payments and receipts have improved my business turnover					
30	The adoption of MMS for payments and receipts has improved my business cash flow					
31	MMS have reduced transaction cost					
32	MMS have reduced transport cost					
33	MMS have reduced opportunity cost					
34	MMS are more cost effective than traditional banking services					
35	MMS providers are reliable					
36	The mobile money platform (technology) is safe					

Thank you for participating in this research.

Student:
Frank Sylvio Gahapa Talom
Email: gahapafrank@gmail.com
Cell: (+27) 73 514 0482

Supervisor:
Dr Robertson K. Tengeh
Email: tengehr@cput.ac.za
Office: (+27) 21 460 3450

APPENDIX D: QUESTIONNAIRE (FRENCH)

QUESTIONNAIRE

Cape Peninsula University of Technology

Faculté de commerce et de sciences de gestion

Cher Répondant,

La présente enquête a pour but d'établir **l'impact des services d'argent mobile sur la performance financière des PME à Douala, au Cameroun**, elle est effectuée dans le cadre de la réalisation des exigences requises pour l'obtention d'un diplôme de Master en technologie (MTech) avec spécialisation en entrepreneuriat de la Faculté de commerce de l'Université technologique de la péninsule du Cap. Je m'appelle **Frank Sylvio Gahapa Talom** et mon numéro d'étudiant est **212021850.**

L'objectif de cette étude est d'évaluer l'impact des services d'argent mobile sur la performance financière de petites et moyennes entreprises (PME) à Douala, au Cameroun. Par le biais de l'évaluation de l'impact des services d'argent mobile sur la performance financière des PME, cette recherche pourrait informer les propriétaires sur les avantages des paiements mobiles comme une solution d'inclusion financière et une innovation qui les aiderait à améliorer, mieux gérer et développer leurs activités. En répondant à ce questionnaire, vous contribuerez d'ores et déjà à une intervention positive dans le domaine de l'entrepreneuriat, de l'argent mobile pour les PME et de la gestion d'entreprise.

Les informations recueillies sur le questionnaire seront utilisées strictement à des fins académiques et nous vous assurons que toutes les informations fournies resteront strictement confidentiels. De plus, la participation à cette étude se fait sur une base volontaire et vous avez le droit de vous retirer à tout moment si vous le souhaitez.

SECTION A: INFORMATION DÉMOGRAPHIQUE

Veuillez marquer d'un X votre choix. Certaines questions permettent de marquer plus d'un X.

1) Nom du répondant (facultatif): _____
2) Sexe: Homme ☐ Femme ☐
3) Âge en nombre d'années: En dessous de 18 ☐; 18 à 38 ☐; 39 à 59 ☐; 60 et au-delà ☐
4) Éducation: Aucune ☐; Primaire ☐; Secondaire ☐; Tertiaire ☐; Autodidacte ☐
5) État civil: Célibataire ☐; Marié ☐; Divorcé ☐; Veuf ☐; Concubinage ☐

SECTION B: INFORMATIONS DE NATURE COMMERCIALE

6) Nom de l'entreprise (facultatif):_____
7) Secteur d'activité: Commerce ☐; Service ☐; Industrie manufacturière ☐; Mixte ☐
8) Nombre d'années d'existence: En dessous de 2 ☐; 2 à 3 ☐; 4 à 5 ☐; 6 à 7 ☐; au-dessus de 8 ☐
9) Employés: En dessous de 2 ☐; 2 à 5 ☐; 6 à 10 ☐; 11 à 15 ☐; au-dessus de 15 ☐
10) Source du capital: Économies ☐; Institution financière ☐; Famille et amis ☐; Institutions financières informelles (Djangui-Tontine) ☐; Autres ☐ (veuillez spécifier)
11) Disposez-vous d'un compte bancaire pour vos activités? Oui ☐; Non ☐

Si votre réponse à la Q.11 était oui, veuillez sauter cette question 12, mais au cas contraire, veuillez continuer.

