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Establishing Mobile Financial Services in Ethiopia

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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2016

Abstract

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MBA, ESAMI Business School, 2006

BCOM, Panjab University, 2000

Doctoral Study Submitted in Partial Fulfillment

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Abstract

Mobile phone service is increasing among low income populations; however, with over 1 billion mobile service users worldwide, many people still lack banking services. Banks do not reach out to the poor because of the high operational costs involved. Scholars and industry practitioners have indicated that mobile phones could be an alternative channel for delivering financial services to the less advantaged and unbanked, without requiring a traditional bank with a branch network. The purpose of this bounded case study was to explore the strategies bank managers used to implement the new mobile banking service to the Ethiopian community. The new product development theory served as the conceptual framework for this study. Twenty experienced bank managers were interviewed from the leading private bank in Ethiopia. Data were segmented and categorized. After member checking and triangulation, data were sorted into 4 themes: development, testing, commercialization of new products or services, and an organizational commitment to adopt new technologies and innovative processes. The findings may contribute to the body of knowledge regarding strategies bank managers can use for implementing and introducing new products in order to contribute to the prosperity of individuals, businesses, and communities.

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Dedication

I dedicate this study to My Lord Jesus Christ, upon whom I relied for the strength and courage to achieve this glorious level in my life. I also dedicate this to my late father, Mr. James Hanington Mbakaize Kanagwa. You always believed in intellectualism and desired the same for me; I hope you'll accept a doctor of business in exchange. I felt your presence when I felt despondent, and the revolutionary fire that you instilled in me still burns. I know that you are smiling in heaven.

Acknowledgments

With immense appreciation, I acknowledge my chair, Dr. Charlotte Carlstrom. Through your unflinching guidance, I strengthened my resolve to complete my doctoral study. Secondly, I sincerely appreciate the commitment and kind support from my committee members, Dr. Kevin Davies and Dr. Matthew Gonzalez. I have been blessed by your presence and wisdom. Thirdly, to Dr. Alice Gobeille for the encouragement and support during the start of the DBA journey when I almost gave up. I would like to thank Dr. Freda Turner for being there to listen and assure continued faculty support. Finally, I acknowledge the tremendous support and encouragement of my family.

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Section 1: Foundation of the Study

Background of the Problem

Banks do not reach out to poor people because of the high operational costs involved (Amin, Supinah, Aris, & Baba, 2012). Mobile phones could be an alternative channel for delivering financial services to less advantaged and unbanked people, without requiring a traditional bank with a branch network (Ha, Canedoli, Baur, & Bick, 2012; Keramati, Larijani, Mojir & Taeb, 2012). The main advantages of the mobile phone lie in its capabilities to reach everywhere (Chin, Felt, Sekar, & Wagner, 2012). The power is in transforming the economics of service delivery, especially by reducing the costs of financial transactions (Kweyu & Ngare, 2014). Financial institutions and mobile phone service providers are introducing resourceful methods of bringing these unbanked populations into the formal economy using mobile phones (Maurer, 2012; Mirabaud, 2010). The methods used by financial institutions to introduce unbanked populations into the formal economy do not fully address the challenge in providing the unbanked with the financial services they need (Tobin, 2012). Mobile phones have the potential to provide these unbanked people with services, such as the ability to deposit, withdraw, or transfer money; pay bills; be paid wages; purchase/redeem tickets or vouchers; obtain a loan; and purchase goods and services such as insurance (Dikit, Pathan & Shringarpure, 2012). The problem in this study was to explore the specific strategies bank managers needed to establish mobile banking in the unbanked community in Ethiopia.

Problem Statement

Mobile phone service is increasing among low income populations; however, with over 1 billion mobile service users worldwide, many people still lack banking services (Lawuo, Mbasa, & Manyaw, 2013). At the end of 2012, there were over 300 million worldwide mobile phone customers and of these, less than 60% had access to banking services (Abdul & Manan, 2013). The general business problem I sought to address was that banking services are not available in all countries. The specific business problem that I addressed in this study was that some bank managers lacked the strategies to implement and establish mobile banking to the unbanked community in Ethiopia.

Purpose Statement

The purpose of this qualitative single case study was to explore the strategies bank managers used to establish mobile banking services to the Ethiopian community. The targeted population for the study comprised of Ethiopian bank managers. This population was appropriate for this study because local managers were responsible for the introduction of new banking services to a community. The introduction of this new banking system may lead to an increase in the number of jobs created from mobile banking agents, financial literacy, and prosperity in the Ethiopian community (Ahmad & Singh, 2012).

Nature of the Study

A qualitative method was the most appropriate method for the research project. The qualitative method enables researchers to provide a participant perspective of an event, which is achieved by research reports that capture and communicate participant tacit knowledge (Md. Ali & Yusof, 2011). Using the qualitative method was beneficial

because the focus of this study was to describe a specific event in its current state, gain insights, identify concerns, and describe findings in real-world settings (Marshall & Rossman, 2011). The qualitative method was the most appropriate for this study because it uses surveys and experimental designs on a sample of a population in numeric form to generalize about the population (Gordon, 2012; Simon, 2011; Suri, 2011). The quantitative method was not applicable to the study since the main objective of the study was to observe and not to quantify; therefore, the quantitative method was not appropriate for the study. A mixed method is a combination of quantitative and qualitative approaches in a research process. The mixed method approach would not be the best method for this project because it would have numeric elements (Cronin, 2014; Doz, 2011). The qualitative method was the best choice, and I worked through interviews to describe the experiences of the study population.

For this research project, a case study design was more appropriate than phenomenological design, ethnographic design, grounded theory design, or narrative design since the case study is an approach to research exploration of the phenomenon (Marshall & Rossman, 2011). A phenomenological design would not be appropriate as it examines human experiences and often includes philosophical presuppositions about phenomenology and the denial of subject-object dichotomy (Abrahamson, Beverly, Brooks, Hultgren, & Weinger, 2011). An ethnographic design involves the collection and analysis of data about cultural groups (Marshall & Rossman, 2011). Grounded theory research incorporates the views of a large number of participants into common enlightenment of a process or activity and strives to create or recognize a theory (Yin,

2014). Grounded theory would not be suitable for DBA research since it discontinues the usage of theoretical ideas in order to create sensible and substantive theory (Yin 2011, 2014). Narrative design is appropriate for cognitive science, organizational studies, knowledge theory, sociology, and education studies (Doz, 2011). The purpose of this study design was to explore the phenomenon through in-depth processes and analyze specific events by individuals or groups (Marshall & Rossman, 2011). The case study design was the most appropriate since it involved a study of a case within the real life, contemporary context or setting. A single case or multiple cases over time can be examined by analyzing multiple sources of information (Yin, 2014).

Research Question

The purpose of this qualitative study was to explore the introduction of a mobile banking system to the unbanked population in Ethiopia. The research question that this study centered was as follows: What strategies did bank managers use to establish mobile banking services to the Ethiopian community? To answer this question, I conducted face-to-face semistructured interviews with bank managers who were responsible for introducing the mobile service.

Interview Questions

The semistructured interview with questions (see Appendix A) for the study were as follows:

1. Describe the steps of the mobile banking services installation process.

2. Describe the process of developing new products in the bank.

3. What was achieved in the installation process?
4. What is the expected timeframe for the installation process?
5. How much time is left for the installation process?
6. Who are major stakeholders involved in the installation?
7. What unexpected events happened to block the installation process?
8. Describe other obstacles that were overcome in the introduction of this new banking service.
9. What remains to be done in the installation process?
10. Describe anything else you would like to add that would aid in the understanding of this phenomenon.

Conceptual Framework

The innovation of processing financial exchange and payment methods via mobile phone may have a major impact on slow economic growth in many parts of the world (Srivastava, 2013). The new product development theory (NPD) describes the complete process of bringing a new product to market (Johnson & Jones, 1957). The theory evolved in the early 1950s when companies were diversifying and expanding randomly (Johnson & Jones, 1957). Over the past decades, the business world has become increasingly aware of the role of NPD for a company's growth and survival. The theory serves as a lens through which to view innovation of new ideas or products that

may lead to transformation (Smith, 2011). A good understanding of customer needs and wants, the competitive environment, and the nature of the market represent the top required factors for the success of a new product (Johnson & Jones, 1957). The theory's six concepts are (a) exploration, (b) screening, (c) proposal, (d) development, (e) testing, and (f) commercialization (Johnson & Jones, 1957). The last three concepts were particularly important to the study; the concepts of development, testing, and commercialization. The Ethiopian financial sector is not diversified in terms of the type of financial institutions and the type of financial products and services being delivered (Getnet, 2014). The financial service there is dominated by a cash-based system (Getnet, 2014). The mobile banking development in Ethiopia is still in its infancy stage, with only six banks licensed out of 19 in 2013 and two banks piloting the roll out of the service (Getnet, 2014). The NPD theory concept of development was able to elucidate the strategies bank managers were using to develop the mobile banking service. The concept of testing explained the steps bank managers were employing to conduct or market tests for conformity with earlier assumptions of the mobile banking service. While the concept of commercialization explained how bank managers launched the mobile banking service in Ethiopia.

The theorist seeks to explain how, why, and at what rate new ideas and technology spread through cultures (Barclay & Benson, 1990). The NPD theory helps business leaders appreciate behavioral changes within a social system when introducing new technology (Ahmed & Dale, 2012). As applied to this study, the NPD theory

allowed me to effectively explore participants' perceptions and experiences regarding the introduction of the new banking system.

Operational Definitions

The following definitions provided context for the study:

Diffusion of innovation (DIT) theory: Diffusion of innovation theory (DIT) describes how over time, an idea or product gains momentum and diffuses through a specific population or social system (Rogers, 1995).

Mobile banking: Mobile banking is a system that enables customers of a financial institution to perform a number of financial transactions through a mobile device such as a mobile phone or tablet (Srivastava, 2013).

New product development (NPD) theory: New product development theory describes the complete process of introducing a product onto the market (Johnson & Jones, 1957).

Technology acceptance model: Technology acceptance model describes how a new technology will be perceived by users (Abdul & Manan, 2013).

Assumptions

Assumptions are issues or situations that are out of a researcher's control (Simon, 2011). One assumption of this study was that bank managers chosen to participate would be honest in their responses pertaining to the introduction of the new banking system. Another assumption was that the bank managers chosen would represent the views of other bank managers in the banking industry in Ethiopia.

Limitations

A limitation is a potential weakness present in a researcher's study with no control over a limitation (Simon, 2011). The first limitation in this study was that verification of any documents contributed by participants would not be possible because most banks considered such as restricted internal documents. The second limitation was the possibility that bank managers' understanding of the process would differ among banks. The third limitation was that the sample size was limited to 20 bank managers in the Ethiopian banking industry.

Delimitations

Delimitations are characteristics that limit the scope of the study (Simon, 2011). The delimitations in this study were in my control. Delimiting factors included the choice of objectives, the research questions, theoretical perspectives that I adopted (as opposed to what could have been adopted), and the choice of population for the study. The first delimitation was that the study was limited to bank managers in Ethiopia and may not have been representative of all banks in other countries. The second delimitation was the choice of my specific business problem which was only focusing on implementation strategies of the mobile banking service in Ethiopia. The third delimitation was that the research question focused only on installation and implementation and not development and sustainability of service.

Significance of the Study

Financial institutions and mobile phone service providers are introducing resourceful methods of using mobile phones to facilitate financial transactions (Cruz,

Neto, Muñoz-Gallego, & Laukkanen, 2010). The purpose of this qualitative case study was to explore strategies that bank managers needed to establish mobile banking services. The study may contribute to effective business practice by highlighting ways bank managers can increase and expand market share by introduction of new products to more customers and enhance financial inclusion (Mburu, 2012; Sun, Goh, Fam, Xue, & Xue, 2012). The study's results could provide evidence leading to actions instrumental in the broader introduction of the mobile banking service (Mirabaud, 2010). The study's results may contribute to improving social change in the community by increasing the number of jobs created from mobile banking agents, financial literacy of the unbanked, and prosperity in the Ethiopian community (Berger & Nakata, 2013; Mburu, 2012). The results of the study revealed the specific strategies bank managers needed to establish mobile banking services in Ethiopia.

A Review of the Professional and Academic Literature

The purpose of the study was to explore the specific strategies bank managers needed to establish mobile banking services in Ethiopia. Current literature related to mobile banking details advantages of instituting the mobile services to an unbanked community. Mobile banking is an interactive distribution channel that enables users to perform banking activities such as balancing accounts, making payments, credit applications, and other banking transactions through a mobile device (Al-Akhras, Al-Sayyed, Alian, & Qwasmi, 2011). Eighty-five percent of the literature review's current sources are peer reviewed and published in 2011 or later. The other 15% are peer-reviewed articles published before 2011, nonpeer-reviewed articles, and books related to

the previously listed topics of the literature review. A collection of peer-reviewed journals, textbooks, doctoral dissertations, and government articles comprised the literature review. Walden University library was the main source of information, while Google Scholar provided additional access to relevant information. Walden University library provided access to relevant articles from the collections of doctoral dissertation, management, and business databases such as Business Source, INFORM/Global, and ProQuest. Several searches were made using varying combinations of the keywords: *mobile banking, mobile phones, mobile financial services, emerging markets,* and *unbanked population*.

