EFFECTS OF TOTAL QUALITY MANAGEMENT PRACTICES ON MOBILE AND DIGITAL BANKING APPLICATIONS.

By

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DECLARATION

I hereby declare that this submission is my own work and that, and to the best of my knowledge and believe, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Kwame Nkrumah University of Science and Technology, Kumasi or another educational institution except where due acknowledgement is made in the thesis.

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ABSTRACT

Quality management in the banking sector have received much attention in recent years, as a result of its quality products like the mobile and digital banking applications, which have provided the organizational benefits and sustainability. As such, quality of products like mobile and digital banking is a key factor of organizational performance. Based on this the researcher aimed to identify the effects of the total quality management practices on mobile and digital banking application on the performance of the banking sectors in Ghana. The following objectives were adhered to achieve the aim of the study identified, factors for measuring the mobile and digital banking application performance of the banking sectors in Ghana, to identify the effect of Quality Management Practices of mobile and digital application on the bank's performance and to identify how the total quality management system put in place is influenced by the cultural of the bank. In order to achieve the objectives a survey was conducted using a convenient and random sampling to select the respondents and the data was collected from the workers of the selected bank. Primary data collected by administering questionnaires was used in the analysis using quantitative analysis, where descriptive analyses including, tables and graphs, regression analysis and correlation were used in the analysis. Base on the analysis it was revealed that the use of the TQM of mobile banking practices has improved customer services and care in a large extent in which the quality management practices of these application's on the bank's performance were that, the applications are reliable, easy to used, the user Interface of the app is well designed, logging into the mobile banking app is fast and they are confident about the security of banking via these banking applications. Finally, there is a positive effect of Quality Management Practices of Mobile and Digital application on the bank's performance as well.

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DEDICATION

To Theophilus Okine my husband

You have stood by me right from the beginning of this programed. Thank you for your

exceptional faithfulness, dedication and commitment towards raising our children.

Together you have helped in making this dream a reality.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Quality management in the banking sector have received much attention in recent years, this is as a result of the quality products like the mobile and digital banking application, which have provided the organizational benefits and sustainability. As such, quality of products like mobile and digital banking is a key factor of organizational performance. Also, the bank uses the Mobile and digital Banking platform to provide services to their customers in a form of an Application (mobile banking Platform) which is downloaded by the user or customers on their smart phone. Such platform is available for iOS, Windows based as well as Android phones. One will have to register himself/herself on that platform by opening the app and getting registered through it. In Mobile Banking you can transfer funds from your bank A/c through your smart phone just with the help of the internet, from anywhere to everywhere.

Many researchers have studied that quality management practices created competitive advantage (Kalra & Pant, 2014) and improved organizational performance (Mohd Akhir & Rushami, 2014). According to Nyaga & Gakobo (2017) "Organizations are globally experiencing changes in their business due to the growing of consumer awareness of quality, technological advancement and innovation, globalization and intense competition. To respond to these challenges and ensure their survival, many organizations have implemented mixed quality improvement drives as a means to improve their competitiveness and organizational performance".

Consequently, the banking industry in general, as far as globalization and national level has been gainful in each and every year since 1970. According Seyram and Yakubu (2013), the banking industry has turned out to be increasingly focused because of deregulation. Banks of today have much adaptability on the administrations they offer, the area where they work and the rate they pay depositors for their deposit (Seyram and Yakubu, 2013). In spite of the fact that this view apparently is great, this adaptability is making extreme challenge among banks and even among banks and other money related establishments that presently offer financial administrations. Subsequently, Ghana has a well-created banking system that was utilized broadly by past governments to fund endeavors to build up the local economy. By the late 1980s, the banks had experienced generous misfortunes various non-performing loans in their portfolios.

Therefore these lines a law was presented which helped constrains on risk introduction to single borrowers and sectors. These measures reinforced national bank supervision, improved the administrative structure, and step by step improved asset preparation and credit distribution. In a few pieces of the world, financial institution have confronted testing times of late (Brown and Caylor, 2004), these most banks which have suffered from loan loss and even terminations. Majority reasons for the issue has been followed to low quality resources in their portfolios that turned dangerous which dissolved their capital and debilitated their capacity to play out their intermediation work. The unpalatable result has been loss of trust in the banking system with desperate ramifications for the management of the economic. Without uncertainty, there has been a disappointment of corporate administration (Brown and Caylor, 2004).

Moreover, most bankers might want to accept that banks are into fund business, and not in the service industry. In this manner, they will in general contend as far as money related ability are opposed to support quality. Individual, assets, time and systems are

given more resources and money instaed of overseeing to Client and offering them services. The backbone of any any business is its clients. Benefits originate from sales minus cost. Sales must be acknowledged first before expense is taking care of. Client chooses sales dependent on their view of item and service quality. To put it plainly, quality decides benefits, and clients alone characterize and figure out what that quality is and ought to be (Domingo, 2003). Likewise, as per Selvaraj (2009) banking sectors in Ghana, they have made a period of furious challenge, because of which the management of the service and quality performance is relied upon to accept an expanding significant job in these industries. Hence the Banks can end up more grounded and successful just on the off chance that they turn out with better customer services, quality, expenses, and innovations. Customers of today have a wide decision of service providers and they would decide on simply the best service providers regarding to their quality, dependability, and productivity and who are at standard with global gauges. Consequently, the nature of service assumes as an overwhelming role and is an essential factor in guaranteeing the survival of the service provider in the worldwide market.

Moreover, Mobile and digital Banking is a key factor for financial institution to endure and develop over the long run (Tidd, 2001). Comprehensively, innovations like Mobile and digital Banking can be seen regarding the procedures of the association or its items or administration yields (Utterbecks, 1996). It can likewise be portrayed as major transformational changes that are unavoidable in their effect on the association or gradual alterations in progressing exercises that in total outcome in substantive difference in business forms (Damanpur, 1991). In straightforward terms, innovation includes the transformation of new knoweledge into new product which incorporates Mobile anddigital Banking procedure or service and the putting of this new product,

procedure or service into utilization either through the commercial center or by different procedures of delivery. Thusly the entire spotlight is currently focused on giving services to client or customers beyond his desires. This idea is material to all service industries and has brought forth the idea of TQM in banking sector, Saravanan and Rao (2006).

1.2 Statement of the Problem desires

In a global market, companies survive only if they consistently produce products that meet and exceed their customer's needs (Kotler, 2003). The popularity of the concept of TQM, its adoption and implementation notwithstanding seems to be limited to firms of developed countries such as USA, UK, JAPAN and other European countries, with little emphasis if any, on firms in developing countries (Mellahi and Eyuboglu, 2001). This requires Ghanaian organizations or banking Sectors to comply with International Organization for Standards (ISO) 9000 in meeting customers 'continuous demands for quality services.

According to Abude (2009), in order to survive and thrive in today's competitive world and a more competitive working environment of tomorrow, it's very necessary for banking sectors to implement an efficient and effective quality management system. This is because, in every banking sector, an effective implementation of the use of TQM system ensures a positive returns on the performance of the bank. Abude (2009), stated that banks are struggling to improve service and proclaim that they are customer-focused and outstanding but exceptional quality service is still the exception rather than the rule. Consequently, the unprecedented growth in the number of banks and other financial institutions in Ghana is a laudable attempt in the development of the financial sector in particular and the banking industry as a whole. However the products and services these financial institutions offer are frequently questioned as to whether they

help in the wellbeing of their customers or the institutions and other stakeholders alone. Furthermore Mabisa et al (2018) carried "an initial investigation at First National Bank and within the service and staff engagement portfolio has indicated that the department is having difficulty in the effective implementation of Total Quality management. This negatively impacts on the competitive advantage of the organisation and has led in recent months to a decrease in business performance. Although First National Bank is focused on providing quality products and services a lot of these interventions are done in isolation within the different business units in the organisation. It could be argued that FNB is not adopting a structured framework like TQM to continuously improve operations leading to increased competiveness within the market and ultimately sustainable profit growth within the financial service sector of South Africa".

Finally, it has been observed that Extent literature recommends that various research carried out has been done on the service quality and connection between organization quality and performance through TQM, yet just a few number of research on TQM and quality service in the financial institution or the banking sector have been done. Analysts like Ahmed (2002), Neyer (2000), Sureshchandar et al. (2002), Meyer and Dornach (1997) have proposed the need of the present investigation to see how banks can perform in a superior manner and what basic measurements for progress are with the goal that they could be executed to improve their banking performance, satisfy client prerequisites and exceed expectations in quality service. Therefore based on the problems and challenges identified above there is a need to carry out a research to identify the impact of total quality management practices and quality services on the performance of the banking sectors in Ghana. Since not much research have been done on this area.

1.3 Research Questions

The research questions of the study are as follows:

1. What are the factors for measuring the mobile and digital banking application performance of the banking sectors in Ghana?
2. What are the effect of Quality Management Practices of mobile and digital application on the bank's performance?
3. How does the total quality management system put in place is influenced by the cultural of the bank?

1.4 Aim of the Study

The aim of the study was to identify how the total quality management practices of mobile and digital banking applications have effects on the performance of the banking sectors in Ghana.

1.5 Objectives of the Study

Specific objectives were,

1. To identify factors for measuring the mobile and digital banking application performance of the banking sectors in Ghana;
2. To identify the effect of Quality Management Practices of mobile and digital application on the bank's performance; and
3. To identify how the total quality management system put in place is influenced by the cultural of the bank.

1.6 Significance of the Study

This study will help Ghanaian and every banking industry in the global knows that without providing customers with innovative quality products and services the banks

future will not be certain. This study will also help organisations which have implemented TQM know how effective they will gain a competitive advantage in the market and a direct result of this was increased business performance and sustainable profit. This study will also help the banking industries or any other organization to have the TQM structured approach in order to increase business performance and customer satisfaction through continual improvement. Leadership within FNB need to be made aware that profit hides inefficiency and that TQM as a structured approach will greatly improve business performance and increase shareholders confidence with increased financial results.

Furthermore, the study is important in providing better understanding of the relationship between quality management and employee's performance in banking sector in Ghana which will serve as a guide to evaluate how the quality management and quality service affect the performance of the banks. In a more perspective view, the outcome of the research would be used to alert the management of the study to know how effective is their total quality management and quality services towards their productivity. Moreover the study would serve as background information for similar research in the future.

1.7 Scope of the study

The scope of the study covered the theoretical and the geographical dimensions of the study. This study emphasised on the total quality management practices and quality services of the bank, focusing on the effect of total quality management practices and quality services on the performance of the banking sectors in Ghana. The theoretical scope covers the total quality management practices and quality services of the selected bank which has been identified as the key variables of total quality management practices and quality services.

This concept could be viewed from many perspectives but for the purpose of this study it was looked from the banking sector in which the study was limited to the Fidelity Bank of Ghana. Fidelity Bank has been operating long enough to give the kind of academic insight the study seeks to offer in the research. Furthermore, Fidelity Bank operate in almost all the regions of Ghana and so getting data needed to accomplish the study was obtained without any hindrance.

1.8 Structure of the Thesis

This study was segmented into five (5) main parts.

Part one was made up of the background of the study, problem statement and objectives of the study, research question and hypothesis, scope and limitations of the study, significance of the study and the organisation of the study. Also, part two includes the literature review which was related to the study. Furthermore the third part included the methodology of the study that was used to carry out the study. It explains the entire research design and methodology used, the data collection method and statistical procedures used to analyze the data. In addition the fourth part presented the data analysis and interpretation, presenting them in forms that shall be easily and readily understood by readers. These included tables, figures and charts and finally the fifth part featured the summary of findings, conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter deals with literature review. It involves locating, reading, and summarizing of materials written by other authors that are related to the research topic under investigation. The chapter provides the theoretical, conceptual, and empirical review for the study. The literature for this study focused on the following thematic areas; Total Quality Management Practices, Mobile and Digital Banking Application, Banking System in Ghana, and the effect of total quality management practices of mobile and digital banking application on the performance of the banking sectors.

2.2 Overview of Banking System in Ghana

The banking sector clearly has seen the amazing change over the period. Practical arrangements combined with empowering condition made by the Bank of Ghana and governments have had essential suggestion for the sector. Significant changes to the financial area began in 1989 through the order of the financial law (PNDC Law 225). These changes saw the rise and the activities of various privately consolidated banks, Obeng G. (2017). Additionally before the part of the bargain, the Ghana Bank division involved thirty-three (33) banks, of which sixteen (16) were locally controlled and the staying seventeen (17) were remote controlled. Altogether, the bank office was 1,342 branches conveyed over the ten (10) districts of the country.