12 Pourquoi ne disposez-vous pas d'un compte bancaire pour vos activités?

Utilise le compte bancaire du propriétaire ☐; Frais bancaires trop élevés ☐; Les banques ne répondent pas à nos besoins ☐; Perte de temps ☐;

autres ☐ (veuillez spécifier)

13 Comment vos clients paient-ils leurs créances?

Cash ☐; Argent mobile ☐; Dépôt bancaire ☐; Cheque ☐; autres ☐(veuillez spécifier)

14 Comment payez-vous vos dettes à vos fournisseurs?

Cash ☐; Argent mobile ☐; Dépôt bancaire ☐; Cheque ☐; autres ☐(veuillez spécifier)

15 Quelle est la meilleure façon de décrire les principaux défis auxquels vous vous trouver confrontés en tant que petites et moyennes entreprises (PME)?

Difficulté d'accès au crédit ☐, besoin de fonds de caisse ☐, maintien d'un niveau de trésorerie suffisant ☐, coût d'exploitation en hausse ☐, niveau d'imposition élevé ☐, soutien insuffisant des autorités locales ☐, Autres ☐ (veuillez spécifier)

SECTION C: SERVICES D'ARGENT MOBILE ET IMPACT

16 Votre entreprise utilise-t-elle les services d'argent mobile pour effectuer des transactions? Oui ☐; Non ☐

Si vous avez répondu à la question 16 par un « non », veuillez cesser de remplir le questionnaire, mais au cas contraire veuillez poursuivre.

17 Est-ce que votre entreprise dispose d'un compte argent mobile Oui ☐; Non ☐

Si vous avez répondu par oui à la question 17, prière de bien vouloir sauter la question 18, mais au cas contraire veuillez poursuivre.

18 Quel compte de la liste suivante votre entreprise utilise-t-elle pour effectuer des transactions ? Agent d'argent mobile ☐, Employé(s) ☐, Propriétaire de l'entreprise ☐

19 Lequel des énoncés suivants décrit le mieux votre motivation à adopter l'argent mobile?

Convenable ☐, Rapport coût-efficacité ☐, Sécurité ☐, Moins chère qu'un compte bancaire ☐, Enregistrement facile, Concurrences ☐, Accessibilité ☐,

Autres ☐(veuillez spécifier)

20 Avec lequel des fournisseurs d'argent mobile suivants effectuez-vous principalement des transactions? MTN Cameroun ☐; Orange Cameroun ☐; Express Union ☐

21 Depuis combien d'années votre entreprise utilise-t-elle les services d'argent mobile pour faire ses transactions (payer les fournisseurs, recevoir des paiements des clients et autres)? Moins d'1 ☐; 1 à 2 ☐; 3 à 4 ☐; 5 à 6 ☐; Au-dessus de 7 ☐

22 Quel service d'argent mobile (SAM) votre entreprise utilise-t-elle le plus souvent?

Envoi d'argent (aux fournisseurs) ☐; Recevoir de l'argent (en provenance des clients) ☐; Achat de crédit pour la communication ☐; Stockage ☐; Paiement des factures de services publics ☐; Autres ☐ (veuillez spécifier)

23 Combien de fois par jour votre entreprise utilise-t-elle l'argent mobile pour payer ses fournisseurs? Moins de 5 ☐; 5 à 10 ☐; 11 à 15 ☐; au-delà de 15 ☐

24 Combien de fois par jour votre entreprise utilise-t-elle l'argent mobile pour recevoir de l'argent de ses clients? Moins de 5 ☐; 5 à 10 ☐; 11 à 15 ☐; au-delà de 15 ☐

25 Lequel des énoncés suivants décrit le mieux votre chiffre d'affaires mensuel estimé en FCFA avant l'adoption des SAM?

Moins de 50 000 ☐; 50 000 à 100 000 ☐; 100 001 à 200 000 ☐;

200 001 à 500 000 ☐; 500 001 à 1 000 000 ☐; au-delà de 1000 000 ☐

26 Quelle est la meilleure estimation de votre chiffre d'affaires mensuel actuel en FCFA?

Moins de 50 000 ☐; 50 000 à 100 000 ☐; 100 001 à 200 000 ☐;

200 001 à 500 000 ☐; 500 001 à 1 000 000 ☐; au-delà de 1000 000☐

Veuillez indiquer par un « X » dans quelle mesure vous êtes d'accord ou pas d'accord avec les affirmations suivantes concernant l'argent mobile (AM) et les services d'argent mobile (SAM).

