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E-Business Strategy to Adopt Electronic Banking Services in Ethiopia

Teklebrhan Woldearegay Gebreslassie
Walden University

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Walden University

College of Management and Technology

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Teklebrhan Gebreslassie

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Walden University
2017

Abstract

E-Business Strategy to Adopt Electronic Banking Services in Ethiopia

by

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MSc, Royal Holloway University of London, 2010

BSc, Microlink Information & Technology College, 2007

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

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November 2017

Abstract

E-banking services in Ethiopia are increasing among low-income populations; however, with over 53 million mobile service users countrywide, more than 85% of the population still lacks access to banking services. A single case study was used to explore e-business strategies that bank managers use to promote the adoption of electronic banking services to the unbanked population in Ethiopia. The extended resource-based view of strategy served as the conceptual framework for this study. Data were collected from interviews with 12 experienced bank managers from leading commercial bank in Ethiopia. Data were analyzed using coding techniques and word clustering, with the help of qualitative data analysis software. After member checking and methodological triangulation, data were sorted into 5 themes including ensuring leadership, creating accessibility, fostering customers' acceptance, leveraging unique features and organizational resources, and building an e-banking ecosystem. The result showed that bank managers need to develop a customer-centric organizational posture and they should focus to build e-banking ecosystem inside and outside the country so that they can realize their vision to become global competitor. The findings from the study may contribute to positive social change for the unbanked communities in Ethiopia by informing bank managers options of e-banking adoption strategies thereby improve the convenience and accessibility of banking services.

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Dedication

This study is dedicated to our martyrs, who sacrificed their lives fighting to bring positive social change to the country and the Ethiopian people; I relied upon them to achieve this milestone in my life. The dedication of this project also goes to my family, particularly to my wife Mrs. Tsega Asefa and our four children, Daniel, Semhal, Dagmawit, and Lidia. Thank you for taking care of our children as I progressed through this demanding doctoral journey. Thank you for sacrificing the time for me to complete my studies and for always encouraging me that all things are possible through dedication and perseverance.

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Section 1: Foundation of the Study

The Ethiopian e-banking is evolving slowly. Bultum (2014) argued Ethiopian banks focus on branch-based competition rather than e-banking services. The International Monetary Fund (IMF, 2013) recorded 0.46 automatic teller machine (ATM) and 2.95 commercial bank branches per 100,000 adults respectively in Ethiopia. The IMF estimated that 78% of the bankable population in Ethiopia remained unbanked. The Ethiopian bank industry provides e-banking services to only 5% of bank account holders (National Bank of Ethiopia [NBE], 2015). According to the NBE (2015), out of the current total e-banking users, 68.2% Internet banking users and 36.6% mobile banking users are from the capital city of Ethiopia, Addis Ababa. Bultum (2014) identified lack of competition between local and foreign banks and poor technological infrastructure as factors that hinder e-banking adoption in the Ethiopian banking industry. In this qualitative case study, I explored the e-business strategies used by Ethiopian bank managers to advance the adoption pace of electronic banking services.

Background of the Problem

Ethiopia's banking sector has undergone significant reforms since 1991, showing clear steps towards the proliferation of privately owned domestic bank institutions (NBE, 2015). The change has led the way for the establishment of 16 private commercial banks, 31 microfinance institutions, and 16 private insurance companies in the country (World Bank, 2014). According to the NBE (2015), all banks in aggregate so far have opened more than 1,616 branches from which 33.5% of the total is located in the capital city. While the World Bank (2012) showed 2.9 commercial bank branches per 100,000 adults,

the NBE (2015) claimed the ratio of bank branches to the total population went down to one branch of 53,156 adults. Nevertheless, the IMF (2013) estimated Ethiopia's unbanked population to be around 80 million people. Ethiopian banks focus on branch network expansion at the expense of e-banking strategies (NBE, 2015). The role of electronic banking, however, is still at its infant stage regardless of the more than 30 million mobile users (Group Special Mobile Association, 2014). According to the NBE (2015), out of 16.52 million bank account holders, there are only 746,050 e-banking services users. Bambore (2013) and Altum (2014) identified five major factors that affect adoption of e-banking in the Ethiopian banking industry: (a) security risk, (b) lack of trust, (c) lack of legal and regulatory framework, (d) lack of infrastructure, and (e) absence of competition between local and foreign banks. Siraye (2014) found perceived behavioral control plays the most important role in predicting an individual's intention to accept e-banking service channels in the Ethiopian context.