Studies appearing in the review of literature section relating to mobile banking development (Abdul & Manan, 2013; Agwu & Adele-Louise, 2014; Boateng & Duncombe, 2013; Darballey & Weber, 2010; Kweyu & Ngare, 2014) collectively showed how mobile technologies could potentially create access of financial services to other customer segments. Studies relating to mobile banking, mobile phones, and mobile technologies (Lawuo et al., 2013; Li & Zhang, 2010; Prabhu & Vijaya, 2014; Srivastava, 2013) illustrated how mobile banking might lead to increased financial access to the unbanked population. Mobile banking technologies provided access to financial services and implementation strategies of new mobile banking services in emerging markets (Mburu, 2012).An overview of influential works is provided in the field of business including the NPD theory (Johnson & Jones, 1957) and the DIT (Rogers, 1995).

The goal and intent of the study was to explore the specific strategies bank managers in Ethiopia used in introducing the new mobile banking service. The review of

the literature provided information from scholarly articles that examined the current understanding of mobile banking in emerging markets. The organization of the literature review was as follows: (a) NPD theory; (b) mobile banking and mobile phones, trends in utilization of mobile banking, and types of mobile financial transactions; (c) empowering environment for mobile financial services and enabling guidelines for mobile financial services; and (d) information communication technology (ICT) developments within the east Africa legislative framework.

New Product Development (NPD) Theory

NPD theory is acknowledged, both in theory and practice, as the most relevant tool for business to introduce new products onto the market (Ahmed & Dale, 2012). The NPD theory is a complete process of bringing a new product to market (Johnson & Jones, 1957). NPD is one of the most important determinants of sustained company performance, and therefore, represents a key challenge for businesses (Swink, 2002). The theory evolved in the early 1950s when companies were diversifying and expanding randomly (Johnson & Jones, 1957). The business world has become increasingly aware of the role of NPD for a company's growth and survival. A good understanding of customer needs and wants, the competitive environment, and the nature of the market represent the top required factors for the success of a new product (Johnson & Jones, 1957). The theory's six concepts are (a) exploration, (b) screening, (c) proposal, (d) development, (e) testing, and (f) commercialization (Johnson & Jones, 1957). In this study, I focused on the last three concepts: development, testing, and commercialization.

The emphasis of the NPD process kept varying from one aspect to another. During the 1980s, companies were more concerned with the quality of their product; in the 1990s, companies were more fascinated with re-engineering products; and currently, companies consider the time to market (Swink, 2004). Swink (2004) stated that for a technological company, time to market was more vital than the cost of developing the product; if a company was losing time it could lead to the loss of market share. Pitta and Pitta (2012) agreed that businesses should emphasize more time to market concerns than the cost or quality. Businesses that don't launch new products to the market on time risked losing competitive advantage.

Pitta and Pitta (2012) categorized the evolution of new product innovation in three stages. The first historical stage was prior to World War II; during this period companies were more product oriented and did not pay much attention to customers' needs and requirements. The second stage, started at the middle of 1960's and was characterized by the introduction of competition and development of the markets. During this period, knowledge about the markets was vital in the NPD process (Pitta & Pitta, 2012). The third stage has revealed modern theories of the NPD process, emphasizing innovation processes to satisfy a diversified customer (Pitta & Pitta, 2012). The development of new products has long been recognized as vital to business development and it's important to continuously make improvements in the NPD process (Pitta & Pitta, 2012).

Development. Johnson and Jones (1957) described this stage as a challenging yet vital process of the NPD. To ensure sustained growth and long term survival, businesses must continually develop new products (Swink, 2002). This stage emphasized turning

ideas or opportunities into demonstrable producible items (Johnson & Jones, 1957). During this stage, a concrete marketing plan is drawn and the technical team presents the final prototype of the product developed and ready for testing (Pitta & Pitta, 2012). Companies often use two committees for new product activities (Pitta & Pitta, 2012). An adhoc product committee gathers information from other departments and customers (Johnson & Jones, 1957). Pitta and Pitta (2012) agreed that an idea or opportunity can be internal or external of the company. Companies may consider (a) experts or consultants, (b) published sources, and (c) stakeholders, like customers for exploring opportunities (Pitta & Pitta, 2012). Swink (2002) attested that new ideas can come from customer feedback, consumer complaints, and also by brainstorming with marketing, sales, and technical staff.

Development was relevant to this study because all steps related to developing the mobile banking service in Ethiopia were explained in detail. Bank managers were able to elucidate on the marketing plan for the new service, taking cognizance of the Ethiopian financial services industry. The role of product development committees (if any) and the membership of the committee was also explained by the bank managers in Ethiopia.

Testing. This stage is characterized by conducting product and market tests for conformity with earlier predictions, assumptions, and deductions of the product (Johnson & Jones, 1957). Also during this stage, final product and market plans for the product are generated (Johnson & Jones, 1957). Testing provides business leaders with a sense of how collaborative team integration processes and NPD processes were required in order to be reasonably successful in testing the product (Smith, 2011).

Testing was relevant to this study because the results of conformity tests on the mobile banking service and market from assumptions were explained by the Ethiopian bank managers. Bank managers elucidated details of marketing plans for the mobile banking service. Testing also revealed the collaboration and integration of all processes and teams in the product development process of the mobile banking service in Ethiopia by the banks.

Commercialization. During this stage, the product is fully launched in both production and distribution to the market (Johnson & Jones, 1957). During commercialization, the marketing plan is fully implemented in accordance with the product guidelines and the product performance is monitored to ensure sustainability (Johnson & Jones, 1957). Commercialization is considered a fundamental stage in the NPD process as new products bring revenue to the business and enable business leaders to achieve their financial objectives (Ahmed & Dale, 2012).

Commercialization was relevant to this study because details of activities related to the marketing, launch, and post launch management of the mobile banking service in Ethiopia were explained. Effective product launch was a critical factor for a mobile banking service to be successful. Studies have shown that a strong product launch improved the chances of a product succeeding in the market place (Ledwith, Nicholas, & Perks, 2011). During the product launch, internal collaboration between product development teams, marketing, and production has been shown to have a greater positive effect on product success due to increased innovation capabilities (Hans, Magnus, &

Maximilian, 2011). Marketing helps bring in ideas that match the market while interacting with bank managers (Pitta & Pitta, 2012).

A vital aspect in the design of goods and services process is the understanding of the influences of the product life cycle (Smith, 2011). Each product has a limited life, and its eventual performance evolves in distinct stages, each presenting different encounters, opportunities, and challenges to the vendor (Swink, 2002). Profits from products either increase or reduce at different stages of the product life cycle (Swink, 2002). These profit changes require business leaders to develop and implement appropriate marketing, financial, manufacturing, purchasing, and human resource strategies in each stage (Smith, 2011).

Researchers and consultants have promoted many tools and techniques for accelerating the execution phase of NPD (Swink, 2002). Successfully introducing new products demands finding space in an overcrowded marketplace (Swink, 2002). External factors also determine the likelihood of success and the impact that varies by industry (Pitta & Pitta, 2012). Supply exceeds demand in many markets and often only strong brands will succeed (Swink, 2002). The less intense market for industrial marketers results in more scope to segment and differentiate (Pitta & Pitta, 2012).

The focus of the NPD emphasizes that following the due processes and structure are linked with increased success (Alfredo, Emanuele, & Lucio, 2012). However, this view is not fully supported by some studies (Alfredo et al., 2012; Pitta & Pitta, 2012; Swink, 2002). Ledwith, Nicholas, and Perks (2011), in their study on businesses in the U. K., suggested that practitioners assign different levels of importance

to the various NPD best practices. Regardless of company size, strategy is viewed as the most important best practice for NPD, while metrics and performance evaluation are seen as the least important (Ledwith et al., 2011). This does not support previous research, which has shown that excellence in NPD process is the primary driver of NPD realization (Ledwith et al., 2011). Barclay and Benson (1990) suggested that NPD success may be measured at the individual project level as well as at the overall NPD program level. However, concentrating only on the new product rather than the totality of the firm's new product program could result in unsustainable growth of the enterprise (Alfredo et al., 2012; Pitta & Pitta, 2012; Swink, 2002) .

In their study of the impact of corporate culture and commitment on the performance of international NPD programs, Brentani and Kleinschmidt (2004) posited that corporate culture and commitment can have an important impact on the outcome of the NPD in a firm. Using empirical results from 252 international NPD programs, their findings revealed that international NPD outcomes are associated with the corporate culture and commitment dimensions. Managers charged with the development of new products for international markets should leverage and coordinate broad creative capabilities and resources, which often are diffused across geographical and cultural boundaries (Brentani & Kleinschmidt, 2004).

Roberto and William (2009), in their study of NPD practices, stated that internal integration affects time and product performance differently than external integration. They analyzed survey responses to questions about the procedures and performance measures of the NPD programs at 250 small to medium size machinery

manufacturing and electrical equipment firms in four countries: Italy, Germany, Japan, and the United States. Their findings revealed that the use of collaborative NPD practices such as customer involvement, supplier involvement, and cross-functional integration are found across the world although researchers did find some significant differences in focus. Specifically, American firms were more likely to use internal integration practices and this translated into better performance (Roberto & William, 2009). Their study, combined with the findings of other recent research in the area of collaborative NPD processes, suggests that tradeoffs occur with the variable use of internal and external integration practices (Roberto & William, 2009).

In conclusion, NPD is regarded as a vital tool for organizations that desire to face competition on the basis of quality and suitability of purpose (Ahmed & Dale, 2012). Ahmed and Dale (2012) attested that new products are fundamental to the development and sustainable success of the present-day corporation. Likewise, there is a direct linkage between product innovation and business success, sustainability, competitive advantage and growth of a business or industry (Alfredo et al., 2012; Ledwith et al., 2011).

Diffusion of Innovation Theory (DIT)

Rogers (1995) advanced the DIT, considered as one of the most common theoretical foundations. The DIT affirmation is that relative advantage, compatibility, complexity, trialability, and observability characteristics were the main determinant of innovation diffusion (Rogers, 1995). The DIT is a theory used to explain how, why, and at what rate new technology spreads through cultures (Rogers, 1995). Al-Jabri and Sohail (2012) used the DIT to conduct their study on mobile banking adoption in Saudi Arabia.

They used the DIT framework to investigate the attributes that influenced the mobile banking adoption in Saudi Arabia. Al-Jabri and Sohail collected and analyzed data from 330 actual mobile banking users in Saudi Arabia. The results revealed that relative advantage, compatibility, and observability factors positively affected mobile banking adoption. Introduced in 1995, DIT combined with other theories like technology acceptance model (TAM) and has been widely used in research of information technology adoption (Zhang, Zhu, & Liu, 2012). Lin (2013) combined the DIT constructs and knowledge based trust constructs to study the mobile banking adoption. The result of his empirical investigation revealed that perceived relative advantage and ease of use considerably influenced mobile banking intention in Taiwan. Sheng, Wang, and Yu (2011) integrated DIT and TAM in their study. They established that perceived usefulness, perceived ease of use and compatibility were positively related to mobile banking adoption; whereas, perceived risk had a negative relationship to mobile banking adoption in mainland China.

The diffusion of innovation theory was relevant to this study from the commercialization stage, which is the last stage of the NPD process. Commercialization represents the activities related to the marketing, launch, and post launch management of new products that stimulate customer adoption and market diffusion (Ledwith et al., 2011; Pitta & Pitta, 2012). The launch of the mobile banking service may increase the uptake of banking services in Ethiopia, with the increased penetration rate of mobile phone subscribers. As of 2014, there were about 28.3 million mobile phone subscribers in Ethiopia, recording an annual growth rate of 19.2% (Getnet, 2014). The mobile phone

subscribers' penetration rate is increasing in each year. In 2014, the mobile phone penetration rate reached at 33.3% (Getnet, 2014). The growth of mobile phone subscribers in Ethiopia presents an opportunity for the development of the mobile banking service.

Technology Acceptance Model (TAM)

Technology acceptance model is a theoretical model, adopted from the theory of reasoned action used to explain users' acceptance of a new technology (Abadi, Forghani, & Kabiry, 2013; Al-Akhras et al., 2011). First introduced in 1986 by Davis (1989), the theory has proven to be a useful theoretical framework (Chan, Chong, & Ooi, 2012; Li & Zhang, 2011). Davis used earlier research from various scholars to conjecture that perceived usefulness and perceived ease of use constructs were essential in users' decisions to adopt information technology. However, usefulness was significantly linked to usage than was ease of use or implementation of a technology (Lin, 2013; Sheng et al., 2011).

Existing literature showed that TAM was the main model used in predicting and explaining information system adoption (Abadi et al., 2013; Lin, 2013; Tobin, 2012; Zhang et al., 2013), such as mobile banking adoption. For example, Amin, Anis, Lada, and Mohd (2008) used TAM as the base theoretical foundation to conduct a study on mobile banking adoption in Malaysia. Data were retrieved and analyzed data from banks customers in Malaysia Berhad. The results were that perceived usefulness and perceived ease of use were strong determinants of behavioral intention to adopt mobile banking (Amin et al., 2008). Perceived credibility, the amount of information on mobile banking,

and normative pressure are significant factors in explaining the acceptance of mobile banking (Amin et al., 2008). Abdul and Manan (2013) used TAM as a theoretical foundation to conduct a study on mobile banking in Pakistan. Data were gained from 372 respondents in the biggest cities of Karachi and Hyderabad (Abdul & Mann, 2013). The results revealed that consumers' intention to adopt mobile banking services was significantly influenced by social influence, perceived risk, perceived usefulness, and perceived ease of use. The most significant positive impact was of social influence on consumers' intention to adopt mobile banking services.

