

**PERCEPTIONS OF BANK MANAGERS ON LOYALTY OF MOBILE
PHONE BANKING CORPORATE CUSTOMERS IN KENYA**

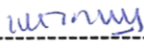
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**A THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN
BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF
NAIROBI**

2018

DECLARATION

This thesis is my original work and has not been submitted to any college, institution or university for academic credit.

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This thesis has been submitted for examination with our approval as the appointed University Supervisors.

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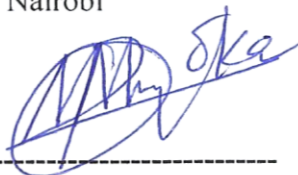
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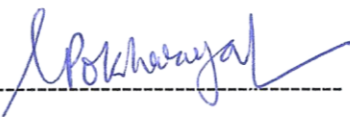
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DEDICATION

My late father Nguthuku wa Kimani went to be with the Lord on 5th May 2013 and therefore did not live long enough to celebrate this achievement. I dedicate this project to him along with my mother Wanjiku wa Nguthuku (Muciku), members of my entire family for being there for me and all colleagues and friends for the support and encouragement you gave me during this academic journey. May God bless you all.

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ABBREVIATIONS AND ACRONYMS

ATM	-	Automated Teller Machine
CBK	-	Central Bank of Kenya
CV	-	Coefficient of Variation
CRM	-	Customer Relationship Management
DIT	-	Diffusion of Innovations Theory
IT	-	Information Technology
KBA	-	Kenya Bankers Association
PDA	-	Personal Digital Assistant
PSYCAP	-	Psychological Capital
QQ	-	Quantile Quantile
SMS	-	Short Message Service
SPSS	-	Statistical Package for the Social Sciences
RMT	-	Relationship marketing theory
TMT	-	Top Management Team
RBT	-	Resource based theory
VIF	-	Variance Inflation Factors

ABSTRACT

The broad objective of the study was to assess the perceptions of bank managers on loyalty of mobile phone banking corporate customers in Kenya. The specific objectives were to: determine the extent to which mobile phone banking attributes influence commercial bank corporate customer loyalty; establish whether manager psychological capital and demographics separately moderate this relationship; and to determine the extent to which mobile phone banking attributes, manager demographics and psychological capital jointly influence commercial bank corporate customer loyalty. The study was anchored on diffusion of innovations theory, relationship marketing theory and resource based theory. The research hypotheses were derived from the study objectives and the extant literature. The study used a positivistic approach and descriptive cross-sectional design. The target population of the study was 78 top managers from 26 commercial banks in Kenya offering mobile phone banking services. The data were analysed using descriptive statistic, inferential statistics and factor analysis. The results of the study revealed that mobile phone banking attributes had statistically significant influence on corporate customer loyalty ($R=0.830$, $F=34.586$, $P<0.05$). Manager demographics factors individually moderated the relationship between mobile phone banking attributes and corporate customer loyalty except age (Age ($\beta= .038$, $P=0.237$ which is >0.05), Education level $R=.761$, $F=6.490$, $P<0.05$), Gender ($\beta= -.078$, $t=1.372$, $P<0.05$) and Professional background ($\beta= 0.201$, $t=2.961$, $P<0.05$). Psychological capital also moderated the relationship between mobile phone banking attributes and corporate customer loyalty ($\beta=0.301$, $t=2.905$, $P<0.05$). The study further revealed that mobile phone banking attributes, manager demographics and psychological capital had statistically significant joint influence on corporate customer loyalty ($R^2=0.688$, $F=34.586$, $P<0.05$). The study has contributed to theory, policy and practice in relation to marketing in general and customer loyalty in particular. The results have contributed to strengthening the existing body of literature by confirming empirically that manager demographics and psychological capital affect the relationship between mobile phone banking attributes and corporate customer loyalty in the banking sector. Embracing mobile phone banking will help banks attain corporate customer loyalty and general operational efficiency. It is recommended that banks use the findings of this study to develop marketing strategies that enable corporate customers adopt mobile phone banking and become loyal to them. The government can use these results in policy development regarding bank products in Kenya. However, the study had limitations in that only top management was targeted leaving out other employees. Sampling other senior managers in each bank could ensure a larger and more inclusive sample. The selection of research variables was not exhaustive. The study used cross sectional research design which limits generalisation. However, the results were not adversely affected by these limitations. Future research could address these limitations by conducting a study in a different context and using longitudinal studies.

CHAPTER ONE: INTRODUCTION

1.1 Background

Customer loyalty is an issue of great importance because of its contribution to organizational performance. Many researchers have acknowledged the importance of customer loyalty in service industry as it has potential for development of sustained competitive edge (Gremler & Brown, 1996). Loyal customers try new company's goods or services; buy them frequently and recommend them to others. They also give the company sincere feedback (Caruana, 2002). Customers are concerned with the benefits a product offers; hence banks have to anticipate the service attributes that they seek to remain loyal. An understanding of perceived benefits that customers seek in services and its influence on customer loyalty is a fundamental basis for marketers to formulate sound marketing strategies.

The attributes of an innovation as perceived by the targeted consumers influence its adoption. Mobile phone banking rate of adoption is influenced by these attributes namely; compatibility, relative advantage, trialability complexity and observability (Al-Jabril & Sohail, 2012). The trends of adopting new innovation as well as differentiating potential adopters and non-adopters of various technologies can be measured by these attributes (Hiltz & Johnson, 1989).

Several studies on adoption of technological innovations have included the impact of managers' characteristics in an organizational setup (Chuang et al., 2009). Manager psychological characteristics enable an organisation develop, create and accept information technology (IT) innovations. Psychological capital includes; hope, optimism, self-efficacy and resilience (Luthans et al., 2007). Individuals with psychological capital are more innovative and creative in their activities. Identifying psychological capital in an individual is critical in fostering innovation (Jafri, 2012). Most researches regarding mobile phone banking in commercial banks are cross sectional surveys such as those conducted by Wamuyu (2014) in Kenya, Nyeko (2014) in Uganda, and Dzogbenuku (2013) in Ghana. These studies concentrated on determinants of mobile phone banking and adopter's characteristics. The few studies done on customer loyalty have been carried out on specific geographic areas and researchers have yet to agree on customer loyalty antecedents (Auka, 2012; Khatibi et

al., 2002). This study was motivated by the importance of customer loyalty in the performance of commercial banks.

Innovative attributes are some of the factors found to significantly influence customer loyalty but the results have been contradictory (Dachyar & Fatkhurrohman, 2011; Rajaguru & Matanda, 2006; Lee & Liu, 2008; Rambocas, 2012). A study by Khan and Rizwan (2014) found out that Satisfaction together with Customer involvement, Perceived Service Quality and Corporate Image influenced customer loyalty of commercial banks in Pakistan. Rorio (2015) found that quality of service plays a vital role in influencing customer loyalty in commercial banks in Kenya. Demographic and psychological characteristics of managers in an organization have been found to influence innovation and organizational performance (Nielson, 2010; Kinuu et al., 2012; Luthans et al., 2007).

The general role of commercial banks is to provide financial services to the general public and business, ensuring economic and social stability and sustainable growth of the economy. Banks business is divided into corporate and retail. Corporate customers are more sophisticated and display more relational behaviour than retail customer. They buy the company's products in large quantities and hence the banks operational cost is lower thereby contributing more to organization's revenue. Managing and maintaining loyal business customers can offer greater revenue for a service provider (Rauyruen & Miller, 2007). Banks would benefit more from continued use of mobile phone banking by corporate customers hence the context of this study. Corporate customers, however, can leverage greater bargaining power and may require more favourable conditions, thus leading to lower profitability.

The intense competition in the banking industry has led to a greater focus on the variables that influence customer loyalty. It is important to develop an understanding of these variables in the corporate customer context. The study investigated the influence of mobile phone banking attributes, manager demographic and psychological capital on corporate customer loyalty.

1.1.1 Mobile Phone Banking Attributes

Mobile phone banking attributes refers to benefits which a new product or service offers to customers. These attributes influence adoption rate as well as customer

loyalty (Dachyar & Fatkhurrohman, 2011). Rogers (2003) proposed the following attributes of innovation: compatibility; complexity; relative advantage; observability and trialability. These factors are correlated positively with adoption rate except complexity which is negatively correlated. The attributes of innovation are applicable to mobile phone banking innovation targeted at consumers (Al-Jabril & Sohail, 2012). The trends of adopting new innovation as well as differentiating potential adopters and non-adopters of various technologies can be measured by these attributes (Hiltz & Johnson, 1989). Kibera (1979) noted that researchers differ on whether product attributes relate to innovation decision process and hence further studies should be conducted to conclude on the relationship between the attributes and innovation behavior. Since these attributes can be controlled by marketers, an understanding of how service or product attributes influence adoption of an innovation is an important area for research (Menor & Roth, 2009).

Mobile phone banking is an innovation whereby the customer uses a mobile device for example mobile phone to interact with the bank and carry out banking services (Luo et al., 2010). It is a delivery channel which has empowered both customers and non-customers and improved performance by mobile phone operators. Internet banking is an innovation for accessing services in a bank remotely using internet via a secured site (Yee & Faziharudean, 2010). Mobile phone banking is an innovative mode used in banks to deliver service. Customers can carry out various transactions conveniently such as checking balances, transferring funds, bank statements, paying bills, management of stock, investments and insurance (Durkin et al., 2003).

This technology innovation has brought efficiency in delivery of banks services thereby reducing their operational costs. Mobile phone banking provides the customer anytime, anywhere real time bank services using a mobile phone. Using a mobile phone for banking activities is beneficial for both customers and banks, inducing a powerful relationship between banks and their customers (Laukkanen, 2007). Mobile phone banking help banks deepen relationships with customers and create a bond based on trust and anticipation of their financial services' needs. It also enhances customer experience and generates new revenue streams.

Despite the strategic importance of customer loyalty in a firm's performance, the current understanding of its antecedents is inconsistent (Auka, 2012; Khatibi et al.,

2002). Innovative attributes influence adoption of mobile banking but studies on their benefits to the organization are limited. In this context the study was to determine the assumed effect of mobile banking attributes on corporate customer loyalty.

1.1.2 Manager Demographics

Demographics are statistical characteristics of a population. They include professional background, age, education and gender. The characteristics of managers in an organization impacts on their decisions as well as actions of their organizations (Hambrick & Mason, 1984). Various researchers have established varied findings on how demographics of managers relate to performance in an organizational. For instance, top managers' age influences the nature of strategic decisions that they make. It has been argued that younger managers incline to more aggressive strategies (Hambrick & Mason, 1984). Conversely; it has also been argued that age has a negative influence on team performance (Tsui & O'Reilly, 1989) and was found to have a negative relationship with strategic choice which affects performance negatively.

Educated individuals are able to tolerate ambiguity and show ability of being able to integrate and deal with complex matters (Jehn & Bezrukova, 2004). A person's education significantly indicates their ability, skills and knowledge and is also an indicator of a person's cognitive preferences. Professional background is the expertise and specialization in a particular professional area that managers bring to an organization. The expertise of team members' influences team efficiency and effectiveness (Certo et al., 2006) which stimulates effectively the decisions they make hence performance of the organization.

Arguments as to whether gender diversity influence organizational performance have equally been varied. For instance, there has been an argument that gender diversity in management improves task performance, decision-making and information processing leading to improved performance of the organisation (Certo, et al., 2006). There has also been an argument that there is no correlation between gender diversity and performance.

The performance of an organization reflects the actions and demographics of top managers in that organization (Nielson, 2010; Kinuu et al., 2012). The decisions made

by these Managers are influenced by their demographics. These decisions translate into the actions that their organizations adopt. Several studies on adoption of technological innovations in an organization have taken into account the impact of managers' characteristics (Chuang et al., 2009). There is no consensus on the impact of manager demographics on firm's performance based on previous inconsistent and contradictory study results. This study investigated the moderating effect of manager demographics on the relationship between mobile phone banking attributes and customer loyalty.

1.1.3 Manager Psychological Capital

This concept refers to positive psychological development state of a manager. Psychological capital includes optimism, hope, resilience and self-efficacy (Luthans et al., 2007). It helps individuals enhance their creativity and be more innovative while carrying out various activities. To foster innovation in an organisation it is critical to identify individuals' psychological capital (Jafri, 2012). Managers as well as employees psychological capital enable an organisation develop, create and accept information technology (IT) innovations (Ziyae et al., 2015).

Individual attitudes, perceived socio normative expectations and perceived behavioral efficacy as determinants of behavioral intentions are greatly influenced by the attitudes and behavior of managers. Transformational leadership relate positively to organizational innovation (Khan et al., 2009). Innovation increases the value of service, influences customer satisfaction and hence, customer loyalty (Bersali & Guermat, 2014). Zhao et al. (2009) established that an organization's performance is determined by various personality traits. These traits includes; self-efficacy, personal initiative, conscientiousness, openness to experience, innovativeness and achievement orientation.

According to Hambrick and Mason (1984) the choice of strategy adopted by an organization is determined by the manager's values and perception of the situation. Hambrick (2007) noted that Psychological attributes of top managers,' which influence the strategic decision and organization performance needed to be further explored.

Psychological capital has been empirically demonstrated to have positive organizational outcomes. However the firm requires research based evidence of how Psychological capital influences performance. The relationship between PsyCap and its outcomes is inconsistent across contexts and has a higher impact in studies conducted in the United States of America compared to other countries (Avey et al., 2011). In this study Psychological capital was assumed to moderate the relationship between mobile phone banking attributes and corporate customer loyalty.

1.1.4 Customer loyalty

Customer loyalty is the behavior associated with consumer purchases over time. It is measured by how frequent a product is purchased, repeat purchases and share of the wallet. It is a strong commitment to consistently re-patronize or re-buy a preferred service or product resulting in a repeat purchase of the same brand, despite marketing efforts or other influences. It is mainly influenced by the consumer having a positive attitude of the company's products (Looy et al., 2003). Loyalty in the service domain has been defined extensively as behaviours that can be observed (Bloemer et al., 1999). A consumer's behaviour as opposed to thoughts is the actual determination of loyalty. However according to Pearson (1996), it is mindset of the consumer that favours the company and its products, commit to a repeat purchase and recommend the product to others.

According to Anderson and Jacobson (2000), the action of a firm in customer value creation results in customer loyalty. This leads to repeat purchases and the customer becoming an ambassador of the firm. Ndubisi (2005) noted that it is uneconomical to recruit new customers instead of retaining the existing ones as the cost of serving a loyal customer is five to six times less than acquiring a new one. The increased profit from serving a loyal customer is derived from low operational costs, higher sales and low marketing costs (Bowen & Chen, 2001). Customer loyalty contributes to the performance of a firm in the long term. It is an important driver that leads to lower costs, increased sales and market share (Alrubaiee & Al-Nazer, 2010)

Due to the increasing competition in the banking industry, banks have been forced to improve on their loyalty programs and embed their sustainability. However studies have indicated that some customers still remain loyal despite substandard products

due to high switching costs. According to Hennih- Thureau et al., (2002), organisations should build and increase relationships with their customers to remain competitive.

Loyal customers bring various benefits to the organisation including; business referral, profitability, publicity, competitive positioning and customer share. According to Lin and Wang (2006), business competitions currently consider customer loyalty the main factor in achieving continued competitive advantage. The installation of technology which is friendly to the customer as a channel to deliver normal bank services is a common way of attaining increased market share and customer loyalty. This technology includes mobile phone banking, internet banking and automated teller machine (ATM). The importance of customer loyalty in the performance of an organization cannot be underscored. However it not easy to maintain it, as customers normally defect to other competing firms offering better value and convenience. Since innovations like mobile phone banking brings efficiency and convenience to customers, this study was to establish whether innovative attributes impacted customer loyalty in the banking context.

1.1.5 Commercial Banks in Kenya

A commercial bank refers to a company that has been licensed to carry on, banking business in Kenya. Commercial banks in Kenya have segmented their business into corporate and retail banking. Mobile phone banking in Kenya was first adopted by the retail customers but has since been rolled over to the corporate customers. However the adoption has been limited as the features are not been tailor made for the corporate customers. Kenya has been in the lead in the world in adoption of mobile phone banking due to lack of efficient money transfer mechanism. Banking business includes services such as accepting deposits, lending money and offering investment products.

Commercial banks in Kenya are categorized into 3 classes: small peer group, medium peer group and large peer group. Small peer group consists of banks with less than 1% market share index, medium peer group are banks with market share index of between 1% and 5% while large peer group is composed of banks with over 5% market share index. All the seven banks in the large peer group category offer mobile phone banking. Ten banks out of eleven in the medium peer group category offer mobile

phone banking while only nine banks out of twenty four in the small peer group category offer mobile phone banking (CBK, 2015).

Commercial banks have continued to rollout innovative banking products such as mobile phone banking leading to reduced costs and increased efficiency. The stiff competition among banks in Kenya has led to adoption of more efficient delivery channels through the use of technology as a way of increasing their market share. Competitiveness in commercial banks is a function of size but adoption of new service innovations cut across all categories.

The Central Bank of Kenya (CBK) has the primary role of formulating and implementing the monetary policy. It is also responsible for ensuring that the financial system functions as expected as well as fostering liquidity and solvency. It is also mandated to supervise and regulate financial institutions. The banking industry in Kenya comprise of 42 commercial banks, 12 microfinance banks, 80 foreign exchange bureaus, 1 mortgage finance company, 15 money remittance providers, 3 credit reference bureaus and 8 representative offices of foreign banks, (CBK, 2015).

The banking industry is a component of the financial sector which is a key element in maintaining a stable economy. Adoption of technology has transformed the banking industry's packaging, delivery and consumption of their services. Technological innovations for example mobile phone banking reduce operational costs. This cost savings has enabled banks to focus on financial inclusion of the unbanked. Gupta (2008) noted that mobile phone banking is an important tool which supports innovation leading to growth, development and competitiveness. Innovation in services is beneficial to both commercial banks and customers leading to customer loyalty. The study used the context of commercial banks in Kenya due to their importance in the development of the economy.

1.2 Research Problem

There is intense competition in the banking industry which has made commercial banks develop innovative product using technology. Banks understand that their success lies with having a long term relationship with customers (Koçoğlu & Kirmaci, 2012) because this relationship leads to customer loyalty and is beneficial to both parties (Roig et al., 2006). They have realized that customer relationship is critical if

they are to remain competitive. Customer relationship management (CRM) is an important factor as it focuses on customer loyalty rather than single business transactions.

Customer loyalty leads to reduced operational costs (Gaurav, 2008). It is also cheaper for companies to serve a loyal customer than acquire a new one (Ndubisi (2005). There is controversy on what antecedents lead to customer loyalty (Auka, 2012; Khatibi et al., 2002). And no framework for the key antecedents is currently available (Agrawal et al, 2012). This study has introduced manager psychological capital as a moderating variable which is a new contribution in the study of customer loyalty not found in the literature reviewed. Various studies have considered only a few service attributes as antecedents of customer loyalty with contradictory results. The geographical scope covered by these studies is also limited with most studies done in different towns. They have also used different conceptualization and methodology.

Mobile banking in Kenya is an innovative phenomenon that started with the launch of Mpesa, a mobile money transfer and financing service, launched by Safaricom in 2007. The service became an instant success in Kenya due to the government's support for the innovation, Safaricom market dominance and customer focus management. The mobile transfer services were integrated with banking platforms to serve bank customers. Mobile banking platforms handle an estimated 2.3 billion shillings per day (Kangethe, 2017). Mobile banking (m-banking) has emerged as an important distribution channel, with considerable research devoted to its adoption. However, this research stream has lacked a clear roadmap or agenda (Shaikh & Karjaluo, 2015). Service innovation research is still an under-researched, under-developed phenomenon and in need of more empirical research (Thakur & Hale, 2012). There has also been limited research that focuses on the factors affecting adoption of mobile technology by bank customers (Oluoch, 2013). Studies on adoption of innovation for example Mari (2003); Al-Jabri and Sohail (2012); Dzugbenuku (2013) and Nyeko (2014) concluded that only some innovative attributes significantly influenced adoption of mobile phone banking. This contradicts diffusion of innovation theory (Rogers, 2003) which postulates that adoption of innovations is influenced by all the five innovation attributes.

Dachyar and Fatkhurrohman (2011) conducted a study in Indonesia to determine whether innovation factors influence customer loyalty. He found that two attributes of innovation relative advantage and compatibility among others factors significantly influenced customer loyalty. Data was collected from telecom companies in Indonesia. The study was limited to only two attributes of innovation leaving the other three attributes detailed in the adoption literature. This calls for a study incorporating all service attributes to determine their impact on customer loyalty.

On his part Bersali and Guermat (2014) did a study on the Impact of innovations on customer loyalty of Algerian mobile phone customers. He found that effective innovations are positively associated with customer loyalty. The study had limitations in that data was collected using convenient snowballing approach and the results cannot therefore be generalised.

A study by Makori and Mwirigi (2013) on the relationship between corporate clients' satisfaction in corporate banking services and their loyalty to the bank found that Perceived service value, relationship banking and corporate image correlate positively with corporate customers' loyalty to the corporate banking services. He focused on Mombasa city in Kenya. There is need for a study integrating more variables and focusing on the whole country.

Maditinos et al. (2013) studied the critical factors affecting consumer acceptance of online banking in Greece and found that security risk, performance risk and perceived usefulness directly influenced intention to use internet banking. Quality of the internet and perceived ease of use did not impact internet banking adoption directly. Data collected from internet users in Greece. The study results differ with Cruz and Laukkanen (2010) on complexity and is inconsistent with various technology adoption studies and diffusion of innovation theory.

In another study on Mobile banking adoption conducted in Brazil Cruz and Laukkanen (2010) found that perception of complexity, cost, relative advantage and risk hindered mobile banking usage while observability had no impact. This is inconsistent with various technology adoption studies and diffusion of innovation theory. Data collection was limited to banking customers of only one major bank.