Problem Statement

The slow diffusion of electronic banking negatively affects the profitability of banking businesses in most of the developing countries (Deb & Lomo-David, 2014; GSMA, 2014). Out of 16.52 million Ethiopian bank account holders, there are only 746,050 e-banking services users in Ethiopia (NBE, 2015). The general business problem is Ethiopian banks do not use technology to reduce the unbanked population, resulting in loss of profitability. The specific business problem is that some bank managers in Ethiopia lack e-business strategies to promote the adoption of electronic banking services.

Purpose Statement

The purpose of this qualitative single case study was to explore e-business strategies that bank managers use to promote the adoption of electronic banking services. The study population included 12 experienced bank leaders from one commercial bank in Addis Ababa, Ethiopia. Experienced bank leaders with decision-making authority can meet the information requirements for this study in sharing their real-life experiences. Bank managers could benefit from the result of this study by having a better understanding of e-business strategies to enhance the scale and pace of adopting electronic banking services. The implication for positive social change could include the potential for some bank managers to accelerate the adoption of e-banking services in Ethiopian market, resulting in increasing financial access and reducing risks and inconvenience to the unbanked population.

Nature of the Study

The three methods that researchers use to conduct studies are (a) quantitative, (b) qualitative, and (c) mixed methods (Ritchie, Lewis, Nicholls, & Ormston, 2013). Researchers use the quantitative method to quantify the problem by way of generating numerical data (Upjohn, Attwood, Lerotholi, Pfeiffer, & Verheyen, 2013). According to Upjohn et al. (2013), researchers use a quantitative approach to describe the population and infer the sample results to the broader population based on descriptive and inferential statistics. Qualitative researchers use an interpretive and naturalistic approach to the social world (Rosenthal, 2016). Researchers using mixed methods leverage the strength of both qualitative and quantitative methods (Makrakis & Kostoulas-Makrakis, 2016). I

did not plan to use inferential statistics; therefore, the quantitative and mixed methods were not appropriate for this study. Using a qualitative approach facilitates researchers gaining an understanding of underlying reasons, opinions, and motivations related to subject phenomena (Hinterhuber, 2013). Hinterhuber (2013) noted that using a qualitative method enables a researcher to study phenomena in their natural settings, for identifying, exploring, and interpreting themes regarding the meanings people bring to them. Rosenthal (2016) noted researchers employing qualitative methodology seek to explore rather than examine a phenomenon or outcome. Therefore, the qualitative method was appropriate for this study.

There are several qualitative designs, but I considered three designs:

Phenomenology, ethnography, and case study. The objective and foci of the three designs are different (Lewis, 2015; Pfadenhauer & Grenz, 2015). While phenomenological researchers concentrate on understanding, the essence of participants' lived experiences (Cibangu & Hepworth, 2016), researchers using an ethnography design seek to describe and interpret a culture-sharing group (Lewis, 2015; Simpson, Slutskaya, Hughes, & Simpson, 2014). However, the purpose of this study was not to seek the essence of participants' lived experience or to interpret a group's culture. Therefore, the phenomenology and ethnography designs were not appropriate for this study. A case study is useful to conduct in-depth research on particular individuals, programs, activities, processes, or events bounded in time and space (Sutherland, 2016). Yin (2014) also noted the case study is useful in situations when the researcher seeks to answer *what*, *how* and *why* questions regarding contemporary phenomena. Since the focus of the

research was a contemporary phenomenon over which I had little or no control on behavioral events, a single case study design was appropriate for addressing the purpose of this qualitative study.

Research Question

The overarching question was: What e-business strategies do bank managers in Ethiopia use to promote the adoption of electronic banking services?

Interview Questions

- 1) What e-business strategies do you use to advance the adoption of the electronic banking services?
- 2) What were the critical features of your bank's e-business strategies to move the adoption pace of the e-banking services?
- 3) What barriers did you encounter in implementing your e-business strategies for increasing customers using e-banking services?
- 4) How did you address those barriers to implementing the e-banking strategy?
- 5) How do you assess the effectiveness of your e-business strategies?
- 6) What factors were critical in your success regarding implementing e-banking strategies?
- 7) What other additional information would you like to add to strategies to advance the adoption of electronic banking services?