Because this study focused on bank managers and not the end users of the mobile banking service, the TAM was only relevant from the testing stage. The stage was characterized by conducting product and market tests for conformity with earlier predictions, assumptions and deductions of the product (Johnson & Jones, 1957). The TAM was the main model used in predicting and explaining information system adoption (Abadi et al., 2013; Lin, 2013; Tobin, 2012; Zhang et al., 2013) such as mobile banking adoption. At the testing stage of the NPD, bank managers would conduct tests in conformity with the mobile banking service performance assumptions (Johnson & Jones, 1957; Ledwith et al., 2011; Pitta & Pitta, 2012).

Overview of Mobile Banking and Mobile Phones

Mobile phones have radically altered the lives and of how people communicate across the world (Srivastava, 2013). As cell phones usage spread to the poorest parts of the world, a new economic benefit is obvious (Agwu & Adele-Louise, 2014; Comninos, Esselaar, Ndiwalana, & Stork, 2008). Mobile services can effectively replace physical

transportation or specific transactions (Mburu, 2012; Prabhu & Vijaya, 2014). Where purchasing of goods and services had to be done physically, mobile banking is evolving towards a lifestyle and convenience proposition, with innovation commonly developed around transportation, retail, financial services and commerce (Mburu, 2012; Prabhu & Vijaya, 2014).

Mobile phones create an easy and inexpensive channel for delivering financial services to unbanked people, without requiring a traditional bank and the associated high operational costs (Bhuiyan, 2004; Mirabaud, 2010). In addition, in continents such as Africa, only 15-20% of families have a formal bank account (Balogun, Aijiboye, & Dunsin, 2013). Accordingly, mobile phones can act in favor of the unbanked poor population. The inclusion of the unbanked population into the formal economy is a real possibility by using mobile services (Berger & Nakata, 2013; Tobin, 2012). Transacting with mobile services can also generate a personal record that can act as a basis for assessing creditworthiness and accessing micro-loans or other financial services (Reeves & Sabhawal, 2013; Srivastava, 2013). Pioneering projects in India, the Philippines, and Kenya on domestic and international remittances, have proven economically viable (Kweyu & Ngare, 2014; Mburu, 2012; Prabhu & Vijaya, 2014). Kenya's largest mobile operators, Safaricom and Vodafone, launched M-PESA in 2007. The M in M-PESA is for mobile and PESA is a Swahili word for money. The M-PESA service is one of the first mobile money transfer services in the east African region. Within 5 years, M-PESA provided services to 15 million Kenyans (more than a third of the population) and serves as conduit for a fifth of the country's gross domestic product (GDP; Berger & Nakata,

2013; Hoon et al., 2013; Kesenwa et al., 2013; Mburu, 2012; Lawuo et al., 2013; Nanjala, 2013).

On average, four out of 10 people in emerging markets have no bank account (Berger & Nakata, 2013; Dikit et al., 2012; Lawuo et al., 2013). A great potential for the development of mobile banking exists in these countries, since there are few computers connected to the Internet, as opposed to widespread cell phone penetration **(**Abadi et al., 2013; Heyer & Mas, 2011; Laukkanen, 2007; Nanjala, 2013). Only 20% of African households have bank accounts (Kesenwa et al., 2013; Mburu, 2012). The limited access to financial services in Africa originates from deficient infrastructure, physical-geographical inaccessibility, financial illiteracy, all of which increase the cost of providing banking services (Ahmad & Singh, 2012; Kesenwa et al., 2013; Lawuo et al., 2013; Reeves & Sabhawal, 2013; Srivastava, 2012; Tobin, 2012). Ethiopia, Uganda, and Tanzania for instance, each have less than one bank branch per every 100,000 people compared to 100 people per bank branch in Spain (Balogun, Aijiboye, & Dunsin, 2013). Sub-Saharan Africa has the lowest deposit institution penetration in the world averaging 16.6%, compared to 63.5% in developing countries, with most of the deposits being held in commercial banks (Agwu & Adele-Louise, 2014; Maurer, 2012; Mburu, 2012). An emerging market like Brazil has 154 million cell phone users, which means approximately 80% mobile penetration rate (Comninos et al., 2008; Cruz et al., 2010; Hoon et al., 2010).

The number of mobile phone subscribers in Africa more than doubled from 246 million in 2008 to 500 million (Agwu & Adele-Louise, 2014; Balogun et al., 2013).

Nigeria has more than 75 million mobile phone subscribers (Agwu & Adele-Louise, 2014; Balogun et al., 2013). In some of the least developed regions, such as parts of sub-Saharan Africa, there are much higher levels of mobile access available compared to other basic services, such as electricity, sanitation and financial services. For example, in Nigeria, 56 million people live without access to electricity, and 38 million live without access to clean water (Agwu & Adele-Louise, 2014; Balogun et al., 2013; Lawuo et al., 2013). However, estimates are that more than 90% of the population has access to a mobile phone network (Balogun et al., 2013; Lawuo et al., 2013).

Mobile phones have the potential to provide unbanked populations with services, such as the ability to deposit, withdraw or transfer money, pay bills, obtain credit, and purchase other goods and services, such as insurance (Berger & Nakata, 2013; Lawuo et al., 2013). The challenge was to explore the necessary strategies banks needed to implement to enable the unbanked communities' access the needed financial services (Chin et al., 2012; Lin, 2013; Mburu, 2012).

Trends in the Utilization of Mobile Banking and Payments

Mobile banking has the potential to revolutionize the customer experience in personal financial services, with nonbank organizations often leading the way (Keramati et al., 2012; Kesenwa, Oima, & Oginda, 2013). Mobile banking offers great opportunities for financial institutions to expand their market share and for unbanked to participate in the global financial system (Berger & Nakata, 2013; Dikit et al., 2012; Hinson, 2011). Usage of smartphones is increasing, while new applications are proliferating and banks across Europe are mobilizing to respond to the growing mobile opportunity (Berger &

Nakata, 2013; Kang & Kim, 2012; Keramati et al., 2012). Embracing of mobile banking services is on the increase, with an increasing number of mobile phone users enroll in mobile banking services (Berger & Nakata, 2012). As the smartphone users are continuously increasing, so will mobile banking users. Services like mobile banking allow customers to get account facts and do transactions and allow consumers to make payments & transfers (Ahmad & Singh, 2012; Comninos et al., 2008; Tobin, 2012). Dittus and Klein (2011) attest that there is an increased use of mobile phones and of smartphone users for mobile banking services since 2010. The presence of mobile banking by 2012 had risen; 28% of mobile phone users and 48% of smart phone users (Hoon et al., 2013). In 2013, mobile disbursement services noted growth with increased access to locations for retail customers (Neil & Pénicaud, 2014).

Types of Mobile Services

Mobile banking is a system wherein the customers are allowed to do financial transactions through a device called mobile or personal digital assistant. Mobile banking services are easily accessible to everyone irrespective of their income groups (Keramati et al., 2012). There are various types of mobile financial transactions and services and the services are expanding with the technological advancements. Mobile financial services can be divided into mobile banking and mobile payment:

Mobile Payment. Mobile payment refers to the range of mobile commercial services involving payment transactions initiated or confirmed by using a mobile phone. The use of mobile telephony is very helpful in the field of micropayments. Small purchases of goods or services are increasingly operated via the mobile phone. Credit

card processing is not a viable option for small payments because of the minimum credit card transaction costs. Mobile payment systems have inherent advantages achieving low transaction costs (Cobert, Helms, & Parker, 2012). In promoting the business, many of these services were initiated as complimentary offers to attract their usage to the consumers. Some service providers avail cheaper alternatives to collect dues from customers regularly so as to sustain the cost of servicing consumers who pay via mobile phones (Boateng & Duncombe, 2013).

Mobile banking services. Mobile banking includes the broad range of services available in banking operations. Mobile banking services are regulated similarly to traditional banking practices in the sense that the same regulatory and supervisory treatment applies to them. Regulations empower national authorities to supervise the financial markets (Darballey & Weber, 2010). These are services wherein mobile money may be connected to a bank account, which gives the user a variety of transaction options that they would otherwise access at a bank branch. Mobile money users can withdraw money from some ATMs instead of going to a mobile money agent. This proposition however works only in areas where ATMs are available (Maurer, 2012). The bank accounts on mobile phones allow a user to move funds across two accounts through its linkage to core bank technology platform. Mobile banking transactions could be carried out domestically across different national borders (Li & Zhang, 2010). In the east African countries, there are huge benefits in mobile money service especially for the low-income groups and village populations.

Mobile financial services can indeed have enormous social and economic benefits (Mburu, 2012). Traditionally, people who want to send money need to travel to deliver the cash in person or ask an intermediary, such as a taxi driver, to deliver the money (Darbelley & Weber, 2012). Mobile payment can make it easier, quicker, cheaper and safer to transfer money while allowing customers to pay money into the system by handing cash to an agent, usually a mobile operator's airtime seller, who credits the money to the customers' mobile-money account. Customers can transfer money with the help of a short message service (SMS) containing a special code, which can be taken to an agent to withdraw cash. Therefore, non-banks are deeply involved in offering mobile financial services. Launched in 2007 by Safaricom, Kenya's largest mobile operator, M-PESA has in 2009 nearly 7 million users, is a country of 38 million people, 18.3 million of whom have mobile phones (Lawuo et al., 2013; Mburu, 2012; Reeves & Sabhawal, 2013; Srivastava, 2013). M-PESA is primarily used to transfer money, bill pay, and for deposits. Poor people generally save for unexpected events and for safety of monies in unsafe communities. Therefore, mobile financial services offer a more reliable alternative (Maurer, 2012; Tobin, 2012). The different kinds of technological innovations have made a paradigm shift in the banking sector (Sheng, Wang & Yu, 2011). E-banking encompasses Internet banking, ATM banking, mobile banking, television based banking, PC banking and online banking (Keramati et al., 2012).

Empowering Environment for Mobile Financial Services

In the developing world, mobile-money schemes are very innovative. Mobile payment especially benefits from a favorable environment in the developing countries

having less experience with traditional banking services (Darballey & Weber, 2010). Policy makers and regulators can control and impact market development of mobile banking (Heyer & Mas, 2011). The regulators of mobile banking services build a transparent and fair ground for both banks and non-bank providers to reach out to consumers efficiently (William & Suri, 2014).

For the mobile banking services to grow in a country, there are major guidelines that may help to build an enabling policy and controlling environment (Berger & Nakata, 2013). Further, vital constituents that will impart transparency and surety for future growth of mobile banking operations should be considered to ensure sustainable mobile banking services in a country (Darballey & Weber, 2010). Policymakers, controllers, and service suppliers should engage in working together (Dass & Muttukrishnan, 2011). In fact, the most essential regulatory problem relating to rivalry in mobile banking is interoperability – user ability of one mobile banking service to communicate directly with users on another system (Gunnar, 2014). Two types of interoperability are relevant here: exchanging and using information between mobile network operator (MNO) payment systems and exchanging and using information between MNO payment systems and banks (Dittus & Klein, 2011). The issue of exchanging and using information in heterogeneous network when compared to ICT networks is extremely pertinent to the mobile banking context. The challenge with mobile money is that it can be exchanged only within a specific network hence mobile money framework is still regarded as an enclosed park (Prabhu & Vijaya, 2014). The controlling threats needs to be ascertained and pacified by the regulators (Darballey & Weber, 2010). The interoperability of mobile

banking services could be beneficial for both end-users and mobile money banking service providers. The key lies in identifying when and how interoperability could make business sense for suppliers, and thus result in value for end-users (Prabhu &Vijaya, 2014). The role of an enabler should be played by the administrator and aid the suppliers in building the protocol which will be mainly accountable for designing and executing in a considerable manner (Klein & Mayer, 2011). The benefits of exchanging and using information will transpire mainly from old mobile money operations like from the ones with an operating agent or third party channel and a lively consumer base (Heyer & Mas, 2011). The exchanging and usage of information across networks can be of importance only if various types of transactions could be carried out and a deep customer base (Heyer & Mas, 2011). The service providers face many challenges in the emerging markets, including technical explanations, business consensus, and functional methods (Dittus & Klien, 2011). The cost of these challenges should commensurate with the value to the business (Maurer, 2012). Mobile banking providers also need to be aware of making an agreement and to share revenues and costs, customer fees disclosure policies, and the alternative system available to end-users (Cobert et al., 2012). The policymaker drives financial inclusion, which helps to ensure that the interoperability does not erase the healthy rivalry (Gunnar, 2014).

As the mobile banking business is still emerging, it is difficult to ascertain whether interoperability would really decrease costs and widen the customer base (Heyer & Mas, 2011). As a matter of fact, high market share does not necessarily depict that consumers are paying more prices, that rivalry and product ideation is being subdued, or that the

company with high market share is not taking advantage of the market opportunity. For any regulatory intervention, timing and cost-effectiveness must be carefully looked at, and market-led solutions should be the chosen option (Klein & Mayer, 2011)

Financial Sector and Financial Inclusion in Ethiopia

The Ethiopian financial sector has evolved through three major stages; first, financial repression and fostering state led industrial and agricultural development through preferential credit (in the socialist regime); second, market-led development through liberalization and deregulation (post-1991); and third, financial inclusion through allowing private banks and microfinance institutions (MFIs) since second half of 1990s (Getnet, 2014). The Ethiopian financial sector consists of three public banks one including the Development Bank of Ethiopia (DBE), 16 private banks, 14 private insurance companies, one public insurance company, 31 microfinance institutions and over 8,200 Saving and Credit Cooperatives (SACCOs) in both rural and urban areas. The financial sector is closed to foreign players only restricted to local Ethiopians (Getnet, 2014). The government owned Commercial Bank of Ethiopia (CBE) is the dominant commercial bank and accounts for 70% of total assets of banks as of May 2013. The balance, 30%, is accounted by the other 15 banks (Getnet, 2014).