Al-Jabri and Sohail (2012) on their part did a study to determine adoption of mobile banking in Saudi Arabia. He found that observability, relative advantage and compatibility influenced mobile phone banking adoption, while no significant influence was noted with complexity and trialability. As a limitation he used convenience sampling of all adult residents of Saudi Arabia and the results cannot therefore be generalized. The study results are also inconsistent with various technology adoption studies and diffusion of innovation theory.

Reviewed literature has identified various gaps. Firstly, the bulk of literature has focused on adoption of innovation without extending to the benefits accrued to an organisation following the adoption. The role played by service features has rarely been focused in studying antecedents of customer loyalty. This study extended the impact of adoption to customer loyalty. Secondly, most studies on financial innovation in Kenya for example Wamuyu (2014) and Oluoch et al. (2013) have been done on banks in specific towns in Kenya and focused on bank customers as the population of study. A study focusing on the whole country is necessary. This study considered all banks in Kenya offering mobile phone banking service and the population was managers in those banks.

Studies on mobile banking are limited despite its success in Kenya. The way M-banking users are retained and persuaded to use this service continuously is very limited (Al-Ghazali et al, 2015). The study aimed to make a contribution to the understanding of the interaction effects of mobile phone banking attributes, manager demographics, managers psychological capital and corporate customer loyalty. The research question addressed by this study was therefore: To what extent do mobile phone banking attributes, manager demographics and psychological capital influence loyalty of commercial bank corporate customers in Kenya?

1.3 Research Objectives

The overall study objective was to establish the perceptions of bank managers on loyalty of mobile phone banking corporate customers. The specific objectives were to:

- i. Determine the extent to which mobile phone banking attributes influence commercial bank corporate customer loyalty.

- ii. Establish the effect of manager psychological capital on the relationship between mobile phone banking attributes and commercial bank corporate customer loyalty.
- iii. Assess the influence of manager demographics on the relationship between mobile phone banking attributes and commercial bank corporate customer loyalty.
- iv. Determine the extent to which mobile phone banking attributes, manager demographics and psychological capital jointly influence commercial bank corporate customer loyalty.

1.4 Value of the Study

Available literature suggests that researchers have yet to agree on the main factors influencing customer loyalty but several studies have identified antecedents of loyalty to include quality of service and customer satisfaction. Empirical findings have been mixed and contradictory. The study result adds two variables to the theory of customer loyalty, mobile phone banking attributes and manager demographics as independent and moderating variable respectively.

One of the functions of the central bank of Kenya (CBK) is to formulate policies not just geared towards enhancing access to financial services but also ensuring that such services are affordable to the bank customers. The CBK also licenses and supervises the banking sector as well as approve each bank's tariff rates. This study was important to the government and central bank authorities in providing a better understanding of mobile phone banking adoption and customer loyalty among corporate banking customers in commercial banks. It will help them in policy formulation and implementation as well as in approving appropriate products and delivery channels to suit targeted clientele.

Customer loyalty is a major concern to practitioners due to intense competition in the banking industry and higher service expectation. Customer loyalty can be enhanced by the banks offering their customers products and services that meet their needs. Bank management require evidence-based understanding of their customers behavior to enable them develop strategies that target customer relationship and retention. The findings of the study is invaluable to the banking sector as it will help in understanding customers' acceptance of this innovation and determine the influence

of mobile phone banking attributes on corporate customer loyalty. This will help in developing and implementing marketing strategies that enhance customer loyalty.

1.5 Structure of the Thesis

This thesis is organized into five chapters. The first chapter has presented the conceptual background of mobile phone banking, manager demographics, manager psychological capital and customer loyalty. It has further discussed the research objectives, research problem and value of the study. Chapter two has discussed the theoretical foundations of the study, reviewed empirical literature on the relationships between the research variables, identified the knowledge gaps and developed the conceptual framework and hypotheses.

Chapter three has discussed the two main research philosophies namely phenomenological and positivistic paradigms and justified the use of positivistic approach. It has also discussed the research design, the relevant population and data collection. It has further presented the operationalized study variables and discussed the data analysis. Chapter four has presented and discussed the findings of the diagnostics tests, research variables and hypotheses tests. Chapter five has presented the summary, conclusions and recommendation arising from the results of the relevant tests. It has further discussed the limitations and implications of the study and provided suggestions for further research.

1.6 Summary of the Chapter

This chapter has presented the background of the study and discussed the following study variables; mobile phone banking attributes, manager demographics, manager psychological capital and customer loyalty. The chapter has also described the context of the study, research objectives, value of the study, research problem and finally the structure of the study. The next chapter has reviewed the relevant literature and presented a conceptual framework and study hypotheses.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on diffusion of innovations theory, relationship marketing theory, resource based theory, mobile phone banking attributes, manager demographics, manager psychological capital and customer loyalty. Research gaps are also identified. The chapter concludes with a conceptual framework and study hypotheses.

2.2 Theoretical Foundation of the Study

This study used diffusion of innovations theory, relationship marketing theory and resource based theory. Diffusion of innovations theory is among the technology adoption theories widely used in information systems research. Technology adoption theories have been used in studies of innovation diffusion and adoption. According to these theories, how innovations in information technology is adopted and used is determined by user's beliefs and attitudes towards it (Davis, 1985).

2.2.1 Diffusion of Innovations Theory

This theory originated in communications and is one of the oldest theories in social science. It was developed by Rogers (1962) and explains how a product or idea spreads through the social system or a certain population. Through diffusion the population adopts the product, idea or behaviour. Adoption implies that the behaviour of a person changes and he or she buys or use new products or services. In adoption it is critical that the product, idea or behavior be perceived as innovative or new. This theory takes a radical approach from other theories of change by considering reinvention or products, ideas or services rather than persuading people to change.

This is one of the earliest underlying theories that researchers use to investigate the factors that influence adoption of innovation by individuals (Nor et al., 2010). Diffusion of Innovations (DIT) main goal is to understand innovation adoption using the four elements of diffusion; innovation, time, communication and social systems. Time comprises of innovation decision process, relative time of innovation adoption and rate of adoption of innovation. Innovation decision process is the mental process individuals go through from innovation knowledge to attitude formation, adoption decision and lastly confirmation.

Adoption of innovation by individuals is done at different times. The adoption tends to be on a time sequence in a specific innovation which is categorized according to their propensity to adopt the new idea. The five adopter categories are: innovators, early adopters, early majority, late majority and laggards. The following innovative attributes influence the adoption rate; compatibility, complexity, relative advantage, observability and trialability. According to Rogers (2003) these factors are correlated positively with adoption rate except complexity which is negatively correlated. The trends of adopting new innovation as well as differentiating potential adopters and non-adopters of various technologies can be measured by these attributes (Hiltz & Johnson, 1989)

Studies from a variety of disciplines regarding innovative technology adoption have been done using diffusion of innovations theory as the conceptual framework. The findings of these studies are mixed, varied and contradictory. For instance, some empirical investigations indicate that only some innovative attributes have significant influence on adoption of mobile phone banking while other attributes have no significant influence (Mari, 2003; Al-Jabri & Sohail, 2012; Dzogbenuku, 2013; Nyeko, 2014). This is contrary to diffusion of innovation theory (Rogers, 2003) which postulates that all the five innovation attributes significantly influence adoption of innovations. Studies on adoption of technology suggest that individuals' perceptions of innovative attributes predict the adoption decisions (Datta, 2011; Flight et al., 2011).

2.2.2 Relationship Marketing Theory

Relationship marketing refers to all marketing activities concerned with the development, establishment and maintenance of exchanges successfully (Mishra & Li, 2008). It is concerned with the relationship between the firm and its customer and how it influences business development and customer needs (Gronroos, 2000). According to this theory relationship marketing success result from some cooperative relationships aspects that determine the success of relational exchanges (Arnett & Badrinayanan, 2005). According to Buttle (1996), marketing concerns have progressively shifted from developing, selling, and delivering products/services to developing and maintaining a mutually satisfying long-term relationship with customers.

Relationship marketing promotes long-term customer relationship which is an important factor in customer relationship management (CRM) with the focus being on customer loyalty rather than single business transactions. Organization with effective relationship marketing understand their customers' needs and meet them better than their competitors leading to reduced operational costs and customer loyalty (Gaurav, 2008). Customer relationship management (CRM) enable banks obtain information from customers and use it to create incentives for repeat purchases and continuous relationship. According to Ndubisi (2007) customer relationships is a source of marketing intelligence which helps a firm in the development of their marketing strategy.

Relationship marketing overlaps with other marketing efforts for example channel marketing, and service marketing. However the strategies used are different for example channel marketing focus on channel interaction, while service marketing focus on intangible services. Relationship marketing concentrates on improving various relationships leading to improved firm performance. It recognizes the value of customer retention and improved communication. Relationship marketing assumes that the strategies used by the company to interact with its customers can result in customer loyalty development and maintenance (Berry, 1995). It is a business strategy that uses information technologies to listen to customers, focus on their needs and offer them the right products and services. CRM strategy success is determined by the specific goals set. These goals include customer retention, customer loyalty and improved customer lifetime value and satisfaction (Luck & Lancaster, 2003; Xu & Walton, 2005).

The success of marketing efforts through strong relationships results in increased customer loyalty and organisational performance (Sirdeshmukh & Sabol, 2002). It has been found that the development of good relationships with customers plays a key role in generating customer loyalty. Enduring relationships with customers provide a unique and sustained competitive advantage that is hardly duplicated by competitors. Such a strategic orientation is reputed to improve customers' satisfaction and loyalty as well as raising financial performance (Andreassen, 1994).

It is economical to retain customers by satisfying them as the duration of their stay with the firm and the strength of the relationship determine the profitability of the organisation. Relationship marketing contributes to improved customer satisfaction, retention, loyalty and reduced marketing costs in banks (Bergeron & Fallu, 2008). Commercial banks' should embrace relationship marketing to maintain relationships with stakeholders and customers (Soimo et al., 2015).

Customer loyalty and retention is a strategic objective of maintaining customer relationships in the long run. A low defection rate means a high retention rate and determines higher profits. Banks understand that their success lies with having a long term relationship with customers (Koçoğlu & Kirmaci, 2012) because this relationship leads to customer loyalty and is beneficial to both parties (Roig et al., 2006). According to Kuria (2009), organizational competitiveness is achieved through marketing productivity and appropriate CRM practices. An empirical investigation by Aminu (2012) in Nigeria concluded that relationship marketing influenced customer loyalty and that firms marketing focus in all sectors had shifted from transactional to relational.

2.2.3 Resource Based Theory

According to this theory a firm has a bundle of valuable resources at its disposal. How these resources are combined, brings out the difference between one firm and another. Firm's resources include all assets, attributes, processes, information, knowledge and capabilities. Resource based theory (RBT) use resources as the basic unit of analysis. Resource based theory has been used in many studies that seek to explain the sources of sustainable competitive advantage for organisations. It was proposed by Wernerfelt in 1984 and postulates that strategic resources possessed by a firm yield significant influence on performance.

The evaluation of a firm using its resources can lead to different insights from traditional perspectives (Wernerfelt, 1984). According to (Barney, 1991) firms are able to compete in a fast changing business environment using heterogeneous intangible resources which are valuable, rare and imperfectly imitable. These firm resources are semi-permanently tied to it and include technological, financial, human, physical and commercial. The firm use these resources to produce goods and delivery

them to its customers (Barney, 1991). Human assets include human capital, psychological capital and social capital. (Newman et al., 2014).

Psychological capital refers to positive psychological development state of an individual. It comprises of optimism, resilience, self-efficacy and hope. Individuals with psychological capital are more innovative and creative in their activities (Luthans et al., 2007). Managers are critical in yielding high performance of organizations. Their demographic differences can potentially contribute differently and complementary to a given task while their behavioral differences results in a richer repertoire of management skills and competencies leading to enhanced performance. According to Szeless et al. (2003) resource-based relatedness influences the performance of multi-business firms.

When analyzing the effect of information technology (IT) using resource based view, IT is considered a resource that the organization can use to improve its capabilities and performance. Resource-based theory is the underlying theory used to study what determines the differences in performance of different firms (Finney et al., 2005; Liu, 2010). Maintaining firm competitiveness through the deployment of dynamic capabilities in a rapidly changing market environment is inseparably tied to innovation (Teece, 2007). According to RBV, firms' sustainable competitive advantage and superior performance is a result of the possession of intangible resources and their effective deployment (Sirmon et al., 2008).

2.3 Mobile Phone Banking Attributes and Corporate Customer Loyalty

Banking innovations provide service attributes which enhance adoption. Innovations in themselves do not influence customer loyalty directly but they do so through loyalty antecedents (Dachyar & Fatkhurrohman, 2011). According to Scott et al. (2008), innovation adoption process is not straightforward, but attributes of the innovation, contextual factors, and situational factors play an important role in the process. Enhancing our understanding of these numerous influencing factors could provide valuable information to guide dissemination efforts and thereby increase the efficiency of innovation implementation.

Kibera (1979) noted that researchers differ on whether product attributes relate to innovation decision process and hence further studies should be conducted to

conclude on the relationship between the attributes and innovation behavior. The innovation adoption framework helps in understanding consumers' acceptance of innovations as postulated by diffusion's theory. A study done by Domeher et al. (2014) in Ghana found out that attributes of financial innovation significantly influenced their adoption. Since these attributes can be controlled by marketers, an understanding of how service or product attributes influence adoption of an innovation is an important area for research (Menor & Roth, 2009). Effective innovation is critical in winning and retaining customers in an organization. Innovations based on technology enhance customer benefits from the existing products in the same market (Benner & Tushman, 2003).

Banks innovations are used as a strategy to compete in the market place and improve banks' performance (Batiz-Lazo & Woldesenbet, 2006). A study by Gichungu and Oloko (2015) found that online banking, ATM banking, agency banking and mobile phone banking positively impacted on the financial performance of commercial banks in Kenya. A study by Muiruri and Ngari (2014) found that mobile banking and other financial innovations influenced bank's performance in Kenya. According to Calantone et al. (2002), the ability of a firm to innovate determines its performance. Pooja and Singh (2009) found that innovative banks in India were more efficient and profitable than non-innovative banks. A study by Kyei and Bayoh (2017) in Ghana found that there is positive and significant relationship between innovation and customer retention. Service innovation was found to be the main driver of customer retention.

Mobile phone banking attributes predict the rate of adoption of mobile phone banking by customers. These attributes include compatibility, complexity, relative advantage, observability and trialability. Various studies have come out with varied and contradictory results on the attributes that influence adoption of mobile phone banking and indeed other innovations. For instance, Al-Jabri and Sohail (2012) observed that observability, relative advantage and compatibility influenced mobile phone banking adoption in Saudi Arabia, while no significant influence was noted with complexity and trialability.

Elogie et al. (2015) did a study on the factors that influence the adoption of smart phones among undergraduate students in Nigeria and found that relative advantage and complexity predicted adoption while, compatibility, observability and trialability did not. In India a study by Kapoor et al (2013) found that relative advantage, compatibility, complexity and trialability displayed significant impact of the intention to adopt interbank mobile payment service while observability did not. Kalaiarasi and Srividya (2013) found that young online banking users are significantly influenced by the trialability, compatibility and complexity characteristics of the innovation. The dimensions of relative advantage and perceived risk had insignificant influence on adoption of online banking among students in India. A study done by Maditinos et al. (2013) found that perceived usefulness, security risk and performance risk impacted on the intention to use internet banking. On the contrary, the impact of perceived ease of use and quality of the internet connection seemed to have only an indirect effect on internet banking adoption in Greece. Perceived ease of use in technology adoption model is a similar concept with complexity in DIT (Kim & Crowston, 2011).

Wessels and Drennan (2009) found that perceived usefulness, compatibility, perceived risk, perceived cost and attitude are primary determinants of consumer acceptance of m-banking in an Australian context. Perceived ease of use was found to have no impact. A study done by Keel et al (2012) found that there was significant relationship between all technological factors (except for complexity) and the adoption of E-Learn @ USM in Malaysia. A study by Nor et al. (2010) found that perceived ease of use did not affect the attitude toward using Internet banking by students in public universities in Malaysia.

Slyke et al. (2002) found that perceptions of relative advantage, complexity, compatibility and result demonstrability are significantly related to intentions to use domino discussion databases in USA. There was no significant relationship between intentions to use and perceived trialability, visibility, or voluntariness. Cruz and Laukkanen (2010) did a study in Brazil and found that perception of cost, risk, low perceived relative advantage and complexity hindered the use of mobile banking. Observability had no influence. A study by lou et al. (2017) on tourist satisfaction enhancement using mobile QR in China found that relative advantage, observability and compatibility, positively influenced attitude toward QR while complexity and

trialability attributes had no effect on attitude. A study by Eriksson et al (2008) in Estonia found that adoption of internet banking was influenced strongly by relative advantage and complexity while Compatibility had a weak effect. A study by Karma et al. (2014) in Sudan found that intention to use M-banking by bank customers was strongly impacted by perceived ease of use, perceived trust and perceived risk. Perceived usefulness had no influence. Alomar and Visscher (2017) noted that e-procurement adoption by firms in Belgium was influenced by; competitive pressure, organizational readiness, size, attitude towards change and trading partners' pressure. Relative advantage did not influence e-procurement adoption significantly.

Customer loyalty is a common subject in the service and marketing literature (Heskett & Sasser, 2010). It brings into the business benefits that justify investigation of the factors that contribute to its enhancement since these antecedents are dynamic, change and evolve over time (Johnson et al., 2006). Customers' loyalty to a particular firm is due to customers' perception that they are receiving greater value than what is offered by the competitors (Sirdeshmukh et al., 2002). Retaining customers is considered more profitable than acquiring new ones (Ennew, 2003; Weinstein, 2002). In fact, customer retention is a result of customer loyalty, which has been found to impact on a firm's financial performance (Anderson et al., 1994).

Loyal customers are indeed crucial to business survival. For that reason many companies use defensive marketing strategies to increase their market share and profitability by maximizing customer retention (Tsoukatos & Rand, 2006). Dachyar and Fatkhurrohman (2011) did a study in Indonesia and found that Innovative attributes (compatibility and relative advantage) and commitment from the customers had a higher impact on loyalty compared with other antecedents in the study namely; perceived quality, customer satisfaction, consumer trust, perceived value, customer complaints and customer expectations.

Studies have found out that innovative attributes influence customer loyalty but results are mixed and contradictory on which and whether all the attributes influence customer loyalty. For example Lee and Liu (2008) found out that compatibility and relative advantage are crucial in influencing customer loyalty. Rambocas (2012) did a study in Trinidad and Tobago and found that relative advantage and government

support are important determinants of internet banking loyalty. Complexity and trialability had no impact which contradicts previous studies on technology adoption (Tan & Tao, 2000). The inconsistencies in the literature indicated that there was need for a more rigorous study.

2.4 Mobile Phone Banking Attributes, Manager Psychological and Corporate Customer Loyalty

Adoption of any innovation is influenced by the five constructs of the diffusion of innovation theory (Davis et al., 1989). The likelihood that an innovation is adopted depends partly on its attributes. A study by Rajaguru and Matanda (2006) found that customer loyalty was positively impacted by product attributes. Managers have an important strategic decision making role which includes innovation processes and opportunity recognition.

The firm's performance is directly impacted by the personal attributes and behaviours of its managers (Oscar et al., 2013). For effective competitive advantage, the design strategy for product loyalty should be meaningful from customers' perspective. Loyalty element should be embedded into product design process, especially for those with product attributes. From the literature reviewed no study was found where manager psychological capital moderated the relationship between mobile phone banking attributes and customer loyalty.

2.5 Mobile Phone Banking Attributes, Manager Demographics and Corporate Customer Loyalty

Customers are concerned with the benefits that a product offers hence service features are a major determinant of customer loyalty in commercial banks. Products developed through the use of technology have reduced costs and customers are able to create service outcomes on their own. This leads to reduced switching rates and enhanced customer loyalty (Shapiro, 2003). Several studies have been done on adoption of technological innovations taking into account the impact of managers' demographics in an organizational context (Chuang et al., 2009).

Managers of innovative banks have higher education with diversity in their respective areas of expertise (Bantel & Jackson, 1989). According to Hernandez and Mazzon (2006) education and average age correlated significantly with innovations. However,

these studies have failed to prove how or why demographics influence the performance of the firm (Opong, 2014).

2.6 Mobile Phone Banking Attributes, Manager Demographics and Psychological Capital and Corporate Customer Loyalty

Mobile phone banking is an intangible service innovation and a means of service delivery that use high technology (Suoranta & Mattila, 2004). In the innovation adoption literature, perceived innovation attributes are a major determinant of adoption (Rogers, 2003). Studies on the effect of innovation attributes on customer loyalty have found them to significantly influence customer loyalty (Dachyar & Fatkhurrohman, 2011; Rajaguru & Matanda, 2006). Based on the resource based theory, studies done on managers' demographic and psychographic capital have concluded that their personal characteristics have a direct impact on firm performance (Carpenter et al., 2004; Hambrick & Mason, 1984).

For example research findings indicate that managers make faster decisions if they possess high motivation, achievement levels (Kauer et al., 2007). According to Karami et al. (2006) managers who are more educated normally develop formal strategic plans. A study by Lichtenstein (2005) on owners and managers' observable characteristics, values, performance, strategic choice and behaviour found out that executive values influenced the performance of the firm significantly while the level of education, age, professional experience and tenure had no significant effect.

2.7 The Knowledge Gaps

The identified knowledge gaps and how this study has bridged some of them by evaluating the influence of mobile phone banking attributes on customer loyalty is summarized in Table 2.1. The reviewed literature on customer loyalty in commercial banks demonstrates that most of the studies have identified customer loyalty antecedents to include service quality and customer satisfaction. Understanding consumer needs and preferences will enhance successful adoption of mobile phone banking leading to customer loyalty.