Conceptual Framework

Barney (1991) developed the resource-based view (RBV) strategy and Hinterhuber (2013) proposed an extension of the RBV model. Hinterhuber revised the theory to offer an explanation for strategic management based on the premise that firm managers can identify, *ex-ante*, those resources and capabilities leading to competitive advantage and superior profitability. According to Barney (1991), a company has a competitive advantage and superior profitability if its resources and capabilities are valuable, rare, inimitable, and organized. Hinterhuber incorporated two demand-based variables, unmet customer needs and large size of the addressable market segment, into Barney's RBV definition. Based on the extended RBV model, companies require a sophisticated understanding of unmet customer needs, customer willingness to pay, and sizes of market segments to achieve superior performance. Dwivedi, Wade, and Schneberger (2012) also identified the RBV as one of the 42 theories relevant to study information systems. As applied to this study, the extended RBV model was helpful to explore the bank's e-banking strategies, which may lead to superior performance regarding the adoption pace of e-banking services. Figure 1 is a graphical depiction of the extended RBV model as it applies to examining organizational strategies.

Operational Definitions

Business to business (B2B): B2B is an e-commerce business model which happens when a company sells products and services to customers who are primarily other businesses (Mangiaracina, Marchet, Perotti, & Tumino., 2015).

Business to customer (B2C): B2C is an e-commerce business model that happens during the buy and sell interactions between companies and clients, who are primarily individuals (Lu, Hu, Huang, & Tzeng., 2015)

Competitive advantage: Competitive advantage is a firm's position in its value activities: designing, producing, marketing, delivering, and supporting its product (Porter, 1985).

Electronic banking: E-banking is the technology-mediated self-service channel in the banking industry, which comprises mainly of Internet banking, mobile banking, and ATMs (Ayo, Oni, Adewoye, & Eweoya, 2016).

Electronic business: E-business is any process that a business organization conducts over a computer-mediated network. The processes can include all activities by which a company adds value to a customer, including production, marketing, and the provision of after-sales services (Jovarauskiene & Pilinkiene, 2015).

Electronic business strategy: E-business strategy is the configuration of intercalated and interlocking activities, which depend on information technology (IT) to foster creation of economic value (Torres, Lisboa, & Yasin, 2014)

Market-based view of competitive strategy (MBV): MBV is an outside-in approach to competitive strategy, which deals with market positioning (Asdemir, Fernando, & Tripathy, 2013).

Assumptions, Limitations, and Delimitations

The following subsection identifies the assumptions, limitations, and delimitations of this study. Assumptions are those beliefs assumed in a study or understood to be true

without verification (Silverman, 2013). Limitations are those elements that a researcher has no control over. Delimitations define characteristics in the study that set the boundary for the study.

Assumptions

Assumptions are self-evident truths, which usually stem from the research methods employed (Leedy & Ormrod, 2015). Silverman (2013) noted assumptions are realistic expectations that a researcher believed to be true or plausible. They are untested beliefs in theory (Samadi-niya, 2014). Assumptions are beliefs, which are necessary for conducting the research, but researchers cannot verify them (Connell, 2013; Simons & Goes, 2013). In the organizational qualitative study, researchers assume that the organizational world is a social construct, and the people constructing their organizational realities are knowledgeable agents (Gioia, Corley, & Hamilton, 2013). In this qualitative case study, I had the following assumptions: (a) Participants have sufficient knowledge of the research area to provide meaningful answers; (b) Interviewees can represent the beliefs of the industry; (c) e-banking strategy creates economic value for customers as well as the organization; (d) participants will answer the interview questions honestly and accurately without bias.

Limitations

Limitations are factors beyond the researcher's control, which can negatively affect the reliability and validity of the study results (Leedy & Ormrod, 2015). Limitations are constraints, which may affect the quality of research findings (Simons & Goes, 2013). Yin (2014) noted achieving generality in a case study's finding is difficult

because it involves the behavior of single event, person, or organization that may not reflect the character of another similar entity. Limitations of this study may relate to the following issues: The interviews may have limited attendees because of work schedule or uncontrollable circumstances. New technology may come along in the banking industry that makes the result of this study irrelevant. There also may be a possibility to miss valuable information because of not probing the right question.