The entry of the private sector in the financial sector has created better opportunities for enhanced access to financial services in the country directly through their operations and indirectly through the spillover effect on public financial institutions (Getnet, 2014). The Ethiopian financial sector is not diversified in terms of the type of financial institutions and the type of financial products and services being delivered. The

financial service is dominated by a cash based system. There is no active stock market and the financial market comprising the interbank money market, foreign exchange market, and bond and treasury bills market is at an infant stage supporting very limited transactions (Getnet, 2014). The financial sector in Ethiopia is highly regulated and completely closed from foreign companies.

The success of financial institutions facilitating financial intermediation depends on their capacity to assess the benefits and costs of the service, to develop suitable financial products that meet customers' needs and to monitor or avail credit. Despite the expected impact of financial intermediation in economic development, the level of financial intermediation is quite low in Ethiopia (Getnet, 2014). The ratio Private sector credit to GDP reduced from 19.3% in 2004 to 13.9% in 2011 (Getnet, 2014). The reduction of private sector credit to GDP is contrary to a rising trend in SSA (Getnet, 2014). The SSA average has increased from 15.6 to 22.7% during the same period.

Over 79% of total credit disbursed by the banking sector in 2012/13 went to the public sector while only 21% went to the private sector (Getnet, 2014). This distribution of credit in the financial sector is a disincentive towards Ethiopia's financial deepening and inclusive growth strategy, in addition to reduction in financial deepening in the country. The Government of Ethiopia plans to expand financial access amongst low income groups over the next 5 years (Getnet, 2014).

Financial inclusion is enabling access to financial services to the unbanked poor people who have no access to a formal banking system. Financial inclusion takes into consideration the relationship between financial services and inclusion, and how financial

regulation influences the size and composition of financial sector (Berger & Nakata, 2013; Boateng & Duncombe, 2013). In Ethiopia, one of the indicators for measuring financial services' access is the population per bank branch. The Ethiopian banking industry as a whole had a network of 2,323 branches as at September 30, 2014, in which the number of population being served by a single branch was around 37,861 (Getnet, 2014). In 2012, the commercial bank branch (per 100,000 adults) ratio was 2.94 which is lower than SSA, 3.71 (Agwu & Adele-Louise, 2014; Getnet, 2014). Ethiopia has one of the lowest financial inclusion ratios of SSA, with only 20% of the households having access to a bank account (Getnet, 2014). Importantly, most of the bank branches are found within the capital city than other parts of the country side where the 85% of the population reside.

Banks have still limitations in reaching out the unbanked population in Ethiopia. Access to finance is a major constraint for formal and informal sectors in the country. Limited access to and cost of finance has had an adverse impact for entry into the financial sector and be lucrative for the existing financial institutions. In 2013 only 7.1 million customers had deposit accounts, i.e., less than 8% of Ethiopians have a bank account (Getnet, 2014). The government of Ethiopia takes financial inclusion as a policy objective and has been trying to build inclusive financial systems in the financial sector so that financial institutions to reach out to the unbanked. Financial inclusion is stipulated in the country's five years growth and transformation plan (GTP). The plan targets to create 3 million jobs provide 15,000 hectare of land for working premises, construct shade and buildings in the plan period (Getnet, 2014).

For a country like Ethiopia, with a population of over 90 million people spread over a large geographic area, technology may hold the key for increasing financial inclusion, efficiency and gross domestic savings (Bhuiyan, 2004; Getnet, 2014; Heyer & Mas, 2011). Mobile banking is a countless way to financially include the unbanked population in countries like Ethiopia where there is low access to financial services (Mburu, 2012). The mobile banking development in Ethiopia is still in its infancy stage, with only 6 banks licensed in 2013 and 2 banks piloting the roll out of the service (Getnet, 2014). Currently, the mobile banking system in Ethiopia can be considered as accessing the core banking system within one bank, and not to other banks (Getnet, 2014; Lin, 2013; Mburu, 2012). Hence, only a customer of a given bank can access some banking services via his/her mobile phone. The mobile banking service in Ethiopia is endowed with huge potential as the sector remains untapped (Getnet, 2014). For the banked customer mobile banking mostly creates convenience and for addressing financial inclusion, mobile money (e-wallet) plays vital role, which may impact expanding access to finance (William & Suri, 2014). As of 2014, there were about 28.3 million mobile phone subscribers in Ethiopia, recording an annual growth rate of 19.2% (Getnet, 2014). The mobile phone subscribers' penetration rate is increasing in each year. In 2014, the mobile phone penetration rate reached at 33.3% (Getnet, 2014). The growth of mobile phone subscribers in Ethiopia presents an opportunity for the development of the mobile banking service.

Information and Communication Technology (ICT) Developments in the East Africa

The ICTs can be implemented effectively to provide financial service innovations to the poor who live in developing countries, a market collectively known as the base of the pyramid (Berger & Nakata, 2012). The need for collaboration between the two regulators, which are communications and financial, are increasingly becoming critical in the development of mobile financial services (Klien & Mayer, 2011). While one is an expert at the financial aspects of mobile money, the other regulator understands the facilitating technology better. At present, in the entire east African region, personal contacts do exist amongst the two types of regulators. With the fast growth mobile financial services, new regulators may have to join the industry, as it attracts more sectors of the economy (Neil & Pénicaud, 2014). The mobile financial services regulator in Ethiopia regulates the interconnection between the mobile banking and networks within east Africa. The major challenges related to the information communication technology are harmonized by posing different legal and regulatory systems in the particular region and the different business models, technologies, mobile banking forms and functionalities need are clarified at the time of utilizing mobile financial services within the sector (Neil & Pénicaud, 2014). The main key areas have been particularly important for the economic and regulatory environments in east Africa, and it is indicated that the expansion of mobile technology and information communication technology are interrelated especially mobile money. The major factors are considered very important for the mobile market landscape, concentration of market, skills of technology users, penetration of mobile technology, and potential size of mobile financial services within the market. The mobile financial services can be utilized with mobile phone usages with

the use of agent, predictor of utilizing the mobile finance and related services. The east African region is considered as large network and it is more likely to have more and more mobile financial services users with the same level of penetration in the mobile market (Corbert et al., 2012; Heyer & Mas, 2011). There are various network effects within the information communication technology and with the growing network, the mobile money transactions are also increasing in a considerable manner. The technological development in context to mobile financial services are very costly and considered as a time consuming process but convenience factor is very high and therefore, it is establishing and developing in various regions (Ha et al., 2012; Mburu, 2012). There are different mobile money schemes in the east African region and they have advantage while launching their services. The mobile financial services offer various technological advancements and new possibilities for financial service including the financial and banking services (Heyer & Mas, 2011). Huge investments have been made for creating better mobile networks and reach further into marginalized areas and satisfy the need of customers within the market (Dittus & Klein, 2011). The traditional mobile services are declining with the development of mobile financial services, and at the same time, there are various business partners who are getting involved in the new platform of mobile money and related financial services (Amin et al., 2012). In addition, the wide range of mobile banking services are also developing within the region and the rapid growth in mobile financial services adds emergence and need for effective framework in east African region (Nanjala, 2013: Tobin, 2012). The legal regulators and government tend to look towards the developed information technology and mobile financial services (Neil

& Pénicaud, 2012). The east African region is at the forefront of mobile financial services with large number of implementations and as a result, the technological developments experiments with new business models and ways of conducting mobile financial services and to create more development opportunities in mobile banking within the region (Kweyu & Ngare, 2014) .

Legislative and Regulatory Frameworks for Mobile Financial Services in East Africa

It is important to understand the legislative and regulatory frameworks for mobile financial services in the east African Countries so as to establish mobile financial services within the market place (Darballey & Weber, 2010). The mobile financial services are related to the money transactions conducted through mobile phones and the study also presents the regulatory challenges, which can also hinder the potential benefits of mobile financial services within the country (Hanafizadeh, Behboudi, Abedini & Jalilvand, 2012). The mobile financial service distorts the independent regulations within the sectors and notably, the financial sectors (Darballey & Weber, 2010). It involves the overlapping between the multiple government agencies and multiple ministries and ultimately, adds complexity to the oversight within the sector (Laukkanen & Kiviniemi, 2010). The rapid growth of mobile technologies enables financial institutions like banks explore the emerging business opportunities to introduce more financial services to a varied customer base (Lawuo et al., 2013). The changing business models are leading towards the financial landscape and limited experience of legislative regulatory frameworks in the region leads to the negative concerns of mobile financial services (Lin,

2013). The national regulations have to be considered with the development in technological development and therefore, it is imperative to identify and address the gaps which overlap between the legislation and regulation related to mobile financial services (Kang & Kim, 2012).

Among various banking services, mobile banking is one of the most risky fields, which is prone to customer resistance (Laukkanen & Kiviniemi, 2010; Prabhu & Vijaya, 2014). There are also a number of challenges and risks involved with new technology and it takes time for users to become comfortable and embrace the change (Al-Akhras et al., 2011; Amin et al., 2012). Laukkanen (2007) carried out a qualitative in-depth study exploring the factors that create value perceptions in fund transfer service via personal computer and mobile phone. The results revealed that customer value perceptions in banking actions differ between Internet and mobile channels. The findings suggested that efficiency, convenience, and safety are salient in determining the differences in customer value perceptions between internet and mobile banking. For some people new technology will not replace the existing way they do their banking but will be an added service they can use (Lin, 2013; Mburu, 2012). This could be due to the fact that some people not having access to mobile phones or mobile communication being unaffordable especially in emerging markets like in SSA (Hinson, 2011; Lawuo et al., 2013). Importantly, some people prefer the face-to-face contact as they receive from personalized banking, and that may not be possible with mobile banking (Chong et al., 2012).

There are many risks in mobile banking as personal and commercial data is transmitted wirelessly and can be seen in some circumstances by third party

intermediaries or unauthorized individuals (Chin et al., 2012; Kang & Kim, 2012; Laukkanen & Kiviniemi, 2010). Legal aspects also have a role to play, as the relationship between the bank and its customers appears vague in mobile banking (Darballey & Weber, 2010). The security of financial transactions on mobile banking devices is a prime concern for customers of this service (Darballey & Weber, 2010; Sheng et al., 2011). The risk taking nature of entrepreneurship is also related to the relatively high risk of something going wrong with security in mobile banking systems (Abadi et al., 2013; Agwu & Adele-Louise, 2014). Many financial institutions recommend people take caution with mobile banking due to the security risks and regularly check their banking statements (Boateng & Duncombe, 2013; Dass & Muttukrishan, 2011). Some scholars have advanced concerns of mobile banking facilitating financial crimes like terrorism and other forms of violence through remittances to wrong parties (Chin et al., 2012). Nanjala (2013), in a study on impact of post-election violence and mobile banking services in Kenya, argued that mobile remittance services can be used to abet crimes. The results revealed that remittance flows to victims of violence increased in the aftermath of the 2007 post-election violence to hot conflict zones in the Rift Valley province. Mobile-money services, however, were not useful in terms of remittance receipts to victimized households.

Transition and Summary

In Section 1, the study includes the foundation of the study, background of the problem, purpose statement, assumptions, limitations, the significance of the study, and a review of the professional and academic literature concerning mobile financial services.

A discussion in Section 1 focused on how the method of qualitative research and case study design helped explore specific strategies bank managers utilized to introduce mobile banking services. Section 2 includes the process of obtaining, collecting, and analyzing data in the study. Section 3 includes an overview of the study and presents the findings from the research. A discussion in Section 3 focused on how the findings of the study affect professional business practices, present recommendations for action and future studies, and create positive social change.

Section 2: The Project

Section 2 of the study includes details of the research pertaining to strategies that bank managers in Ethiopia used to establish mobile banking services. I explain the process for collecting data, the methods used, and the selection of participants in collecting and organizing the information for the study. Ethical considerations, also discussed in this section, are very important and were taken cognizance of while conducting research (Young, 2011); I treated participants according to the ethical guidelines of the research study.

Purpose Statement

The purpose of this qualitative single case study was to explore the strategies bank managers used to establish mobile banking services to the Ethiopian community. The targeted population for the study comprised of Ethiopian bank managers. This population was appropriate for this study because local managers are responsible for the introduction of new banking services to a community. The introduction of this new banking system may lead to an increase in the number of jobs created from mobile banking agents, financial literacy, and prosperity in the Ethiopian community (Ahmad & Singh, 2012).

Role of the Researcher

As a researcher, I took adequate steps to ascertain that all data collected from participants were reliable and valid (Kemparaj & Chavan, 2013). According to Yin (2011), the role of the researcher is to inquire more, rather than accept accounts that identify everyday life experiences participants share with each other. I was aware of ethical dilemmas that could occur during the interview process. An interview with

participants required informed consent, confidentiality, and privacy. I selected and designed the study, collected the data, planed the approach, and secured IRB approval (12-18-15-0301086) from Walden University to conduct the study. The data collection process was to gather reliable and valid data from participant interviews with open-ended questions, recordings, journals, and documentation review (Marshall & Rossman, 2011). As guided by the Belmont Report, respect for individuals demanded that participants entered into a research program voluntarily and with good information about the research goals. I avoided generalizations, personal biases, and other nonethical considerations.