The performance of the banking sector remained strong, underpinned by relatively strong asset growth and marginal improvement in liquidity in 2016. (Bank of Ghana Banking Sector (2017). According to PWC (2014) "today banking industry is fairly saturated comprising 27 universal banks, 137 rural and community banks, and 58 non-

banking financial institutions including finance houses, savings and loans, leasing and mortgage firms. During the year the regulator strengthened its supervision of these non-bank financial institutions. This has led to the closure of those institutions which did not meet the regulatory requirements. The minimum capital for the deposit and non-deposit taking micro-finance institutions was raised in August 2013 to GHS 300,000 and GHS 500,000 respectively. The capital requirement increases up to an additional GHS200, 000 for institutions with over 5 branches. Primary liquidity reserves have been set at 10% of total deposits".

In addition, the baking sector has seen numerous changes. Before the changes, there has been a broad post-autonomy government mediation. Open proprietorship described the banking system. Every one of the banks that were set up between the mid 1950 to the late 1980 were either completely or lion's share claimed by the public sector. Interest rate were midway constrained by the Monetary Authority (Bank of Ghana) and there were confinements on sectorial credit distribution. According to Brownbridge & Gockel, (1996), "financial sector policies were characterized by severe financial repressions, real interest rates were steeply negative and most of the credit was channeled to the public sector. This triggered a series of reforms which included the liberalization of allocative controls on banks, restructuring of 10 insolvent banks and reforms to prudential regulation and supervision. Thus, as part of a comprehensive macroeconomic adjustment programme, financial sector liberalization in Ghana was initiated in the early 1990s, under the Financial Sector Adjustment Programme (FINSAP)".

Consequently, in terms of Innovations the Banks and other financial institution have exploited current development technology in the worldwide and are presenting new benefits particularly those which are ICT arranged to meet the objectives of clients. All

these are relied upon to get clients' fulfillment the banking sector. Inventive administrations, for example, universal finances move, school charges credit, debatable authentication of store, vehicle advances, shopper/contract buy advance, explorers' check, and so on., have been set up (Gilbert & Wheelock, 2007). Additional growth that has occurred over the last decade is computerization and networking of all banks' branches nationwide to capture and retain customers. Roughly, there are certain banks that have a nationwide network while others have gotten to an advanced stage of networking all their branches in the country.

Most banks processes and data processing have massively improved over time (Abor, 2005). Automated Teller Machines (ATMs) have become common, giving customers the liberty to execute business at their own convenience. Personal computer banking, telephone banking, internet banking, branchless banking, SMS banking, etc., have also been developed. Currently, banks are extending their branch networks. The banking sector landscape in this regard can be said to be changing, competitive and promising with regards to savings mobilization, development financing and service delivery (Hinson, Amidu & Ensah., 2006). These are driven by the improvement in media transmission systems and headway in PC innovation in Ghana. In the event that these advancements are customized towards reserve funds assemblies which are directed to beneficial segments, financial development and consumer loyalty would happen.

2.3 Overview of Total Quality Management Practices

According to Abude (2009) "Total Quality Management Practices refers to the management methods used to enhanced quality and productively in an institutions especially business. Total Quality Management Practices is a comprehensive system that work horizontally across an institutions. Involving all department and employees.

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Consequently, in recent decades, TQM has become the buzz word in the management practice. It has been defined in many different ways. The International Standard ISO 8402, Quality Management and Quality Assurance-Terminology has defined TQM as the management approach of an organization, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organization and to society" (Ljungstrom & Klefsjo, 2002).

Also, Temtime and Solomon (2002) said that TQM looks for constant improvement in the nature all things considered, individuals, items, and services of an institution. TQM is a system provided in a way to deal with the managments that expects to upgrade an incentive to clients by structuring and ceaselessly improving hierarchical procedures and system (Kartha, 2004). The emphasis is on workers contribution and strengthening alongside customers and customer loyalty as the point of convergence. The principles of TQM are persistent improvement, top administration initiative pledge to the objective of consumer loyalty, representative strengthening, and client center (Ugboro & Obeng, 2000). "TQM means that the organization's culture is defined by and supports the constant attainment of customer satisfaction through an integrated system of tools, techniques and training" (Sashkin & Kiser, 1993).

According to Ombati (2010), implementation of TQM improves quality and productivity in organizations and it works across board in an organization to include all employees and departments and extends backwards and forward to leverage on the suppliers and clients/customers relationships. TQM supplies a frame of reference for implementing effective quality and productivity resourcefulness that can increase the profits and capacity to compete of an organization. TQM practices are constructs that can be taken advantage of by organizations in adoption and implementation of Quality

management. TQM practices have been researched and discussed in various studies (Sadikoglu and Olcay, 2014; Masindet and Ogollah, 2014).

Various studies have yielded various arrangements of TQM rehearses. Every association relies upon a gathering of works on relying upon the idea of the firm in light of the fact that there are numerous TQM rehearses and an assortment of measurements. Magutu, et al., (2010) indicated even though there are excess of practices been depicted; likenesses among practices can be selected. The evident basic practices proposed are: top management duty and backing, association for quality, representative preparing, worker interest, provider quality administration, client center, consistent improvement of value framework, data and investigation and factual quality systems use. TQM perspectives can likewise be gathered into delicate and hard TQM components. The delicate components include administration worker connection, representative contribution; center around client, key quality arranging, process the board, constant improvement, information and data investigation and learning and training while the hard components envelop quality apparatuses and strategies, client/provider connection and item/process relations, (Nekoueizadeh and Esmaeili, 2013).

2.3.1 The total quality management implementation in banking sector

This section reviews the execution of TQM in banks. Utilization of TQM in the banking isn't excessively old, prior investigations demonstrates that TQM approach in the banking is an ongoing pattern and is indicating better execution after its usage Kayis, Kim and Shin (2003). "TQM, which is about total customer service and continuous customer satisfaction, is applicable to almost all service industries including banks where the customer is treated as king. In fact, customers in service industries, especially in the banking, are rather more sensitive to quality and delivery of service than their

manufacturing counterpart as they are in direct contact with the service providers"
(Safakli, 2004).

 Therefore, the use of TQM program in the financial sector might be perhaps the best
elective that care about improved administration quality and higher customer loyalty
together with holding its clients. A paper distributed in Total Quality Management
Journal looks at six contextual analyses and closes with key factors that prompted
fruitful TQM usage in the Turkish financial part (Mellahi and Eyuboglu , 2001). The
results showed that successful TQM implementation requires: management's
unwavering commitment to TQM and enthusiasm; formal national bodies to introduce
organizations to TQM and provide assistance during and after TQM implementation;
and a highly educated and competent management team. A paper published in 2003
proposes a model linking perceived service quality, customer satisfaction, customer
loyalty and employee satisfaction while implementing TQM amongst Australian and
Korean banking industries" (Kayis, Kim and Shin, 2003). The study in addition
reviewed the model which have been developed by the use of several measure and
identified an important critical connections and way interfaces between perceived
service quality, satisfaction of customer, and customer reliability just as between TQM
practices and worker fulfillment.

Consequently, a write up published in Managing Service Qualityexamines the
significance of preparing and training for TQM in banks of South Africa. The board
duty and chiefs comprehension of TQM standards and strategies was additionally
observed to be basic (Vermeulen and Crous, 2000). Findings further indicated that none
of the institutions have a well-developed TQM training strategy and plan. A paper
published in 2007 examines the critical success factors of TQM implementation in the

UAE banking sector. 16 factors were found to be critical to TQM implementation success (Al-Marri et al. 2007).

The factors are: "top-management support; strategy; continuous improvement; benchmarking; customer focus; quality department; quality system; human resource management; recognition and reward; problem analysis; quality service technologies; service design; employees; services capes; service culture; and social responsibility. Another study on assessing the need of TQM in the banking sector of the Northern Cyprus published in Journal of Transnational Management focused on implementing TQM principles in Turkish Cypriot banks (Li, Zhao and Lee, 2001). He found that there is a need for updating and implementing new rational management methods followed by motivation and training of employees and employers. Further, he argued that continuous monitoring of customer satisfaction is also necessary to make TQM more effective. A recent study published in 2009 presents the important total quality service factors in Indian commercial banks and examines the level of implementation of TQM practices in three groups of Indian banks" (Selvaraj, 2009).

The study reveals that the important TQM factors are:

• Top-management commitment.

• Human resource management.

• Technical and important systems.

 • Customer focus.

• Employee satisfaction.

 • Service culture.

• Social responsibility.

Finally, a research study by Li et al. (2001), surveys reviews authorized bank in Hong Kong on the utilization of value the executives rehearses. They attempted to investigate the present status of value the board activities in Hong Kong and furthermore contrast the outcomes and those from UK money related establishments in 1994. The outcome demonstrates that they have 68 percent achievement rate for quality activities. They have likewise picked up consumer loyalty, proficiency, and quality mindfulness. They will in general commit more exertion in meeting services guidelines and giving brief services.

2.3.2 Total quality management practices and the banking Performance

Banking sectors are maybe the biggest business that takes into account the requirements of different sections of the populace, mirroring the decent variety of society. In addition, saw administration quality will in general assume a noteworthy job in high contribution (high communication among clients and specialist co-ops) enterprises like banks (Angur et al., 1999). Additionally, banks regularly have long haul business associations with clients. What's more, the financial division is enormous enough to catch and speak to practically all the basic highlights of client saw administration quality and the basic components of brilliance that administration may experience so as to viably deal with a service organization.

According to Awino, et al.,(2012) TQM is one of the most popular strategies meant to improve the efficiency and competitiveness of an organization through improving of the quality of products and services. In the banking sector, TQM practices operate as an interdependent system that combines with other organizational assets to generate competitive advantage. It underscores commitment of the managers and those in positions of leadership, concentrating on the customer, symbiotic supplier relationship,

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employee empowerment, benchmarking, statistical process control, employee involvement, empowerment and training. Bank performance reveals how well the bank achieves its objectives in terms of quality of offerings, operations, innovation, employees' satisfaction, customers' satisfaction, sales, profitability and aggregate organization's vision and mission. Different studies have used varied organizational performance measures".

Therefore from the review of (Awino, et al., 2012) the extant literature on the banking performance metrics can be grouped into financial and nonfinancial performance indicators. "Financial performance indicators include: market share value, return on investment, earning-per-share and profits while non-financial performance indicators include: productivity, quality, efficiency, process improvement, innovation performance, operational performance, attitudinal and behavioral measures such as commitment, customer satisfaction, employee satisfaction and retention Adoption of TQM practices has been shown to enhance an organization's competitive advantage" (Awino, et al., 2012). Earlier studies gave varied results of the effect of TQM practices and banking performances. In some studies there was positive relationship between TQM practices and organizational performance (Mwaniki and Bichanga, 2014; Masindet and Bichanga, 2014). Other studies reported negative or non-significant relationship between TQM practices and some organizational performance indicators particularly customer focus and financial performance, team work and financial performance (Al-Ettayyem and Al-Zu'bi, 2015)

Consequently, Authors such as Ahmed (2002), Neyer (2000) and Sureshchandar et al.(2002) have recommended the requirement for this sort of concentrate to support how banks perform in creating nations and what best practices should be executed to improve the budgetary exhibition and economies of this piece of the globe. Banks can

likewise profit by TQM's accentuation on representative preparing. As Mary Walton sees in The Deming Management Method: It isn't sufficient to have great individuals in your association. They should be ceaselessly procuring the new learning and the new abilities that are required to manage new materials and new techniques for generation. Instruction and retraining are an interest in individuals that is required for long haul planning‖ .Some banks shun preparing because of expense or time contemplations, or insufficient valuation for its worth.

However, Sovereign Bank, a cutting-edge financial institution, has shown that it is possible to estimate the return on training dollars (Engel & Kapp, 2004). Mellahi & Eyuboglu (2001) on his research on "Turkey banking sector find that successful TQM implementation requires: management's unwavering commitment to TQM and enthusiasm; formal national bodies to introduce organizations to TQM and provide assistance during and after TQM implementation; and a highly educated and competent management team". Curry and Kkolou (2004) found that CRM has revealed many aspects that closely resemble the total quality management (TQM) approach. Su, Tsai and Hsu (2010) porivided a concept of "total customer relationship management'(TCRM). Since ISO 9000 QMS (International Organization for Standardization 9000 Quality Management System) is always available and useful in the field of TQM implementation, it is introduced offering the framework with five components. Issues and content pertaining to CRM literature are classified and lodged into these components as elements. Five components are Customer-related process, Management responsibility, Resource management, Product or service realisation, Measurement, analysis and improvement".