Table 2. 1: Summary of Knowledge Gaps

Study	Focus of the study	Study Methodology	Findings	Knowledge gaps	Focus of the current study
Wessels and Drennan (2009)	Consumer Acceptance of M-Banking in Australia	A survey. Data collected through email rental list in Australia	Compatibility, perceived usefulness, perceived risk, attitude and perceived cost determined consumer M-banking acceptance by consumers in Australia. Perceived ease of use was found to have no impact.	Study done in a western country and results inconsistent with varies technology adoption studies and diffusion of innovation theory	Study done in an African country and data collected from commercial banks' managers through drop and collect method of data collection.
Cruz and Laukkanen (2010)	Mobile banking adoption in Brazil	A survey. Data collected from banking customers of a major Brazilian bank	Perception of complexity, cost, relative advantage and risk hindered mobile banking usage. Observability had no impact.	Study done in Brazil, in South America and results inconsistent with varies technology adoption studies and diffusion of innovation theory	Study done in an African country and data collected from commercial banks' managers

Dachyar and Fatkhurrohman (2011)	Use of structural equation model to determine whether innovation factors influence customer loyalty	A survey. Data collected from telecom companies in Indonesia	Innovation factors significantly influenced customer loyalty.	Study focused on two attributes in the DIT namely: relative advantage and compatibility as well as other nine antecedents of loyalty.	The study included all five attributes in the DIT and had moderating variable of manager demographics. Data was collected from commercial banks in Kenya.
Al-Jabri and Sohail (2012)	Determine adoption of mobile banking using the theory of diffusion of innovation	A survey. The population consisted of all adult individuals residents of Saudi Arabia	Observability, relative advantage and compatibility influenced mobile phone banking adoption, while no significant influence was noted with complexity and trialability.	Study focus was innovation attributes and used convenience sampling.	This study included manager demographics. Population of the study consisted of managers of all commercial banks in Kenya.
Auka (2012)	Determine	Data collected	Customer value, customer	Data collected using stratified	Data was collected from all

	whether perceived value, Service quality and customer satisfaction influenced loyalty	from bank customers in Nakuru town, Kenya	satisfaction and service quality determine customer loyalty.	sampling.	managers of commercial banks offering mobile phone banking services in Kenya.
Dzogbenuku (2013)	Students adoption of banking innovations in Ghana	Data collected from students of Central University College, Ghana	There was correlation between the parameters that measured adoption of mobile phone banking and observability as well as complexity. No correlation with relative advantage, compatibility, perceived risk as well as trialability was found.	The study focused on innovation attributes with the population of study being university students.	The population of study was managers of commercial banks in Kenya offering mobile phone banking.
Oluoch et al. (2013)	Mobile banking adoption in Kenya	Survey. Data collected from bank	Perceived usefulness positively impacted adoption of m-banking	Study focused on customers of five banks in the large peer group category.	The study was anchored on DIT, TCB and resource based theory and focused

		customers in Nakuru town, Kenya. Study anchored on TAM	while perceived risk had a negative impact.		on managers of commercial banks in Kenya offering mobile phone banking.
Makori and Mwirigi (2013)	The relationship between corporate clients' satisfaction in corporate banking services and their loyalty to the bank: A study of commercial banks in Mombasa city	Data collected from bank corporate customers in Mombasa city, Kenya	Perceived service value, relationship banking and corporate image correlate positively with corporate customers' loyalty to the corporate banking services.	Study focused on Mombasa city	Data was collected from managers of commercial banks in Kenya offering mobile phone banking.
Maditinos et al. (2013)	Critical factors affecting consumer acceptance of	A survey. Data collected from internet users in Greece	Security risk, performance risk and Perceived usefulness directly influenced intention to use	Study done in a western country and results inconsistent with varies technology adoption studies and diffusion of	Study done in an African country and data collected from commercial banks' managers

	online banking.		internet banking. Quality of the internet and perceived ease of use did not impact internet banking adoption directly.	innovation theory	
Wamuyu (2014)	Factors determining adoption and continued use of mobile money in Kenya	A survey. Data collected from Embakasi area of Nairobi, Kenya	Social and economic factors and innovative attributes influence successful use of mobile money in Kenya.	Both quantitative and qualitative approaches were used. Data collected through focus groups discussion and questionnaires respectively. The study was done in Embakasi area in Nairobi, Kenya.	This study used quantitative approach with a target population being managers of commercial banks in Kenya offering mobile phone banking.
Nyeko (2014)	Factors determining adoption of SMS	Data collected from students in West Nile	Financial cost, complexity, trialability and Internet connectivity quality	Target Population was university students in Uganda. The study used purposeful	The target population was managers of commercial banks in Kenya offering

	in the West Nile Region, Uganda	region, Uganda.	influenced SMS banking adoption significantly while, security, Perceived ease of use and trust did not.	sampling. The moderating variables were limited to age and gender.	mobile phone banking. The moderating variable was manager demographics.
Bersali and Guermat (2014)	Impact of innovations on loyalty in Algerian mobile service providers	Data collected from Algerian mobile customers	Effective innovations are positively associated with customer loyalty.	Data collected using convenient snowballing approach	Data was collected from all managers of banks offering mobile phone banking services.
Alomar and Visscher (2017)	Factors Affecting e-Public Procurement Adoption	A survey. Data collected from firms in Belgium	E-procurement adoption influenced by; attitude towards change organizational readiness size, trading partners' pressure and competitive pressure. Relative advantage had no impact.	Study done in a western country and results inconsistent with varies technology adoption studies and diffusion of innovation theory	Study done in an African country and data collected from commercial banks' managers.

(Source: Current Researcher)

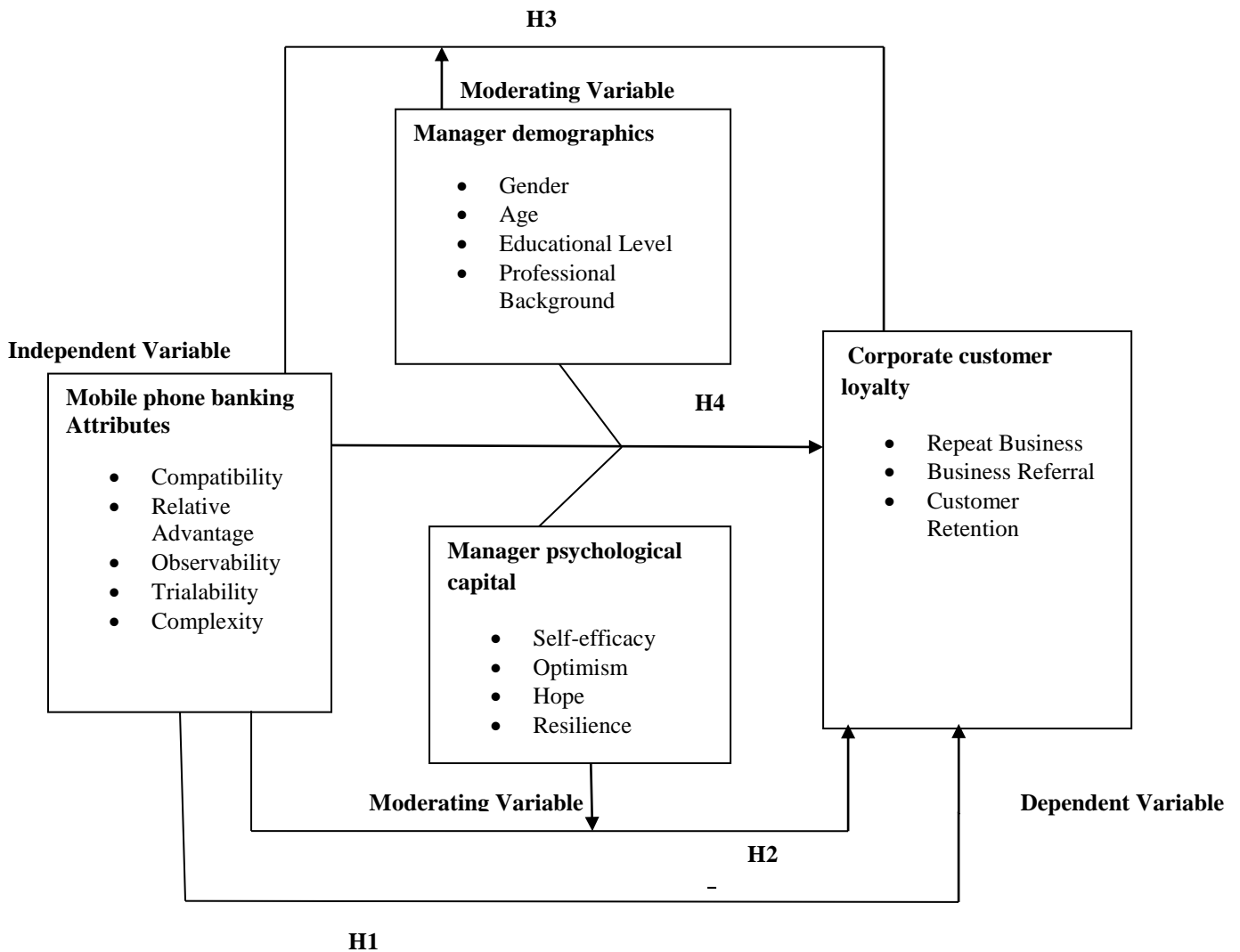
2.8 Conceptual Framework and Hypotheses

2.8.1 Conceptual Framework

Rogers (2003) proposed the following attributes of innovations that help to decrease uncertainty about the innovation: compatibility, observability, complexity, relative advantage and trialability. These attributes help in meeting customer demand for both quality products as well as friendly and efficient service resulting in increased customer loyalty which is an important determinant of long-term financial performance.

Mobile phone banking attributes is critical in customer retention and organization performance but few studies have been done on the effect of mobile phone banking attributes and customer loyalty with manager psychological capital moderating the relationship. The research variables have been conceptualized in the model (Figure 2.1).

Figure 2. 1: Conceptual Model



In the proposed conceptual model (Figure 2.1) mobile phone banking attributes has an independent empirical role while corporate customer loyalty has a dependent role. The model further conceptualizes that manager demographics and psychological capital moderate the relationship between mobile phone banking attributes and corporate customer loyalty.

2.8.2 Hypotheses

The study tested the following hypotheses:

H01: Mobile phone banking attributes has no statistically significant influence on corporate customer loyalty

- H02: Manager psychological capital has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty
- H03a: Age has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty
- H03b: Education level has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty
- H03c: Gender has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty
- H03d: Professional background has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty
- H04: Mobile phone banking attributes, manager demographics and psychological capital have no statistically significant joint influence on corporate customer loyalty

2.9 Summary of the Chapter

This chapter reviewed the relevant literature underpinning the study. It reviewed the diffusion of innovations theory, relationship marketing theory and resource based theory. It also reviewed the key constructs of the study namely mobile phone banking attributes, manager demographics, manager psychological capital and corporate customer loyalty. The identified Research gaps have also been presented. The chapter concluded with a conceptual framework and study hypotheses. The next chapter has presented the research methodology for the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter has discussed research philosophy and design of the study. It has also described the population of the study, data collection and reliability and validity tests. It concludes with operationalization of the study variables and discussion of the pertinent data analysis.

3.2 Research Philosophy

Scholars in social sciences posit that empirical research is dominated by a number of philosophical orientations. However, there are two main philosophies namely phenomenological and positivistic paradigms. These philosophies represent alternative orientations to knowledge based on different beliefs about the world and assumptions used to conduct research (Cooper & Schindler, 2008). Research philosophy refers to intellectual structure and underlying assumptions which form the base of research in a field of inquiry. Sobh and Perry (2006) noted that the philosophy used in a research determines the research methodology and type of questions to be asked.

The phenomenological paradigm focuses on exploring and understanding a phenomenon from reference frame of the participant. This philosophy focuses on interpretation, meaning and immediate experience (Irungu, 2007). It is based on the belief that research involves gathering large amounts of information through in-depth interviews to uncover understanding and meanings of the issues being studied. A phenomenological researcher is open to and trusts experience. He identifies and temporarily sets aside any pre-assumption and bias so that he can study the phenomenon in an open, fresh and wondering eyes (Lewis & Staehler, 2010; Finlay, 2011). Phenomenology explores the core concepts of individuals lived experiences to seek the implicit and explicit meanings of the phenomenon.

The positivists seek to understand social phenomena without the subjective perception of individuals. Positivism emphasizes that research is factual, consistence, impartial, neutral, valid and results are measurable. It further assumes that the approach is methodologically quantitative, value free (Zikmund, 2003) and involves complete separation of the researcher from the phenomenon being investigated. The positivistic

allows for the operationalisation of various hypothetical concepts as well as generalisation of the results. Positivist researchers deduce and formulate research through variables, hypotheses and operational definitions based on existing theories. Positivistic studies generally use quantitative methods for empirical testing of formulated hypotheses (Buttery & Buttery, 1991). Several studies on Mobile phone banking have used a positivistic approach (Luarn & Lin, 2005; Alawadhi & Morris, 2008).

The current study used a positivistic approach as it sought to objectively establish facts by empirically establishing relationships among variables. The philosophy allowed the researcher to report the findings of the study as observed, interpret the results and maintain his independence from the study. The study adopted quantitative research which is consistent with this philosophy to empirically analyzing the relationships among the study variables.

3.3 Research Design

Research design assists the researcher in structuring how to collect, analyze and interpret data. This study used a descriptive cross-sectional design. According to Cooper and Schindler (2000) descriptive studies are used to describe the phenomena or characteristics of a population under study embracing the details of a topic. A descriptive cross-sectional survey affords the opportunity of capturing the characteristics of a population and test hypotheses quantitatively and qualitatively. It helps a researcher determine any significant relationships between the study variables (Nachmias & Nachmias, 2004).

According to Zikmund (2003), a survey is a quick means of accessing data on a population accurately at a single point in time. The study used descriptive cross-sectional survey. Cross sectional studies are appropriate where the overall objective is to establish a significant relationship among variables at some point in time (Mugenda & Mugenda, 2003). The research design therefore offered an opportunity to establish the relationships between mobile phone banking attributes and customer loyalty and to determine the moderating influence of manager demographics and psychological capital on this relationship. This type of design has previously been

used in marketing research by many researchers including Munyoki (2007), Tibenderana (2010) and Kinoti (2012).

3.4 Population of the Study

The study population comprised of head office managers of all the twenty six commercial banks offering mobile phone banking services (Appendix 11) out of a total of 43 commercial banks in Kenya. Out of the twenty six commercial banks, seven were in the large peer group category, ten in the medium peer group category while nine were in the small peer group category (CBK, 2015). Small peer group consists of banks with less than 1% market share index each, medium peer group are banks with market share index of between 1% and 5% while large peer group is composed of banks with over 5% market share index each. Eight of these banks are foreign owned while seventeen are local.

The sample frame consisted of 78 Managers in the 26 banks offering mobile phone banking services. These are manager in charge of departments, concerned with the development, implementation and performance of innovative products in their respective banks. They have evidence based data on the contribution of mobile phone banking in the overall bank performance. They also have a higher level of understanding backed by data on how mobile phone banking attributes influence customer loyalty. The managers of interest in this study were in the departments of marketing, operations and finance. Data was collected from all these managers and analyzed to determine their perception on the influence of mobile phone banking attributes on corporate customer loyalty.

3.5 Data Collection

Primary and secondary data were both used in the study. Secondary data was reviewed from commercial banks' and central bank reports. The unit of analysis was head office managers' of commercial banks in Kenya. Primary data was collected from top managers in Finance, Marketing and Operations in Head Office of each bank participating in the study. These managers provided the data used for inferential

statistics relating to the study variables such as descriptive statistics and tests of hypotheses.

Managers in Head Office are responsible for development and implementation of innovative products in the bank. They are deemed to be equipped with information regarding products and services offered by their respective banks. Three respondents per each bank were targeted to respond to the questionnaire. According to Newbert (2008) one senior managers per organization is deemed to be in a position to understand an organization's internal operations and therefore sufficient in a study.

The pertinent data were collected from head of Finance, Marketing and Operations using Semi-Structured questionnaires. The questionnaires were dropped at the respective head office department by the researcher assisted by two research assistants and picked after completion. For introduction, the researchers used a letter from the University of Nairobi. This method enabled the researcher reach all the potential respondents.

The questionnaire was divided into section one and two. Section one collected the bank data and demographics of the respondent. The second section elicited information from respondents on the study variables namely: mobile phone banking attributes, manager psychological capital and customer loyalty. The 5-point rating scale used ranged from 'not at all' to 'a very large extent'. The study adopted measurements instruments from previous studies (Table 3.1) and customized them for mobile phone banking. The questionnaire was fine-tuned through input from the supervisors and discussants at the proposal's Departmental, Open Forum and Doctoral Committee presentations. The questionnaire was further refined after the pilot study by clearing any ambiguity. The questionnaire is attached as Appendix I.

3.6 Reliability and Validity Tests

3.6.1 Reliability Test

This refers to a measure of degree to which results from an instrument are consistent on repeated measurements (Mugenda & Mugenda, 2003). It is concerned with estimate of random error in measurement. According to Zikmund et al. (2010), when different measurement attempts produce similar results, the measure is reliable. Cronbach's alpha is the most widely used multiple-item scales reliability measure and

was used to measure reliability of the research instrument. The value of reliability coefficient ranges from 0 to 1. The greater the absolute value of the Pearson product-moment correlation coefficient, the stronger the linear relationship.

Different researchers have used different cut-off points of the cronbach alpha coefficients. Nunnally (1978) noted that if values were too low, either few items were used or the items had little in common. He recommended cronbach alpha coefficient of 0.7. Davis (1964) recommends a minimum cronbach coefficient of 0.5 for predictive research where the population group is between 25 and 50. Sekaran (2003) noted that the presence of internal consistency can be accepted if the alpha coefficient is between 0.50 and 0.80.

This study adopted a cut off Cronbach alpha coefficient of 0.7. A pilot study was done on top managers of three banks to establish the relevance and clarity of the questionnaire content and whether the instrument measured the study variables adequately. Responses from the respondents on statements clarity were used to adjust the questionnaire used for data collection.

3.6.2 Validity Test

Measurement validity refers to the extent a study concept is represented correctly by a set of measures or constructs and the extent of non-random or systematic error (Nunnally, 1978). It is based on the study results and is concerned with the meaningfulness and accuracy of inferences (Bryman & Cramer, 2005). It refers to how accurately the data obtained capture what they were purported to measure. The study adopted research instruments from various researches carried out in mobile phone banking attributes, manager demographic and psychological capital and customer loyalty.

The research instrument was enhanced by expert opinions received during the thesis-proposal presentations. To enhance content validity, the researcher conducted a pilot study using a sample of managers in three banks offering mobile phone banking. The pilot study helped the researcher identify any ambiguous and unclear questions and used the feedback to refine the questionnaire before the actual data collection. Factor analysis was done using banking attributes, manager demographics, manager psychological capital and corporate customer loyalty.

3.7 Operationalization of the Study Variables

The operationalized study variables are presented below. These variables were measured using multiple indicators.

Table 3. 1: Operationalization of Study Variables

Variable	Nature of Variable	Indicators	Measures	Supporting literature	Questionnaire number
Mobile phone banking attributes	Independent	-Compatibility -Relative Advantage -Observability -Triability -Complexity	Five point rating scales	Moore and Benbasat (1991), Al-Jabril and Sohail (2012), Mari (2003), Dzogbenuku (2013) and Nyeko (2014)	Section 2 Part (a)
Manager demographics	Moderating	-Gender -Age in years -Education level -Professional background	Direct measures		Section 1
Manager psychological capital	Moderating	-Self-efficacy -Optimism -Hope -Resilience	Five point rating scales	Sapyaprapa, et al. (2013), Luthans et al. (2007), Ziyae et al. (2015) and Jafri (2012)	Section 2 Part (b)
Customer loyalty	Dependent	-Repeat purchases -Business referral -customer retention	Five point rating scales	Dehghan and Shahin (2011), Auka (2012), Khatibi et al. (2002) and Dachyar & Fatkhurrohman (2011)	Section 2 Part (c)

3.8 Data Analysis

Data diagnostics tests such as multicollinearity, normality and homogeneity was done using SPSS Statistical software that determined data was properly modelled. Multicollinearity between variables was tested using variance inflation factors (VIF). Principal components analysis was done on all the study constructs. Shapiro-wilk test (Ghasemi & Zahediasl, 2012) was done and the results plotted in Q-Q plot to establish data normality. Homogeneity of study variables was tested using levene test. The P-value result of less than 0.05 would indicate that the population had different variances. Inferential and descriptive statistics were then used to analyse the data. Descriptive statistics provided measures of central tendency, dispersion and coefficient of variation while inferential statistics tested the relationships between the study variables (correlation, analysis of variance and regression analysis).

Regression analyses tested the hypotheses determining mobile phone banking attributes, manager demographics, manager psychological capital relationships with corporate customer loyalty. The strength of the relationship between the study variables was measured by Pearson moment correlation (r) while the amount of variation between these variables was measured by coefficient of determination (R^2). The general model for predicting corporate customer loyalty was represented by the following model: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \epsilon$. Where Y is the dependent variable and is a linear function of X_1, X_2, \dots, X_n plus ϵ ; β_0 is the regression constant or intercept; β_1 - n are the regression coefficient or change induced in Y by each X ; X_1 - n are independent variables; ϵ is the error term or random variation due to other unmeasured variables.