		Pas du tout d'accord	Pas d'accord	Neutre	D'accord	Tout à fait d'accord
27	Le processus d'enregistrement est simple et abordable					
28	L'adoption des SAM pour les paiements et les encaissements a un impact sur le chiffre d'affaires de mon entreprise.					
29	Les paiements et les encaissements effectués par argent mobile ont amélioré mon chiffre d'affaires					
30	L'adoption des SAM pour les paiements et les encaissements a amélioré les flux de trésorerie de mon entreprise.					
31	Les SAM ont réduit les coûts de transaction, de transport et d'opportunité.					
32	Les SAM sont plus rentables que les services bancaires traditionnels.					
33	Les fournisseurs des SAM sont fiables					
34	La plateforme (technologie) d'argent mobile est sûre					

Merci d'avoir participé à cette étude.

Etudiant:
Frank Sylvio Gahapa Talom
Email: gahapafrank@gmail.com
Portable: (+27) 73 514 0482

Superviseur:
Dr Robertson K. Tengeh
Email: tengehr@cput.ac.za
Bureau: (+27) 21 460 3450

APPENDIX E: INTERVIEW GUIDE (ENGLISH)

INTERVIEW GUIDE

Faculty of Business and Management Science

Dear Respondent,

This is a research survey which is being conducted in order to establish **the Impact of Mobile Money Services on the financial performance of SMEs in Douala, Cameroon**, in fulfilment of the requirements for the degree of Master of Technology (MTech) in Entrepreneurship in the Faculty of Business at the Cape Peninsula University of Technology. My name is **Frank Sylvio Gahapa Talom** and my student number is **212021850**.

This research will focus on assessing the impact of Mobile Money Services on the financial performance of small and medium enterprises (SMEs) in Douala, Cameroon. By evaluating the impact of mobile money services on the financial performance of SMEs, this research could inform owners on the benefits of Mobile Money as a solution for financial inclusion and an innovation which will help them to improve, better manage and grow their businesses. By participating to this Interview, you will already be contributing towards a positive intervention in the field of entrepreneurship, mobile money for SMEs and business management.

The information obtained from the interview will be used strictly for academic purposes and, please be assured that all of the information provided will be treated as strictly confidential. In addition, participation in this study is voluntary and you have the right to opt out anytime if you wish to do so.

AN INTERWIEW WITH THE SMALL AND MEDIUM ENTERPRISES

1) How long has your business been operating?
2) What do you do as a business? List your main activities.
3) How have you heard of mobile money?
4) When approximately, did you start using mobile money services in your business?
5) What were your motivations for the mobile money adoption in your business?
6) How long have you been using mobile money in your business to pay suppliers and / or receive payment from customers?
7) What made you decide to use mobile money to pay suppliers and receive payment from customers?
8) What are your main challenges as a small and medium enterprise (SME)? With regards to your activities (operations).
9) Has the adoption of mobile money services (payments and receipts) improved your business operation? If yes, How so? If no, How so?
10) Would you say that mobile money services are more cost effective than traditional banking services? If yes, why would you say that? If no, why would you say that?
11) Have you ever encountered any problems while using mobile money services? Please elaborate.
12) Do you regret adopting the mobile money services in your business? Why or why not?

APPENDIX F: INTERVIEW GUIDE (FRENCH)

GUIDE D'ENTRETIEN

Cape Peninsula University of Technology

Faculté de commerce et de sciences de gestion

Cher Répondant,

La présente enquête a pour but d'établir **l'impact des services d'argent mobile sur la performance financière des PME à Douala, au Cameroun**, elle est effectuée dans le cadre de la réalisation des exigences requises pour l'obtention d'un diplôme de Master en technologie (MTech) avec spécialisation en entrepreneuriat de la Faculté de commerce de l'Université technologique de la péninsule du Cap. Je m'appelle **Frank Sylvio Gahapa Talom** et mon numéro d'étudiant est **212021850.**

L'objectif de cette étude est d'évaluer l'impact des services d'argent mobile sur la performance financière de petites et moyennes entreprises (PME) à Douala, au Cameroun. Par le biais de l'évaluation de l'impact des services d'argent mobile sur la performance financière des PME, cette recherche pourrait informer les propriétaires sur les avantages des paiements mobiles comme une solution d'inclusion financière et une innovation qui les aiderait à améliorer, mieux gérer et développer leurs activités. En participant à cet entretien, vous contribuerez d'ores et déjà à une intervention positive dans le domaine de l'entrepreneuriat, de l'argent mobile pour les PME et de la gestion d'entreprise.