2.4 Mobile and Digital Banking Application

The term mobile banking refers to "the use of mobile device to access bank account and perform online banking tasks such as checking balances, transferring funds, bill payments etc. (Duggal, 2013) Mobile banking functionality can be divided into three main areas: informational functions, transactional functions and Service", Marketing & Acquisition. (Pegueros, 2014) information area incorporates elements of acquiring information from bank account, for example, account balance, exchange or transaction history, advance, home loan and credit data. Transnational service comprise of cash or money transfer, payment of bills and remote deposit capture. A few banks additionally incorporate the capacity of procurement of prepaid membership in their mobile financial services. Services highlights serve to improve client experience, including contact alternatives, often posed inquiries (FAQ), help data, alarms and restoration notices, and so on. Showcasing and Acquisition highlights contain uncommon offers, coupon, new item data, publicizing, client inquire about, etc. (Pegueros, 2014) The following sub-sections contain discussion about different theories related to the development of mobile banking and different mobile banking services available, including SMS banking, mobile web and mobile banking apps.

Consequently, Mobile banking has been defined as the use of mobile devices (e.g., mobile phones and tablets) to access banking services (H.-F. Lin, 2011; Zhou, Lu, and Wang, 2010). Mobile banking has been seen as an extension of online banking by adopting mobile and wireless technologies, allowing users to complete various banking activities (e.g., balance inquiries, money transfers, and bill payments) on the go (Yao and Zhong, 2011). Mobile banking began with Short Message Service (SMS) banking and WAP banking (Streeter, 2009). SMS banking (or text banking) can complete a user's banking tasks by responding to text messages that are sent by the user, while

WAP banking allows a user to browse a mobile version of web banking (Anonymous, 2010; Streeter, 2009). With the wide adoption of smart phones, such as the iPhone, Blackberry and HTC, a new type of mobile banking has emerged: mobile banking applications (apps) or app banking. After downloading mobile banking apps to their smart phones, users can not only manage their bank accounts but also can obtain additional functions such as locating nearby bank branches and ATMs (Scotiabank expands its suite of mobile banking apps, 2011). Although mobile banking apps are gaining in popularity, the adoption rate remains low. A recent survey showed that less than two percent of bank customers have tried banking apps (J.D. Power, 2012). Perhaps for this reason, banking apps have not drawn much attention from IS researchers. However, the digital and the mobile baking Apps has been potential benefits to banks, resulting from providing digital and mobile banking, can only be obtained when self-service and value-added services are accepted by its customers.

Furthermore, Lee (2009) found that perceived benefits of using digital banking, such as faster transaction speed and lower transaction handling fees, positively influenced the intention to adopt digital banking. Research conducted by Safeena et al. (2010) revealed that awareness of the existence of a mobile banking service and its potential advantages would lead to greater intention to adopt mobile banking. Trust and perceived credibility, which refer to the extent to which an individual perceives that security and privacy are protected, have been found to significantly affect intention to use online banking (Amin, 2009; A. Y.-L. Chong et al., 2010; Sanayei, Shaemi, & Salajegheh, 2011). M.-C. Lee (2009) and Safeena et al. (2010) found that perceived risk was an obstacle to mobile banking adoption. Through investigating different dimensions of perceived risk, M.-C. Lee (2009) further found that "financial risk and security risk affected the intention to adopt online banking, and performance risk and time risk negatively

influenced attitude. Researchers have also explored other possible determinants of intention to use mobile banking. Perceived risk, trust, and perceived cost have been found to be direct indicators of behavioural intention to adopt mobile banking" (GU 2009; Koenig-Lewis et al., 2010; Wessels & Drennan, 2010).

2.5 The Benefit of TQM of mobile and digital banking application of the banking sectors.

The advantage of mobile banking applications can be isolated into two separate regions: advantage for clients and advantage for banks. As per the International Data Corporation (IDC), there were all out 281.5 million of cell phone sold during the main quarter of 2014 (International Data Corporation, 2014). The time spent on smartphone of customers also tends to increase. According to the research of Exact Target Company, smartphone users spend at least 3.3 hours per day on their device (ExactTarget, 2014). The high utilization of mobile phone gives a chance to mobile banking applications to carry more accommodation to clients. The accompanying graph, directed by Future Foundation, in relationship with Monitise, drilled down some bit of leeway of mobile banking to clients.

In the event of advantages for banks, Deloitte Development LLC has drilled down two key open doors for bank when execute mobile banking. Improving operational efficiencies: transaction led through mobile channel has essentially lower cost than some other channels. Changing to mobile channel save millions dollar every year as well as reducing dependency on branches and ATMs (Deloitte Development LLC, 2010). Increasing revenue: mobile banking can provides banks several direct and indirect opportunities for revenues growth. The "following opportunities can be harnessed to increase revenue through mobile banking:

- Expanding distribution and coverage models:

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- Monetizing the value of customers analytics

- Delivering greater real-time access to product and services

- Offering discount and purchasing incentives to bank customers

- Conducting targeted marketing campaigns" (Deloitte Development LLC, 2010)

Most investors might want to accept that banks are in the account part, and not in the administration business. In this manner they will in general contend as far as budgetary ability (for example Resource base, measure of credits discharged, money streams and so forth.) as opposed to support quality. Anyway banks rely upon consumer loyalty to proceed with business. This orders them as an administration organization. At the point when the client cooperates with the bleeding edge work force and requires a specific administration, it is this decision time that chooses whether the client will return or move to the nearby contender. In this way banks will in general profit by the TQM client first Moto (Al-Shobaki, Fouad and Al-Bashir, 2010:304).

Consequently, toward the start of the 1990's, financial service industry was experiencing low quality crosswise over better places far and wide. Many client's weren't happy with the level services and were not content with the data given by money related organizations, a significant number of them much of the time thought about changing their banks however were reluctant to do as such, this is essentially because of the way that not just a couple of banks were seen contrarily, yet the entire business required an overhaul (Ayyash, Al-Fayomi and Abuzayed, 2012:112). Full usage of TQM didn't' occur immediately in the money related area given the way that it was initially introduced to suit the assembling business' determinations. For the administrations area the execution procedures should have been adjusted. This doesn't show any issue with the way of thinking itself, it just features the issue that there is a

route for appropriate usage of TQM that considers the uncommon attributes of the monetary administrations industry.

Later on, genuine activities occur in regards to the usage of TQM inside an administration orientated business substances including the money related area. Thusly, specialists begin to feature the relevance of TQM in the administration settings as a rule and in the budgetary administrations specific (Ayyash, Al-Fayomi and Abuzayed, 2012:112). Quality administration in the money related administrations division has an alternate structure and structure than it is in the modern segment. The real driver of applying TQM at the money related division is the aggressive powers, consumer loyalty and cost productivity.

"This sector is very labour intensive, and its staff interacts frequently with customers. Leadership, motivation, and team work are very important factors for achieving excellence in quality service (Ayyash, Al-Fayomi and Abuzayed, 2012). The popularity of TQM in the banking sector has encouraged a number of organisations to view its benefits and effects on organisation performance. The service quality of banks, especially perceived service, plays an important role in high involvement industries like banks. Leading academicians and researchers strongly believe that providing quality service to customers is not only the most important and effective factor for customer satisfaction but also the essential criterion that measures the competitiveness of a service organisation like banks" (Talib, Rahman and Min, 2012).

Consequently, the idea of service quality has risen up out of TQM theory and now it is treated as a basic basis for powerful TQM usage. The writing recommend that administration quality can be sorted into various ways, for example, client care quality; online administration quality; banking administration item quality and mechanized

administration quality with the regular mean to accomplish consumer loyalty, improved monetary execution, and aggressiveness. Moreover Talib, Rahman and Min, (2012) stated that service quality is a multidimensional meaning rather than having a uni-dimensional meaning. Literature review further shows that measuring service quality is not an easy task and lot of problems are there in measuring it. Most forms of measurement of service quality focuses on customer satisfaction (Talib, Rahman and Min, 2012).

2.6 Factors for measuring the mobile and digital banking application performance of the banking sectors in Ghana

Wahjudi et al. (2001) lists some frequently used performance measures. Those performance measures are financial performance, customer satisfaction, product/service quality, operational performance, business performance, employee satisfaction, and innovation performance. Furthermore, Wahjudi et al. (2001) states that "researchers often use different groupings of performance measures, that is business performance frequently includes financial performance and sales performance". Furthermore, numerous writters list their absolutely perceptual model as their exploration limitation, for example, announced by Brah and Lim (2006), Demirbag et al. (2006), and Jayaram et al. (2010). Since it is hard to get target execution information and that the exhibition of one industry can't be contrasted with the presentation of another industry, an improved perceptual plan has been utilized by Tari et al. (2010) and Agus et al. (2000).

 In their study, Tari et al. (2010) uses competitive measures in the scale of 1 to 7, where 1 means ''much worse than competitors and 7 means much better than competitors''. In this scenario, the respondents are compelled to compare their

performance relative to their competitors. Having this in mind, it is important to consider the data availability of the selected performance measures. While it is impossible to get data on customer satisfaction, product/service quality, operational performance, employee satisfaction, and innovation performance in Indonesia, the data on sales performance and financial performance are usually available, especially for some specific industries. That is why we propose the use of financial performance and sales performance.

Consequently, Awan et al. (2008) uses net profit margin, return on asset and sales growth rate to measure financial performance, while Aydin et al. (2008) employs operating income, sales growth, and return-on-investment. Demirbag (2006) utilizes revenue growth over the last three years, net profits, profit to revenue ratio, and return on assets. Madu et al. (1996) recommends profitability, sales growth, competitiveness, productivity, profit growth, cost and market share as measures of organizational performance. Which measures that is feasible to be included in the proposed model need to be checked with the availability of public data in Indonesia. In this way, the respondent can have a more objective estimate about their firm performance.

Finally based on this study the following measures will be used to determine the performance of the mobile and digital banking application on the banking;

    i.   Customers satisfactions

    ii.   mobile and digital banking application quality

    iii.   employee satisfaction

    iv.   mobile and digital banking application performance

2.7 The theoretical review

2.7.1 Resource Based Theory (RBT)

The asset based perspective on the firm and the resultant asset based hypothesis give a significant structure to interpreting and guaging the supporting of an association's upper hand and execution (Palmatier et al., 2014). Each organization has asset groups and capacities that empower it to contend in the fierce market. Wernerfelt (1984) considers an association's assets at a given time as those substantial and impalpable resources which are secured semi-for all time to the firm and incorporate brand names, in-house learning of innovation, work of talented faculty, exchange contacts, hardware, productive systems, capital and so forth. For abilities, capacities and aptitudes to be a basic determinant of advantageous upper hand and advance hierarchical execution they should be of worth, uncommon, hard to duplicate and basic. The RBV has been censured as being static and repetitious. Static since it doesn't either focus because of hierarchical activities on assets viability after some time or depict how dormant assets influence continued upper hand in changing markets anyway considering dynamic capacities as an asset has helped alleviate worries about RBT capacity to portray the impacts of assets in evolving conditions.

Likewise, the other purpose of takeoff is that RBT is redundant or self-checking hypothesis which may not be tried systematically (Palmatier et al. 2014). TQM practices like top administration duty and backing, building solid relations with clients and engaging representatives through preparing and improving prize frameworks combined with other hierarchical assets are altogether profitable assets that can upgrade authoritative exhibition regarding worker and consumer loyalty. Top administration duty and backing is a basic hierarchical asset. Top chiefs in an association are in charge of the definition, usage and observing of the association's systems; they are in charge

of the general arranging, association, bearing and control; they assign assets important in embraced an association's operational targets and they help steer an association toward the required change. An association is on a par with its pioneers; this is on the grounds that the achievement or disappointment of an association to a great extent relies upon the degree of duty, commitment and bolster depicted by the top supervisors. Responsibility, commitment and backing are intrinsic attitudinal attributes which are important, uncommon and hard to mimic.

Subsequently, Top Management that is submitted and underpins exhaustive execution of TQM practices furnishes administration and is held with deference by the representatives who are constantly prepared to help any quality projects radiating from their pioneers, this improves the working relationship and makes cooperative energy in an association. At the point when individuals from an association function as a group, they are altogether dedicated to the association's vision and mission of serving its clients' needs and desires. Absence of top supervisors' dedication and backing in the usage of any quality activities is one of the causes why associations come up short. Workers who are enabled and associated with basic leadership, prepared in the usage and execution of the required techniques are an association's center asset for they comprehend the current and the normal future heading of the association.