Table 3. 2: Study Objectives, Hypotheses, Analytical Methods and Interpretation

Objective	Hypotheses	Analysis Method	Interpretation of output of the analytic method
<p><i>Objective 1:</i> To determine the extent to which mobile phone banking attributes influence corporate customer loyalty.</p>	<p><i>H01:</i> Mobile phone banking attributes has no significant influence on corporate customer loyalty.</p>	<p>Simple Regression Analysis</p> $Y_1 = \beta_0 + \beta_1 X_1 + \varepsilon.$ <p>Where:</p> <p>Y_1 = corporate customer loyalty</p> <p>β_0 = Y intercept/constant.</p> <p>β_1 = Regression Coefficients.</p> <p>X_1 = Mobile phone banking attributes</p> <p>ε = error term/Radom variation due to other unmeasured variables</p>	<p>F-Significance of overall model</p> <p>R-Strength of the relationship between mobile phone banking attributes and corporate customer loyalty variables</p> <p>R²-Extent to which variations in corporate customer loyalty are explained by mobile phone banking attributes</p>
<p>Objective 2: Establish the effect of manager psychological capital on the relationship between mobile phone banking attributes and corporate customer loyalty.</p>	<p><i>H02:</i> Manager psychological capital has no significant moderating influence on the relationship between mobile phone banking attributes and corporate customer</p>	<p>Hierarchical Regression Analysis</p> $Y_{2a} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_{2a}$ <p>(Interaction through addition)</p> <p>Where:</p> <p>Y_{2a} = Corporate customer loyalty</p> <p>β_1 and β_2 = Regression Coefficients</p> <p>X_1 = Mobile phone banking attributes</p>	<p>F-Significance of overall model</p> <p>R-Strength of manager psychological capital on the relationship between mobile phone banking attributes and corporate customer loyalty variables</p> <p>R²-Extent to which variations in corporate customer loyalty are explained by the moderating effect</p>

	loyalty.	X_2 =Manager psychological capital ε =is the error term $Y_{2b} = \beta_{2\ 0b} + \beta_{2\ 1b} X_1 + \beta_{2\ b2} X_1 \cdot X_2 + \varepsilon_{2b}$ (Interaction through multiplication)	
<i>Objective 3</i> Establish the effect of manager demographics on the relationship between mobile phone banking attributes and corporate customer loyalty.	<i>HO3:</i> Manager demographics has no significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty	Hierarchical Regression Analysis $Y_{3a} = \beta_0 + \beta_1 X_1 + \beta_3 X_3 + \varepsilon$ (Interaction through addition) Where: Y_{3a} =Composite score for corporate customer loyalty β_1 and β_3 = Regression Coefficients X_1 = Mobile phone banking attributes X_3 = Manager demographics $Y_{3b} = \beta_{03b} + \beta_{3b1} X_1 + \beta_{2b2} X_1 \cdot X_3 + \varepsilon_{3b}$ (Interaction through multiplication)	F -Significance of overall model R -Strength of manager demographics on the relationship between mobile phone banking attributes and corporate customer loyalty variables R ² -Extent to which variations in corporate customer loyalty are explained by the moderating effect
<i>Objective 4:</i> Determine the extent to which mobile phone	<i>HO4:</i> Mobile phone banking attributes, manager demographics	Multiple Regression Analysis: $Y_{4a} = \beta_0 + \beta_{1a} X_1 + \beta_{2a} X_2 + \beta_{3a} X_3 + \varepsilon_{4a}$ Where:	F -Significance of overall model R -Strength of the relationship between mobile phone banking attributes and

<p>banking attributes, manager demographics and psychological capital Jointly influence corporate customer loyalty.</p>	<p>and psychological capital have no significant joint influence on corporate customer loyalty.</p>	<p>Y_{4a} = Composite score for corporate customer loyalty β_0 = Y intercept/constant. β_1, β_2 and β_3 = beta coefficients X_1 = Mobile phone banking attributes X_2 = Manager demographics X_3 = manager psychological capital ϵ = error term/Radom variation due to other unmeasured variables</p> $Y_{4b} = \beta_{04b} + \beta_{14b} X_1 + \beta_{24b} X_2 + \beta_{34b} X_3 + \epsilon_{4b}$	<p>corporate customer loyalty variables R²–Extent to which variations in corporate customer loyalty are jointly explained by combined effect of mobile phone banking attributes, manager demographics and manager psychological capital</p>
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3.9 Summary of the Chapter

The positivistic research philosophy and research design used in the study has been justified in this chapter and details of how data was collected, analyzed and interpreted presented. It has also presented the details of reliability and validity tests, operationalized study variables and techniques used to analyze the data. The next chapter presents data analysis and findings.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents research findings of the overall objective of the study which was to determine the relationship between mobile phone banking attributes manager demographics and psychological capital and loyalty of commercial bank corporate customers in Kenya. The chapter also presents findings of the diagnostics tests, research variables and hypotheses tests. Data used in testing the hypotheses was collected from commercial banks in Kenya using a structured questionnaire. Respondents were presented with descriptive statements for each variable in a likert scale and requested to rate the extent of their agreement with each statement.

The chapter further presents findings of data diagnostics namely; reliability and validity tests, normality tests, multicollinearity tests and tests of homogeneity of variance. The demographics of the organizations were analyzed using percentages and frequencies. The use of inferential and descriptive statistics in explaining variables manifestations is explained.

4.2 Test for Reliability

This refers to a measure of degree to which results from an instrument are consistent on repeated measurements. Its goal is the estimation of measurement errors which are normally random. It is a measure of an instrument's internal consistency. The measurement instrument should be reliable for it to measure consistently (Mugenda & Mugenda, 2003; Saunders, 2007; Cooper & Schindler, 2011).

The test items internal consistency or average correlation was assessed using cronbach's alpha. The alpha coefficient value ranging from 0 to 1 were used. This study adopted the alpha coefficients ranges to describe reliability factors extracted from formatted questionnaires on likert scale (rating from scale 1 to 5). The study used a cut off cronbach's alpha coefficient of 0.7. Table 4.1 below presents the test of reliability results.

Table 4. 1: Test for Reliability

Study variable	Cronbach's Alpha	No of items	Decision
Manager demographics	.985	6	Reliable
Mobile phone banking attributes	.715	33	Reliable
Manager psychological capital	.940	24	Reliable
Corporate customer loyalty	.758	6	Reliable

Source: Primary data

Table 4.1, indicates that alpha coefficients are all above the 0.7 cut off point. This was confirmation of reliability of the data used to draw conclusions from theoretical concepts.

4.3 Test for Validity

Validity refers to the questionnaire's ability to measure what is intended meaningfully and describe the construct accurately (Cooper & Schindler, 2011). It is used in science as evaluation criteria on whether conclusions made in a study explain what happened accurately and if the research instrument is able to produce the expected measurement (Aiken & West, 1991). Pre-testing for validity on the questionnaire was done by initially involving a few respondents from the study population to improve the instrument.

Criterion validity was carried out on the instrument by randomly pilot testing eight managers from different departments of the banks who were not considered under the final survey of the study to establish if the respondents could answer the responses with ease. Questions that were unclear, inadequate or sensitive were cleaned, sorted or dropped. The study incorporated views of content experts consisting of a few lecturers from Nairobi University, the supervisors and the researcher's cohort in the School of Business, University of Nairobi. The outcome of the pilot test was better review of the instrument, clear instructions and clarification on the measures to be captured that avoided unreliable results.

Factor analysis was applied to test validity construct. Construct validity shows how the instrument is measuring the target construct (Zapolski et al., 2012). In extracting the factors, Principal Component Analysis was used and Varimax rotation method applied to rotate the factors. The factors attributed to the variables were all uni-

dimensional thus considered valid measurement of the study constructs. The results of factor analysis are presented in appendix III.

4.4 Tests for Statistical Assumptions

There are different assumptions for statistical tests that the study variables should meet. This ensures the use of correct statistical models. It is beneficial to test assumptions to ensure that your data meets important assumptions (Osborne et al., 2001). The study performed the test of regression assumptions. For regression result of the study in classical linear regression model to be robust and valid, it was better to satisfy basic assumption of classical linear regression model.

As noted by Brooks (2008), all data is considered to have been included in the model if the basic assumptions are met. Otherwise information will have been left on violation of these assumptions. Data multicollinearity, homogeneity and normality were tested after which the model was applied to analyse results of the regression and significance testing of the slopes. The objective of the regression analysis was to predict the strength and direction of relationship between the study variables.

4.4.1 Tests for Normality

Use of inferential parametric statistical procedures requires that the data to be tested is normally distributed. Ghasemi and Zahediasl (2012) noted that the assumption of normality needs to be checked before carrying out any parametric test, because their validity depends on it. Normality test was intended to ascertain whether data was distributed normally. When normality is absent using statistical tests that assume normality may not be appropriate. In this study Shapiro-Wilk test was used to measure normality.

Table 4. 2: Shapiro-Wilk Test for Normality

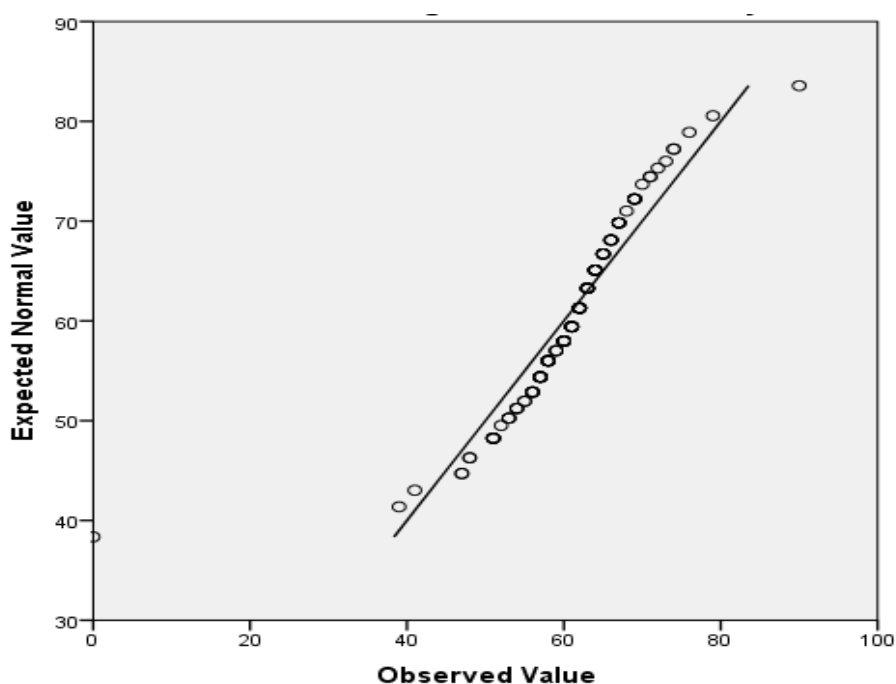
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Manager demographics	.126	26	.200 [*]	.969	26	.592
Mobile phone banking attributes	.112	26	.200 [*]	.970	26	.619

Manager psychological capital	.183	26	.200	.866	26	.343
Corporate customer loyalty	.137	26	.200*	.919	26	.242
a. Lilliefors Significance Correction						
*. This is a lower bound of the true significance.						

Source: Primary Data

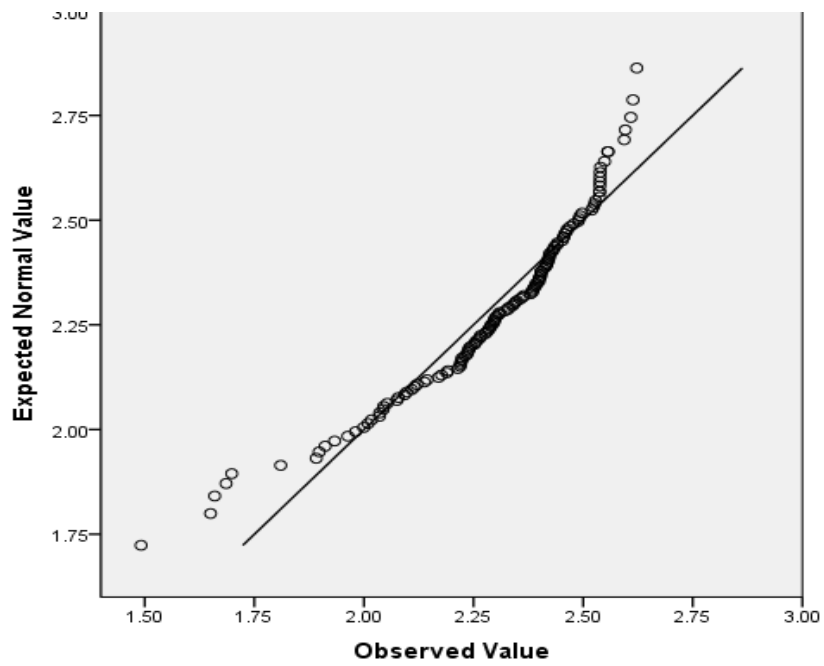
As shown in Table 4.2, p-values for the Sharipo-Wilk tests were 0.592 managers demographics, 0.619 for mobile phone banking attributes, 0.343 for Manager psychological capital and 0.242 for corporate customer loyalty. Since all the p-values are greater than the cut-off point of 0.05, this confirms the hypothesis that data was collected from a population which is normally distributed. The test results therefore confirmed that the population of the study was normally distribution. Data normality is also demonstrated by the plotted Quantile Quantile plot (QQ plot). Q-Q plots are as presented in Figures 4.1(a), 4.1(b), 4.1(c) and 4.1(d). The normal distribution had a good fit for the study variables.

Figure 4. 1: Normal Q-Q Plot of Data on Corporate Customer Loyalty



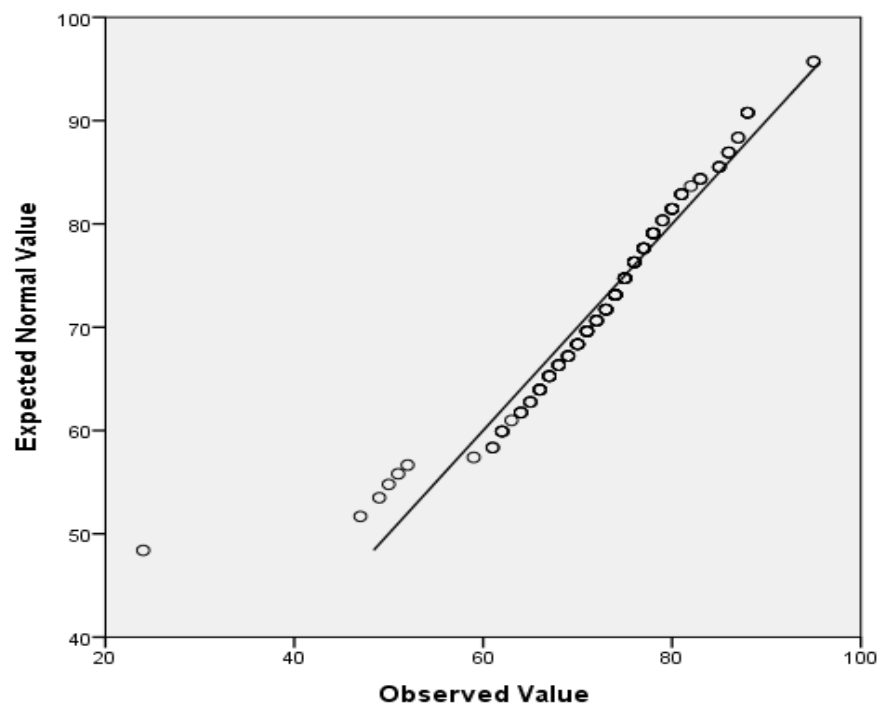
Source: Primary Data

Figure 4. 2: Normal Q-Q plot of Data on Manager Demographics



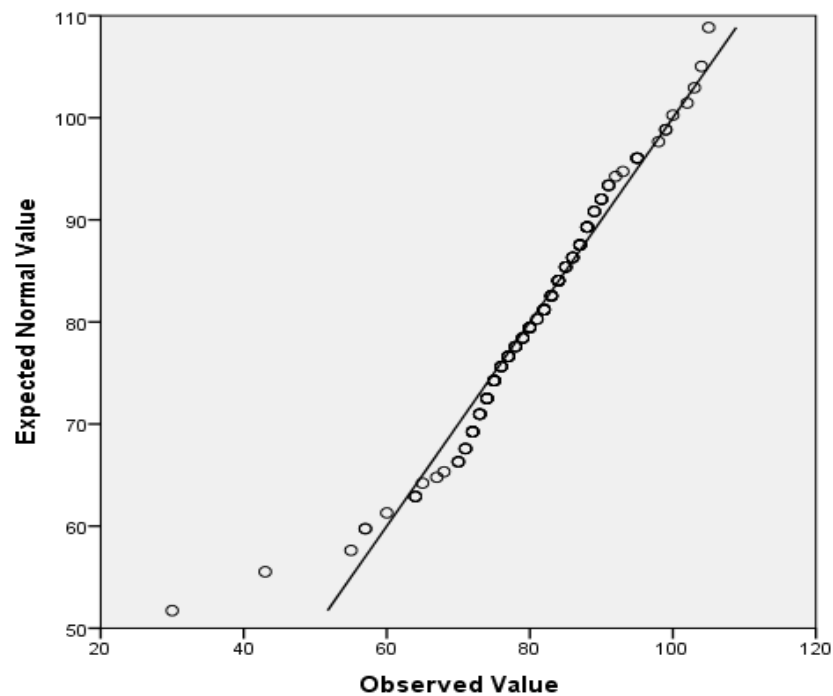
Source: Primary Data

Figure 4. 3: Normal Q-Q plot of Data on Mobile Phone Banking Attributes



Source: Primary Data

Figure 4. 4: Normal Q-Q Plot of Data on Manager Psychological Capital



Source: Primary Data

From Figures 4.1(a), 4.1(b), 4.1 (c) and 4.1(d) we observe that the circles in the Q-Q plots show that all the observed values cleaved along the line of best fit. This demonstrates the data was normal. Therefore the normal distribution provided a good fit for all the variables.

4.4.2 Test for Multicollinearity

Multicollinearity is a phenomenon whereby high correlation exists between the independent variables. It occurs in a multiple regression model when high correlation exists between these predictor variables leading to unstable and unreliable estimates of regression coefficients. This leads to strange results when attempts are made to determine the extent to which individual independent variables contribute to the understanding of dependent variable. The consequences of Multicollinearity are increased standard error of estimates of the betas, meaning decreased reliability and often confusing and misleading results. Multicollinearity test was conducted to assess whether high correlation existed between one or more variables in the study with one or more of the other independent variables.

Variance inflation factor (VIF) measured correlation level between the predictor variables and estimated the inflated variances due to linear dependence with other

explanatory variables. A common rule of thumb is that VIFs of 10 or higher (conservatively over 5) points to severe multi-collinearity that affects the study (Newbert, 2008). A tolerance threshold value of below 0.2 indicates that collinearity is present (Menard, 1995). Table 4.3 presents the result of tests for Multicollinearity.

Table 4. 3: Test for Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	Mobile phone banking attributes	.955	1.047
	Manager demographics	.877	1.140
	Manager psychological capital	.914	1.094
a. Dependent Variable: Corporate customer loyalty			

Source: Primary Data

As shown in Table 4.3 the results revealed no problem with multicollinearity. The variables of the study indicated VIF values of between 1.047 and 1.140 which is less than the Figure recommended by the rule of thumb. This indicated that the data set displayed no multicollinearity.

4.4.3 Test for Homoscedasticity

Homoscedasticity was measured by Levene’s test. This test examines whether or not the variance between independent and dependent variables is equal. If the Levene's Test for Equality of Variances is statistically significant $\alpha= 0.05$ this indicates that the group variances are unequal (Gastwirth et al., 2009). It is a check as to whether the spread of the scores in the variables are approximately the same (Bryk & Raudenbush, 1988).

Table 4. 4: Test for Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Manager demographics	1.295	6	16	.315
Mobile phone banking attributes	1.123	6	16	.392
Manager psychological capital	2.443	6	16	.072

Source: Primary Data

From the results in Table 4.4, P-values of Levene’s test for homogeneity of variances were greater than 0.05. The test therefore was not significant at $\alpha= 0.05$ confirming homogeneity.

4.5 Descriptive Statistics

The study performed descriptive analysis of the data gathered on mobile phone banking attributes and corporate customer loyalty, manager demographics and corporate customer loyalty and manager psychological capital and corporate customer loyalty. The findings are discussed in the sections below.

4.5.1 Mobile Phone Banking Attributes

The mobile phone banking attributes comprised compatibility, relative advantage, trialability complexity and observability. The study sought to determine the influence of the five attributes of mobile banking on loyalty of corporate customers of commercial banks in Kenya. The findings are discussed here below.

4.5.1.1 Compatibility

The study was to establish whether compatibility had an influence on loyalty of commercial bank corporate customers in Kenya. Respondents were presented with descriptive statements for factors of compatibility in a likert scale and requested to rate the extent of their agreement with each statement, as applied in their organizations. The descriptive are shown in Table 4.5.

Table 4. 5: Descriptive Statistics for Measures of Compatibility

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
Mobile phone banking is consistent with values and needs of our corporate customers	78	2.4615	.81146	33
Using mobile phone banking fits well with the way our corporate customers do their banking.	78	2.3462	.74524	32
Using mobile phone banking have helped our corporate customers manage their time	78	2.9231	.74421	25
Our corporate customers are willing to try mobile phone banking technology	78	3.5385	.56699	30
Mobile phone banking fits well into our corporate customers working style	78	2.7692	.65163	24
Mobile phone banking fits well with how our corporate customers manage their finances	78	2.4231	.75753	31
Our corporate customers enjoy using mobile phone banking because of its easy in application	78	3.1154	.81618	26
Overall Mean Score		2.7967	0.79903	29

Source: Primary Data

As the results in the above table indicates, in general respondents moderately agreed that compatibility measures influences commercial banks corporate customer loyalty (mean= 2.7967). The low coefficients of variation ranging from 24% to 33% imply that the influence of compatibility measures on commercial banks corporate customers loyalty was less varied across the organizations.