After living in Ethiopia for the last 2 years and working 15 years as a senior banker in many other developing countries in Africa and Asia, I was familiar with the banking industry and a variety of people participating in my research. The creation of professional relationships with three of the 20 potential participants while serving in the Ethiopian banking industry occurred 2 years ago (at the publication of this study). My professional relationship with some of the targeted participants did not produce biases that emerged in the analysis of the study, as I asked the same questions to all the 20 participants until no new answers were obtained (Ferguson & Jacob, 2012). The recruitment process consisted of an invitation letter and consent form (see Appendix C) sent to participants by face-to-face contact and e-mail.

The selected participants incorporated their experiences into the research as a means to understanding the phenomenon under study. The experiences of the participants assisted in describing the requisite steps for establishing the mobile banking service. Listening, thinking, taking notes, and asking probing questions helped improve the

quality of interview dialogue with the interviewee and added value to the research. I gathered information from participants and used the data to provide insight on strategies bank managers used to establish mobile banking services (Marshall & Rossman, 2011).

Participants

The current participants working for the selected bank assisted in creating a stronger understanding of how bank managers installed the new banking system. I selected participants from the leading private bank in Ethiopia, one that was the only private bank with the largest network across the country, and that was at the most advanced stage of rolling out the mobile banking service bank (Marshall & Rossman, 2011). The eligibility criteria for the 20 bank managers to participate in the study was they had to have (a) been working for the bank within the last 5 years, (b) exposure to electronic banking products, and (c) knowledge of the implementation of the mobile banking system. The sample size of participants was sufficient for gaining comprehensive knowledge of implementation of the mobile banking system. The sample size for a case study was reasonable enough to support collection of appropriate data (Yin, 2014). Purposive sampling of the 20 bank managers helped in the selection of participants and provided a solid understanding of the phenomenon.

The professional relationship shared with some of the participants, being in the same profession and industry, did not cause any bias when gathering information from face-to-face interviews or handwritten interview notes. I bracketed personal biases to ensure participants freely and objectively responded to the Interview Questions. I also gathered copies of archival materials, newsletters, review statements, e-mails, and

handouts (nonclassified) provided by the bank managers that would fit the needs of the study (Doz, 2011).

To gain access to the participants for the study, I contacted the bank president by phone to schedule a meeting to discuss the study in detail. A signed letter of cooperation (see Appendix B) from the bank president authorized permission to recruit and access 20 consenting bank managers, collect data, and conduct member checking with participants. Providing invitation letters and consent forms (see Appendix C) and face-to-face contact enhanced comprehension of study documents.

In the order of the returned signed consent forms, I assigned a code of P1, P2, P3, etc. to each participant or to their e-mail addresses. I also provided the date and time for returning all signed consent forms and my contact number to answer any questions pertaining to the invitation letter and their participation in the study. The objective was to obtain consent from participants with the understanding that all personal identifiable information was safe and confidential (Madil, 2011).

Research Method

The qualitative method is beneficial because a specific event is described (Marshall & Rossman, 2011). According to Yin (2011), there are five features of qualitative research to gain knowledge from the experiences of others: (a) studying the lives of people under real-world conditions and providing meaning from the information collected, (b) representing the views and perspectives of participants in the study, (c) covering the contextual conditions of the participants' lives, (d) contributing insights into existing or newly emerging concepts by adding insight to the social behavior of humans,

and (e) striving to use multiple sources of data and not on a single source alone. Hence, the qualitative method was the most appropriate for this study.

Because of the lack of numerical data and the blending of quantitative and qualitative data, quantitative and mixed method research were not appropriate for this study (Arghode, 2012). Quantitative method uses surveys and experimental designs on a sample of a population in numeric form to generalize about the population (Markov & Crestani, 2014). Mixed methods is a combination of quantitative and qualitative approaches in the research process and was also not appropriate for this study (Palinkas et al., 2011). The qualitative method was the best choice, and I worked through interviews to describe the experiences of the study population (Marshall & Rossman, 2011).

Research Design

The importance of investigating a contemporary phenomenon in-depth, especially when the boundaries between the phenomenon and context were not evident, was the basis for using the case study design (Yin, 2014). The purpose of the case study design was to investigate and provide a description of individual cases or multiple cases that focus and examine everything within a particular phenomenon (Cronin, 2014). For this research study, a case study design was more appropriate than phenomenological design, ethnographic design, grounded theory, or narrative design since the case study is an approach to research exploration of the phenomenon. The case study design was appropriate for performing research pertaining to what strategies bank managers used to introduce a new mobile banking system. Data saturation occurred when there was no new information occurring, no new coding, or new themes happening (Marshall & Rossman,

2011). While using the case study design in the study, I conducted data saturation until no new information emerged, fewer surprises emerged, and the achievement of data saturation was completed (Yin, 2014). A phenomenological design would not have been appropriate as it examines human experiences, has intentionality of consciousness, and often includes philosophical presuppositions about phenomenology and the denial of subject-object dichotomy (Marshal & Rossman, 2011). An ethnographic design involves the collection and analysis of data about cultural groups (Cruz & Higginbottom, 2013). Grounded theory research incorporates the views of a large number of participants into common enlightenment of a process or activity and strives to create or recognize a theory (Marshall & Rossman, 2011). Grounded theory design is the discovery and development of a theory that verifies data pertaining to a specific phenomenon (Lawrence & Tar, 2013). Grounded theory is not suitable for DBA research since it discontinues the usage of theoretical ideas in order to create sensible and substantive theory. Narrative design collects and analyzes individual's narrative accounts of a particular phenomenon (Etherington & Bridges, 2011) and was not suitable for this study. The case study design focuses on exploring the phenomenon through an in-depth process and analyzes specific events by individuals or groups (Marshall & Rossman, 2011).

Population and Sampling

The focus of the study was to understand the strategies bank managers used to introduce the new mobile banking system to the Ethiopian community. The eligibility criteria for the 20 bank managers to participate in the study was (a) working for the bank within the last 5 years; (b) exposure to electronic banking products; and (c) knowledge of

the implementation of the mobile banking system. The sample size of participants was sufficient for gaining comprehensive knowledge of implementation of the mobile banking system (Suri, 2011). I used purposive sampling. Purposive sampling of the 20 bank managers helped in selecting of participants and provided a solid understanding of the phenomenon. The sample size for a case study was reasonable enough to support collection of appropriate data (Yin, 2014). When conducting face-to-face interviews, each participant was interviewed individually at their office in the bank premises. If for any reason the participants chose not to participate in the research study, a snowball sampling technique would have been used as the alternative sampling strategy (Marshall & Rossman, 2010; Yin, 2011).

To gain access to the participants for the study, I contacted the bank president by phone and scheduled a meeting to discuss the study in detail. A signed letter of cooperation (see Appendix B) from the bank president authorized permission to recruit and access consenting participants, collect data, and conduct member checking with participants. Providing invitation letters and consent forms (see Appendix C) to participants by face-to-face contact made the course of action easier when responding to all questions relating to the invitation letters, their participation, the study, and consent forms.

During the meeting, I explained the purpose of the invitation letter, bank managers' participation, the study, the consent form, and answered any questions relevant to the invitation letter. I assigned a code of P1, P2, P3, etc. to each participant or to their e-mail addresses. I also provided the date and time for returning all signed consent forms. I

ensured that data saturation was taken into consideration while interviewing participants. Data saturation occurred when the same themes continued to show up and no new information was generated within the responses of the interview questions (Marshall & Rossman, 2013). Handwritten notes during the interviews also assisted me in detecting data saturation while listening to each of the recorded interviews (O'Reilly & Parker, 2013).

Ethical Research

Ethical considerations are very important while conducting research and I treated participants according to the ethical guidelines of the research study (Young, 2011). Upon IRB approval, I selected the targeted organization cases and invited potential participants to participate in the study. To obtain full informed consent from the participants, I provided invitation letters and consent forms (see Appendix C) to the participants by face-to-face contact or e-mail. Face-to-face contact with the participants assisted in responding to questions relating to the invitation letter and the consent form. A signed letter of cooperation (see Appendix B) from the bank president authorized permission to recruit and obtain access to the consenting participants. I met the participants from their offices in the bank premises and explained the purpose of the study and answered any questions pertaining to the invitation letter, their participation, the study, and consent form. To ensure the participant's identities were free from exposure; after securing signed consent from the participants, a code of P1, P2, P3, etc. was assigned to the participants in the order the letters of consent are returned.

As guided by the Belmont Report, I ensured that all participants were autonomous, with the capacity to comprehend information being sought, and had ability to make decisions independently without coercion (Belmont Report, 1979). The invitation letters and consent forms invited and obtained the consent of the participants with the understanding that all information personally identifiable to the participants was safe from exposure and exploit in the study. The participants had the option to withdraw from the study at any time. Should a participant have declined to continue in the study, they could verbally opt out of the study and I would disregard all information and data pertaining to their participation. I did not provide incentives to participants for participating in the study (Doz, 2011; Young, 2011). I did not disclose names of participants of the study and each participant was assigned a code of P1, P2, P3, etc. for identity protection. The participants requested a summary of the research findings to keep for their records. All of the gathered responses of the participant interviews and organizational information will remain in my possession password protected in a safeguarded file for a period of 5 years (Chenail, 2012).

Data Collection Instruments

In qualitative research, I was the human instrument for data collection. As an instrument, I built on research ideas and theories from a various sources (Doody & Noonam, 2013). Additional instruments used were interviews, hand written notes, and recordings. The data collection was a vital process of conducting the research as it provided the ways of collecting data within the research study (Yin, 2014). I interviewed 20 participants. Bailey (2012) attests that case study normally begins with first-person

accounts or experiences that determine the data. The main objective of the face-to-face semistructured interviews was to learn what strategies bank managers would utilize in introducing the new mobile banking service to the Ethiopian banking community (Madill, 2011).

The data collection process contained semistructured interviews (see Appendix A) that use open-ended questions, which generated in-depth responses from bank managers interviewed for the proposed study (Madill, 2011). I used a tape recorder to capture the interviews and participant responses and organized data using the Atlas.ti 7 software computer based program (Gordon, 2012). Each individual interview session took place at the participant's offices in the bank premises. I provided invitation letters and consent forms (see Appendix C) to participants of the study. In the order of the signed and returned consent forms, I assigned a code of P1, P2, P3, etc. to each participant. At the start of the interview recording, the day, date, time, and the participant's assigned code (P1, P2, P3, etc) were stated. The participants were informed during the interview that I would take notes of the interview recording session in my interview notebook to remind me of specific items for interpretation. After recording each interview, the participants were reminded that I would contact them again by phone or e-mail (as appropriate for the participant) to review with them my interpretation of their responses, provide them with an opportunity to make corrections on any errors and for member checking. Member checking enhances the reliability and validity of the data collection instrument of semistructured interviews (Marshall & Rossman, 2011). Member checking allowed the participants and me to discuss the outcome of the process leading to interpretations of the

collected data. The discussion between the participants and me provided an assurance that validity and reliability were a part of the research. I kept data saturation in mind while interviewing participants. Data saturation occurred when the same themes continue to show up and no new information was revealed within the responses of the interview questions (Marshall & Rossman, 2013). Handwritten notes during the interviews supported, detect data saturation while listening to each of the recorded interviews (O'Reilly & Parker, 2013).

Data Collection Technique

The purpose of this qualitative case study was to explore the specific strategies Ethiopian bank managers used to establish mobile banking services to the Ethiopian community. The overarching research question was: what were the specific strategies bank managers needed to establish mobile banking service into the community in Ethiopia? Data collection process pertaining to the research question resulted from face-to-face semistructured interviews, handwritten interview notes, and any copies of archival materials, newsletters, review statements, emails, and handouts (nonclassified) provided by the bank managers (Fassingner & Monow, 2013). The semistructured interview with open-ended questions related to the strategies bank managers utilized in implementing the new mobile banking service (Amerson, 2010). In the study, open-ended questions assisted in the collection of data from the semistructured interview questions (see Appendix A). A strength that the interview process provided to the study was structure and direction to the interview conversations and permitted the use of open-ended questions to extract the views and experiences of participants (Marshall & Rossman,

2011). The interviews elicited in-depth information by using the guided conversation method (Yin, 2011). Weakness within the interview process would be displayed when the interview process was not structured correctly and the questions asked are closed ended (Friborg & Rosenvinge, 2013). This being an exploratory case study, I did not conduct a pilot or field test (Marshall & Rossman, 2011).

I kept all handwritten interview notes pertaining to the subjects of the proposed study in a notebook (Fagermoem & Strom, 2012; Tessier, 2012). Copies of archival materials, newsletters, review statements, emails, or handouts (nonclassified) provided detailed information on mobile banking, and the strategies bank managers used in introducing this service. In case studies, multiple sources of data serve to corroborate evidence gathered from other sources (Yin, 2011). An advantage of using copies of the documents in the study provided detailed information on mobile banking implementation strategies within the Ethiopian banking industry, outside of the semistructured interviews and handwritten interview notes (Markov & Crestani, 2014). A disadvantage of using copies of the documents was the concern of bias selectivity of the information especially if the collection was incomplete (Yin, 2014).