Important preparing gave at the correct time as per the association's preparation needs evaluation helps in improving representatives' proficiencies in embraced their undertakings which are pair with the goals of the association. Adequate preparing will upgrade representatives' devotion to the association, support their inspiration, lessen turnover rates and improve their work execution. Workers who are completely dedicated to the association's main goal of guaranteeing that the clients get quality

contributions will give fundamental data on quality improvement and on the best way to improve the association's procedures.

2.7.2 Kanter's Structural Empowerment Theory

This theory points consideration at interrelations inside the institution or the organization instead of the person's own qualities. As per the theory, the power posessed by the leader will prosper by sharing it through engaging and designating to other people and accordingly, pioneers will accomplish expanded authoritative execution (Masindet & Ogollah, 2014). According to Armstrong and Laschinger, 2006 power is the capacity to marshal resources and achieve goals, as opposed to the idea of power in the conventional stratified situations. Power stems from formal and informal systems within organizations. Formal power springs from specific job characteristics such as flexibility, adaptability, creativity associated with independent decision making, visibility and centrality to organizational purpose and goals while informal power proceeds from social connections and the development of communication and information channels with peers, supervisors, subordinates (Masindet & Ogollah, 2014; Armstrong & Laschinger, 2006).

For strengthening of the employees to occur, they ought to have open door for headway, access to data, access to help, access to assets, instruction and preparing (Masindet and Ogollah, 2014). The obligation of the service is to ensure that the above conditions are satisfied to guarantee work viability. This theory is couple with the prerequisites for effective execution of TQM rehearses in any organization for it conceives that albeit Top service has formal power by goodness of their positions they ought to be happy to partake in the basic leadership by counseling, making an air of open correspondence and empowering their youngsters and customers to contribute thoughts that can help

improve the association's procedures and capacity to give quality contributions Armstrong and Laschinger, 2006.

In the context of SACCOs the top managers must be committed to service quality, they must empower employees to make decisions involving issues and complaints raised by the customers. They must provide opportunities for and resources to support the continuous learning of employees to enhance their skills and capabilities. These actions by top management leads to a motivated workforce that would be ready to serve customers better thus improving organizational performance in terms of employee and customer satisfaction. Managers in an organization that has embraced TQM are positive about shared decision making; they confer with employees and support them in their work; they create an atmosphere of open communication where the employees can inform their seniors about the progress of their accord and indicate when problems arise or when there is stagnation in the task Armstrong and Laschinger, (2006).

Employee involvement through provision of appropriate, relevant and realistic training on how to continuously improve the quality of the organization's offerings and processes in order to meet customer needs and expectations is a way of empowering them, however, that alone cannot enable them to make and implement pertinent decisions on quality. Managers must encourage and support them in an environment free of trepidation. For training to produce the results anticipated and be transferrable in a work situation, the employees must believe in themselves and be committed and engaged. The organization can empower its customers by creating a platform that enables them to contact the organization with offerings enquiries and related questions Armstrong and Laschinger, 2006.

The institution must make channels to gather data from the client about their preferences. An association whose individuals are focused on accomplishing high level of customer satisfaction sees the client as the ruler and pays attention to and acts rapidly on any worries raised by the client. A client who feels the association esteems them will make rehash buy of the association's contributions and will elevate the association to other potential clients.

2.8 Empirical Review

Talib, Rahman and Qureshi (2012) carried out a research on the Impact of Total Quality Management and Service Quality in the Banking Sector and the discoveries demonstrate that to guarantee fruitful execution of TQM in the banks, there are sure basic measurements which should be tended to: the board duty and backing towards TQM, persuading and preparing of representatives, and observing of clients' prerequisite through criticism. Next to this, it was likewise discovered that service quality is a significant develop in banking sector and distinguishes four expansive applied classifications identified with administration quality. The finding will give a comprehension of the job of TQM and administration quality in banking division and it additionally gives helpful heading to future research. Likewise, Edoun et al (2003) explored on the Application of Total Quality Management (TQM) in the South African Banking Sector: The Case of First National Bank (FNB) in South Africa. From the search, Total Quality Management (TQM) instrument was thought about the three nuts and bolts components so as to create quality, these incorporate between alia: customer satisfaction, representative contribution and progression in execution improvement. The research in this way decided to recognize the obstructions that block the administration and staff commitment portfolio to successfully execute TQM. The reason for the present investigation is to gather unique information so as to depict and

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quantify the conduct in a bigger populace. The underlying or rather essential information for this examination was gotten from an electronic directed study which target was to test the sort of boundaries that avoid powerful TQM execution in the administration and staff commitment portfolio. The optional information were gathered through archives examination and web look into.

Besides, Pattanayak and Maddulety (2013) considered on the Effect of TQM on consumer loyalty in Indian Banking industry: A writing audit and the examination endeavors to close the exploration hole of connection among TQM and Customer fulfillment. So the goal is to discover the relationship between the multidimensionality of TQM and Customer fulfillment in the financial business in the Indian setting. This examination will give useful data that causes the experts to exactly recognize territories of concerns and take restorative measures to improve their degree of consumer loyalty. Learning around there will enable administrators of the financial associations to coordinate their assets satisfactorily in improving the more significant donors of Customer fulfillment. Likewise the examination completed by Ahmad et al (2017) was to decide the Impact of Quality Management Practices on Manufacturing Performance and the investigation concern shifting develops of value practices are required to be actualized by their field. This examination additionally is to look at the relationship of value the executives practices and assembling execution in the Malaysian car industry. With the end goal of study, a poll was created and conveyed among the car sellers dependent on test irregular inspecting. System of applied model utilizing PLS-SEM examination. This proposition structure model in this examination is to research the causal connection between the factors of value the executives rehearses on assembling execution.

At long last, Nyaga and Gakobo (2017) contemplated on the impact of value the board rehearses on hierarchical execution of investment funds and credit co-agents in kirinyaga district, Kenya. The investigation utilized clear research plan and focused on an aggregate of six (6) enrolled store taking SACCOs working in Kirinyaga County, Kenya with a populace of 400 and eighteen (418) respondents. The objective populace included representatives of the SACCOs. The example size of one hundred and twenty six (126) subjects was drawn utilizing stratified irregular testing. The examination instrument for this investigation was a self-controlled organized poll that was created by the scientist. The unwavering quality of the things was dictated by use of Cronbach's coefficient alpha.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section of the study describes the methodology of the study, it includes the research design, the techniques used to collect data for the study, selection of the population, the source of the data used, the sampling and sample size of the study and data presentation of the data analysis. The chapter also includes the profile of the Fidelity bank. The main aim of the study is to identify the effects of total quality management practices of mobile and digital banking application on the performance of the banking sectors in Ghana. The relevant of the study data for this study was obtained from Fidelity Bank in Ghana.

3.2 Profile

Fidelity Bank was issued with its universal banking license on June 28th 2006, making Fidelity Bank Ghana Limited, the 22nd bank to be licensed by the Bank of Ghana under the new Banking Act, 2004 (Act 673). The Bank is owned by Ghanaian individuals, other institutional investors and its senior executives. The Bank was formerly Fidelity Discount House, the leading discount house in Ghana. After operating profitably for 8 years, the business environment in the country attracted investors to the idea of establishing a bank. Fidelity Bank has a team of high caliber professionals with diverse skills and experience. The Bank has invested heavily in technology and continues to invest heavily in training to ensure that it is at par with the best in the world. Fidelity Bank offers a comprehensive range of products and services to meet the banking and financial needs of existing and potential customers. To ensure the relevance of our comprehensive range of products and services, we continually review the demographics

of our customer segments to ensure that our offerings meet the banking and financial needs of existing and potential customers .

Fidelity Bank's vision is to become a world-class financial institution that provides superior returns Nexceptional Corporate Governance Standards, good knowledge of the Local Market, Financial Capital and above all, a Customer-Centric Culture, Fidelity Bank is contributing its quota to the development of the banking industry and by extension the Ghanaian economy.

On 1 October 2014, the Bank acquired ProCredit Savings and Loans Company Limited (PCSL) from ProCredit Holding Germany (PCH) and the DOEN Foundation of the Netherlands. ProCredit Savings and Loans Limited (PCSL) is a non-bank financial institution that provides savings and lending services to its clients. Fidelity Bank has two subsidiaries:

• Fidelity Asia Bank Limited and

• Fidelity Securities Limited

Fidelity Asia Bank Limited (FABL) was established in July 2012 as a wholly owned Asian subsidiary in Malaysia. FABL carries on the business of offshore banking.

Fidelity Securities Limited (FSL), a fully owned subsidiary of the bank, its the investment banking arm of the bank. Formerly known as Fidelity Asset Management, FSL's business involves providing advisory services, issuing of securities, raising of capital and undertaking portfolio investment management for clients .

3.3 Research Design

In research studies, there are many strategies that can be used, theses research strategy could be experiment, survey, case study, grounded theory and archival research (Saunders et al, 2007). No research strategy is inherently superior or inferior to any

other. What is most important is that a particular research strategy will enable the researcher to answer a particular research question(s) and realize the objectives (Saunders et al, 2007). For the purpose of research, the approach used is quantitative method and descriptive research design. Quantitative research, according to Saunders, Lewis and Thornhill (2012), is a study approach planned to ensure accuracy, reliability and generalization of findings. It does that by developing testable hypothesis and theories which lend themselves to generalization. Consequently, Descriptive research provides information on the characteristics of a population or phenomenon and supplies answers to the questions of who, what, when, where and how associated with a particular research problem. Descriptive design is used to obtain information concerning the current status of the phenomena to describe, "What exists" with respect to variables or conditions in a situation (Cohen et al. 2007).

Furthermore, the study adopted an explanatory research design approach of a single case study as the research strategy. Robson (2002) as cited by Saunders et al, 2007; defines case study as "a study for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence". The case study design was employed to find answer to the research questions. The researcher used a case study design because the research was limited to Fidelity Bank. The case study approach is often associated with exploratory, without being restricted to these areas (Yin, 1994). Bhattacherjee (2012), indicated that quantitative method ensures objectivity in interpretation of responses through a standardized measure. Since the study being an explanatory, there is a need to have personal contact, therefore the questionnaires were administered by the researcher to obtain the information needed for the study.

3.4 Population

Population refers to the total number of cases in the focus of interest. Also, according to Ngechu (2004), a study population is a well-defined or specified set of people, group of things, households, firms, services, elements or events which are being investigated and it can be refers to the target group which the research is interested in gaining information and drawing conclusion. In addition Expoel (2009) defined population as a large collection of individuals or objects that is the main focus of a scientific query. Furthermore, Nwankwo (1999) stated that the population of any research work is the universe of such group; of people or object which a researcher is interested. Therefore based on the study, the population suitable for the data collection is the fidelity banks in Ghana. This is because the population which is to be studied should fit a certain specification and the population should be homogenous, Ngechu (2004). Therefore the population of this study targeted all fidelity banks in Greater Accra which comprises of 500 workers.

3.5 Sampling Size

A research sample refers to the sub-members of the target population from whom data will be collected. (Lavrakas, 2008) stated that the sample size of a survey most typically refers to the number of units that were chosen from which data were gathered. The sample size is an important feature of any empirical study in which the goal is to make inferences about a population from a sample. In practice, the sample size used in a study is determined based on the expense of data collection, and the need to have sufficient statistical power.

3.5.1 Sample size calculation

The survey of the population involved a minimum optimal size of 83 respondents out of the total population of 500 staff at fidelity banks in Greater Accra. Therefore 500 were used as N since the sampling technique was purposive. The desired maximum sampling error was 10%. The minimum optimal size (n) of was chosen based on the Yamane formula (1973).

This formula is given as n= $N/1 + N\ e^2$

Where, n = desired sample,

Size N= total population,

e = margin of error (10%)

The optimal sample size (n) is therefore calculated from the equation as follows;

N = 500

$= 500/1 + 500 * 0.1^2$

$= 150/1 + 5$

$150/6$

$= 83$

Therefore 83 of the respondents were used for the analysis

3.6 Sources of Data

There is only one source of data available for data collection which is the primary data. In this study

3.6.1 Primary Data

Only structured questionnaires guides were used in the data collection. The structured questionnaires were used to get the unbiased opinion of respondents, the Specimen of

the questionnaire is attached as Appendix I. These data collection instruments made it very convenient for respondents to give the information needed for the analysis. In collecting primary data, close-ended questionnaires was designed and used. The questionnaire for the present study shall be adapted from a combination of instruments developed.