In addition, most influential compatibility factor was that our corporate customers are willing to try mobile phone banking technology as depicted by the mean score of 3.5385, standard deviation of 0.56699 and CV of 30%. It was followed by the statement that our corporate customers enjoy using mobile phone banking because of its easy in application as portrayed by the mean score of 3.1154, standard deviation of .81618 and C.V of 26%. On the other hand the most varied compatibility measure that influence corporate customers' loyalty according to the respondents that mobile phone banking is consistent with values and needs of our corporate customers (C.V of 33%).

4.5.1.2 Relative Advantage

This is the degree to which a new service or product is perceived by customers as better in satisfying them compared to similar existing products. The rate at which a new offering is adopted by prospective customers is determined by whether they perceive it to have relative advantage. A relative advantage is commonly achieved by offering consumers greater value, either by lowering prices or by supplying improved benefits and service that quantifies higher prices. The data on relative advantage was obtained by the respondents rating in a likert scale the extent to which statements on relative advantage influenced corporate customers' loyalty. The results are indicated in Table 4.6.

Table 4. 6: Descriptive Statistics for Measures of Relative Advantage

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
Mobile phone banking is cheaper to our corporate customers	78	3.3462	.74524	22
Mobile phone banking allows Commercial bank corporate customers to conduct banking transactions more efficiently	78	3.3846	.75243	22
Mobile phone banking allows Commercial bank corporate customers conduct banking transactions more conveniently	78	3.4615	.70602	20
Our corporate customers find mobile phone banking safer in carrying out the transaction	78	3.3462	.89184	27
Mobile phone banking gives our corporate customers greater control over their finances	78	3.2692	.82741	25
Mobile phone banking is easily available to our corporate customers	78	3.4615	.90469	26
Overall Mean Score		3.3782	0.804605	24

Source: Primary Data

Respondents were presented with descriptive statements for factors of relative advantage in a likert scale and requested to rate the extent of their agreement with each statement, as applied in their organizations. The results shown in Table 4.6 indicated on overall respondents agreed that relative advantage as a construct of mobile phone attributes influence corporate customers loyalty. This is depicted by standard deviation of 0.804605, mean score of 3.3782 and C.V of 24%. The most varied factors were that our corporate customers find mobile phone banking safer in carrying out the transaction with (mean= 3.3462, standard deviation of 0.89184 and

C.V of 27%) and that Mobile phone banking is easily available to our corporate customers with (mean=3.4615;standard deviation=0.90469 and CV of 26%.

All other statements also depicted a mean above 3.0; mobile phone banking is cheaper to our corporate customers with (mean= 3.3462, standard deviation= 0.74524 and CV of 22%), mobile phone banking allows commercial bank corporate customers to conduct banking transactions more efficiently (mean=3.3846, standard deviation=0.75243 and coefficient of variation=22%), our corporate customers find mobile phone banking safer in carrying out the transaction (mean=3.3462, standard deviation=0.89184 and coefficient of variation=27%) and the statement that mobile phone banking gives our corporate customers greater control over their finances with (standard deviation= 0.82741, mean =3.2692 and coefficient of variation of 25%). This depicts that relative advantage is very important construct that influences corporate customers' loyalty among commercial banks in Kenya.

4.5.1.3 Observability

Observability is a very crucial construct as it enables the customers clearly see the benefit of the firms' product and eventually develop a long lasting confidence and relationship in the usage of the technology. Based on this argument, this study was to determine whether observability influenced the development of corporate customers' loyalty in the banking sector. Various statements depicting the different manifestations of observability were availed and respondents requested to rate the extent of their agreement with each statement, as applied in their organizations. Results are indicated in Table 4.7.

Table 4. 7: Descriptive Statistics for Measures of Observability

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
Our corporate customers are able to access mobile phone banking anytime and anywhere	78	2.8846	.81618	28
Our corporate customers are able to see the effect of a transaction immediately when	78	3.4231	.64331	19

they use mobile phone banking				
Our corporate customers are satisfied with the results of using mobile phone banking	78	3.1538	.78446	25
Our corporate customers sees mobile phone banking worth their value	78	3.1154	.76561	25
Mobile phone banking has no queue to our corporate customers	78	3.3077	.73589	22
Our corporate customers in other countries can access services through mobile phone banking without any problem	78	2.8846	.76561	27
Overall Mean Score		3.1282	0.751843	24

Source: Primary Data

The overall mean score for the observability dimensions was 3.1282, standard deviation of 0.751843 and a coefficient of variation of 24%. This depicts moderate influence of Observability on corporate customer loyalty. The statement that our corporate customers are able to see the effect of a transaction immediately when they use mobile phone banking had the highest mean of 3.4231, standard deviation 0.64331 and coefficient of variation of 19% followed by the statement that mobile phone banking has no queue to our corporate customers (mean score=3.3077, standard deviation= 0.73589 and CV 22%). Other statements that depicted a mean above 3.0 were; our corporate customers are satisfied with the results of using mobile phone banking (Mean score=3.1538, standard deviation of 0.78446 and CV of 25%) and the statement that our corporate customers sees mobile phone banking worth their value (standard deviation= 0.76561, mean score = 3.1154 and coefficient of variation of 25%).

However the statements that our corporate customers are able to access mobile phone banking anytime and anywhere and our corporate customers in other countries can

access services through mobile phone banking without any problem had mean scores Below 3.0 (mean=2.8846, standard deviation=0.81618, coefficient of variation=28%) and (Mean=2.8846, standard deviation=0.76561, coefficient of variation=27%) respectively. The statement that our corporate customers are able to access mobile phone banking anytime and anywhere had the highest coefficient of variation depicting that respondents had varied responses on the same (C.V of 28%). .

4.5.1.4 Trialability

Creating an innovative product and making consumers aware of its existence and use is very important. It is also important to make consumers try small quantities of the product and find out whether it meets their needs better than the existing products. To achieve this, various statements depicting the different manifestations of trialability were presented to respondents to rate the extent of their agreement with each statement, as applied in their organizations. Results are appended in Table 4.8.

Table 4. 8: Descriptive Statistics for Measures of Trialability

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
Before using mobile phone banking, our corporate customers are given an opportunity to try it	78	3.7308	.66679	18
Our corporate customers are permitted to use mobile phone banking on a trial basis	78	3.3462	.56159	17
Our corporate customers find it easy to use mobile phone banking after trying	78	3.6538	.68948	19
Our bank tested mobile phone banking before allowing our corporate customers to use	78	3.8077	.89529	24
It took time before our corporate customers accepted	78	3.4231	.75753	22

the mobile phone banking				
Our corporate customers sometimes gets worried that their transactions may be tempered with	78	4.1538	3.70613	89
Mobile phone banking ensures that information about our corporate customers is safe after several trials	78	3.7308	.77757	21
Our corporate customers try mobile phone banking for long before accepting it fully	78	3.1923	.63367	20
Overall Mean Score		3.62981	1.086006	29

Source: Primary Data

The results in Table 4.8 indicate that trialability aspects had an overall standard deviation score of 1.086006, mean of 3.62981 and coefficient of variation of 29%. This depicts a strong influence on the corporate customer loyalty. The statement that our corporate customers sometimes gets worried that their transactions may be tempered with had the highest mean of 4.1538, standard deviation of 3.70613 and coefficient of variation of 89%. This was followed by the statement that our bank tested mobile phone banking before allowing our corporate customers to use with mean of 3.8077, standard deviation of 0.89529 and coefficient of variation of 24%.

Other statements also had a mean above 3.0 depicting moderate or strong agreement; the statement that before using mobile phone banking, our corporate customers are given an opportunity to try it had a standard deviation of 0.6667, mean of 3.7308 and coefficient of variation of 18%, the statement that our corporate customers are permitted to use mobile phone banking on a trial basis had a standard deviation of 0.56159, mean of 3.3462 and coefficient of variation of 17% and the statement that our corporate customers find it easy to use mobile phone banking after trying had a standard deviation of 0.68948, mean of 3.6538 and coefficient of variation of 19%. However the statement that our corporate customers try mobile phone banking for

long before accepting it fully had the lowest mean but moderate (Mean=3.1923, standard deviation=0.63367 and coefficient of variation of 20%. This depicts that trialability is very important in influencing corporate customers' loyalty in commercial banks in Kenya.

4.5.1.5 Complexity

The ease of applicability of any system is very important to customers as it enables them to adopt it in their daily routine without struggle. This will enhance the usability and eventually leads to loyalty. Statements were presented to respondents on a 5-point Likert scale to rate their agreement with statements relating to complexity. Results are shown in Table 4.9.

Table 4. 9: Descriptive Statistics for Measures of Complexity

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
Our corporate customers learn using mobile phone banking easily	78	3.3462	.62880	19
Using mobile phone banking makes banking easier for our corporate customers	78	3.2308	.65163	20
Using mobile phone banking requires our corporate customers apply more mental efforts	78	2.8462	.61269	22
Our corporate customers require technical skills to use mobile phone banking	78	2.8846	.51590	18
Our corporate customers operate mobile phone banking for themselves without any assistance	78	3.0000	.56569	19
It can be difficult and frustrating to use mobile phone banking by our corporate customers	78	3.1154	.71144	23
Overall Mean Score		3.07053	0.614358	20

Source: Primary Data

The results show an overall mean score of 3.0705, standard deviation of 0.614358 and coefficient of variation of 20%. This is a moderate relationship. The statement that our corporate customers learn using mobile phone banking easily had the highest mean score of 3.3462, standard deviation of 0.62880 and coefficient of variation of 19%. This was followed by the statement that using mobile phone banking makes banking easier for our corporate customers with a mean score of 3.2308, standard deviation of 0.65163 and coefficient variation of 20%.

However the statements that using mobile phone banking requires our corporate customers to apply more mental efforts and our corporate customers require technical skills to use mobile phone banking had means below 3.0 (Mean=2.846, standard deviation of 0.61269 and coefficient of variation of 22% and (mean = 2.8846, standard deviation = 0.5159 and coefficient of variation of 18%) respectively. The low range of coefficient of variation between 18% and 23% depicts that there was low variations among the respondents concerning the aspects of complexity.

4.6 Manager Demographics

Demographics are statistical characteristics of a population such as age, gender, education and professional background. They are unique personal attributes ascribed to individual managers in organizations that determine the nature of decisions that they make. The characteristics of managers' influence their decisions and therefore the actions adoption by their firms (Hambrick & Mason, 1984). Manager demographics is one of the moderating variables in the study.

To collect data on manager demographics, respondents were requested to avail their personal data as guided by the questionnaire. The results are shown in Table 4.10.

Table 4. 10: Manager Demographics

Gender	Frequency	Percentage (%)
Male	51	65.4
Female	27	34.6
Total	78	100
Age Category		
Up to 25 years	12	15.4
26 to 35 years	24	30.6
36-45 years	36	46.2
Over 45 years	6	7.8
Total	78	100
Current level of education		
Postgraduate Degree	48	61.5
Undergraduate Degree	30	38.5
Diploma	0	0.00
Total	78	100
Number of years worked with the banking sector		
Less than 3	6	7.7
4-9	24	30.8
10-15	42	53.8
16-19	6	7.7
Total	78	100
Number of years held the current bank		
0-4 years	18	23
5-9 years	36	46.2
10-14 years	18	23
Over 15 years	6	7.8
Total	78	100

Source: Primary Data

The study findings reveals that majority of the respondents (65.4%) were males with (34.6%) being females. This implies there were more males than female managers in commercial banks in Kenya. Hoobler, et al. (2011) argued that successful leadership

is associated with stereotypes masculinity such as dominance and assertiveness, disapproving female managers since they violate gender stereotypes. As a result there are more barriers for women to reach executive positions.

Concerning the length of service in the banking sector, the results indicate that majority of the managers (53.8%) had worked in the banking sector for between 10-15 years. This means that majority of the managers had relevant and adequate knowledge of the bank products. Given the number of years served in the banks and experience, the data collected was deemed to be more reliable. This length of service for long periods in the banking sector could be attributed to experience and the technical nature of management roles.

The study also established the highest level of education attained by the managers. Prior experience of managers and their level of education have been recognized as critical success factors for organizations. Box, White and Barr (1993) noted that performance of business is influenced by high education levels. The results reveal that managers had a relatively high level of qualification with (61.5% and (38.5%) holding postgraduate degrees and Bachelor's degrees respectively. This implies that, unlike in the past when managers were associated with people with low and average levels of education but high experience, majority of the managers were highly educated. The level of education is considered a critical factor for improved firm performance and survival in difficult conditions (Yusuf, 1995).

4.7 Manager Psychological Capital

Psychological capital refers to psychological capacities of individual's that is capable of being harnessed and measured to improve a firm's performance. It is considered an important tool for the creation, development and acceptance of innovation in information technology (Ziyae et al., 2015). The following constructs were conceptualized in this study; optimism, resilience, hope and self-efficacy. According to Luthans et al. (2007) Individuals with psychological capital are more innovative and creative in their activities.

In order to establish whether manager psychological capital had an influence on corporate customer loyalty, respondents were presented with statements of psychological constructs to state the extent of their agreement. A Likert scale was

used to measure manager psychological capital dimensions. The subsequent subsections present the test of manifestations of the aspects of manager psychological capital in commercial banks in Kenya.

4.7.1 Self-efficacy

The study was set to establish the importance of manager psychological capital in terms of self-efficacy dimensions. To achieve this, various statements depicting the different manifestations of self-efficacy were presented to respondents who were requested to indicate on a 5-point Likert scale to what extent they agreed with specific statements. The results are presented in Table 4.11.

Table 4. 11: Descriptive Statistics for Measures of Self-efficacy

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
I feel confident in analyzing a long-term problem to find a solution.	78	4.0000	.35935	9
I feel confident contacting people outside the company (e.g., suppliers, customers) to discuss problems.	78	4.5000	.50990	11
Although seniors assign me an extra job which I have never done, I still believe in my ability to do it.	78	4.4231	.64331	15
I am confident in my performance and that I can work under pressure and challenging circumstances.	78	4.6538	.48516	10
I feel confident that I can accomplish my work goals.	78	4.6154	.49614	11
If organizations transform new working system which is difficult to understand, I am still confident that I can learn new tasks from this system.	78	4.6154	.49614	11
Overall Mean Score		4.46795	0.498333	12

Source: Primary Data

The overall mean score for self-efficacy aspects was 4.4679, standard deviation of 0.498333 and coefficient of variation of 12%. This depicts very strong agreement as far as self-efficacy dimension in the manager psychological capital is concerned. All the statements had above 4.0 mean score that is; I feel confident in analyzing a long-term problem to find a solution with standard deviation of 0.35935, mean score of 4.000 and coefficient of variation of 9%, I feel confident contacting people outside the

company (e.g., suppliers, customers) to discuss problems with standard deviation of 0.50990, a mean of 4.500 and coefficient of variation of 11%, although seniors assign me an extra job which I have never done, I still believe in my ability to do it with a standard deviation of 0.6433, mean of 4.4231 and coefficient of variation of 15%, I am confident in my performance and that I can work under pressure and challenging circumstances with a standard deviation of 0.48516, mean of 4.6538 and coefficient of variation of 10%,

I feel confident that I can accomplish my work goals with a standard deviation of 0.49614, mean of 4.6154 and coefficient of variation of 11% and the statement that if organizations transform new working system which is difficult to understand, I am still confident that I can learn new tasks from this system having a standard deviation of 0.49614, mean score of 4.6154 and coefficient of variation of 11%. There was low variation among the respondents ranging between 9% and 15% on all the aspects of self-efficacy.

4.7.2 Optimism

The study set to establish the importance of manager psychological capital in terms of self-optimism dimensions. To achieve this, various statements depicting the different manifestations of optimism were presented to respondents who were requested to indicate on a 5-point Likert scale to what extent they agreed with specific statements. The results are presented in Table 4.12.

Table 4. 12: Descriptive Statistics for Measures of Optimism

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
I'm optimistic about what will happen to me in the future as it pertains to work.	78	4.5385	.58177	13
At work, I always find that every problem has a solution.	78	4.2692	.66679	16
I believe that all the problems occurring at work always have a bright side.	78	4.2692	.60383	14
If I have to face with bad situation, I believe that everything will change to be better.	78	4.2308	.58704	14
I believe that success in the current work will occur in the future.	78	4.2308	.58704	14
I am always stuck with the problem until I find a solution.	78	4.1538	.73170	18
Overall Mean Score		4.28205	0.626362	15

Source: Primary Data

The findings in Table 4.12 indicate that the overall standard deviation observed for statements on optimism was 0.626362 with mean score of 4.28205 and coefficient of variation of 15%. This depicts very strong agreement as far as optimism dimension as a construct of manager psychological capital is concerned. The statement that I'm optimistic about what will happen to me in the future as it pertains to work had standard deviation of 0.58177 with the highest mean score of 4.5385 and coefficient of variation of 13%. The statement that I am always stuck with the problem until I find a solution had standard deviation of 0.73170 with the lowest mean score of 4.1538 and coefficient of variation of 18%.

Furthermore all the statements pertaining optimism had a mean above 4.0 depicting strong agreement among the respondents. This implies that optimism is an important construct among manager psychological capital as far as technology and corporate customer loyalty is concerned in commercial banks in Kenya.

4.7.3 Hope

The study set to establish the importance manager psychological capital in terms of hope dimensions. To achieve this, various statements depicting the different manifestations of hope were presented to respondents who were requested to indicate on a 5-point Likert scale to what extent they agreed with specific statements. Results are presented in Table 4.13.

Table 4. 13: Descriptive Statistics for Measures of Hope

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
At the present time, I am energetically pursuing my work goals.	78	4.3077	.47068	11
I have several ways to accomplish the work goal.	78	4.2308	.58704	14
When I found that my performance appraisal was less than the expected goal, I try to find ways to improve and do better.	78	4.4231	.50383	11
I feel that I am energetic to accomplish the work goal.	78	4.3077	.47068	11
When I set goals and plan to work, I concentrate to achieve the goal.	78	4.3077	.47068	11
I work as the goals set by the believing that “Where there is a will, there is a way”.	78	4.2692	.45234	11
Overall Mean Score		4.3077	0.492542	12

Source: Primary Data

The overall mean score for hope dimensions was 4.3077, standard deviation of 0.492542 and coefficient of variation of 12%. This was an indication of high level of agreement among the respondents. All other statements also had a mean above 4.0; at the present time, I am energetically pursuing my work goals (Mean=4.3077, standard deviation=0.47068 and coefficient of variation=11%), I have several ways to accomplish the work goal (Mean=4.2308, standard deviation=0.50383 and coefficient of variation=14%), when I found that my performance appraisal was less than the expected goal, I try to find ways to improve and do better (Mean=4.4231, standard deviation=0.50383 and coefficient of variation=11%).

I feel that I am energetic to accomplish the work goal (Mean=4.3077, standard deviation=0.47068 and coefficient of variation=11%), when I set goals and plan to work, I concentrate to achieve the goal (mean=4.3077, standard deviation=0.47068 and coefficient of variation=11%) and I work as the goals set by the believing that “Where there is a will, there is a way” (mean=4.2692, standard deviation=0.45234 and coefficient of variation=11%). There was also low variation among respondents concerning the manifestations of hope and corporate customer loyalty as indicated by low range of coefficient of variation (11% to 14%).

4.7.4 Resilience

The study established how resilience factors are perceived by respondents. Statements were presented to respondents who were requested to indicate on a 5-point Likert scale to what extent they agreed with specific statements. Results are presented in Table 4.14.

Table 4. 14: Descriptive Statistics for Measures of Resilience

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
I usually manage difficulties one way or another at work.	78	4.2692	.60383	14
I usually take stressful things at work in stride.	78	4.2308	.58704	14
When the output of my work is not a success, I try to re-do it again.	78	4.2308	.42967	10
Although too much responsibility at work makes me feel awkward, I can go through the work successfully.	78	4.1923	.56704	14
I am undiscouraged and ready to face difficulties at work.	78	4.2308	.42967	10
When I face disappointment at work, I quickly get through it.	78	4.3077	.54913	13
Overall Mean Score		4.2436	0.52773	13

Source: Primary Data

The findings in Table 4.14 indicate that the overall mean score of resilience dimension as far as manager psychological capital is concerned is 4.2436 and coefficient of variation of 13%. The statement with the highest mean score is when I face disappointment at work, I quickly get through it (Mean=4.3077, standard deviation=0.54913 and coefficient of variation=13%) with the statement that although too much responsibility at work makes me feel awkward, I can go through the work successfully having the lowest but depicting high agreement mean score (mean=4.1923, standard deviation=0.56704 and coefficient of variation=14%). All other statements had a mean above 4.0 implying strong agreement from respondents. The statements that “I usually manage difficulties one way or another at work,” “I usually take stressful things at work in stride” and “although too much responsibility

at work makes me feel awkward, I can go through the work successfully” had the highest coefficient of variation depicting high level of variation among respondents.

4.8 Customer Loyalty

Due to the critical position that customer loyalty holds in organizations, its measurement is key because it highlights to the owners of the organization on how well the marketing strategies, products and services and subsequent customer service delivery were utilized to derive benefits for them. It is uneconomical to acquire new customers rather than retain the loyal ones. Ndubisi (2005) found out that it would cost five to six times more to recruit a new customer as opposed to serving a loyal customer.

The increased profit from serving a loyal customer is derived from low operational costs, higher sales and low marketing costs (Bowen & Chen, 2001). Customer loyalty is measured by how frequent a product is purchased, repeat purchases and share of the wallet. It is mainly influenced by the consumer having a positive attitude of the company's products (Looy et al., 2003). To capture data on the corporate customers' loyalty, statements regarding their manifestations were presented to the respondents. The results were presented in Table 4.15.