Les informations recueillies de cet entretien seront utilisées strictement à des fins académiques et nous vous assurons que toutes les informations fournies resteront strictement confidentiels. De plus, la participation à cette étude se fait sur une base volontaire et vous avez le droit de vous retirer à tout moment si vous le souhaitez.

JOSIANE TCHOUMENI
TEL: 072 353 6880
SWORN TRANSLATOR
AT
HIGH COURT SOUTH AFRICA
WITWATERSRAND LOCAL DIVISION

UNE INTERVIEW AVEC LES PETITES ET MOYENNES ENTREPRISES

1) Depuis combien de temps votre entreprise fonctionne-t-elle?

2) Que faites-vous en tant qu'entreprise? Énumérez vos principales activités.

3) Avez-vous entendu parler de l'argent mobile?

4) Quant approximativement, avez-vous commencé à utiliser les services de l'argent mobile dans votre entreprise?

5) Quelles étaient vos motivations pour l'adoption de l'argent mobile dans votre entreprise?

6) Depuis combien de temps utilisez-vous l'argent mobile dans votre entreprise pour payer les fournisseurs et / ou recevoir des paiements de la part de clients?

7) Qu'est-ce qui vous a poussé à utiliser de l'argent mobile pour payer vos fournisseurs et recevoir des paiements de vos clients?

8) Quels sont vos principaux défis en tant que petite et moyenne entreprise (PME)?

9) L'adoption de services d'argent mobile (paiements et reçus) a-t-elle amélioré les opérations de votre entreprise? Si oui, comment?

10) Diriez-vous que les services d'argent mobile sont préférable «coût – efficacité parlant» que les services bancaires traditionnels? Si oui, justifiez-vous?

11) Avez-vous déjà rencontré des problèmes lors de l'utilisation des services d'argent mobile?

12) Regrettez-vous d'avoir adopté les services d'argent mobile dans votre entreprise ?

APPENDIX G: ETHICAL CLEARANCE FORM

P.O. Box 1906 • Bellville 7535 South Africa •Tel: +27 21 4603291 • Email: fbmsethics@cput.ac.za
Symphony Road Bellville 7535

Office of the Chairperson **Research Ethics Committee**	**Faculty:** **BUSINESS AND MANAGEMENT SCIENCES**

At a meeting of the Faculty's Research Ethics Committee on **16 October 2018**, Ethics **Approval** was granted to **Frank Gahapa (212021850)** for research activities of **M Tech: Business Admin (Entrepreneurship)** at Cape Peninsula University of Technology.

Title of dissertation/thesis/project:	THE IMPACT OF MOBILE MONEY SERVICES ON THE FINANCIAL PERFORMANCE OF SMES IN DOUALA, CAMEROON Lead Researcher/Supervisor: Dr R Tengeh

Comments:

Decision: Approved

Signed: Chairperson: Research Ethics Committee	**18 October 2018** **Date**

Clearance Certificate No | 2018FBREC597

APPENDIX H: EDITORIAL LETTER

The Editor Editorial Services
(043) 726-4829 gailfrank@nahoonreef.co.za

09 - 10 - 2019

TO WHOM IT MAY CONCERN

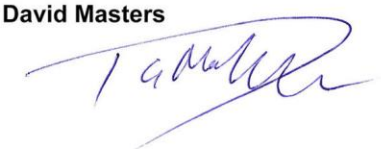
This is to certify that the research paper titled "THE IMPACT OF MOBILE MONEY SERVICES ON THE FINANCIAL PERFORMANCE OF SMEs: THE CASE OF DOUALA, CAMEROON" by FRANK SYLVIO GAHAPA TALOM has been edited by David Masters.

As English is not the first language of the candidate, a great deal of rephrasing has been required in order to give the writing the precision and the formal tone which should characterise an academic document. Although I have not contributed to the content of the text, the changes which have been made have been made at my discretion. Consequently, any discussions concerning the suitability of any of the phrasing should be referred to me and not to the candidate.

Should anyone wish to discuss or clarify any points of grammar, I may be contacted by e-mail at gailfrank@nahoonreef.co.za and my telephone number at home is (043) 726 4829

Yours sincerely,

David Masters



APPENDIX I: LETTER OF INTRODUCTION FROM THE UNIVERSITY

Cape Peninsula University of Technology

Faculty of Business & Management Sciences
Entrepreneurship and Business Management
District Six Campus
☎+27 21 460 3450
✉ TengehR@cput.ac.za

STUDENT NAME: **FS Gahapa Talom**
STUDENT NO: **212021850**
COURSE: **MTech: Business Administration in Entrepreneurship**

To whom it may concern

This serves as confirmation that Mr Gahapa Talom is registered for the abovementioned qualification in the Department of Entrepreneurship and Business Management at Cape Peninsula University of Technology.