3.6 Sampling Technique

Consequently, sampling process or technique involves taking a portion of the target population; investigate that group and then generalizing the findings to the larger population from which the sample was drawn (Alugchaab, 2011). According to Singh (2012), the use of sampling technique saves time, reduces cost and makes provision for accuracy and reliability. There are several sampling techniques that researchers use in selecting of respondents but in this research, the sample techniques used for the study were the convenience sampling and random sampling method. In convenience sampling (also known as haphazard or accidental sampling), is when "a sample of units or people is obtained, who are most conveniently available" (Zikmund, 2000).Therefore the convenient sampling was used to select respondents that were available at the time of the data collection to respond to the questionnaires and the simple random sampling technique ensures that each individual is chosen randomly and entirely by chance, such that each individual has the same probability of being chosen at any stage during the sampling process. Therefore for ease of convenience, proximity and accessibility in distributing and collecting data, the sample size for the study was 83 selected from the Fidelity bank.

3.7 Instruments

Just a single primary instruments was utilized to gather information for the study which is the structured questionnaire. The questionnaires were utilized to gather information from the people examined in Fidelity Bank. The surveys were intended to inspire data of total quality services practices of mobile and digital banking application and explanations behind these. The questionnaires were distributed over a time of three weeks and respondents were permitted a time of multi week inside which to answer surveys. The respondent has the opportunity of addressing the questions the manner in which they like. The strategy was embraced so as to increase an intensive comprehension of the issue under study. This strategy offered the respondents the chance to communicate however much as could be expected. The procedure additionally caused it workable for inquiries to be disclosed to respondents for the correct response to be picked up.

3.10 Actual Field Work

The researcher took the information needed for the analysis from the workers of fidelity bank. This approach was adopted in order to monitor the data collection and to ensure that data supplied or responses given are of high quality.

3.10.1 Procedure for data collection

The analyst looked for the assent of the respondents before distributing the questionnaire to them for their responds. This was done to guarantee moral adequacy of the exploration discoveries. Members were guaranteed an assurance of confidentiality of the data that they gave, and that they would not be presented to any type of uncomfortable or risk by taking an interest in the study. At last, the respondents were educated that, participation in the study was voluntary. The first step was to seek

approval from the management of fidelity bank to access information from them. The next step was to explain the purpose for the research, after which the person who is to give the necessary information was contacted. Data retrieved was entered into the SPSS to ensure the output of meaningful data for further analysis.

3.9 Ethical Consideration

Ethics as defined by Saunders et al. (2012) refer to rightness of the researcher's conduct in relation to the rights of those who become the subjects of the researcher's work. Ethical considerations are very relevant in being professional with what one does. Bryman and Bell (2007); Saunders, Lewis and Thornhill (2007) describe ethical consideration as the commitment ensured by the researcher to put into consideration the requisite ethics needed to be followed. Ethics and access are some of the critical aspects of every educational research work. The researcher's ability to collect data is dependent on gaining access to appropriate and relevant resources and respondents.

In the researcher's quest to collect data from the population of this study, the consent of the management of the bank under study was first sought for. The respondents were also promised that the data collected are solely for academic purpose and will be used only for that. Cooper and Schindler (2006) also add that the assurance of the confidentiality of the respondents and their responses is what allows for the identity of the respondents not to be indicated on the questionnaires. Therefore base on the assurance of the confidentiality, the respondent agreed and responded to the questionnaire and the interview without any fear or doubt.

3.11 Validity and Reliability of the Instruments

The validity of an instrument refers to the extent to which it measures what was intended to measure. Nunnally (1978). "Validity of the instruments was ensured by

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using appropriate sampling techniques and data instrumentation in measuring the concepts of the research instrument. Validity is also concerned with the question of whether the researcher is studying the phenomenon purported to be studying. Internal validity, it evaluates how well there is a match between the empirical findings and theory whiles external validity measures the extent to which results from the measurements are coherent with the reality and whether generalizations can be drawn from the result" (Ghauri & Gronhaug, 2005). In order to achieve internal and external validity, the questionnaires was developed with participants who had dealt directly with total quality management practices of mobile and digital banking application of the bank. Reliability on the other hand, is "concerned with the findings of the research; if they can be repeated. In other words, reliability measures the extent to which conclusions can be drawn and repeated if the research is done again" (Ghauri et al., 2007). The validity of the scales utilized in this study was assessed for content and construct validity.

3.12 Analysis and Presentation of Data

The data collected from the respondents was edited, coded and analyzed by the researcher. With editing, the researcher went through the questionnaire from the field to check for the consistency of the responses. After editing, the next stage was the tabulation. Here the main information was classified and tabulated. This was the process where the researcher summarized the quantitative data into statistical tables. After the table had been drawn the data was then analyzed. Statistical

Package for Social Science (SPSS) and Microsoft Excel 2010 were employed for the entire data analysis, producing both inferential and statistical analysis. Therefore graph and tables were used for the study whiles regression analysis and ANOVA was used as

the models to determine the effect of Quality Management Practices of mobile and digital application on the bank's performance.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

In this chapter, the results of the data analysis were presented and interpreted in line with the research objectives and the research questions. The data was presented in tables and graphs forms beginning with the sample characteristics and then research questions that were formulated to guide the research. This study is to identify the effects of total quality management practices of mobile and digital banking application on the performance of the banking sectors in Ghana. In this regard, the following objectives were outlined and these were to identify factors for measuring the mobile and digital banking application performance of the banking sectors in Ghana, to identify the effect of Quality Management Practices of mobile and digital application on the bank's performance and to identify how the total quality management system put in place is influenced by the cultural of the bank.

4.2 Data Presentation and Analysis

In all, eighty three (83) individuals were interviewed and also given questionnaires. This was used as a generalization for the entire establishment. For the purpose of this analysis, the forty eighty three (83) respondents will represent 100% response.

4.3. Demographic Characteristics of Participants

The study collected information on the demographics of the respondent. Information was collected on the sex and Age of the respondents.

4.3.1 Education Level of respondents

Figure 4.1 represents the educational level of the respondents. The results show that 2% of the respondents have only been to Secondary school while 15% of the respondents hold Diplomas. 10% of the respondents are HND certified while 30% of the respondents are degree holders. 40% of the respondent have attained their master's degrees. Finally, 3% of the respondents are PhD holders. Therefore, from the analysis, 90% of the respondents have completed either tertiary or post graduate level thus it can be assumed that they may have much knowledge about the research conducted.
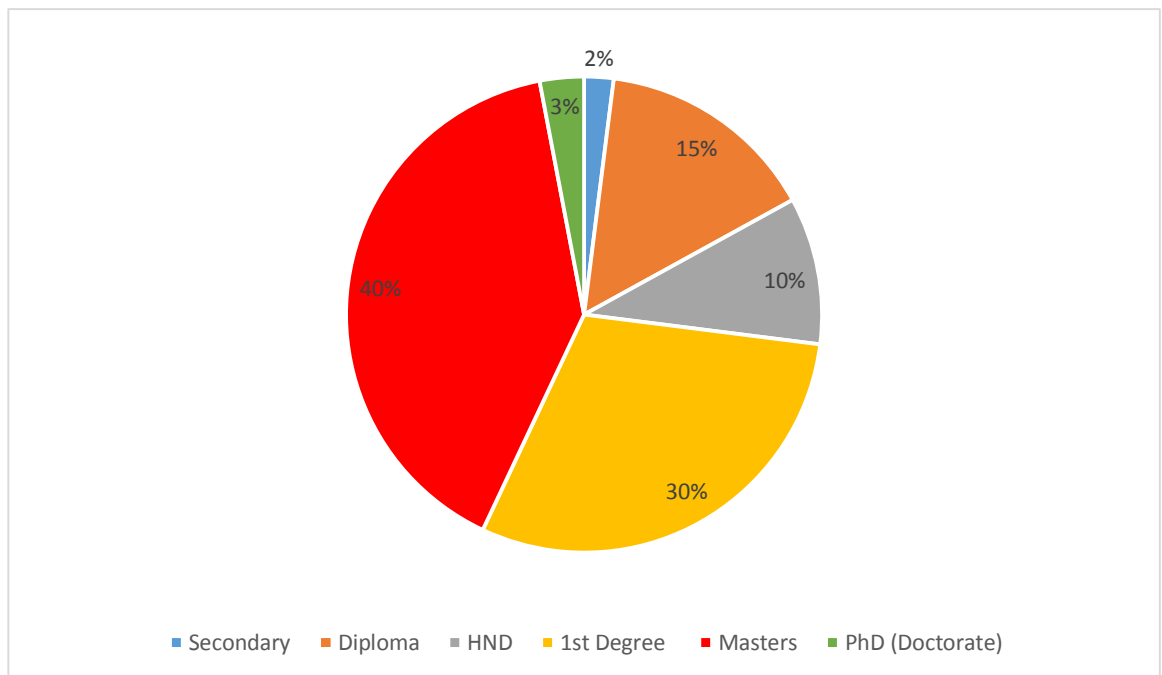
Figure 4.1: Education Level of respondents

Source: Field Data, May 2019

4.3.2 Working experience of the respondents

The results in figure 4.3 revealed that 15% of the respondents had been with the bank for about 1to 5 years while 31% of the respondent had been with the bank between 6 to 10 years. 34% of the respondent have worked with the bank between 11 to15years. Finally, 20% of the respondents have worked with the bank between 16 years and above.

In conclusion, majority of the respondents have worked with the bank between 11-15 years which represent 34%.
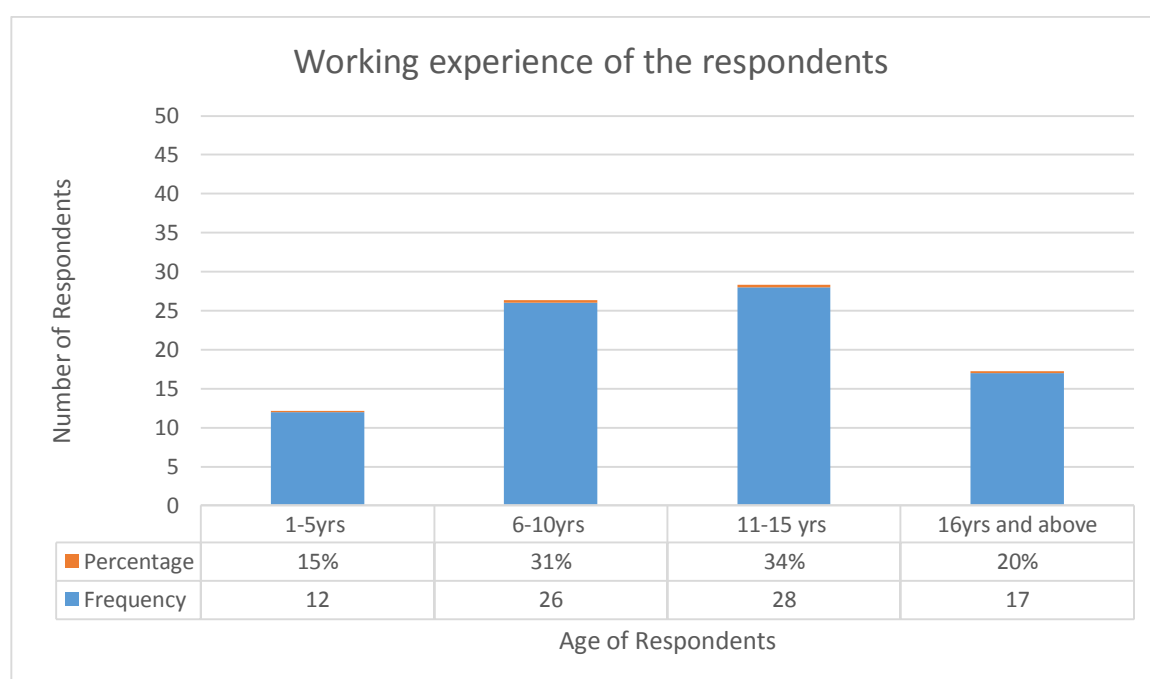
Figure 4.2: Working experience of the respondents

Source: Field Data, May 2019

4.3.3 Category of Staff   the Respondents

From the below figure 4.3 represent the category of staff of the respondents in the bank. The researcher asked the respondents which category they belong to in the banking sector and it was observed that 10% of the respondents are junior staff, while 27% of

the respondent are senior staffs. 13% of the respondents are operational staff, while 27% of the respondents are at the marketing department. Finally, 23% of the respondents are at the IT department.