Table 4. 15: Descriptive Statistics for Measures Corporate Customer Loyalty

	N	Mean Score	Std. Deviation	Coefficient of Variation (%)
Our corporate customers use mobile phone banking more compared to other delivery channels	78	1.6923	.73589	43
Our corporate customers use mobile phone banking to do most of their banking transactions	78	1.6538	.68948	42
Our corporate customers who use mobile phone banking encourage their business partners and staff to do business with this bank	78	2.9615	.77360	26
Our corporate customers who use mobile phone banking provide positive referrals to this bank	78	3.0000	.74833	25
Retention of our corporate customers who use mobile phone banking services is relatively higher than those who don't	78	3.0385	.77360	25
Switching rate of our corporate customers who use mobile phone banking is very low	78	2.9231	.62757	21
Overall Mean Score		2.54486	0.724745	30

Source: Primary Data

The overall mean score for corporate customer loyalty is 2.54486, standard deviation of 0.724745 and coefficient of variation of 30% depicting moderate agreement by

respondents on the corporate customer loyalty manifestations. The statement that retention of our corporate customers who use mobile phone banking services is relatively higher than those who don't had highest mean score of 3.0385, standard deviation of 0.7736 and coefficient of variation of 25%. This was closely followed by the statement that our corporate customers who use mobile phone banking provide positive referrals to this bank with a standard deviation of 0.74833, mean of 3.000 and coefficient of variation of 25%.

However the statements with lowest means were that our corporate customers use mobile phone banking more compared to other delivery channels and our corporate customers use mobile phone banking to do most of their banking transactions with mean score of 1.6923, standard deviation of 0.73589 and coefficient of variation of 43% and mean of 1.6538, standard deviation of 0.68948 and coefficient of variation of 42% respectively. The statement that our corporate customers use mobile phone banking to do most of their banking transactions had the highest coefficient of variation of 43% depicting highest variation among responses with the statement that switching rate of our corporate customers who use mobile phone banking is very low having the lowest coefficient of variation of 21% depicting low variation among the respondents.

4.9 Factor Analysis

Factor analysis was performed by use of KMO and Bartlett's Test for sampling adequacy to test various types of validity including construct, discriminant and convergent validity. Further Varimax methods and also principal component analysis was applied to extract those factors that clearly measure the variables under investigations. This was enabled by the use of Eigen values that are normally greater or equal to 0.5. The study results are presented in Table 4.16

Table 4. 16: Summary of KMO and Bartlett's Test

Variable	KMO	Bartlett's Test of Sphericity		
		Chi-square (χ)	Df	Sig. Level
Mobile phone banking attributes	.721	603.410	78	.000
manager psychological capital	.773	643.146	78	.000
manager demographics	.765	563.351	78	.000
Corporate Customer Loyalty	.737	204.262	78	.000

Source: Primary Data

The results indicate that the sampling adequacy for all the variables under study showed adequacy in the respective samples. Mobile phone banking attributes (KMO=.721, Chi-square (χ)= 603.410, df=78 and sig. level=0.000); manager psychological capital (KMO=.773, Chi-square (χ)= 643.146, df=78 and sig. level=0.000); manager demographics (KMO=.765, Chi-square (χ)= 563.351, df=78 and sig. level=0.000) and corporate customer loyalty (KMO=.737, Chi-square (χ)= 204.262, df=78 and sig. level=0.000). All the variables showed varied factor loadings with mobile phone attributes showing six factor loadings, manager psychological capital showing seven factor loadings, manager demographics showing five loadings and corporate customer loyalty showing three factor loadings therefore implying that they closely measure the dependent variable. Detailed results of factor analysis details are in Appendix 3.

4.10 Regression Analysis and Hypotheses Testing

4.10.1 Introduction

The study hypotheses were tested based on the moderating role of manager demographics and psychological capital in the relationship between mobile phone banking attributes and loyalty of corporate bank customers in Kenya. To achieve this, four hypotheses were formulated based on the study objectives. Simple, hierarchical and multiple regression analyses were used in the tests.

A number of inferential statistical operations which included the values of R, R², F ratio, t-values and p-values were interpreted to accept or reject the hypothesis. Decision points to reject or fail to reject a hypothesis were based on the p-values. Where $p < 0.05$ the study failed to reject the hypotheses. And where $p > 0.05$, the study rejected the hypotheses. Interpretations of results and subsequent discussions also considered coefficients of determinations (R²), F-Statistic values and beta values. R² indicated the change in dependent variable explained by change in the independent variables combined.

Further, the higher F-Statistic the more significant the model was. The negative or positive effect of the independent variable on the dependent (either negative or positive) was explained by checking the beta (β) sign. The R-value shows the strength of the relationship between the variables, t-values represent the significance of individual variables. The findings are presented in various sections of this chapter along the study objectives and corresponding hypotheses. The results have been discussed within the context of theory and empirical literature.

4.10.2 Mobile Phone Banking Attributes and Corporate Customer Loyalty

The study established the influence of mobile phone banking attributes on loyalty of corporate bank customers through the following overall hypothesis:

H1: Mobile phone banking attributes has no statistically significant influence on corporate customer loyalty

The study first tested the independent effects of mobile phone banking attributes on each of the performance measures before establishing the combined effect of mobile

phone banking attributes on corporate customer loyalty. The results are presented in the following sub-section.

4.10.3 Individual Mobile Phone Banking Attributes and Corporate Customer Loyalty

Regression analysis was performed to determine and test the hypothesis for the existence of a link between independent mobile phone banking dimensions (compatibility, relative advantage, observability, trialability and complexity) and corporate customer loyalty. The results are shown in Table 4.17.

Table 4. 17: Individual Effects of Mobile Phone Banking Attributes Dimensions on Corporate Customer Loyalty

Model Summary						
Model	R	R Square	Adjusted R Square		Std. Error of the Estimate	
1	.728 ^a	.530	.374		.26762	
Predictors: (Constant), compatibility, relative advantage, observability, trialability and complexity						
ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.243	1	.243	3.389	.013
	Residual	.215	77	.072		
	Total	.458	78			
a. Dependent Variable: Corporate customer loyalty						
b. Predictors: (Constant), compatibility, relative advantage, observability, trialability and complexity						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.364	.342		6.917	.000
	Compatibility	.234	.092	.333	2.533	.014
	Relative advantage	.234	.092	.333	2.533	.014
	Observability	.238	.077	.393	3.099	.003
	Trialability	.055	.093	.091	.597	.023
	Complexity	.030	.120	.037	.248	.005
a. Dependent Variable: Corporate customer loyalty						

Source: Primary Data

The results of analysis to establish the effect of mobile phone banking attributes dimensions on corporate customer loyalty are shown in Table 4.17. Results of the study showed a strong relationship ($R=.728$). This was an indication that mobile phone banking dimensions explained 53% ($R^2=.530$) of corporate customer loyalty. The other variables in the firm explained the remaining 47%. The analysis from the model had the F value of 3.389. P-value was less than 0.05, implying that mobile phone banking attributes had statistically significant effects on corporate customer loyalty. The results also show statistically significant results for individual mobile phone banking attributes since their corresponding $p\text{-value} < 0.05$.

The study then determined the combined effect of mobile phone banking attributes on corporate customer loyalty. The composite index was computed for both mobile phone banking attributes and corporate customer loyalty and the hypothesis tested through simple regression analysis. The results were as presented in Table 4.18.

Table 4. 18: Regression Results for Overall Combined Results for the effect of Mobile Phone Banking Attributes on Corporate Customer Loyalty

a) Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.802 ^a	.643	.640	.77199		
a. Predictors: (Constant), Mobile phone banking attributes						
b) ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	124.427	1	124.427	208.779	.000 ^a
	Residual	69.133	77	.596		
	Total	193.560	78			
a. Dependent Variable: Corporate customer loyalty						
b. Predictors: (Constant), mobile phone banking attributes						
c) Combined coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.499	.273		-1.829	.070
	Mobile phone banking attributes	1.163	.081	.802	14.449	.000
a. Dependent Variable: Corporate customer loyalty						

Source: Primary Data

As shown in Table 4.18 coefficient of correlation $R=.802$ is an indication of relatively strong relationship between mobile phone banking attributes and corporate customer loyalty. The coefficient of determination $R^2 =.643$ indicates that mobile phone banking attributes explained 64.3% of corporate customer loyalty.

The other variables in the firm explained the remaining 35.7%. The analysis from the model had the F value of 208.779 with p-value of 0.00 which is less than 0.05. The findings, thus, were sufficient to support the idea of the influence of mobile phone banking attributes, implying that mobile phone banking attributes had statistically significant effects on corporate customer loyalty thus the hypothesis was rejected. Based on regression coefficients results in Table 4.18 the regression equation can be written as follows;

$Y = -.499+ 1.163 X_1$ where Y = corporate customer loyalty, X_1 = mobile phone banking attributes.

The results of the combined effects of mobile phone banking attributes showed that a unit increase in mobile phone banking attributes will cause a 1.163 increase in corporate customer loyalty.

4.10.4 Mobile Phone Banking Attributes, Manager Psychological Capital and Corporate Customer Loyalty

The objective was to determine the moderating effect of manager psychological capital on the relationship between mobile phone banking attributes and corporate customer loyalty. This led to formulation of the hypothesis that:

H2: Manager psychological capital has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty

This hypothesis was tested using stepwise regression analysis. In step one, mobile phone banking attributes was regressed on corporate customer loyalty. In step two mobile phone banking attributes was regressed on manager psychological capital. In step three the interaction term between mobile phone banking attributes and manager psychological capital was introduced. The moderation effect is confirmed when the

effect of interaction term is statistically significant. The findings are presented in Table 4.19.

Table 4. 19: Regression Results moderating effect of Manager Psychological Capital on the Relationship between Mobile Phone Banking Attributes and Corporate Customer Loyalty

(a) Model Summary										
Model	R	R Square	Adjusted Square	RStd. Error of Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. Change	
1	.322	.104	.048	.73989	.104	1.856	3	75	.150	
2	.111	.012	-.003	.27553	.281	4.634	2	76	.150	
3	.700	.489	.394	.59014	.385	6.490	5	73	.000	
(b) ANOVA										
Model	Sum of Squares		df	Mean Square	F	Sig.				
1	Regression		3.048	3	1.016	1.856	.030			
	Residual		26.277	23	.547					
	Total		29.325	26						
2	Regression		14.961	2	4.980	8.823	.000			
	Residual		22.007	24	.446					
	Total		28.967	26						
3	Regression		14.349	4	1.794	6.490	.000			
	Residual		14.975	22	.348					
	Total		29.325	26						
(c) Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics				
		B	Std. Error	Beta	T	Sig.	Tolerance	VIF		
1	(Constant)	.803	.314		2.559	.013				
	Mobile phone banking attributes	.360	.086	.426	4.192*	.000	.966	1.035		
	Corporate customer loyalty	.290	.106	.278	2.740*	.008	.966	1.035		
2	(constant)	.740	.319		2.321*	.023				
	Mobile phone banking attributes	.357	.086	.421	4.148*	.000	.964	1.037		
	Manager psychological capital	.314	.108	.301	2.905*	.005	.925	1.081		
3	Mobile phone banking attributes and Manager psychological interaction	-.675	.068	-.354	-3.957*	.046	.958	1.044		
a. Predictors: (Constant), Manager psychological capital, mobile phone banking attributes										
b. Predictors: (Constant), Manager psychological capital, mobile phone banking attributes, Interaction term between Manager psychological capital, mobile phone banking attributes										
c. Dependent Variable: Corporate customer loyalty										

Source: Primary Data

Regression results displayed in Table 4.19 show that the regression model was robust and thus fit for analytical task for which it was intended ($F=1.856$, $P<0.05$). Both R , R^2 and beta coefficient are significant ($R=0.322$, $R^2=0.104$, $F = 1.856$, $P<0.05$) suggesting that regression model explains 10.4% of variance in corporate customer loyalty. Further, it is evident in model one in the table that for every unit change in mobile phone banking attributes, there is a corresponding 42.6% change in corporate customer loyalty ($\beta=0.426$, $t = 4.192$, $P<0.05$). In model two, the variance changes to 42.1% for mobile phone banking attributes ($\beta=0.421$, $t=4.148$, $P<0.05$) and 30.1% with respect of manager psychological capital in model three ($\beta=0.301$, $t=2.905$, $P<0.05$).

The findings from the test of hypothesis two imply that manager psychological capital boosts the effect of mobile phone banking attributes and corporate customer loyalty. That is to say, the more the manager psychological capital, the stronger the influence between mobile phone banking attributes and corporate customer loyalty. The interaction between mobile phone banking attributes and manager psychological capital had an influence on corporate customer loyalty to support a moderation relationship.

The results indicates that mobile phone banking attributes and manager psychological capital have statistically significant influence on corporate customer loyalty ($t=-3.957$, $p=<0.05$). This implies that mobile phone banking attributes depend on manager psychological capital in determining corporate customer loyalty; thereby rejecting the hypothesis, that manager psychological capital has no significant moderating effect on the relationship between mobile phone banking attributes and corporate customer loyalty.

4.10.5 Mobile Phone Banking Attributes, Manager Demographics and Corporate Customer Loyalty

The study further determined the moderating effect of manager demographics on the relationship between mobile phone banking attributes and corporate customer loyalty. Since it is not possible to compute composite scores for manager demographics as they are in ordinal scale, each construct was measured separately. Below is how gender, age, educational level and professional background separately moderated the relationship between mobile phone banking attributes and corporate customer loyalty.

H3_a: Age has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty.

This hypothesis was tested using stepwise regression analysis. In step one; mobile phone banking attributes was regressed on corporate customer loyalty. In step two mobile phone banking attributes was regressed on age. In step three the interaction term between mobile phone banking attributes and age was introduced. The moderation effect is confirmed when the effect of interaction term is statistically significant. The results are contained in Table 4.20

Table 4. 20: Regression Results moderating Effect of Age on the Relationship between Mobile Phone Banking Attributes and Corporate Customer Loyalty

a) Model Summary										
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
1	Mobile phone banking attributes and customer loyalty	.614 ^a	.378	.376	.44724	.378	297.220	1	77	.000
2	Mobile phone banking attributes and age	.567 ^a	.321	.320	.63723	.321	231.681	1	77	.000
3	Mobile phone banking attributes, age interaction on customer loyalty	.616 ^a	.379	.377	.44706	.379	149.433	2	76	.000
b) ANOVA										
Model		Sum of Squares			df	Mean Square	F	Sig.		
1	Mobile phone banking attributes and customer loyalty	Regression	59.451		1	59.451	297.220	.000 ^b		
		Residual	98.011		77	.200				
		Total	157.462		78					
2	Mobile phone banking attributes and age	Regression	94.076		1	94.076	231.681	.000 ^b		
		Residual	198.968		77	.406				
		Total	293.044		78					
3	Mobile phone banking attributes, age interaction on customer loyalty	Regression	59.731		2	29.866	149.433	.000 ^b		
		Residual	97.731		77	.200				
		Total	157.462		78					
c) Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics			
		B	Std. Error	Beta			Tolerance	VIF		
1	(Constant)	1.031	.127		8.116	.000				
	Mobile phone banking attributes and customer loyalty	.606	.035	.614	17.240	.000	1.000		1.000	
2	(constant)	.999	.181		5.521	.000				
	Mobile phone banking attributes and age	.762	.050	.567	15.221	.000	1.000		1.000	
3	Mobile phone banking attributes, age interaction on customer loyalty	.038	.032	.051	1.184	.237	.679		1.473	

Source: Primary Data

The results in Table 5.20 on the moderating effect of age on the association between mobile phone banking attribute and customer loyalty was computed using three steps. In model one the result shows that the association between relationship mobile phone

banking attributes and customer loyalty was significant ($R = .614^a$, $R^2 = 0.378$, $P\text{-value} < 0.05$). In model two ($R = .567^a$, $R^2 = 0.321$, $P\text{-value} < 0.05$) and in model three ($R = .616^a$, $R^2 = 0.379$, $P\text{-value} < 0.05$), suggesting that there was a small progressive increase in the value of the coefficient of variation in each step thus portraying that there is no influence of age. Coefficient of determination $R^2 = 0.377$ implies that age influence the association between mobile phone banking attributes and customer loyalty by 37.7% and the value of interaction term (MPB * AGE) having ($\beta = .038$, $P = 0.237$ which is > 0.05), suggesting no moderating influence of age on the association between mobile phone banking attributes and customer loyalty. The study therefore fail to reject the sub hypothesis that age moderates the effect of mobile phone banking attributes on customer loyalty.

The study further determined the influence of the moderating effect of educational level on the relationship between mobile phone banking attributes and customer loyalty through a sub hypothesis that:

H3_b: Educational level has no statistically significant moderating effect on the relationship between mobile phone banking attributes and corporate customer loyalty.

It involved testing the effect of the independent variable (mobile phone banking attributes) and the moderator variable (educational level) on the dependent variable (customer loyalty), and the interaction between mobile phone banking attributes and educational level.

Step one involved testing the influence of mobile phone banking attributes on customer loyalty. The second step involved testing the effect of the predictor variables (mobile phone banking attributes and educational level) on the criterion variable (customer loyalty). In step three, the interaction term between mobile phone banking attributes and educational level (calculated by obtaining the product of standardized values of mobile phone banking attributes and educational level) was introduced and tested for its significance on overall customer loyalty. The moderation effect is confirmed when the effect of the interaction term is statistically significant. The results were as presented in Table 4.21

Table 4. 21: Moderation Results of the Effect of Educational level on Mobile phone banking attributes and Customer Loyalty

a) Model Summary										
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Changed	df1	df2	Sig. F Change
1	Mobile phone banking attributes and customer loyalty	.439 ^a	.192	.190	.61573	.104	1.856	3	75	.150
2	Mobile phone banking attributes, educational level	.523 ^a	.274	.272	.58386	.281	4.634	2	76	.150
3	Mobile phone banking attributes and educational level interaction	.761 ^a	.579	.578	.39456	.385	6.490	5	73	.000
ANOVA										
Model				Sum of Squares	df	Mean Square	F	Sig.		
1	Mobile phone banking attributes and customer loyalty	Regression		3.048	1	1.016	1.856	.030		
		Residual		26.277	77	.547				
		Total		29.325	78					
2	Mobile phone banking attributes, educational level	Regression		14.961	2	4.980	8.823	.000		
		Residual		22.007	76	.446				
		Total		28.967	78					
3	Mobile phone banking attributes and educational level interaction	Regression		14.349	5	1.794	6.490	.000		
		Residual		14.975	73	.348				
		Total		29.325	78					
c) Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients		T	Sig.	Collinearity Statistics		
		B	Std. Error	Beta				Tolerance	VIF	
1	(Constant)	.803	.314			2.559	.013			
	Mobile phone banking attributes	.360	.086	.426		4.192*	.000	.966	1.035	
2	Customer Loyalty	.290	.106	.278		2.740*	.008	.966	1.035	
	(constant)	.740	.319			2.321*	.023			

3	Educational level	.357	.086	.421	4.148*	.000	.964	1.037
	Customer Loyalty	.314	.108	.301	2.905*	.005	.925	1.081
	Mobile phone banking attributes and educational level interaction	.675	.068	.354	3.957*	.006	.958	1.044

Source: Primary Data

Table 4.21 shows that the regression results for model three involving the moderation effect was robust and thus fit for analytical task for which it was intended ($F=6.490$, $P<0.05$). Both R , R^2 and beta coefficient are significant ($R=.761^a$, $R^2=.579$, $P<0.05$) suggesting that mobile phone banking attributes and education level interaction explains 57.9% of variance in customer loyalty. The study further shows that the results in step one and two were also significant. The study thereby rejects the hypothesis that educational level has no moderating effect on the relationship between mobile phone banking attributes and customer loyalty.

The study also determined the extent to which gender influence the association between mobile phone banking attributes and customer loyalty through a hypothesis that:

H3c: gender has no statistically significant moderating effect on the association between mobile phone banking attributes and corporate customer loyalty.

The moderation effect is confirmed when the effect of interaction term is statistically significant. The results were as presented in Table 4.22.

Table 4. 22: Moderation Results of the Effect of Gender on mobile phone banking attributes and Customer Loyalty

Model Summary										
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
1	Mobile phone banking attributes, customer loyalty	.585 ^a	.342	.340	.38402	.083	4.181	3	75	.047
2	Mobile phone banking attributes, Gender	.177 ^a	.031	.010	.64747	.083	4.462	2	76	.040
3	Mobile phone banking attributes, gender interaction	.447	.200	.149	.348308	.034	1.883	5	73	.177

b) ANOVA										
Model			Sum of Squares		df	Mean Square	F	Sig.		
1	Mobile phone banking attributes, customer loyalty	Regression	.556		1	.556	4.181	.047		
		Residual	6.118		77	.133				
		Total	6.675		78					
2	Mobile phone banking attributes, Gender	Regression	1.108		2	.554	4.479	.017		
		Residual	5.566		76	.124				
		Total	6.675		78					
3	Mobile phone banking attributes, gender interaction	Regression	1.337		5	.446	3.672	.019		
		Residual	5.338		73	.121				
		Total	6.675		78					

c) Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics			
		B	Std. Error	Beta			Tolerance	VIF		
1	(Constant)	2.120	.314		7.782	.013				
	Mobile phone banking attributes,	.202	.086	.289	2.045*	.000	1.00	1.000		
	Customer Loyalty	.1.570	.106	.332	4.244*	.047	.977	1.023		
2	(constant)	.233	.319		2.414*	.023				
	Mobile phone banking attributes	.157	.086	.291	2.112*	.000	.977	1.023		
	Gender	.131	.108	.380	4.218*	.003	.977	1.090		
3	Mobile phone banking attributes and gender interaction	-.078	.068	.199	1.372*	.040	.958	1.044		

Source: Primary Data

Table 4.22 shows that the regression model was robust and thus fit for analytical task for which it was intended ($F=4.181$, $P<0.05$). Both R , R^2 and beta coefficient are significant ($R=.585^a$, $R^2=.342$, $P<0.05$) suggesting that mobile phone banking attributes explains 34.2% of variance in customer loyalty. Further, it is evident in model one in the table that for every unit change in mobile phone banking attributes, there is a corresponding 20.2% change in customer loyalty ($\beta=0.202$, $t = 2.045$, $P<0.05$). In model two, the variance changes to 15.7% for mobile phone banking attributes ($\beta=0.157$, $t=2.112$, $P<0.05$) and the variance in customer loyalty is 13.1% with respect of gender ($\beta=0.131$, $t=4.218$, $P<0.05$). The findings from the test of moderating effect of gender on customer loyalty however, suggest that gender negatively affects the association between mobile phone banking attributes and customer loyalty ($\beta= -.078$, $t=1.372$, $P<0.05$). This is confirmed in model one where $R^2=0.342$. In model three, after gender is considered by including the interaction variable (MPBA *GD), R^2 reduces to 0.200, which is a 14.2% reduction.