Member checking allowed the participants and me to discuss the outcome of the interview process leading to interpretations of the accumulated data (Henderson & Rheault, 2004). Member checking established validity of the data collection instrument of semistructured interviews and gave participants opportunity to correct errors or challenge what are perceived as wrong interpretations (McConnell-Henry, Chapman, & Francis, 2011). I contacted each participant and shared the results of the interview giving them an

opportunity to make corrections or validate their responses as part of member checking (Marshall & Rossman, 2011). I concluded the member checking after validating all responses from participants**.** Possessing a clear understanding of the participant's experiences helped gain stronger knowledge in understanding of the strategies bank managers used in introducing the new mobile banking service. This also assisted in understanding the process of installing this new banking service to the banking community and importantly gave ground to relating to social change in the study.

Data Organization Techniques

Data organization is essential for understanding and organizing data gathered from the participants' (Yin, 2014). Data organization commenced after transcribing the interview responses. I labeled the tapes and transcripts file to ensure clear identification of information (Gordon, 2012). Additionally, I backed up information obtained from interview transcripts in computer files on a separate personal computer, password protected to ensure data preservation. I created a journal file containing field notes taken during the interviews in categories and descriptions from interview responses organized by the computer based Atlas.ti7 software program (Robinson, 2014). I created a master list of themes that identified all data and its file location to enable easy information retrieval.

The semistructured interviews supplied information from participants regarding the focus of the proposed study (Ferguson & Jacob, 2012). Each participant in the proposed study was asked the same questions in the same sequence (Yin, 2014). The

participants' responses were labeled with the code of P1, P2, P3, etc. The codes were assigned to the participants in the order the letters of consent that were returned.

Handwritten interview notes contained insights and detailed information that included responses from the interview (Fagermoen & Strom, 2012). A combination of handwritten interview notes with the recorded semistructured interview responses improved data management (Tessier, 2012). Handwritten interview notes helped enhance the quality of recorded responses of the participants by correlating information that related to the participant code during the data analysis process (Rabinovic & Kacen, 2013; Tessier, 2012).

The copies of archival materials, newsletters, review statements, e-mails, or handouts (nonclassified) assisted in broadening the scope of the study (Yin, 2014). I reviewed the collected documents separately in order to extract key themes related to topic of the study (Markov & Crestani, 2014). Copies of archival materials, newsletters, review statements, emails, or handouts (nonclassified) were organized using the Atlas.ti 7 software program. The information generated from the software program for the sole purpose of the proposed study was password protected and safeguarded in a secure computer storage file inside a lock box for a period of 5years then destroyed.

Data Analysis Technique

In the study, semistructured interviews of 20 experienced bankers and archival sources formed a foundation for the study and data analysis (Yin, 2014). I analyzed the interview transcripts, assigned codes and developed emerging themes in order to describe segments of the data (Robinson, 2014). The themes and participants' responses addressed

the central research question. Documenting the data analysis process provided evidence that justified the findings of the study (Cambra-Fierro & Wilson, 2011). Data analysis incorporated already produced data to create a new methodological understanding (Irwin, 2013). Following the first step of evaluating the collected data, the next step required the organization and coding of the data gathered from the recorded face-to-face interviews, handwritten interview notes, and any copies of archival materials, newsletters, review statements, e-mails, or handouts (nonclassified) after downloading and scanning them into the Atlas.ti 7 software program. Linking the participants recorded interviews and handwritten interview notes with their assigned code of P1, P2, P3, etc. ensured all personal information was confidential. Coding of the interviewees responses, handwritten interview notes, and copies of archival materials, newsletters, review statements, e-mails, or handouts (nonclassified) using the Atlas.ti 7software program extracted keywords, phrases, and statements from the participant's downloaded data and scanned any copies of archival materials, newsletters, review statements, e-mails, or handouts (nonclassified). The third step consisted of grouping the keywords, phrases, and statements into themes. The fourth and final step involved the preparation and development of interpreting the data. Following the initial interpretations, member checking was conducted. I ensured the results of the study reflected the reality by conducting member checking anytime during the study (Henderson & Rheault, 2004). Collecting and analyzing the data contributed to examining the relationships and meaning of the data as well as revealing properties, repeated patterns, expressions, phrases, and statements helping in the creation codes and themes (Robinson, 2014).

The Atlas.ti 7 software had the features of transcription, organizing, coding, and analysis of the participants recorded face-to-face semistructured interviews, handwritten interview notes, and copies of archival materials, newsletters, review statements, e-mails, or handouts (nonclassified) (ATLAS.ti Scientific Software Development GmbH, n.d). I downloaded the participants' recorded face-to-face interview responses and scanned handwritten interview notes and copies of archival materials, newsletters, review statements, e-mails, and handouts (non-classified) into the Atlas.ti 7 software program. The analytical tool labeled Document Cloud View presents the entire textual database of downloaded transcribed interviews, handwritten interview notes and copies of archival materials, newsletters, review statements, e-mails, and handouts (nonclassified) in a number of code usages or number of linkages to other types of codes. The software, Atlas.ti 7, assisted to identify additional themes and codes amongst the research findings. Using the Atlas.ti 7 software program as an analysis instrument helped create a detailed synopsis of the proposed study's findings and analyzed the findings relative significance to the research questions presented in the study.

In enhancing confidence of the research study, I used data triangulation. Triangulation refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings (Denzin, 1978). Denzin (1978) identified four forms of triangulation: (a) data triangulation, (b) investigator triangulation, (c) theoretical triangulation, and (d) methodological triangulation. In methodological triangulation, the researcher would use interviewing, observation, document analysis, or any other feasible method to assess the situation

(Denzin, 1978). I collected data from face-to-face interviews of 20 bank managers at different times, handwritten interview notes, and any copies of archival materials, newsletters, review statements, e-mails, and handouts (non-classified). This derived the common traits across settings, and which characteristics were unique to certain contexts (Denzin, 1978).

The theory I used in the study was the NPD theory. The semistructured interview questions of this proposed study addressed the NPD (Amerson, 2011). The participant's responses helped me to understand what strategies bank managers utilized in introducing the new mobile banking service. The information generated from the Atlas.ti 7 software program for the sole purpose of the proposed study was password protected and safeguard in a secure computer storage file inside a lock box for a period of 5 years.

Reliability and Validity

The consistency of the research method throughout a study improves reliability. A reliable study is consistent with the research method to reduce uncertainty and increase credibility (Svensson & Doumas, 2013). Validity requires the evaluation of the proposed interpretations and ensures credibility (Newton & Shaw, 2013). The validity of the data provides an assessment of the consistency of the interpretations and creditability of its inferences and assumptions (Yin, 2014). Considering the results of the study to be valid, the reported information provided a clear explanation to the interpretations of the gathered data from the consenting participants who worked for the bank. Using dependability, credibility, transferability, and conformability validities help establish consistent and sustainable conclusions for the accumulated data obtained from the

participants of the study (Guba & Lincoln, 1985). I used a single interview question template for gathering data to the reliability of the study. I ensured proper recording and transcribing of data to foster reliability of the study (Gordon, 2012). I used a tape recorder to record the interviews to enable credible transcription.

Dependability is the assumption of replicability or repeatability (Bernardi, Merseguer, & Petriu, 2012). Dependability is the ability to deliver a service that is available, reliable, safe, with integrity, and maintainability (Rodrigues, Alves, Silveira, & Laranjeira, 2012). To ensure that the interview questions were not biased or misleading, the questions remained directly relevant to the objective of the study. The utilization of good quality research and data from the field test helped build a deep understanding of the qualitative research conducted in the study.

Credibility is results that are reliable from the participants' perspective (Simon, 2011). A study that establishes credibility provides descriptions and immediate recognition of an individual's experiences from their point of view (Henderson & Rheault, 2004). Member checking is a strategy that helps to establish credibility. I made sure the results of the study reflected the reality of participant responses by conducting member checking (Henderson & Rheault, 2004). Member checking is the final step in establishing participant verification, respondent validation, accuracy, and credibility of data recorded during each interview session (Harper & Cole, 2012). Member checking required that I shared with the participants all research results, and allowed the participants to examine the results and statements of the proposed study (Harper & Cole, 2012).

Transferability requires results of the study to be relevant to other significant and valuable perspectives (Jiménez-Buedo, 2011; Simon, 2011). Transferability supports a researcher's ability to generalize results that can be transferred to other settings and situations (Henderson & Rheault, 2004). Strategies for transferability included gathering intense background information pertaining to the comparison of participants, linking the participants' attributes to larger demographic information, and ensuring that participants represented a specific population (Henderson & Rheault, 2004).

Confirmability is results that others confirm or corroborate (Yin, 2014). Confirmability guides the use of the new product development theory when supporting the findings of the proposed study. Audit trail is a strategy that helped to establish confirmability in the study (Guba & Lincoln, 1985). The audit trail strategy assisted incorporate information from the participant's face-to-face interviews, handwritten interview notes, and any copies of archival materials, newsletters, review statements, e-mails, or handouts (nonclassified) to confirm or corroborate data concerning implementation strategies of the new mobile banking service. I kept data saturation in mind while interviewing participants. Data saturation occurred when the same themes continue to show up and no new information was revealed within the responses of the interview questions (Marshall & Rossman, 2013). Handwritten notes during the interviews supported, detect data saturation while listening to each of the recorded interviews (O'Reilly & Parker, 2013).

The use of the data analysis section, dependability, credibility, transferability, and conformability helped understand the implementation strategies bank managers used in

introducing the new mobile banking service. The NPD theory, recorded face-to-face interviews, handwritten interview notes, and copies of archival materials, newsletters, review statements, e-mails, or handouts (nonclassified) helped create a framework to enhance the understanding of implementation strategies bank managers used to introduce the new mobile banking service.

Transition and Summary

Elements described and justified in this section include the reasons why the qualitative method and exploratory single case study design were selected. In addition, data collection methods, data analysis, and others were the primary processes that I used to explore the strategies banks managers use to implement the mobile banking service to the Ethiopian community. I conducted interviews using open-ended questions as the primary means of collecting data and ensured confidentiality and anonymity as part of the standard research practice. Selected participants responses were then entered into software, Atlas.ti7, which aided in organizing and analyzing.

I ensured that the various methods described to protect the reliability, validity, credibility, and authenticity of the study implemented. My disclosed cultural and professional background did not influence the study in any way. My role as the researcher in this study was to ensure that results from participants' responses are understandable and to present the research in an unbiased manner. The next section of this research paper begins with the presentation of findings from the interviews, applied theories, and implications to social change. Finally, I provide my recommendations and

conclusions in Section 3 and present all required supporting documents as appendices to the study.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this qualitative single case study was to explore the strategies bank managers used to establish mobile banking services to the Ethiopian community. The description of findings addresses the central research question provided in Section 1. Section 3 includes (a) an overview of the study, (b) presentation of findings, (c) applications to professional practice, (d) implications for social change, (e) recommendations for action, (f) recommendations for further research, (g) reflections, and (h) conclusions.

Overview of Study

The purpose of this qualitative single case study was to explore the strategies bank managers in Ethiopia used to establish mobile banking services. Twenty bank managers from the leading private bank in Ethiopia participated in this study. Participant interview responses and secondary data (archival data) provided me with the data I used to address the research question. Four themes emerged during the analysis. Bank managers emphasized the need for skills in areas such as product development: awareness, both internally and externally; project management; and marketing. The results from participants' responses provided an in-depth understanding of strategies bank managers used to introduce the mobile banking service.

Presentation of the Findings

The central research question for this study was: What strategies did bank managers use to establish mobile banking services to the Ethiopian community? I used semistructured interviews with open-ended questions (Appendix A), organization mobile

banking policies, and the archival documents to collect data for this study. I analyzed the data for this study using Atlas.ti7. The four themes that emerged from my analysis were: (a) development, (b) testing, (c) commercialization, and (d) organizational adoption of new technologies.

Theme 1: Development

During the development stage, a concrete marketing plan is generated and the technical team presented the final prototype of the product developed ready for testing (Pitta & Pitta, 2012). Companies use two committees for new product activities. An adhoc product committee gathered information from other departments and customers (Johnson & Jones, 1957). All of the research participants confirmed that product committees were used in development of the prototype and marketing plan. Companies may consider (a) experts or consultants, (b) published sources, and (c) stakeholders, like customers, for exploring opportunities.

Participant responses to Interview Questions 1, 2, 6, and 10 indicated that the bank involved the use of an external vendor from India for support in providing the mobile banking technology software. The external vendor worked with the selected product committee to produce the selected features that were relevant to the Ethiopian financial market, as well as link the product to the core banking platform. All participants also indicated that the marketing plan was developed and was in place.

All participants indicated that the major stakeholders in the mobile banking installation process were: (a) National Bank of Ethiopia (central bank) for all product associated approvals and regulation, (b) bank board and management for governance

oversight, (c) project committee for coordination, (d) bank managers for implementation, and (e) external technology vendor for provision of mobile banking software. All participants indicated that there was a 5-year strategic business plan and feasibility study for the mobile banking service. The installation process took the following key steps: (a) selection of a technology vendor from India to provide the mobile banking software, (b) National Bank approval of vendor and authorization of bank to commence pilot tests, (c) set up of project committee to work with vendor, (d) project committee work with bank managers to set up pilot, (e) interdepartmental engagement and communication, (f) customer recruitment for pilot, and (g) soft launch.

The majority of participants indicated that the marketing plan was not well implemented. Interdepartmental engagement was not well executed, staff training across the branch network and within user departments was not effective and as such, awareness of the mobile banking service was still very low even after 12 months of launching the pilot. In addition, the consumer education and awareness to the public had been very low, and the majority of the external customers are yet to fully appreciate the operation of the service.