	Junior Staff	Senior Staff	Operation Staff	marketing Department	IT Department
■ Category of Staff	10%	27%	13%	27%	23%
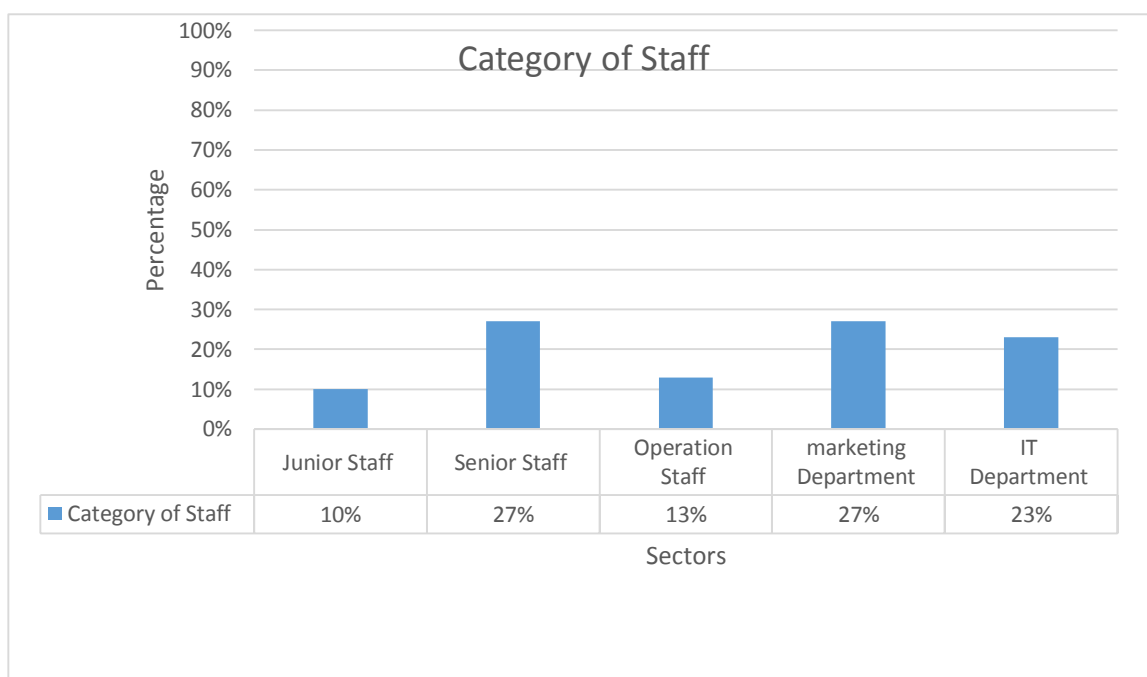
Figure 4.3: Category of Staff the Respondents

Source: Field Data, May 2019

	yes	no
■ pencentage	100%	
■ frequency	83	
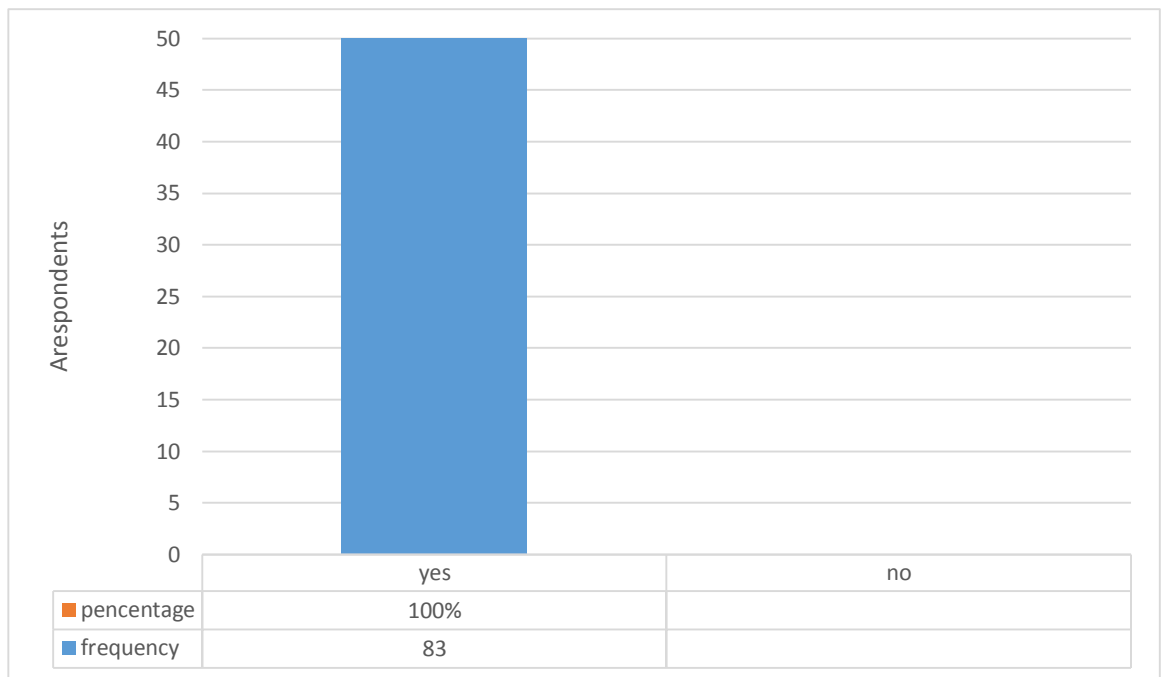
Figure 4.4 Does this bank uses mobile apps

Source: Field Data, May 2019

4.3.4 Does this bank uses mobile apps

The researcher wanted to determine if the bank uses mobile apps and from the respondents 83 which represent 100% of the respondents said the bank uses mobile apps.

Table 4.1 the activities the mobile app does

	Frequency	Percentage
View account activity	78	10.4
View account balance	67	8.9
Pay a bill (e.g., utility bill)	81	10.8
View pending bill payment	67	8.9
Cancel pending bill payment	0	0
Review payment history	55	7.3
Set up new payee	21	2.8
Transfer funds between your account	83	11.1
Find a nearby branch or ATM	45	6.0
Check loan or interest rates	12	1.6
Transfer money to another person's account	83	11.1
Send and receive INTERAC e-Transfer	67	8.9
Pay credit card bill	2	0.3
View credit card balance and activities	12	1.6
Retrieve stock quotes	0	0
Place trades or buy/sell investment	0	0
View balances on loan, mortgage, investment, or trade account	78	10.4
Total	751	100

Source: Field Data, May 2019

4.2.7 The activities the mobile app does

The .researcher wanted to know the activities the mobile app does and out of the total respondents, more than 50% responded that the mobile app is used for the following; to view balances on loan, mortgage, investment or trade account, transfer funds between your account, transfer money to another person's account, send and receive INTERAC e- Transfer review payment history, pay bills (e.g. utility bill), view account activity, view pending bill payment and to view account balance. While less than 50% of the respondents responded that the mobile app is used to; view credit card balance and

activates, pay credits cards bills, check loans or interest rate and set up new payee. Finally, none of respondents responded that the mobile app is used to place trades or buy/sell investment, cancel pending bill payment and to retrieve stock quotes.

4.2.8 The factors that are used for measuring the mobile and digital banking application performance in the banking sector

Table 4.2 Factors that are used for measuring the mobile and digital banking application performance in the banking sector

	Frequency	Percentage
Reliability	83	9.8
Ease of Use	81	10.5
User Interface	79	10.3
Response Time	83	9.8
Security	79	10.3
Understandability	56	7.3
Completeness	76	9.9
Timeliness	81	10.5
Satisfaction	76	9.9
Functionality	75	9.8
Total	769	100.0

Source: Field Data, May 2019

The researcher wanted to determine the factors that are used for measuring the mobile and digital banking application performance in the banking sector and according to the respondents the factors that are used for measuring the mobile and digital banking application performance are Reliability, Ease of Use, User Interface, Response Time, Security, Understandability, Completeness, Timeliness, Satisfaction and Functionality.

aware of TQM practice in the bank

	yes	no
■ pencentage	100%	
■ frequency	83	

frequency ■ pencentage
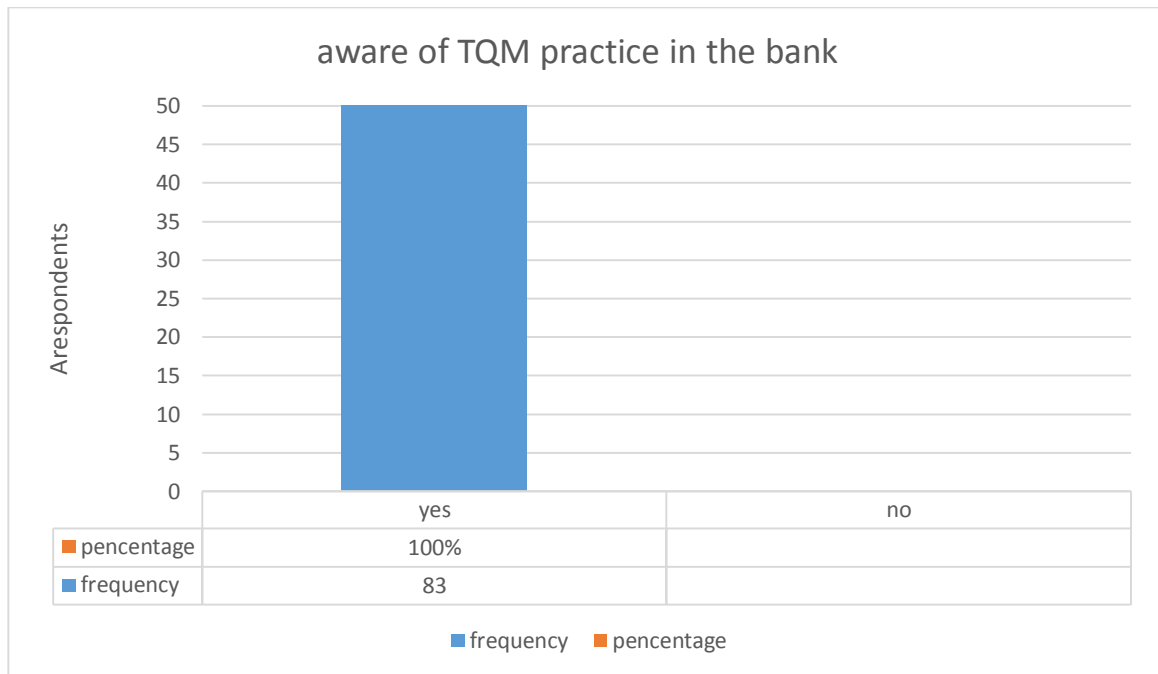
Figure 4.4 Aware of TQM practice in this bank

Source: Field Data, May 2019

4.2.9 Aware of TQM practice in this bank

The researcher wanted to determine the awareness of TQM in the bank and from the respondents 83 which represent 100% of the respondents said that they are aware of the TQM in the bank. This clearly shows that all the respondents were aware of TQM.

4.2.10 The extent of staff aware of TQM in this bank

Table 4.3 the extent of staff aware of TQM in this bank

Rating	Frequency	Percent
A large extent	79	95.2
A little extent	4	4.8
Not At All	0	0
Total	83	100.0

Source: Field Data, May 2019

The table above table 4.6 shows the extent on how the staff are aware of the TQM in the bank. The researcher asked the respondent on how extent they are aware of the TQM banking. 79 of the respondent which represent 95.2% responded that they are aware of the TQM banking in large extent while 4 of the respondent which represent 4.8% responded that they are aware of the TQM banking in a little extent.