This result implies that though the relationship is statistically significant ($p\text{-value}=.040$ at $P<0.05$), gender have an inverse effect on the association between mobile phone banking attributes and customer loyalty. The hypothesis is therefore rejected.

The study also sought to determine the extent to which professional background influence the relationship between mobile phone banking attributes and corporate customer loyalty through a hypothesis that:

H3a : Professional background has no statistically significant moderating effect on the relationship between mobile phone banking attributes and corporate customer loyalty.

The moderation effect is confirmed when the effect of interaction term is statistically significant. The results were as presented in Table 4.23.

Table 4. 23: Moderation Results of the Effect of Professional background on mobile phone banking attributes and Customer loyalty

Model Summary										
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
1	Mobile phone banking attributes and customer loyalty	.386 ^a	.149	.140	.57721	.386 ^a	.149	3	75	.386 ^a
2	Mobile phone banking, Professional background	.501 ^a	.251	.243	.81509	.501 ^a	.251	2	76	.501 ^a
3	Mobile phone banking attributes, professional background interaction	.404 ^a	.163	.146	.57538	.404 ^a	.163	5	73	.404 ^a
b) ANOVA										
Model				Sum of Squares	df	Mean Square	F	Sig.		
1	Mobile phone banking attributes and customer loyalty	Regression		5.723	1	5.723	17.176	.000 ^b		
		Residual		32.651	77	.333				
		Total		38.373	78					
2	Mobile phone banking, Professional background	Regression		21.779	1	21.779	32.781	.000 ^b		
		Residual		65.108	77	.664				
		Total		86.887	78					
3	Mobile phone banking attributes, professional background interaction	Regression		6.260	2	3.130	9.455	.000 ^b		
		Residual		32.113	76	.331				
		Total		38.373	78					
c) Coefficients										
Model		Unstandardized Coefficients		Standardized Coefficients		T	Sig.	Collinearity Statistics		
		B	Std. Error	Beta				Tolerance	VIF	
1	(Constant)	3.315	.139			23.898	.000			
	Mobile phone banking attributes	.245	.059	.386		4.144	.000	1.000	1.000	
	(constant)	1.911	.196			9.756	.000			
2	Mobile phone banking, Professional background	.477	.083	.501		5.725	.000	1.000	1.000	
	Mobile phone banking attributes, professional background interaction	.201	.068	.318		2.961	.004	.749	1.335	
3										

Source: Primary Data

Table 4.23 shows that the regression model was robust and thus fit for analytical task for which it was intended ($F=17.176$, $P<0.05$). Both R , R^2 and beta coefficient are significant ($R=.386^a$ $R^2=.149$, $P<0.05$) suggesting that professional background explains 14.9% of variance in customer loyalty. In model two, the variance changes to 47.7% for mobile phone banking attributes and professional background ($\beta=0.477$, $t=5.725$).

The findings from the test of moderating effect of professional background and mobile phone banking attributes interaction however, suggest that professional background positively affects the association between mobile phone banking attributes and customer loyalty ($\beta= 0.201$, $t=2.961$, $P<0.05$). This is confirmed in model one where $R^2=0.149$ yet in model three, after professional background are considered by obtaining the interaction variable (MPBA *FB), R^2 increases to 0.163, which is a 16.3%. This result therefore implies that the relationship is statistically significant ($p\text{-value}=.004$ at $P<0.05$), thus the hypothesis that professional attributes has no statistically significantly moderating the relationship between mobile phone banking attributes and customer loyalty is rejected.

4.10.6 Joint Effect of Mobile Phone Banking Attributes, Manager Demographics and Psychological Capital on Corporate Customer Loyalty

The objective was to establish whether there was a joint effect of mobile phone banking attributes, manager demographics and psychological capital on corporate customer loyalty. The following hypothesis was formulated and tested.

H₄: Mobile phone banking attributes, manager demographics and psychological capital have no statistically significant joint influence on corporate customer loyalty

To test this hypothesis, multiple regression analysis was used. The results are presented in Table 4.24.

Table 4. 24: Multiple Regression Results for the Joint Effect of Mobile Phone Banking Attributes Manager Demographics and Psychological Capital on Corporate Customer Loyalty

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. Change
1	.830	.688	.668	.39410	.005	.688	1	77	.411
(a) ANOVA									
Model		Sum of Squares		df	Mean Square	F	Sig.		
	Regression	16.116		3	5.372	34.586	.000		
	Residual	7.300		23	.155				
	Total	23.416		26					
(b) Coefficients									
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
		B	Std. Error	Beta			Tolerance	VIF	
	(Constant)	1.656	.596		-2.778	.008			
	Mobile phone banking attributes	.741	.188	.383	3.933	.000	.700	1.429	
	Manager demographics	.888	.125	.774	7.100	.000	.558	1.791	
	Manager psychological capital	.120	.145	.103	.830	.001	.430	2.326	
Predictors: (Constant), Mobile phone banking attributes, managers demographics, Manager psychological capital Dependent Variable: Corporate customer loyalty									

Source: Primary Data

The study findings in Table 4.24 indicate that 68.8% of variation in corporate customer loyalty, is explained by the joint effect of the three variables (Mobile phone banking attributes, manager demographics, Manager psychological capital) ($R^2=0.688$, $F=34.586$, $P<0.05$). The remaining 31.2% is explained by other factors not considered in the study. It is clear from the value of R^2 and F ratio that the regression model was fit for use in the analysis. Therefore, Mobile phone banking attributes, manager demographics, manager psychological capital have significant joint influence on corporate customer loyalty. As indicated in Table 4.24, the results of mobile phone banking attributes on corporate customer loyalty was positive and significant ($\beta=0.383$, $t=3.933$, $p<0.05$) manager demographics ($\beta=0.774$, $t=7.100$, $p<0.05$) and manager psychological capital ($\beta=0.103$, $t=0.830$, $p<0.05$).

Based on the results, the regression model for hypothesis four can be fitted as follows:

The original model: $Y_0 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$

The new model: $Y = 1.656 + 0.741 (X_1) + 0.888 (X_2) + 0.120 (X_3)$

Where:

Y= Corporate customer loyalty

X₁= Mobile phone banking attributes

X₂= Manager demographics

X₃= Manager psychological capital

ε = error term

Based on the above results, the hypothesis that there was no significant joint effect of mobile phone banking attributes, manager demographics, manager psychological capital on corporate customer loyalty is rejected.

Table 4. 25: Summary of Test of Hypotheses

Objective	Hypothesis	Decision
i. To determine the extent to which mobile phone banking attributes influence commercial bank corporate customer loyalty.	H ₁ : Mobile phone banking attributes has no statistically significant influence on corporate customer loyalty	Rejected the null hypothesis
ii. To establish the effect of manager psychological capital on the relationship between mobile phone banking attributes and	H ₂ : Manager psychological capital has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty.	Rejected the null hypothesis

<p>commercial bank corporate customer loyalty.</p>		
<p>iii. To assess the influence of manager demographics on the relationship between mobile phone banking attributes and commercial bank corporate customer loyalty.</p>	<p>H3a: Age has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty.</p> <p>H3b: Educational level has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty.</p> <p>H3c: gender has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty.</p> <p>H3d: Professional background has no statistically significant moderating</p>	<p>Failed to reject the null hypothesis</p> <p>Rejected the null hypothesis</p> <p>Rejected the null hypothesis</p> <p>Rejected the null hypothesis</p>

	influence on the relationship between mobile phone banking attributes and corporate customer loyalty.	
iv. To determine the extent to which mobile phone banking attributes, manager demographics and their psychological capital jointly influence commercial bank corporate customer loyalty.	H4: Mobile phone banking attributes, manager demographics and psychological capital have no statistically significant joint influence on corporate customer loyalty.	Rejected the null hypothesis

4.11 Discussion of the Results

The study had four objectives and corresponding hypothesis. The tests of hypotheses and discussion of the results are presented here below. The findings from these tests were compared with the results of earlier studies.

4.11.1 Mobile Phone Banking Attributes and Corporate Customer Loyalty

The first objective of the study was to establish the influence of mobile phone banking attributes on corporate customer loyalty. This objective had a corresponding hypothesis, H₁, which stated that Mobile phone banking attributes has no statistically significant influence on corporate customer loyalty. Overall, the results indicated that mobile phone banking attributes had a strong positive relationship with corporate customer loyalty since their corresponding p-value was less than 0.05. This implies that commercial banks should embrace mobile phone banking attributes elements for corporate customer loyalty to be realized.

Studies have also found out that innovative attributes influence customer loyalty. For example Lee and Liu (2008) found out that compatibility and relative advantage are crucial in influencing customer loyalty. Rambocas (2012) found that perceived relative advantage and to a lesser extent government support were two fundamental determinants of internet banking loyalty. Customer loyalty is an important area for

further research as there is no consensus on its antecedents. The finding support the diffusion of innovations theory that attributes of an innovation influence its adoption.

4.11.2 The Influence of Manager Psychological Capital on the Relationship between Mobile Phone Banking Attributes and Corporate Customer Loyalty

The objective was to determine the moderating effect of Manager psychological capital on the Relationship between mobile phone banking attributes and corporate customer loyalty. This led to formulation of the hypothesis that Manager psychological capital has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty. The interaction between mobile phone banking attributes and manager psychological capital had an influence on corporate customer loyalty to support a moderation relationship. The results indicate that mobile phone banking attributes and manager psychological capital have significant influence on corporate customer loyalty.

This implies that mobile phone banking attributes depend on manager psychological capital in determining corporate customer loyalty; thereby rejecting the hypothesis, that manager psychological capital has no significant moderating effect on the relationship between mobile phone banking attributes and corporate customer loyalty.

Previous studies have found that psychological capital influence the performance of a firm positively (Lichtenstein, 2005; Oscar et al., 2013). Managers have a critical role in recognizing opportunities and making strategic decisions including those affecting innovation processes (Alexiev et al., 2010). Their personal attributes and behaviours directly impact on performance of the firm (Oscar et al., 2013). For better competitive advantages, the design strategy for product loyalty should be meaningful from customers' perspective. Loyalty element should be embedded into product design process, especially for those with product attributes. From the literature reviewed no study was found where manager psychological capital moderated the relationship between mobile phone banking attributes and corporate customer loyalty. The findings support resource based theory that psychological capital influences a firm's performance.

4.11.3 The Influence of Manager Demographics on the on the Relationship between Mobile Phone Banking Attributes and Corporate Customer Loyalty

The study further determined the moderating effect of manager demographics on the relationship mobile phone banking attributes and corporate customer loyalty. This is operationalized into: Gender, Age, Educational Level and Professional Background. The hypothesis was that Manager demographics has no statistically significant moderating influence on the relationship between mobile phone banking attributes and corporate customer loyalty. Since it is not possible to compute composite scores for manager demographics as they are in ordinal scale, each construct was measured separately. The interaction between mobile phone banking attributes and manger demographics had individual influence on corporate customer loyalty to support a moderation relationship except age. The results indicate that mobile phone banking attributes and manager demographics have significant influence on corporate customer loyalty. This implies that mobile phone banking attributes depend on manager demographics in determining corporate customer loyalty. The study results relating to demographics is contradictory with some studies concluding that the performance of an organization is impacted by the demographics of top managers (Nielson, 2010; Kinuu et al., 2012) while other studies for example Lichtenstein (2005) found demographics to have no significant effect. Managers of innovative banks had higher education with diversity in their respective areas of expertise. According to Hernandez and Mazzon (2006) education and average age correlated significantly with innovations.

4.11.4 Joint Effect of Mobile Phone Banking Attributes, Manager Demographics and Psychological Capital on Corporate Customer Loyalty

The objective was to establish whether the joint effect of mobile phone banking attributes, manager demographics and psychological capital on corporate customer loyalty is greater than their individual effect with the hypothesis that mobile phone banking attributes, manager demographics and psychological capital has no statistically significant joint influence on corporate customer loyalty. The findings from the value of R^2 and F ratio indicated that the regression model was fit for use in the analysis and that mobile phone banking attributes, manager demographics and psychological capital have significant joint influence on corporate customer loyalty.

As indicated in the table, the results of mobile phone banking attribute to corporate customer loyalty was positive and significant thereby rejecting the hypothesis that the relationship between mobile phone banking attributes, manager demographics and psychological capital has no statistically significant joint influence on customer loyalty. Based on the resource based theory, studies examining demographic and psychographic variables have concluded that personal characteristics of managers directly impact the firm's performance (Hambrick & Mason 1984; Carpenter et al., 2004). For example research findings indicate that managers make faster decisions if they possess high levels of achievement motivation (Kauer et al., 2007). According to Karami et al. (2006) managers who are more educated normally develop formal strategic plans. This finding contributes to relationship marketing theory on antecedents of customer loyalty.

4. 12 Summary of the Chapter

This chapter presented research findings of the diagnostics tests, research variables and hypotheses tests. The data diagnostics tests presented includes; reliability and validity tests, normality tests, multicollinearity tests and tests of homogeneity of variance. The demographics of the organizations was analyzed using percentages and frequencies. The use of inferential and descriptive statistics in explaining variables manifestations was explained. The chapter also presented the regression results of the four hypotheses based on the study objectives. Simple, hierarchical and multiple regression analyses were used in the tests. A number of inferential statistical operations which included the values of R, R^2 , F ratio, t-values and p-values were interpreted to accept or reject the hypothesis. The findings of these results were discussed within the context of theory and empirical literature. The next chapter presents summary, conclusion and recommendations of the study.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter discusses the summarized objectives and findings of the study and make recommendations and conclusions. Implications of the study findings are also discussed. The chapter further makes suggestions for further research.

5.2 Summary

The study sought to establish the perceptions of bank managers on loyalty of mobile phone banking corporate customers. Accordingly, a comprehensive conceptual framework was developed and tested empirically guided by the following objectives: determine the extent to which mobile phone banking attributes influence commercial bank corporate customer loyalty; establish the effect of manager psychological capital on the relationship between mobile phone banking attributes and commercial bank corporate customer loyalty; assess the influence of manager demographics on the relationship between mobile phone banking attributes and commercial bank corporate customer loyalty and determine the extent to which mobile phone banking attributes, manager demographics and psychological capital jointly influence commercial bank corporate customer loyalty.

The results of the study revealed that the influence of mobile phone banking attributes on customer loyalty was statistically significant. Further, manager demographics and psychological capital had statistically significant moderating effect on this relationship. The joint effect of mobile phone banking attributes, manager demographic and psychological capital also had a statistically significant effect on corporate customer loyalty ($R=0.830$, $F=34.586$, $P<0.05$). This means that the concepts of mobile phone banking attributes, manager demographic and psychological capital can be used to enhance corporate customers' loyalty. The results of this study contribute to strengthening the existing body of literature on consumer behaviour by providing a basis for linkage (integration) of isolated variables of mobile phone banking attributes, manager demographic and psychological capital and customer loyalty and presents a relationship between the study variables.

An assessment of the influence of mobile phone banking attributes on corporate customer loyalty was revealed to be statistically significant ($R=.802$, $F=208.779$, $p<0.05$). Therefore the management and policy makers of commercial banks need to pay attention to the following mobile phone banking attributes: compatibility; relative advantage; observability; trialability and complexity in their effort to improve the loyalty of corporate bank customers. Corporate customers' products should have those attributes. Manager psychological capital had a positive and significant influence on corporate customer loyalty ($R=.322$, $F1.856$, $p<0.05$). Banks management need to pay attention to Manager psychological capital namely: self-efficacy; optimism; hope and resilience. Managers with high psychological capital are more creative and innovative and would develop products that lead to corporate customer loyalty.

Manager demographics had also a positive and significant influence on corporate customer loyalty ($R=.289$, $F4.181$, $p<0.05$). Bank management should pay attention on manager demographics which includes: gender, education and professional background. Age was found not to have a positive influence. Experienced young managers with high level of education are more likely to make strategic decisions on innovative products that lead to customer loyalty. Evaluation of the joint effect of mobile phone banking attributes, manager demographic and psychological capital revealed that they had a higher impact on corporate customer loyalty.

5.3 Conclusion

The study established statistically significant correlations among the study variables. Based on the findings of this study it was concluded that the influence of mobile phone banking attributes and corporate customer loyalty was direct and statistically significant ($p<0.05$). This implies that banks in Kenya need to pay attention to mobile phone banking attributes to enhance corporate customer loyalty. The attributes should be taken into account during product development. The study outcomes support views posited by diffusion of innovation theory, relationship marketing theory. Diffusion of innovations theory is concerned with adoption of innovation while relationship marketing theory is concerned with the relationship between the firm and its customer and how it influences business development and customer needs.

The moderating effect of manager psychological capital was statistically significant ($p < 0.05$). This means that manager psychological capital has direct positive influence on customer loyalty. This suggests that any increase in psychological dimension namely: optimism, resilience, self-efficacy or hope has direct but varying impacts on customer loyalty. This finding support the resource based theory. According to this theory a firm has a bundle of valuable resources at its disposal which impacts on its performance. The moderating effect of manager demographics was also statistically significant ($p < 0.05$). This implies that demographics of managers which include: age, gender, education and professional background impacts on customer loyalty positively. Banks need to consider the demographics of the manager they appoint and their deployment to increase customer loyalty. Finally, the joint effect of mobile phone banking attributes, manager demographics and psychological capital was statistically significant and was the best fit, implying that the integration of the study variables was greater than effects of individual variables on customer loyalty.

5.4 Recommendations of the Study

The study found that mobile phone banking attributes influence corporate customer loyalty. It also concluded that mobile phone banking attributes are widely applied by banks in Kenya that have adopted mobile phone banking. Commercial banks in Kenya should embrace mobile phone banking attributes more to enjoy the benefits of customer loyalty and reduced operational costs. Bank management and other stakeholders should create an enabling environment in terms of policies that support mobile phone banking and corporate customer loyalty so that improved organisational performance can be realized.

The study found a joint effect of mobile phone banking attributes, manager demographics and psychological capital on corporate customer loyalty. The study therefore recommends application of these factors in commercial banks in Kenya to improve the institutions in the long run in terms of corporate customer loyalty. Those commercial banks that have not embraced mobile phone banking for their corporate customers should consider inclusion to realize reduced operational costs and enhanced operational efficiency.

5.5 Implications of the Study Findings

The research study contributes to theory, policy makers, knowledge to scholars and management. The study findings contribute to the existing body of empirical evidence within the banking context. The current study was to evaluate the moderating effect of manager demographics and psychological capital on the relationship between mobile phone banking attributes and corporate customer loyalty of commercial banks in Kenya. Both manager demographics and psychological capital were hypothesized as moderating variables. The study established the attributes of each variable that were mainly dominant in the organization and the hypothesis that were accepted and rejected thereby contributing to the existing body of empirical evidence within the context of commercial banks in Kenya.

5.5.1 Theoretical and Conceptual Implications

The results of this study contribute to strengthening the existing body of literature by confirming empirically that manager demographics and psychological capital affects the relationship between mobile phone banking attributes and corporate customer loyalty in the banking sector. The results also show the magnitude of the relationship among all variables and corporate customers loyalty. By establishing this influence, managers of the banks can leverage on both to improve customer loyalty and enhanced performance.

The study outcomes support views posited by diffusion of innovation theory, relationship marketing theory and resource based theory. Diffusion of innovation theory focuses on technology adoption through developing of mobile phone banking attributes that fits the way customers do their transactions. Its main goal is to explain how and why new products and service spread in terms of four elements of diffusion namely innovation, time, communication channels and social systems. Relationship marketing is a customer focused strategy concerned with all marketing activities that develop, establish and maintain relationship exchanges successfully.

It entails development of marketing strategies that enables corporate customer adopt mobile phone banking and become loyal to the banks. It is concerned with how a firm relates to its customers and stakeholders and how this, in turn, impacts on business development and the management of customers' needs. Resources are also necessary

to adopt mobile phone banking technology by banks and therefore the study contributes to further building on the resource based theory and how it can be used to underpin the impact of mobile phone banking attributes on customer loyalty.

5.5.2 Policy Implications

The study also contributes to policy implications in terms of decision making by both commercial banks in Kenya that have adopted mobile phone banking and those that are not yet to adopt in Kenya and globally. Commercial banks contribute to economic growth, create employment and provide financial products and services that suit all categories of the population. Loyalty of customers in commercial banks is important as it impacts on financial performance and therefore, the results of this study will assist policymakers to make sound decisions regarding which variables determines customer loyalty. Other policy makers like the government and non-governmental bodies should leverage on mobile phone banking to improve corporate customer loyalty in commercial banks in Kenya.

The results suggest that commercial banks in Kenya need to embrace mobile phone banking attributes, manager demographics and psychological capital activities to attain corporate customer loyalty and general efficiency in the banking industry.

5.5.3 Managerial Implications

The study results indicated that mobile banking attributes had statistically significant influence on customer loyalty. The management need to use this study to improve on the service attributes that leads to corporate customer loyalty. These attributes include relative advantage, compatibility, complexity, observability and trialability. The study also found that manager demographics and psychological capital had statistically significant moderating influence on the relationship between mobile phone banking attributes and customer loyalty. Age however did not have a moderating effect. The bank management should therefore use the result of the study to hire and deploy managers with the right attributes for making strategic decision leading to customer loyalty.