The findings supported the literature indicating that development as the fourth element of the NPD was followed. The concrete marketing plan was generated and the final prototype of the mobile banking system developed for testing. However, the complete due process of the NPD was not complied with leading to less success of the pilot. The NPD emphasizes that following the due process and structure derives increased success (Alfredo, Emanuele & Lucio, 2012). Findings also supported the literature by

elucidating the role of the different product committees the bank managers used that was consistent with the NPD framework.

Theme 2: Testing

This stage was characterized by conducting product and market tests for conformity with earlier predictions, assumptions, and deductions of the product (Johnson & Jones, 1957). Also during this stage, final product and market plans for the product were generated. Participant responses to questions 3, 4, 5, 7 and 8, indicated that the product and market tests were done for conformity with the 5-year business plan for the mobile banking service. Testing provided business leaders with a sense of how collaborative team integration processes and NPD processes were required in order to be reasonably successful in testing the product (Smith, 2011). Seventy-five percent of the participants indicated that from the past year, when the pilot was launched, only 5,000 customers had been recruited out of a customer base of 1.4 million which was very low compared to the expectations in the business plan. The expectations in the business plan were to enroll 20% of the customer base every year during the first five years of launching the service. Fifty-five percent of the participants indicated delays in the testing phase were due to customizing the technology vendor software to the Ethiopian financial services industry requirements, in addition to creating an interface to link the software to the core banking platform. The participants further noted that delays in the testing were also due to the tight regulations from the National Bank of Ethiopia, which had to review every stage of the installation process. All participants indicated that there were immense technology and connectivity challenges from the telecom service provider. Ethiopia has

only one telecom provider that is state owned and was still in the process of scaling up the services nationwide.

Heyer and Mas (2011) stated that policies from regulators could control the growth and development of mobile banking and the results in this study were in agreement. The findings supported the literature indicating that testing is the fifth element of the NPD and the participants explained that this element was followed in Ethiopia's roll out of mobile banking. Findings also supported the literature by revealing details of marketing plans for the mobile banking service, technology tests, collaboration, and integration of all processes and teams.

Theme 3: Commercialization

During commercialization, the marketing plan was fully implemented in accordance with the product guidelines and the product performance was monitored to ensure sustainability. Commercialization was considered a fundamental stage in the NPD process as new products bring revenue to the business and enable business leaders to achieve their financial objectives (Ahmed & Dale, 2012). All participants indicated that the mobile banking service was launched as a pilot a year ago (at this time of this study) and uptake of the service was still very low. Participants cited tight government and industry regulations and low awareness as the major reasons for the low uptake. New product launches are an essential determinant of company performance and a new product is considered a success if it achieved at least 80% of 26 week sales per distributing store after 2 years (Pitta & Pitta, 2012). The launch of mobile banking service in Ethiopia did not meet the objectives of the 5-year business plan within the year of

launching. The expectation of the business plan was to enroll 20% of the customer base every year for 5 years.

The Ethiopian financial sector is not diversified in terms of the type of financial institutions and the type of financial products and services being delivered (Getnet, 2014). The financial service is dominated by a cash based system (Getnet, 2014). The mobile banking development in Ethiopia is still in its infancy stage, with only six banks licensed out of 19 in 2013 and two banks piloting the roll out of the service (Getnet, 2014). Fifty percent of the participants indicated that due to the cohesiveness of the Ethiopian culture, Ethiopians generally prefer direct human interaction in execution of financial transactions and not through non-personal means like electronic channels. Seventy-five percent of the participants also indicated that tight regulations were also an impediment to the growth of the mobile banking business in the financial sector. For example, Participants P1 and P2 noted that government regulations restricted financial institutions to lead the initiative. In successful mobile banking countries like Kenya, Uganda, Tanzania, Nigeria etc., telecom companies led the initiative. Countries that relied on government regulation for installation and advancement of mobile banking service exhibited low acceptance levels of adoption(Berger & Nakata, 2013; Hoon et al., 2013; Kesenwa et al., 2013; Mburu, 2012; Lawuo et al., 2013; Nanjala, 2013).

According to Participant P5, most of the bankable population is very informal and not highly educated which makes it difficult for them to appreciate the mobile banking service that appeared sophiscated. In addition, the mobile banking service is in the English language and not Amharic, which is understood by the majority of people.

Seventy percent of the participants indicated that one of the impediments on a smooth commercialization of the mobile banking service was the unstable technology network from the only state owned mobile network operator.

According to Gabriela and Florin (2015), an organization's culture is a strong force that can affect business goals, lead to more accountability, and lead to higher efficiency of product related investments within organizations. The majority of participants illustrated different departmental cultures that shaped their perspective of product commercialization. The participants from the branches illustrated a culture of dependence on the head office team for directions and decision making, while participants from the head office demonstrated an independent approach towards development and commercialization of new products.

The goal of each company is to increase the revenues through new product launch optimization. New products offer increased sales, profits, and competitive strength for most companies. A new product launch could create and sustain a company's competitive advantage in the marketplace. Companies like Sony, Microsoft, or Dell continuously launched new products and made this activity a crucial part of their marketing strategy (Gabriela & Frolin, 2015). Ninety-five percent of the participants' responses to Interview Questions 1, 2, 4, 9, and 10 indicated an alignment with the type of services their bank provided to consumers and addressed the urgent need to commence an intense consumer education program to create an informed unbanked population.

Half of the participants recommended that the bank incorporate product awareness campaigns as part of corporate events to reinforce the need of ownership and the ability

to cross sell more products to the wide customer base. Nevertheless, despite the different recommendations, all participants stated that awareness of new products to the staff and external customers was necessary for the success of the mobile banking service in the bank, the banking industry, and the economy of the country through financial inclusion of the unbanked. Financial inclusion is top priority for the Government of Ethiopia and will be delivered through widening of the financial sector (Getnet, 2014)

The findings supported the literature indicating that commercialization, as the last element of the NPD, was followed in Ethiopia's roll out of mobile banking. The marketing plan was not properly executed which led to low performance of the product. Low product awareness, both internally and externally, leading to low mobile banking uptake, was consistent with Brentani and Kleinschmidt's (2004) findings, who in their study suggested that corporate culture and commitment can have an important impact on the outcome of the NPD in a business. Findings further confirmed the literature indicating that for the mobile banking services to grow in a country, there should be major guidelines to help in building an enabling policy and controlling environment (Berger & Nakata, 2013)

Theme 4: New Technology and Innovative Process Adoption

Technology innovations and business processes are constantly evolving to meet organizational objectives. The constant advancement in technologies calls for businesses to proactively upgrade their systems to be consistent with the market realities (Gupta & Khana, 2015). All the participants from the bank focused more on online and mobile banking trends that would enhance the customer experience and grow more transactions

for the bank. Approximately 75% of the participants indicated the need for the bank to invest in training employees on new technology innovations and trends that might increase the bank's business.

Participants indicated that services such as mobile bill pay were an area in which the bank needed to invest more training for both employee and consumer education. Participant P1 stated that the majority of the Ethiopian population was not literate and needed to be made aware of the benefits of the mobile banking service. Participant P3 also noted that advances in technology are creating difficulties for customers and bank staff to keep up with the emerging challenges like safety of use of the technology in executing financial transactions.

Ninety-five percent of the participants indicated a need to stay informed of emerging technologies, threats, and opportunities. In addition, participants suggested the need for bank managers to gain technical expertise in the areas of electronic banking products and system security for effective communication when dealing with customers and internal staff. According to Participant P2, bank managers need to understand the challenges of the new technology trends to ensure the bank proactively updates the systems and trains staff to be more abreast of new tools.

The findings supported the literature indicating that perceived usefulness and perceived ease of use constructs were essential in users' decisions to adopt a new technology. Davis (1989) advanced TAM in predicting and explaining new technology adoption. This was relevant at the testing stage to elucidate bank managers' perceptions towards adoption of the new mobile banking technology (Johnson & Jones, 1957;

Ledwith et al., 2011; Pitta & Pitta, 2012). Findings further supported the literature by highlighting risks associated with revealing personal information that could be accessed and misused by fraudsters while executing mobile banking transactions (Chin et al., 2012; Kang & Kim, 2012; Laukkanen & Kiviniemi, 2010). Most participants indicated that the new technology could orchestrate potential risks to both the bank and customers through fraudulent acts from unauthorized users.

Findings Related to Conceptual Framework

The NPD is acknowledged, both in theory and practice, as the most relevant tool for business to introduce new products onto the market (Ahmed & Dale, 2012). The NPD is a complete process of bringing a new product to market (Johnson & Jones, 1957). The theory is one of the most important determinants of sustained company performance, and therefore, represents a key challenge for businesses (Swink, 2002). All participants agreed that key concepts of NPD are critical to the success of an organization. Also, participants illustrated that most lapses in product launching, staff training, awareness, consumer education, and business objectives were not in alignment with the NPD framework. Pitta and Pitta (2012) concurred that new product failures are a result of inconsistency of following due processes as guided by the NPD framework. From the lens of NPD, an effective product development process will lead to the increased success of the product and brand positioning of a business in the market place.

Gabriela and Florin (2015) indicated that a product aware organizational culture, such as incorporating product awareness of new products into employees' work activities, assists employees in developing consistent behaviors. As illustrated in my research

findings, organizational culture might influence participants' perspectives towards product development. Since culture is a component of an organization (Gupta & Khana, 2015), in relation to the NPD theory, all employees must collaborate to ensure success of new products developed in the company.

The identified themes illustrated there is no one best strategy that can lead to an implementation of a new service for increased business performance. Following the concepts of NPD theory, business leaders may implement the actions outlined below, together with the strategies identified in the study, to foster success development and lunching of new products for a business on a sustainable basis. The participants' answers to the interview questions supported the premise of NPD theory, which was the conceptual framework for this study.

Applications to Professional Practice

Based on the study findings, the most significant contribution may be the development of potential best practices to assist avoiding product failures for new products developed and launched in a market. Study findings may assist business leaders to reduce mistakes when launching a new product. Almost 70-80% of new products launched each year fail; therefore, companies attempt to find the main drivers that could affect the launch success. Many successful organizations, such as Apple or JVC, owe their fortune to new products that they launched (Gabriela & Florin, 2015).

In my findings, I introduced potential applications to professional practice by identifying the gap that existed between the product development department and the product user departments. The identified gap elucidated the low product uptake

orchestrated by ineffective communication, trainings, and low product awareness. Gabriela and Florin (2015) noted NPD should be a common strategy for many companies in order to obtain and maintain the firm success, but these companies could also face problem launch decisions which can also be very costly and risky. Furthermore, Yu (2015) indicated that the adoption of new technology innovations has prompted discussions about safety of executing financial transaction on mobile devices. Aligning the need to adopt new technologies and perceived threats provides a business with options to mitigate security risk effectively (William & Suri, 2014). Several of the participants illustrated the need to develop a common strategy for enhancing safety features in mobile banking and align with the bank objectives of growing the customer base and reaching the unbanked population through introduction of the new service.

Ninety percent of the participant responses to Interview Questions 8 through 10 indicated a necessity to create awareness of the mobile banking service to the staff and the customers, which would increase acceptance and growth of the customer base. The results from this study might provide additional material for business leaders to use in championing NPD within their organizations. The NPD is regarded as a vital tool for successfully introducing new products to a market place that will facilitate sustained growth of a business (Alfredo et al., 2012; Pitta & Pitta, 2012; Swink, 2002).

Utilization of external consultants in development of products may improve the development of products; however, products should be customized to the local customer requirements and this practice is consistent with the NPD (Pitta & Pitta, 2012). All Participant responses to Interview Questions 1, 2, 6, and 10 indicated that the bank

worked with an external vendor from India to develop mobile banking technology software. The external vendor worked with the selected product committee to customize the mobile banking software to the Ethiopian financial market, as well as link the product to the core banking platform. The results of this study may assist business leaders to optimally use external consultants while engaging with product development committees to efficiently develop products relevant to a market.

Organizational culture is important to success of developing new products (Gabriella & Florin, 2015). A product development culture of instilling product awareness of new products into employees' work activities assists employees in developing the right behaviors towards effective collaboration while developing products which is consistent with the NPD. The results of this study might assist business leaders foster the right organizational culture towards product development on a sustained basis.

The findings of this study may assist business leaders to implement mobile banking services in highly regulated and infant markets like Ethiopia. The Ethiopian financial market is highly regulated with one telecom service provider with over 30 million subscribers (Getnet, 2014). Ethiopia is utilizing a bank-led mobile banking model which is different from other countries like Kenya, Uganda, Rwanda, etc. that use the mobile telecom network operator-led model.

Globally, the mobile phone market consists 30% of all e-commerce transactions (Prabhu &Vijaya, 2014). Fashion and luxury items are the most purchased via phone at 33% and travel services with 27% (Gabriela & Florin, 2015). New phone technology encourages market research, recreational activities, coupled with convenience (Gupta &

Khana, 2015). Mobile banking has the potential to revolutionize the customer experience in personal financial services, with nonbank organizations often leading the way (Keramati et al., 2012; Kesenwa, Oima, & Oginda, 2013). The findings of this study might assist business leaders to implement mobile banking solutions as a life style business, expand their customer base, and grow revenues from this business.