Finally, none of the respondents responded that they are not aware of the TQM banking.
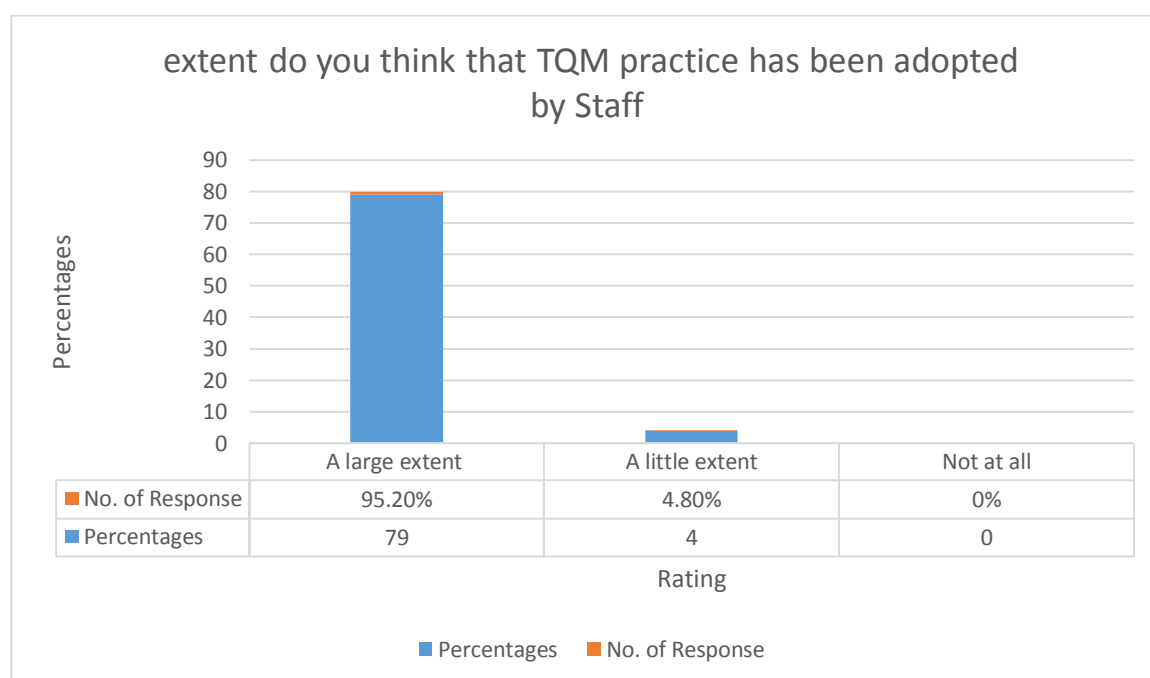
Figure 4.5 To what extent do you think that TQM practice has been adopted by Staff
Source: Field Data, May 2019

4.2.11 To what extent do you think that TQM practice has been adopted by Staff

Figure 4.6 above shows the respondents' suggestions on the percentage of what extent do they think that TQM practice has been adopted by Staff. With 95.20% of the respondents think they have adopted the TQM practice in large extent. , also 4.80% of the respondents think the adaptation of the TQM practice is in little extent.

In conclusion, majority of the respondent which represent 95.2% think that the TQM practice has been adopted in large extent.
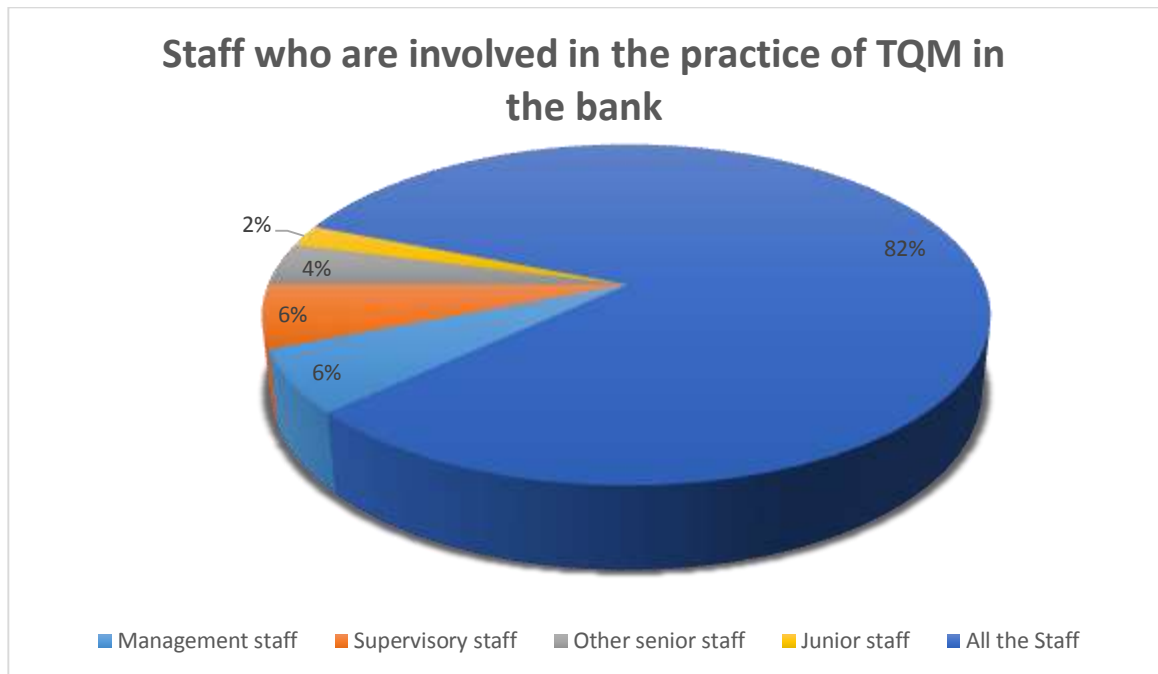
Figure 4.6 Staff who are involved in the practice of TQM in the bank

Source: Field Data, May 2019

4.2.12 Those involved in the practice of TQM in the bank

From the figure 4.7 to identify the staff who are involved in the practice of TQM, it was observed that out of 100%, 82% of the respondents are all staff of bank whiles 6% of the respondents who are involved in the TQM practice are management staff of the bank. 6% of the respondents who are also involved in the TQM practice are supervisory staff in the bank .finally 2 % of the respondents who are involved in the TQM practice are junior staff.

Therefore it was observed from the analysis that majority of the respondents who are involved in the TQM practice are all the staff in the banking sector.

Table 4.4 To what extent are members of staff involved in the practice of TQM In the bank

Rating	Frequency	Percent
A large extent	75	90.3
A little extent	8	9.7
Not At All	0	0
Total	83	100.0

Source: Field Data, May 2019

4.2.13 To what extent are members of staff involved in the practice of TQM In the bank

To determine the extent that the members of staff involved in the practice of TQM In the bank, it was indicated that 90% of the respondents indicated that the members of staff involved in the practice of TQM In the bank are large extent whiles 10% of them said the members of staff involved in the practice of TQM In the bank are little extent.

4.2.14 The major element of TQM practice in the bank

Table 4.5 The major element of TQM practice in the bank

	Frequency	Percent
Continuous quality improvement attitude	2	2.4
Compulsory innovation	3	3.6
Value based decision making	1	1.2
Lower cost of product and service delivery	3	3.6
Cultural change at all levels of the organization	2	2.4
Customer satisfaction/ involvement	3	3.6
Teamwork spirit	2	2.4
All the above	67	80.8
Total	83	100

Source: Field Data, May 2019

To determine the major element of the TQM practice in the bank the researcher asked
the respondents what were the major element of TQM practice in the bank and
majority of the respondents which represent 80% indicated that all the element stated
in table 4.8 are major elements of TQM practice in the bank.

4.2.15 the TQM of mobile banking practices improves customer services and care

Table 4.6 the TQM of mobile banking practices improves customer services and care

	Frequency	Percent
Yes	80	96.4
No	3	3.6
Total	83	100

Source: Field Data, May 2019

The researcher wanted to know if the TQM of mobile banking practices improves customer services and care and according to the respondents 96% of them said YES the TQM of mobile banking practices improves customer services and care whiles 0nly 4% didn't agree to it. Therefore it can be said that the TQM of mobile banking practices has improved customer services and care.

4.2.16 If „ yes" to what extent

Table 4.7 If „ yes" to what extent

Rating	Frequency	Percent
A large extent	75	93.8
A little extent	5	6.2
Not At All	0	0
Total	80	100.0

Source: Field Data, May 2019

Based on the responds from the table 3.9, the researcher asked those that responded Yes to determine the extent the TQM of mobile banking practices has improved customer services and care and 94% stated that it has largely improved customer services and care.

4.2.17 the effect of quality management practices of mobile and digital application on the bank's performance (Independent variable)

Table 4. 8 The effect of quality management practices of mobile and digital application on the bank's performance (Independent variable).

	The app is sometime not reliable		The app is easy to be used		The user Interface of the app is well designed		Logging into the mobile banking app is fast		I am confident about the security of banking via the mobile banking app		The Mobile banking app provides all the online banking functions that our clients wants.	
	Frequency	Percentage	Frequency	Percentage	Frequency	percentage	Frequency	Percentage	Frequency	percentage	Frequency	percentage
strongly disagree	2	2.4	3	3.6	4	4.8	2	2.4	2	2.4	0	0
Disagree	2	2.4	4	4.8	3	3.6	3	3.6	3	3.6	0	0
Neutral	2	2.4	1	1.2	3	3.6	2	2.4			0	0
Agree	35	42.2	31	37.3	19	22.9	21	25.3	20	24.1	11	13.3
strongly agree	42	50.6	44	53.0	54	65.1	55	66.3	58	69.9	72	86.7
Total	83	100.0	83	100.0	83	100.0	83	100.0	83	100.0	83	100.0

Source: Field Data, May 2019

To determine the effect of quality management practices of mobile and digital application on the bank's performance and the following statement were made as the independent variable; the app is sometime not reliable, the app is easy to be used, the user Interface of the app is well designed, logging into the mobile banking app is fast, I am confident about the security of banking via the mobile banking app and The Mobile banking app provides all the online banking functions that our clients wants. And according to the respondents more than 80% of the respondents agreed to the statements made above.

4.2.18 The effect of quality management practices of mobile and digital application on the bank's performance (Dependent variable)

Table 4.9 The effect of quality management practices of mobile and digital application on the bank's performance (Dependent variable)

	The experience that I have had with the mobile app has been satisfactory.		Overall, clients are satisfied with the way that the mobile app has performed		In general, I can say that I am satisfied with mobile app.	
	Frequency	Percentage	Frequency	percentage	Frequency	percentage
strongly disagree	3	3.6	2	2	7	8.4
Disagree	3	3.6	3	3	3	3.6
Neutral			0	0	5	6.0
Agree	15	18.1	58	24.1	31	37.3
strongly agree	62	74.7	83	69.9	37	44.6
Total	83	100.0	2	100.0	83	100.0

Source: Field Data, May 2019

To determine the effect of quality management practices of mobile and digital application on the bank's performance and the following statement were made as the dependent variable; overall, clients are satisfied with the way that the mobile app has performed, In general, I can say that I am satisfied with mobile app and The experience that I have had with the mobile app has been satisfactory. And according to the respondents more than 89% of the respondents agreed to the statements made above.

4.2.19 the total quality management system has putting in place which is influenced by the cultural of the bank

Table 4.10 the total quality management system has putting in place which is influenced by the cultural of the bank

	Mean
management	4.11
Customer focus	4.18
Training and education	4.10
Continuous improvement and innovation	4.04
Top-management commitment	4.00
Supplier management	3.96
Employee involvement	3.90
Information and analysis	3.84
Process management	3.82
Quality systems	3.72
Benchmarking	3.52
Quality culture	3.42
Human resource	2.36
Strategic planning	4.78
Employee encouragement	4.18
Teamwork	4.10
Product and service design	4.04
Communication	4.00

Source: Field Data, May 2019

To determine the total quality management system which the bank have putting in place to influenced culture of the bank were identified by the respondents. According to the table above the mean indicated that the total quality management system that have been putting in place include Communication, Product and service design, Teamwork, Employee encouragement, Strategic planning , Human resource, Quality culture, Benchmarking, Quality systems, Supplier management ,Employee involvement ,Information and analysis ,Process management Training and education ,Continuous improvement and innovation ,Top-management commitment , Supplier management ,employee involvement ,Information and analysis management , Customer focus, Training and education ,Continuous improvement and innovation ,Top-management commitment ,   Supplier management ,Employee involvement

4.3 The effect of Quality Management Practices of mobile and digital application on the bank's performance

4.3.1 Hypothesis

H_0: There is negative effect of Quality Management Practices of mobile and digital application on the bank performance

H_1: There is positive effect of Quality Management Practices of mobile and digital application on the bank performance.