As part of the research he is doing, he would need to undertake empirical data gathering for his research project.

You need to be aware that any information provided in this regard will be kept confidential and none of your particulars will be publicized, unless otherwise agreed upon.

Please allow him permission to utilize your organisation as a source of data collection

Feel free to contact me should you require additional information.

Kind regards

FACULTY OF BUSINESS & MANAGEMENT SCIENCES
06 AUG 2018
Cape Peninsula University of Technology
DEPARTMENT OF ENTREPENEURSHIP

.....
Dr RK Tengeh
Acting Head of Department
Entrepreneurship and Business Management

APPENDIX J: ADDITIONAL OUTPUT FROM THE SPSS ANALYSIS

Reliability scores for each variable

	Cronbach's alpha score
Use of Mobile Money services influences turnover	.609
Use of MMS has increased turnover	.596
Use of MMS has improved cash flow	.603
Use of MMS has reduced the cost of transactions	.639
Use of MMS has reduced transport costs	.659
Use of MMS has reduced opportunity costs	.659
MMS are more cost effective than those of traditional banks	.668
MM service providers are reliable	.614
MM transactions are safe	.626

Mobile Money trends

			N	Mean	Std. deviation	Std. error	95% confidence interval for mean		Minimum	Maximum	Between-component variance
							Lower bound	Upper bound			
Mobile Money services influence turnover	2 years or less		126	2.77	.914	.081	2.61	2.93	1	5	
	3 years or more		159	2.78	.991	.079	2.62	2.94	1	5	
	Total		285	2.78	.956	.057	2.66	2.89	1	5	
	Model	Fixed effects			.958	.057	2.66	2.89			
		Random effects				.057[a]	2.05[a]	3.50[a]			-.006
MMS more cost effective than services of traditional banks	2 years or less		126	3.66	.792	.071	3.52	3.80	1	5	
	3 years or more		159	3.64	.668	.053	3.54	3.75	1	5	
	Total		285	3.65	.724	.043	3.56	3.73	1	5	
	Model	Fixed effects			.725	.043	3.56	3.73			
		Random effects				.043[a]	3.10[a]	4.20[a]			-.004
Monthly turnover in FCFA before the adoption of	2 years or less		126	3.40	1.465	.130	3.14	3.66	1	6	
	3 years or more		159	4.05	1.330	.105	3.84	4.26	1	6	
	Total		285	3.76	1.426	.084	3.60	3.93	1	6	
	Model	Fixed effects			1.391	.082	3.60	3.92			

MMS		Random effects				.329	-.41	7.94			.200
Monthly turnover in FCFA after the adoption of MMS	2 years or less		126	3.94	1.364	.122	3.70	4.18	1	6	
	3 years or more		159	4.40	1.288	.102	4.19	4.60	1	6	
	Total		285	4.20	1.339	.079	4.04	4.35	1	6	
	Model	Fixed effects			1.322	.078	4.04	4.35			
		Random effects				.227	1.31	7.08			.090
Number of payments per day using Mobile Money?	2 years or less		126	1.49	.562	.050	1.39	1.59	1	4	
	3 years or more		159	1.75	.720	.057	1.64	1.86	1	3	
	Total		285	1.64	.666	.039	1.56	1.71	1	4	
	Model	Fixed effects			.655	.039	1.56	1.71			
		Random effects				.129	.00	3.27			.030
Business Bank Account?	2years below		126	1.48	.502	.045	1.40	1.57	1	2	
	3years above		159	1.43	.497	.039	1.36	1.51	1	2	
	Total		285	1.46	.499	.030	1.40	1.51	1	2	
	Model	Fixed Effects			.499	.030	1.40	1.51			
		Random Effects				.030[a]	1.08[a]	1.83[a]			-.001
Years of existence	2 years or less		126	2.75	1.025	.091	2.57	2.93	2	5	
	3 years or more		159	3.26	1.051	.083	3.09	3.42	2	5	
	Total		285	3.04	1.068	.063	2.91	3.16	2	5	
	Model	Fixed effects			1.040	.062	2.91	3.16			
		Random effects				.253	-.19	6.26			.119
Number of employees	2 years or less		126	2.13	.456	.041	2.05	2.21	2	5	
	3 years or more		159	2.14	.397	.032	2.08	2.20	2	4	
	Total		285	2.13	.423	.025	2.08	2.18	2	5	
	Model	Fixed effects			.424	.025	2.08	2.18			
		Random effects				.025[a]	1.81[a]	2.45[a]			-.001
Level of educational attainment	2 years or less		125	2.85	.696	.062	2.72	2.97	1	5	
	3 years or more		156	2.67	.711	.057	2.56	2.79	1	5	
	Total		281	2.75	.709	.042	2.67	2.83	1	5	
	Model	Fixed effects			.704	.042	2.67	2.83			
		Random effects				.088	1.64	3.87			.012