5.6 Limitations of the Study

The study variables are not exhaustive. Other factors like income could be included in manager demographics variable to provide more insights into the moderating

influence of mobile phone banking attributes on customer loyalty. Secondly, the results of this study are based on self-reported data on manager psychological capital. Though the results are quite reliable, information that is generated by key informant is not the only source of information that can explain their levels of performance. Thirdly, this study used a cross sectional research design where data is collected at one point in time. This research design limits deeper investigations of many other possible causal relationships in the study. Consequently, a longitudinal study would provide more insightful findings of the study.

5.7 Suggestions for Further Research

The current study observed mixed results. The study therefore suggests further studies to be carried out to solve this point of contention and bring out the real relationship in various organizations with similar set ups. The study found that a joint relationship existed among the variables. The study therefore recommends an evaluation of this relationship to further bring out the model in all banks in order to integrate them into mobile phone banking attributes and customer loyalty theories. Further studies on this relationship are thus recommended.

The research on the role of manager demographics and psychological capital in the relationship between mobile phone banking attributes and corporate customer loyalty in commercial banks in Kenya offers new contributions in improving the customer loyalty and the general operational efficiency. It could provide a road map of identifying key success factors which could be used by commercial banks in Kenya during operations. This study, therefore, suggests further studies to be carried out to determine the impact of manager demographics and psychological capital as the independent variable and corporate customer loyalty as the dependent variable.

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APPENDICES

Appendix 1: Questionnaire

Dear Respondent,

My name is Stephen Nguthuku and a PhD student in Business Administration – Marketing option at University of Nairobi. Currently I am carrying out a research on the “*Mobile phone banking Attributes, Manager Demographics and Psychological Capital and Loyalty of commercial bank Corporate customers in Kenya*”. I am in the process of gathering relevant data for this study. You have been identified as one of the respondents in this study and request for your assistance towards making this study a success. I therefore kindly request you to respond to the attached questionnaire. I wish to assure you that your responses will be treated with confidentiality and will be used solely for the purpose of this study. I thank you in advance for your time and responses. The questionnaire is divided into section one to five.

Yours Sincerely

SECTION ONE: GENERAL INFORMATION

1. Name of the Bank (optional): _____
2. Department: _____
3. Your job title: _____
4. What is the ownership structure of your Bank? (Please TICK as appropriate)
 - I) Fully government owned []
 - II) Partially owned by government and private entities []
 - III) Privately owned []

SECTION TWO: MANAGER DEMOGRAPHICS

5. Gender
Male [] Female []
6. Age category
Up to 25 years [] 26 to 35 years [] 36 to 45 years []
Over 45 years []

7. Highest attained level of education

Postgraduate degree [] Undergraduate degree [] Diploma [] Certificate []

Other.....

8. How many years have you been in the Banking sector? -----

9. How many years have you been in the Current Bank? -----

10. Professional Background

Finance [] Marketing [] Management []

Others (specify) -----

SECTION THREE: MOBILE PHONE BANKING ATTRIBUTES

11. Please indicate the extent to which you agree or disagree with the following statements as relates to mobile phone banking attributes for your organization where 1=strongly disagree 2= disagree 3=neither disagree nor agree 4=agree 5=strongly agree

Please tick (√) one box for each statement.

	Statements	Strongly disagree (1)	Disagree (2)	Neither disagree nor agree (3)	Agree (4)	strongly agree(5)
A	Compatibility					
1	Mobile phone banking is consistent with values and needs of our corporate customers					
2	Using mobile phone banking fits well with the way our corporate customers do their banking.					
	Using mobile phone banking have helped					

	our corporate customers manage their time					
	Our corporate customers are willing to try mobile phone banking technology					
	Mobile phone banking fits well into our corporate customers working style					
	Mobile phone banking fits well with how our corporate customers manage their finances					
	Our corporate customers enjoy using mobile phone banking because of its easy in application					
	Relative Advantage					
	Mobile phone banking is cheaper to our corporate customers					
3	Mobile phone banking allows Commercial bank corporate customers to conduct banking transactions more efficiently					
4	Mobile phone banking allows Commercial bank corporate customers conduct banking transactions more conveniently.					
	Our corporate customers find mobile phone banking safer in carrying out the transaction					
	Mobile phone banking gives our corporate customers greater control over their					

	finances					
	Mobile phone banking is easily available to our corporate customers					
	Observability					
5	Our corporate customers are able to access mobile phone banking anytime and anywhere					
6	Our corporate customers are able to see the effect of a transaction immediately when they use mobile phone banking					
	Our corporate customers are satisfied with the results of using mobile phone banking					
	Our corporate customers sees mobile phone banking worth their value					
	Mobile phone banking has no queue to our corporate customers					
	Our corporate customers in other countries can access services through mobile phone banking without any problem					
	Trialability					
	Before using mobile phone banking, our corporate customers are given an opportunity to try it					
7	Our corporate customers are permitted to use mobile phone banking on a trial basis					

	Our corporate customers find it easy to use mobile phone banking after trying					
	Our bank tested mobile phone banking before allowing our corporate customers to use					
	It took time before our corporate customers accepted the mobile phone banking					
	Our corporate customers sometimes gets worried that their transactions may be tempered with					
	Mobile phone banking ensures that information about our corporate customers is safe after several trials					
	Our corporate customers try mobile phone banking for long before accepting it fully					
	Complexity					
9	Our corporate customers learn using mobile phone banking easily					
1 0	Using mobile phone banking makes banking easier for our corporate customers					
	Using mobile phone banking requires our corporate customers apply more mental efforts					

	Our corporate customers require technical skills to use mobile phone banking					
	Our corporate customers operate mobile phone banking for themselves without any assistance					
	It can be difficult and frustrating to use mobile phone banking by our corporate customers					

SECTION FOUR: MANAGER PSYCHOLOGICAL CAPITAL

12. Kindly indicate your agreement or disagreement with the following statements concerning managers psychological capital in your organization where 1=strongly disagree; 2= disagree; 3=neither disagree nor agree; 4=agree; 5=strongly agree.

B	Statements	Strongly disagree(1)	Disagree (2)	Neither disagree nor agree (3)	Agree (4)	strongly agree(5)
	Self-Efficacy					
1	I feel confident in analyzing a long-term problem to find a solution.					
2	I feel confident contacting people outside the company (e.g., suppliers, customers) to discuss problems.					
3	Although seniors assign me an extra job which I have never done, I still believe in my ability to do it.					
4	I am confident in my performance and that I can work under pressure and challenging circumstances.					

5	I feel confident that I can accomplish my work goals.					
6	If organizations transform new working system which is difficult to understand, I am still confident that I can learn new tasks from this system.					
	Optimism					
7	I'm optimistic about what will happen to me in the future as it pertains to work.					
8	At work, I always find that every problem has a solution.					
9	I believe that all the problems occurring at work always have a bright side.					
10	If I have to face with bad situation, I believe that everything will change to be better.					
11	I believe that success in the current work will occur in the future.					
12	I am always stuck with the problem until I find a solution.					
	Hope					
13	At the present time, I am energetically pursuing my work goals.					
14	I have several ways to accomplish the work goal.					
15	When I found that my performance appraisal was less than the expected goal, I try to find ways to improve and do better.					

16	I feel that I am energetic to accomplish the work goal.					
17	When I set goals and plan to work, I concentrate to achieve the goal.					
18	I work as the goals set by the believing that “Where there is a will, there is a way”.					
	Resilience					
19	I usually manage difficulties one way or another at work.					
20	I usually take stressful things at work in stride.					
21	When the output of my work is not a success, I try to re-do it again.					
22	Although too much responsibility at work makes me feel awkward, I can go through the work successfully.					
23	I am undiscouraged and ready to face difficulties at work.					
24	When I face disappointment at work, I quickly get through it.					

SECTION FIVE: CUSTOMER LOYALTY

13. The following statements relate to customer loyalty in your institution. Please indicate your opinion on each of the statements regarding the nature of relationship customer loyalty employed by your organization. Where 1=strongly disagree; 2= disagree; 3=neither disagree nor agree; 4=agree; 5=strongly agree.

C	CUSTOMER LOYALTY	Strongly disagree (1)	Disagree (2)	Neither disagree nor agree (3)	Agree (4)	strongly agree(5)
1	Our corporate customers use mobile phone banking more compared to other delivery channels					
2	Our corporate customers use mobile phone banking to do most of their banking transactions					
3	Our corporate customers who use mobile phone banking encourage their business partners and staff to do business with this bank					
4	Our corporate customers who use mobile phone banking provide positive referrals to this bank					
5	Retention of our corporate customers who use Mobile phone banking services is relatively higher than those who don't					
6	Switching rate of our corporate customers who use mobile phone banking is very low					

Thank you for your participation

**Appendix II: List of Commercial Banks offering Mobile phone banking Services
as at 31st December, 2015**

	COMMERCIAL BANK
	Large Peer Group
1	Equity Bank Limited
2	Co-operative Bank of Kenya Limited
3	Kenya Commercial Bank Limited
4	Barclays Bank of Kenya Limited
5	Standard Chartered Bank Kenya Limited
6	Commercial Bank of Africa Limited
7	Diamond Trust Bank Kenya Limited
	Medium Peer Group
8	CFC Stanbic Bank Limited
9	Family Bank Limited
10	National Bank of Kenya Limited
11	Bank of Africa Kenya Limited
12	Guaranty Trust Bank (K) Limited
13	I & M Bank Limited
14	NIC Bank Limited
15	Bank of Baroda (K) Limited
16	Citibank.N.A Kenya
17	Eco Bank Kenya Limited
	Small Peer Group
18	Jamii Bora Bank Limited
19	Consolidated Bank of Kenya Limited
20	Gulf African Bank Limited
21	Habib Bank A.G. Zurich
22	Credit Bank Limited
23	Spire Bank
24	First Community Bank Limited
25	UBA Kenya Bank Limited
26	Sidian Bank

(Source Central Bank of Kenya & <http://www.kba.co.ke/bankcodes/bbk.html>)

Appendix III: Factor Analysis Results

Mobile phone banking attributes

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.721
Bartlett's Test of Approx. Chi-Square	603.410
Sphericity df	78
Sig.	.000

Communalities

	Initial	Extraction
Mobile phone banking is consistent with values and needs of our corporate customers	1.000	.737
Using mobile phone banking fits well with the way our corporate customers do their banking.	1.000	.745
Using mobile phone banking have helped our corporate customers manage their time	1.000	.874
Our corporate customers are willing to try mobile phone banking technology	1.000	.775
Mobile phone banking fits well into our corporate customers working style	1.000	.837

Communalities cont

	Initial	Extraction
Mobile phone banking fits well with how our corporate customers manage their finances	1.000	.946
Our corporate customers enjoy using mobile phone banking because of its easy in application	1.000	.832
Mobile phone banking is cheaper to our corporate customers	1.000	.788
Mobile phone banking allows Commercial bank corporate customers to conduct banking transactions more efficiently	1.000	.877
Mobile phone banking allows Commercial bank corporate customers conduct banking transactions more conveniently.	1.000	.932
Our corporate customers find mobile phone banking safer in carrying out the transaction	1.000	.953
Mobile phone banking gives our corporate customers greater control over their finances	1.000	.844
Mobile phone banking is easily available to our corporate customers	1.000	.684
Our corporate customers are able to access mobile phone banking anytime and anywhere	1.000	.931

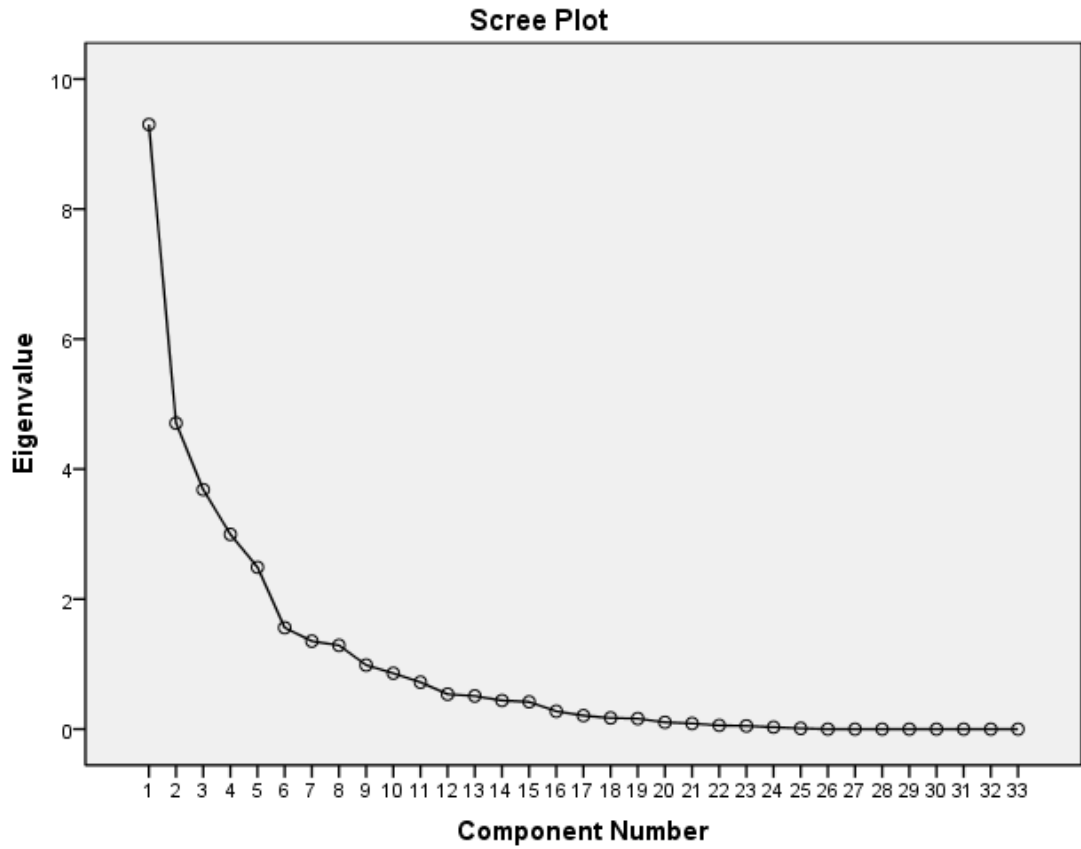
Communalities cont

	Initial	Extraction
Our corporate customers are able to see the effect of a transaction immediately when they use mobile phone banking	1.000	.792
Our corporate customers are satisfied with the results of using mobile phone banking	1.000	.848
Our corporate customers sees mobile phone banking worth their value	1.000	.868
Mobile phone banking has no queue to our corporate customers	1.000	.847
Our corporate customers in other countries can access services through mobile phone banking without any problem	1.000	.784
Before using mobile phone banking, our corporate customers are given an opportunity to try it	1.000	.847
Our corporate customers are permitted to use mobile phone banking on a trial basis	1.000	.789
Our corporate customers find it easy to use mobile phone banking after trying	1.000	.910
Our bank tested mobile phone banking before allowing our corporate customers to use	1.000	.887
It took time before our corporate customers accepted the mobile phone banking	1.000	.738

Communalities cont

	Initial	Extraction
Our corporate customers sometimes gets worried that their transactions may be tempered with	1.000	.549
Mobile phone banking ensures that information about our corporate customers is safe after several trials	1.000	.845
Our corporate customers try mobile phone banking for long before accepting it fully	1.000	.810
Commercial our corporate customers learn using mobile phone banking easily	1.000	.799
Using mobile phone banking makes banking easier for our corporate customers	1.000	.815
Using mobile phone banking requires our corporate customers apply more mental efforts	1.000	.886
Our corporate customers require technical skills to use mobile phone banking	1.000	.882
Our corporate customers operate mobile phone banking for themselves without any assistance	1.000	.828
It can be difficult and frustrating to use mobile phone banking by our corporate customers	1.000	.896

Extraction Method: Principal Component Analysis.



Manager psychological capital

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.773
Bartlett's Test of Approx. Chi-Square		643.146
Sphericity	df	78
	Sig.	.000

Communalities

	Extraction
I feel confident in analyzing a long-term problem to find a solution.	.908
I feel confident contacting people outside the company (e.g., suppliers, customers) to discuss problems.	.849
Although seniors assign me an extra job which I have never done, I still believe in my ability to do it.	.575
I am confident in my performance and that I can work under pressure and challenging circumstances.	.866
I feel confident that I can accomplish my work goals.	.852
If organizations transform new working system which is difficult to understand, I am still confident that I can learn new tasks from this system.	.758
I'm optimistic about what will happen to me in the future as it pertains to work.	.876
At work, I always find that every problem has a solution.	.850
I believe that all the problems occurring at work always have a bright side.	.803
If I have to face with bad situation, I believe that everything will change to be better.	.861
I believe that success in the current work will occur in the future.	.809
I am always stuck with the problem until I find a solution.	.812

Communalities Continued

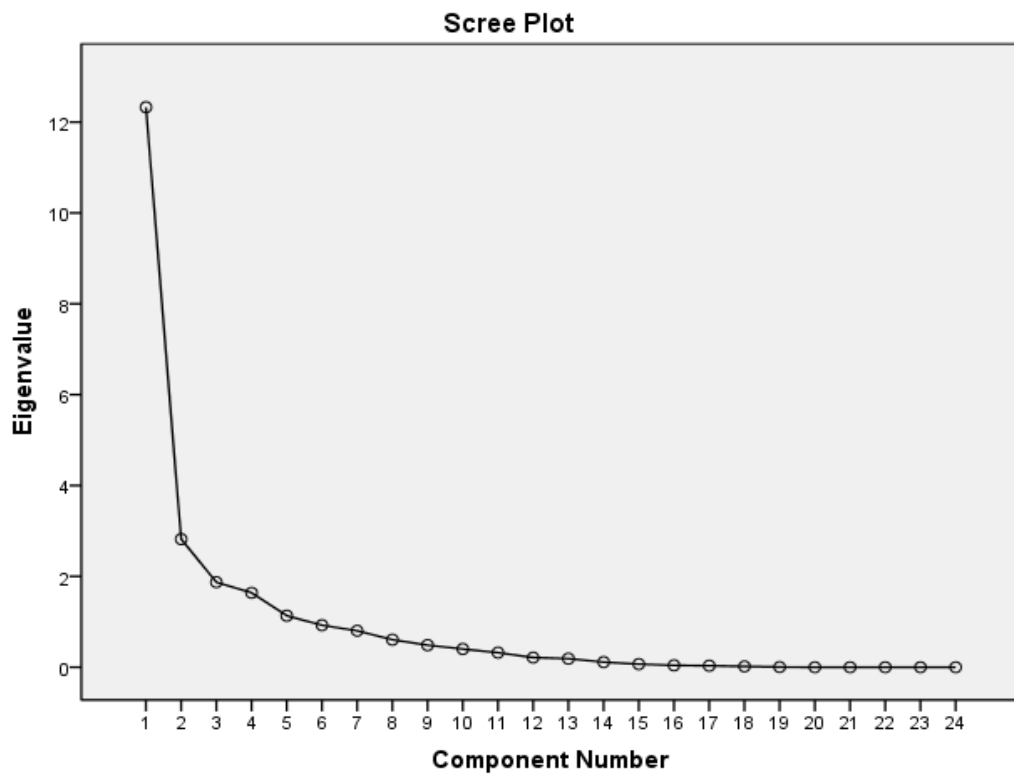
	Extraction
At the present time, I am energetically pursuing my work goals.	.753
I have several ways to accomplish the work goal.	.794
When I found that my performance appraisal was less than the expected goal, I try to find ways to improve and do better.	.884
I feel that I am energetic to accomplish the work goal.	.936
When I set goals and plan to work, I concentrate to achieve the goal.	.936
I work as the goals set by the believing that "Where there is a will, there is a way".	.822
I usually manage difficulties one way or another at work.	.570
I usually take stressful things at work in stride.	.835
When the output of my work is not a success, I try to re-do it again.	.905
Although too much responsibility at work makes me feel awkward, I can go through the work successfully.	.799
I am undiscouraged and ready to face difficulties at work.	.905
When I face disappointment at work, I quickly get through it.	.832

Extraction Method: Principal Component Analysis

Total Variance Explained

Component	Extraction Sums of Squared			Rotation Sums of Squared		
	Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.328	51.366	51.366	5.838	24.323	24.323
2	2.820	11.751	63.117	4.877	20.319	44.643
3	1.871	7.797	70.915	3.956	16.484	61.127
4	1.638	6.824	77.739	3.944	16.435	77.561
5	1.134	4.723	82.462	1.176	4.901	82.462

Extraction Method: Principal Component Analysis.



Customers' loyalty

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.737
• Bartlett's Test of Sphericity Approx. Chi-Square	204.262
df	78
Sig.	.000

Communalities

	Extraction
Our corporate customers use mobile phone banking more compared to other delivery channels	.957
Our corporate customers use mobile phone banking to do most of their banking transactions	.911
Our corporate customers who use mobile phone banking encourage their business partners and staff to do business with this bank	.804
Our corporate customers who use mobile phone banking provide positive referrals to this bank	.861
Retention of our corporate customers who use Mobile phone banking services is relatively higher than those who don't	.834
Switching rate of our corporate customers who use mobile phone banking is very low	.774
Manager demographics	.714
Mobile phone banking attributes	.250
Manager psychological capital	.613
Customer loyalty	.998

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Extraction Sums of Squared			Rotation Sums of Squared		
	Loadings			Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.214	42.137	42.137	4.189	41.889	41.889
dimension0 2	2.099	20.988	63.125	2.108	21.080	62.969
3	1.404	14.037	77.162	1.419	14.193	77.162

Extraction Method: Principal Component Analysis.