Table 4.11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.781[a]	0.610	0.578	0.717

a. Predictors: (Constant), The app is sometime not reliable , The app is easy to be used, The user Interface of the app is well designed , Logging into the mobile banking app is fast, I am confident about the security of banking via the mobile banking app, The Mobile banking app provides all the online banking functions that our clients wants

Source: Field Data, May 2019

Table 4.5 recorded R value as 0.781[a] which signifies a strong positive relationship between the dependable variable, Overall, clients and I are satisfied with the way that the mobile app has performed which represent the Performance and the independent variables captured in the model as (The app is sometime not reliable , The app is easy to be used, The user Interface of the app is well designed , Logging into the mobile banking app is fast, I am confident about the security of banking via the mobile banking app, The Mobile banking app provides all the online banking functions that our clients wants). The statistics of more importance is the Adjusted R-Square which recorded a value of 0.578 representing 57.8% of the total variability in average performance accounted for by the independent variables in the model.

Table 4.12; ANOVA

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	58.716	6	9.786	19.058	.000[a]
	Residual	37.484	73	.513		
	Total	96.200	79			

a. Predictors: (Constant), The app is sometime not reliable , The app is easy to be used, The user Interface of the app is well designed , Logging into the mobile banking app is fast, I am confident about the security of banking via the mobile banking app, The Mobile banking app provides all the online banking functions that our clients wants

b. Dependent Variable: Overall, clients and I are satisfied with the way that the mobile app has performed
 Source: Field Data, May 2019

The model summary table 4.5 displayed in the SPSS output above recorded   R value as 0.781[a] which signifies a strong positive relationship between the dependable variable (which represent Overall, clients and I are satisfied with the way that the mobile app has performed) and the independent variables captured in the model. The statistics of

more importance is the R-Square which recorded a value of 0.610 representing 61.0% of the total variability in average of internal audit accounted for by the independent variables in the model.

The results showed R^2 value of 0.610 meaning that 61.0%, systematic variations could be explained by the measures of the performance of the Quality Management Practices of mobile and digital application in the banking sector. This indicates that there are more variables that explain the performance of the Quality Management Practices of mobile and digital application in the banking sector. The F value which is the overall goodness of fit is 19.058 and greater when compared to the critical value of the constant on the F-table at 5% level of significance.

Also we fail to reject the null hypothesis when the P value is greater 0.05 but reject the null hypothesis when less than 0.05. Since $0.000 < 0.05$ we reject the null hypothesis and therefore accept the alternative hypothesis and conclude that there is positive effect of Quality Management Practices of mobile and digital application on the bank performance

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This final chapter is a concluding chapter of the whole project and the summary of the findings, given conclusions of the entire research work against the background of the objectives as outlined in Chapter One of the study and making of recommendations for possible consideration to the problem identified.

5.2 Summary of the Study

Majority of the respondents were female and they were between the ages of 25 to 45 years. Also, from the analysis, about 90% of the respondents have completed either tertiary or post graduate level thus it can be assumed that they may have much knowledge about the research conducted. In addition, majority of the respondents have worked with the bank between 11-15 years which represent 34% and most of the respondents were senior staff, Operational staff, marketers and IT personal.

5.2.1 Key findings

From the data analysis it was indicated that the bank uses mobile apps where by the mobile apps are used to view balances on loan, mortgage, investment or trade account, transfer funds between your account, transfer money to another person's account, send and receive INTERAC e- Transfer review payment history, pay bills (e.g. utility bill), view account activity, view pending bill payment and to view account balance. Also, the factors that are used for measuring the mobile and digital banking application performance in the banking sector are the Reliability, Ease of Use, User Interface,

Response Time, Security, Understandability, Completeness, Timeliness, Satisfaction and Functionality.

In addition, it was observed that the respondents were aware of TQM practices and they have adopted the practices in the bank and they are aware and adopted in a large extent. It was observed that the staff who are involved in the practice of TQM are all the staff in the banking sector. The major element of the TQM practice in the bank were the value based decision making, lower cost of product and service delivery, cultural change at all levels of the organization, Customer satisfaction/ involvement, Teamwork spirit, Continuous quality improvement attitude and Compulsory innovation.

Furthermore, it was indicated that the TQM of mobile banking practices has improved customer services and care in a large extent. It was observed that some of the quality management practices of mobile and digital application on the bank's performance were that the app is sometime not reliable, the app is easy to be used, the user Interface of the app is well designed, logging into the mobile banking app is fast, I am confident about the security of banking via the mobile banking app and the Mobile banking app provides all the online banking functions that our clients wants.

Finally, the total quality management system which the bank have putting in place to influenced culture of the bank were identified by the respondents and this includes Communication, Product and service design, Teamwork, Employee encouragement, Strategic planning , Human resource, Quality culture, Benchmarking, Quality systems, Supplier management ,Employee involvement ,Information and analysis ,Process management Training and education ,Continuous improvement and innovation ,Top-management commitment , Supplier management ,employee involvement ,Information and analysis management , Customer focus, Training and education ,Continuous

improvement and innovation ,Top-management commitment , Supplier management ,Employee involvement . The study from the Anova analysis indicated that there are more variables that explain the performance of the Quality Management Practices of mobile and digital application in the banking sector. The F value which is the overall goodness of fit is 19.058 and greater when compared to the critical value of the constant on the F-table at 5% level of significance. It was concluded that there is positive effect of Quality Management Practices of mobile and digital application on the bank performance.

5.3 Conclusion

In conclusion , the use of the TQM of mobile banking practices has improved customer services and care to a large extent in which the quality management practices of mobile and digital applications on the bank's performance were that the app are reliable, the app is easy to be used, the user Interface of the app is well designed, logging into the mobile banking app is fast, there are confident about the security of banking via the mobile banking app and the Mobile banking app provides all the online banking functions that our clients wants. Finally, there is a positive effect of Quality Management Practices of mobile and digital application on the bank performance

5.4 Recommendations

1. The service and staff engagement should focus on the core content variables within quality management if they want to effectively implement TQM leading to a competitive advantage.

2. In order to ensure a successful implementation of TQM in the banks, there is a need to motivate employees to improve the level of services provided by them.

3. Also, appointment of qualified and competent managers will successfully contribute to the management of the banks together with giving enough training and education to employees so that they understand specific quality policy and TQM strategy.

4. Lastly, monitoring the customer satisfaction and taking the feedback frequently would further improve the performance of the banking sector.

5. Above all there is a need of top-management commitment towards TQM and giving full support for its successful implementation. Many authors have identified different service quality dimensions which are associated with the banking sector.

5.5 Suggested Areas for Further Research

It must be emphasized that this study forms part of other similar studies that have been conducted in different areas. Taking into consideration its limitations, the study wishes to suggest that further research could be conducted in the following areas:

i. The challenges the banks faces with the use of total quality management practice of mobile and digital banking application.

ii. The relationship between the total quality management practice of mobile and digital banking application and the performance of the banking sectors in Ghana.

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PROJECT WORK

EFFECTS OF TOTAL QUALITY MANAGEMENT PRACTICE OF MOBILE AND DIGITAL BANKING APPLICATION ON THE PERFORMANCE OF THE BANKING SECTOR

(CASE STUDY OF FIDELITY BANK)

The researcher is a master's student of the …………. writing a project on the topic: effects of total quality management practice of mobile and digital banking application on the performance of the banking sector in partial fulfillment of the requirements for the master degree in ………. I would be very grateful to welcome your response to the questionnaire below as your contribution to make the writing of my project work a success. Any information given would be purely for the purpose of academic work and would be treated with utmost confidentiality.

(Please tick (√) the appropriate boxes where applicable).

SECTION A: DEMOGRAPHIC

1. Gender   a) Male [ ]   b) Female [ ]

2. Age   a. 25 Years and below [ ]   b. 26-35 years [ ]   c. 36-45 Years [ ]

    d. 56-55 Ears [ ]   e. 56 years and above [ ]

3. What is your Educational Level?

a. Secondary/Equivalent   [   ]   b. Diploma [   ]   c. HND [   ]   d. 1st Degree [   ]

    e. Masters [   ]   f. PhD (Doctorate) [   ] Other(s) [ ]. If other(s) specify

    ………………………

4. Years of Working in the Bank a) 1-5yrs [ ]   b) 6-10yrs [ ]   c) 11-15 yrs [ ]   d)

16yrs and above [ ]

5. Category of Staff   a) Junior Staff [ ]   b) Senior Staff [ ]   c) Management Staff [ ]

d. marketing Department e.IT Department [ ].

Department Please specify …………………………………

SECTION B

THE FACTORS FOR MEASURING THE MOBILE AND DIGITAL BANKING

APPLICATION PERFORMANCE OF THE BANKING SECTORS IN GHANA.

6. Does this bank uses mobile app?

a. Yes [   ]   b. No [   ]   c. Not Sure   [   ]

7. Which of the following activities do the mobile app does?

Please check (√) all the activities that the mobile app can do

Check transaction right after a purchase	
View account activity	
View account balance	
Pay a bill (e.g., utility bill)	
View pending bill payment	
Cancel pending bill payment	
Review payment history	
Set up new payee	
Transfer funds between your account	
Find a nearby branch or ATM	
Check loan or interest rates	
Transfer money to another person's account	
Send and receive INTERAC e-Transfer	
Pay credit card bill	
View credit card balance and activities	
Retrieve stock quotes	
Place trades or buy/sell investment	
View balances on loan, mortgage, investment, or trade account	

Please others specify…………………………………………………………………

8. Which of the factors uses for measuring the mobile and digital banking application performance in the banking sector?

a. Reliability [   ] b. Ease of Use [ ]   c. User Interface [   ]   d. Response Time [   ]   e. Security [   ]   f. Functionality [ ]   g. Understandability [ ] h. Completeness [   ] I. Timeliness [   ]   J. Satisfaction [ ]

SECTION C

THE EFFECT OF QUALITY MANAGEMENT PRACTICES OF MOBILE AND

DIGITAL APPLICATION ON THE BANK'S PERFORMANCE.

9. Are you aware of TQM practice in this bank?

a. Yes [ ]   b. No [ ]

10. To what extent are the staff aware of TQM in this bank? a) A large extent [ ]

b) A little extent [ ]   c) Not At All [ ]

11. To what extent do you think that TQM practice has been adopted by Staff?

a) A large extent [ ]   b) A large extent [ ]   c) Not at All [ ]

12. Who are involved in the practice of TQM in the bank? a) Management staff [

]   b) Supervisory staff [ ]   c) Other senior staff [ ] d) Junior staff [ ]

e) All of the above [ ]

13. To what extent are members of staff involved in the practice of TQM In the

bank? a) A large extent [ ] b) A little extent [ ] c) Not at all [ ]

14. What are the major element of TQM practice in the bank?

a) Continuous quality improvement attitude [ ]   b) Compulsory innovation [ ]

c) Value based decision –making [ ] d) Lower cost of product and service delivery

[ ]   e) Cultural change at all levels of

the organization [ ] f) Teamwork spirit [ ] g) Customer satisfaction/ involvement [

] h) All of the above [ ]

15. Do you agree that the TQM of mobile banking practices improves customer

services and care? a) Yes [ ]   b) No [ ]

16. If „ yes‟ to what extent? a) Significantly [ ] b) Insignificantly [ ] c) Not at all [

]

17. Please indicate the degree of your agreement or disagreement with each statement

by checking on the space provided.

Use a scale of 1- 5 where 5= agree strongly, 4=agree, 3= not sure, 2= disagree and 1= strongly disagree

NO.	DESCRIPTION	Strongly disagree	Disagree	Not sure	Agree	Agree Strongly
Independent variable						
1	The app is sometime not reliable					
2.	The app is easy to be used					
3.	The user Interface of the app is well designed					
4.	Logging into the mobile banking app is fast					
5.	I am confident about the security of banking via the mobile banking app.					
6.	The Mobile banking app provides all the online banking functions that our clients wants.					
Dependent variable						
8.	Overall, clients are satisfied with the way that the mobile app has performed.					
9.	The experience that I have had with the mobile app has been satisfactory.					
10.	In general, I can say that I am satisfied with mobile app.					

SECTION D

THE TOTAL QUALITY MANAGEMENT SYSTEM PUT IN PLACE IS

INFLUENCED BY THE CULTURAL OF THE BANK.

18. Which of the following total quality management system has putting in place

which is influenced by the cultural of the bank

    a. Top-management commitment [   ]

    b. . Customer focus [   ]

    c. Training and education [   ]

    d. Continuous improvement and innovation [   ]

    e. Supplier management [   ]

    f. Employee involvement [   ]

    g. Information and analysis [   ]

    h. Process management [   ]

    i. Quality systems   [   ]

    j. Benchmarking [ ]

    k. Quality culture [   ]

    l. Human resource management [   ]

    m. Strategic planning [   ]

    n. Employee encouragement [   ]

    o. Teamwork [   ]

    p. Product and service design [   ]

    q. Communication [ ]