Business sector	2 years or less		126	1.36	.784	.070	1.22	1.50	1	4	
	3 years or more		159	1.33	.680	.054	1.22	1.43	1	4	
	Total		285	1.34	.727	.043	1.26	1.43	1	4	
	Model	Fixed effects			.728	.043	1.26	1.43			
		Random effects				.043[a]	.79[a]	1.89[a]			-.003

a. Please note: As the between-component variance was negative, it was replaced by 0.0 to compute this random effects measure.

Correlation analysis

		YE	BA	AY	MMSCETB	MMSIT	TBA	TAA	NOPDS	EDU	BS
YE	Pearson correlation	1	.023	.237**	.048	-.130*	.149*	.173**	-.012	-.159**	-.133*
	Sig. (2-tailed)		.702	.000	.421	.028	.012	.003	.845	.007	.024
	N	285	285	285	285	285	285	285	285	281	285
BA	Pearson correlation	.023	1	-.080	.055	-.095	-.039	-.108	-.154**	-.052	.066
	Sig. (2-tailed)	.702		.179	.357	.111	.507	.068	.009	.388	.270
	N	285	285	285	285	285	285	285	285	281	285
AY	Pearson correlation	.237**	-.080	1	.001	-.012	.189**	.143*	.243**	-.141*	-.011
	Sig. (2-tailed)	.000	.179		.985	.836	.001	.016	.000	.018	.848
	N	285	285	285	285	285	285	285	285	281	285
MMSCETB	Pearson correlation	.048	.055	.001	1	.059	.191**	.064	-.135*	-.006	.047
	Sig. (2-tailed)	.421	.357	.985		.323	.001	.281	.023	.916	.429
	N	285	285	285	285	285	285	285	285	281	285
MMSIT	Pearson correlation	-.130*	-.095	-.012	.059	1	.232**	.285**	.053	.083	.075
	Sig. (2-tailed)	.028	.111	.836	.323		.000	.000	.370	.167	.207
	N	285	285	285	285	285	285	285	285	281	285
TBA	Pearson correlation	.149*	-.039	.189**	.191**	.232**	1	.834**	.179**	.100	.048
	Sig. (2-tailed)	.012	.507	.001	.001	.000		.000	.002	.095	.419
	N	285	285	285	285	285	285	285	285	281	285
TAA	Pearson correlation	.173**	-.108	.143*	.064	.285**	.834**	1	.266**	.113	.040
	Sig. (2-tailed)	.003	.068	.016	.281	.000	.000		.000	.059	.506
	N	285	285	285	285	285	285	285	285	281	285
NOPDS	Pearson correlation	-.012	-.154**	.243**	-.135*	.053	.179**	.266**	1	-.005	.061

	Sig. (2-tailed)	.845	.009	.000	.023	.370	.002	.000		.933	.304
	N	285	285	285	285	285	285	285	285	281	285
EDU	Pearson correlation	-.159**	-.052	-.141*	-.006	.083	.100	.113	-.005	1	.165**
	Sig. (2-tailed)	.007	.388	.018	.916	.167	.095	.059	.933		.005
	N	281	281	281	281	281	281	281	281	281	281
BS	Pearson correlation	-.133*	.066	-.011	.047	.075	.048	.040	.061	.165**	1
	Sig. (2-tailed)	.024	.270	.848	.429	.207	.419	.506	.304	.005	
	N	285	285	285	285	285	285	285	285	281	285

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).