Mobile phones have the ability to provide unbanked populations with additional services, such as the ability to deposit or save, withdraw or transfer money, pay bills, obtain credit, and purchase other goods and services, such as insurance (Berger & Nakata, 2013; Lawuo et al., 2013). The findings of the study may contribute to the industry by introducing ways financial institutions can utilize alternative channels to grow their customer base and enhance financial inclusion by reaching out to the unbanked populations. Financial inclusion has been recognized as a key enabler to reducing poverty and boosting prosperity (Berger & Nakata, 2013; Dikit et al., 2012; Getnet, 2014; Lawuo et al., 2013)

Implications for Social Change

Almost half of Ethiopia's population is unbanked (Getnet, 2014). The large section of the Ethiopian population both urban and rural is a large untapped market with a remarkable business opportunity (Getnet, 2014). Introducing Ethiopia's population to a formal mobile economy and increasing their access to credit and safety in accounts could enhance prosperity and contribute to social change.

The introduction of the mobile banking service may lead to the growth and prosperity of the Ethiopian community through financial inclusion. The government of

Ethiopia takes financial inclusion as a policy objective and has been trying to build inclusive financial systems in the financial sector so that financial institutions to reach out to the unbanked. Financial inclusion is stipulated in the country's 5 years GTP. The plan targets to create 3 million jobs, most of these jobs will come through mobile and agent banking (Getnet, 2014). Therefore, based on my findings, the new mobile banking service may facilitate the growth of the financial sector, creation of jobs for mobile agents, financial empowerment of households, and education of mobile banking users.

Recommendations for Action

The objective of this qualitative study was to understand and explore what strategies bank managers utilized to introduce the mobile banking system in Ethiopia. This study's scope included a conceptual framework that originated from NPD and explained the elements of development, testing, and commercialization. Based on the research findings, I recommend the following actions:

- Bank managers need to take a holistic approach to product development that effectively integrates all the components of the NPD such as people, processes, and systems.
- Bank managers should effectively utilize external consultants in developing products suitable for the local market and taking cognizance of local peculiarities like local language and culture.
- Bank managers should closely collaborate with regulators in highly regulated markets while developing new products so as to hasten product development initiatives

- Bank managers should involve all user departments during the development of new products through interactive methods to foster engagement and ownership of products by all employees. Head office teams should involve the branch teams in developing and launching new products
- Bank managers need to create awareness of new products, both to organizational staff and external customers, through staff trainings and consumer education events.
- Bank managers need to stay current on technology innovations and trends to ensure the organization is taking advantage of these innovations in the market place.
- Bank managers should develop a common strategy for enhancing safety features in mobile banking and align with bank objectives of growing the customer base and reaching the unbanked population
- Bank managers should strive to build a work environment that aligns with the organizational culture and new product development realities.
- Bank managers should customize the mobile banking service to the local Amharic language so as to increase the number of users in Ethiopia.
- Bank managers should use NPD as a common strategy in order to obtain and maintain success and avoid problem launch decisions which can be very costly and risky.

I will seek to publish my research findings through industry publications, academic journals, and conferences focused on NPD. The essence of research is publication;

therefore, the dissemination of research findings via other sources is an essential element of the research process (Simon, 2011). Furthermore, after reviewing other peer-reviewed publications, business leaders can integrate my study findings into corporate training, employee manuals, and product development initiatives. The incorporation of academic research findings into organization documents and publications provides new insights and adds to business research (Svenson & Doumas, 2012).

Recommendations for Further Study

The findings, conclusions, and recommendations stemming from this study may contribute to existing and future research and gaps in business practice regarding best practices business leaders could use to introduce new products and increase business performance. Findings from this study could pave the way for conducting further research regarding the mobile banking in Ethiopia. Considering the significant role of mobile banking in the economy, I recommend further study on commercialization strategies to attract more users of the service. I also recommend conducting a study to explore the implementation strategies bank managers are using to introduce and expand the service in the Ethiopian community. In this study, I explored strategies that bank managers utilized in installing the mobile banking service. However, future researchers could examine the impact and influence of other elements such as regulations. Other researchers could repeat the same study but for more banks in the banking industry.

A limitation in the research is that verification of any documents contributed by participants was not possible because most banks considered such as restricted internal documents. Future researchers may explore ways of revisiting such restricted documents

in the near future after the service is fully operational in the country. Another limitation was possibility that bank managers' understanding of the process may differ among banks. Future researchers might consider exploring further research after the mobile banking service is launched by more banks in the industry and when more experience of the service would have been gained. An additional limitation was that the sample size was limited to 20 bank managers in the Ethiopian banking industry. Further researchers might consider expanding the sample size and to more countries.

Quantitative researchers may examine the extent and nature of the relationship between introduction of the mobile banking service and the performance of the financial institutions. Thematically, my study findings showed a need for bank managers to champion awareness of new products within the bank and to the external customers and also increase collaboration between all departments. Furthermore, researchers could expand my study findings by examining the effect of organization culture on the performance of NPD. By developing policies that align with organizational culture, promoting product awareness, and adapting organizational operations based on technological trends and innovations, bank managers might develop further strategies to enhance implementation of new services in banks.

Reflections

Using a qualitative single case study, I focused on the exploration of strategies bank managers would use to establish a mobile banking service. Sixteen years of commercial banking experience provided me with the background for exploring implementation strategies of new products for bank managers in Ethiopia. Throughout

the research, I bracketed personal presuppositions and biases to ensure participants freely and objectively expressed in-depth perceptions of the phenomenon. Through this qualitative case study, I sought to increase my understanding of strategies bank managers used to implement a new mobile banking service through open-ended interview questions. The findings from the research underscore the assumptions held prior to conducting the research. Although I held uncertainties regarding whether participants would provide accurate information, the richness of the research findings dispelled my initial concerns. Participants' differing perceptions of implementation strategies increased the understanding of bank managers' cognitive framing of the phenomenon. The flexibility and depth of the qualitative case study design enabled me to obtain credible findings through in-depth perceptions and data triangulation (Yin, 2012).

My doctoral study experience enhanced my scholarly knowledge on mobile banking installation. The insight I gained interacting with participants at the bank under study will benefit my current and future career development. Using open-ended questions in this study offered an opportunity for an in-depth discussion with participants, which enhanced my communications and interpersonal skills. The timing of my research was coincidentally aligned with the financial inclusion agenda of Ethiopia's GTP phase 2, and further enhanced my awareness of the need for financial deepening in an emerging economy. I gained personal knowledge on how mobile banking could reach many customers in rural areas and introduce the unbanked population into the formal financial sector.

Summary and Study Conclusions

The purpose of this qualitative single case study was to explore the strategies bank managers use to establish mobile banking services to the Ethiopian community. Using open-ended questions and archival documents, I collected and triangulated data to answer the research question. Four themes emerged during data analysis illustrating the strategies bank managers use to establish mobile banking services. The themes involved (a) development, (b) testing, (c) commercialization, and (d) technology and innovation trends. My findings indicated a need for bank managers to champion awareness of new initiatives within the bank and to external customers and to foster continuous training programs on bank products. Bank managers need to become proactive in their efforts to champion the adoption of industry best practices within their banks, as well as align the best practices and interdepartmental collaboration in product development.

Although there was a general agreement that mobile banking was vital for the growth and transformation of the financial sector and include the unbanked in the formal economy, the extent and means were not definitely determined. The process of designing, developing, and implementing new products is essential for enabling a partnership among stakeholders (internal staff, product teams, and external customers) and for enhancing the competitive position of a company in a market place on a sustained basis. Integrating the NPD framework consistently for implementing new products could enable an improved product development mindset. The meaning of these results underscores the need for bank managers to use a broader business lens in implementing new products. Through a

broad business lens, bank managers could increase shareholder value deriving from proper implementation strategies of new products.

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Appendix A: Semistructured Interview Questions

Interview Questions

1. Describe the steps of the installation process?
2. Describe the process of developing new products in the bank?
3. What was achieved in the installation process?
4. What is the expected timeframe for the installation process?
5. How much time is left for the installation process?
6. Who are major stakeholders involved in the installation?
7. What unexpected events happened to block the installation process?
8. Describe other obstacles that were overcome in the introduction of this new banking service.
9. What remains to be done in the installation process?
10. Describe anything else you would like to add that would aid understanding of this phenomenon.

Appendix B: Cooperation Letter

Letter of Cooperation from a Bank President

Date: July 22, 2015

Dear James Kanagwa,

Based on my review of your research proposal, I give permission for you to conduct the study entitled "Establishment of mobile financial services in Ethiopia" within Ethiopia. As part of this study, I authorize you to recruit bank managers, collect data, conduct member checking from/with individuals currently working for my organization, a list of employee work email addresses to send invitation letters and consent forms, and copies of archival materials, newsletters, review statements, emails, or handouts (non-classified) provided by the bank manager on implementation strategies of mobile banking services. Individuals' participation will be voluntary and at their own discretion.

We understand our organization's responsibilities includes: providing access to employees to recruit, collect data, conduct member checking, debrief research findings and results in a group setting, provide a list of employee work email addresses to send invitation letters and consent forms and copies of documents (copies of archival materials, newsletters, review statements, emails, or non-classified handouts) provided by the bank manager. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting and that this plan complies with the organization's policies.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the student's supervising faculty/staff without permission from the Walden University IRB.

Sincerely,
President

Appendix C: Invitation Letter and Consent Form

Invitation Letter for Participants

Date

Dear Potential Participant**:**

This letter is an invitation to consider participating in a study I am conducting as part of my Doctoral degree in Business Administration at Walden University under the supervision of Dr. Charlotte Carlstrom. I would like to provide you with more information concerning your participation in the project.

This study will explore specific strategies bank managers will utilize to introduce the mobile banking service in Ethiopia. The exploration will help gain a better understanding of what specific strategies bank managers will use in introducing this new mobile banking service. Because of your current position with the selected bank, you are best suited to speak to the various issues, such as implementation strategies of mobile banking services**.**

Attached with this letter is the consent form to participate in this study. The consent form explains the study in more detail. I look forward to speaking with you concerning your participation in this project. Thank you in advance for your assistance.

Sincerely,

James R. Kanagwa, MBA

Consent Form

The researcher is inviting bank managers in Ethiopia. The invited bank managers are asked to take part in a research study concerning the establishment of mobile banking services. This form is part of a process called "informed consent". The process is structured to allow participants the opportunity to understand the study before deciding to be involved. A researcher named James Kanagwa, who is a doctoral student at Walden University, is conducting this study.

Background Information:
The purpose of this research is to explore the specific strategies bank managers will use to introduce a new mobile banking service. The researcher will interview bank managers currently working at the selected banks in the geographical area of Ethiopia.

Criteria for eligibility to participant in study: Must be a bank manager in Ethiopia.

What you will do in this research:
If you decide to volunteer, you will be asked to participate in a face-to-face interview. The interview will consist of 9 questions. With your permission, the researcher will digitally record your interviews. You will not be asked to state your name or other personal information on the interview recordings and the bank where you are employed, will not be identified in the study.

Time required: The face-to-face interviews will be conducted at the either the participant's home, local coffee shop, or anywhere where the employee and the researcher will be comfortable meeting. Each interview will take approximately 1 hour.

Here are a few face-to-face sample questions:

1. Describe the steps of the installation process?

2. What was achieved in the installation process?

3. What is the expected timeframe for the installation process?

4. How much time is left for the installation process?

Voluntary Nature of the Study:
This study is voluntary. Your decision whether or not you choose to participate in the study will be respected. If you decide to participate in the study, you may change your

mind at any time to stop participating. The process of withdrawal from the study would require you to email a written response to the researcher stating your wish to withdraw from the study.

There are no risks of uneasiness or discomfort during the face-to-face interview session with you, the interviewee. Participating in the study will provide a chance for you to tell your story about your experiences concerning the specific strategies being utilized to introduce the mobile banking service. Individuals who choose to participate in this study will not receive any monetary compensations or gifts.

Privacy:
Your responses to the interview questions will be kept confidential. At no time will your actual identity or personal information be revealed. The researcher will not use your personal information for any purposes outside of this research project. In addition, the researcher will not include your name or anything else that could identify you in the study reports. Data will be password protected and safeguarded in a secure computer storage file in a lock box. Data will be kept for a period of at least five years as required by the university.

Contacts and Questions:
You may ask any questions you have now. Alternatively, if you have questions later, you may contact the researcher via phone at xxxxx or email at xxxxxxxxxxx. If you want to talk privately about your rights as a participant, you may also contact Dr. Leilani Endicott. Her phone number is 612-312-1210. Walden University's approval number for this study is 12-18-15-0301086 which expires on Dec 17, 2016.

Statement of Consent:
The nature and purpose of this research have been sufficiently explained, and I agree to participate in this study. I understand that I am free to withdraw at any time without incurring any penalty. I will keep for my records a copy of my signed consent form the researcher provides to me.

Circle your job role: Bank manager or Employee

Printed Name of Participant _____

Participant's Signature _____

Contact number _____

Personal email address _____

Date of consent _____

Researcher's Signature _____

Date _____

Appendix D - Interview Protocol

Interview Protocol

1. Introduce self to participant.

2. Verified receipt and/or responds to consent form, answer for any questions and/or concerns of participant.

3. Get confirmation and acknowledgement that interview is being recorded.

4. Turn on recording device.

5. Thank participant for accepting to participate in the study.

6. Start interview with question #1; follow through to final question.

7. End interview and discuss member checking with participant.

8. Thank the participant for partaking in the study. Confirm the participant has contact information for follow up questions and concerns.

9. End protocol.