Delimitations

Delimitations of research define restrictions implemented by the researcher (Leedy & Ormrod, 2015) as well as the characteristics that limit the scope and the boundary of the study (Simons & Goes, 2013). According to Bryman (2012), delimitation factors include a researcher's choice of specific problem, purpose statement, research question, and criteria to select participants, geographic location, profession, or organization involved in the study. The focus of this qualitative study was to explore the strategies bank managers use to adopt electronic banking services in the Ethiopian context. I conducted a case study at a single commercial bank located in the capital city. Delimitations included the following: (a) The study did not address factors such as customer behaviors, technologies, and environment that may affect the adoption pace of electronic banking; (b) participants were selected only from one bank out of 19 commercial banks in Ethiopia; (c) study findings may not be directly applicable to other banks and financial sectors in the country or other nations in the Sub-Saharan region. Simon and Goes (2013) noted the identification of delimitations in a study helps to limit

the scope. As e-business encompasses all digital businesses, e-business strategy, in this case, was defined only by its application in commercial banking.

Significance of the Study

Bank leaders in Ethiopia seek strategies to catalyze e-banking adoption and thereby increase profitability. The significance of this case study was twofold. First, bank managers can improve their e-banking strategy. Second, the improvement of e-banking adoption enhances banking accessibility and convenience to the population.

Contribution to Business Practice

Bank leaders could benefit from the results of this study because the results could help bank leaders understand strategic issues to improve the scale and pace of electronic banking adoption. A firm uses e-commerce strategies to reach more sophisticated customers, and thereby gain competitive advantage (Torres, Lisboa, & Yasin, 2014). Torres et al. (2014) posited that innovation, marketing, and efficiency are the three dimensions of customer-oriented e-business strategy. Electronic business models enable companies to survive under the conditions of competition, reach greater markets, and educate loyal consumers (Jovarauskiene & Pilinkiene, 2015). A firm should select technology strategies based on the form of the value it intends to provide to the customers (Al-Mudimigh, 2015). Therefore, exploring successful e-banking adoption strategies could help bank managers reduce costs, create customers' value, and thereby increase profits.

Implications for Social Change

Society could benefit from the results of this study because an efficacious e-business strategy helps banks managers design and implement lower cost and convenient electronic banking channels so that individual customers can access financial services at reduced costs. IT is the key enabler to realize the transformational change in every aspect of society. The World Bank (2014) suggested that technological innovations could lower cost and enhance the convenience of accessing financial services. Mishra and Singh Bisht (2013) said employing a customer-centric model for e-banking policy formulation enables banking managers to extend low-cost virtual bank accounts to a large number of currently unbanked customers. Moser (2015) posited that a transformative mobile banking model could reduce the digital divide between urban and rural areas of developing countries, and can lead to overcoming traditional barriers to financial access. Thus, the findings from this case study could contribute to positive social change through informing the bank managers' decision-making processes in choosing a sound e-business strategy to advance electronic banking services' availability to the unbanked population.

A Review of the Professional and Academic Literature

A literature review is a systematic way to synthesize earlier works on a particular research topic. A literature review provides a framework for a researcher to build an overview of the phenomenon, thereby helping to identify major controversies and gaps that the research can fill (Walker & Solvason, 2014). My literature search on e-banking adoption strategy included information on the development of electronic banking and competitive advantage, resource-based and market-based view of strategy in information

systems as a theoretical framework, rival theories of the conceptual framework, and a methodology review. The literature review included information on the current research, the significance of the results, and gaps in current knowledge.

Several databases provided source material for the review. I used journal articles, dissertations, and other reference material from the Walden University online library to conduct the literature review. The primary databases searched for this study included IEEE Xplore Digital Library, ScienceDirect, Business Source Complete, Emerald Management Journal, ProQuestCentral, and ABI/INFORM Complete, Google Scholar, SAGE Research Methods Online, World Bank, and sources from Google Scholar. Various keywords and phrases used when conducting research on scholarly documents included: *e-banking*, *e-business strategy*, *competitive advantage* and *Porter's five competitive forces*, *resource-based-view of strategy*, *market-based-view of strategy*, *e-business strategies*, and *IT on business alignment*. I utilized Zotero software for the purpose of citation management. I used two methods to search literature: The broad exploratory approach and specific detail approach (Ford, 2012). The broad exploratory approach is used to build a generic overview on the topic by searching information on the Internet. The specific detail approach helps to collect peer-reviewed literature in line with the research topic under this study.

The total number of references used was 229, which included books, peer-reviewed journal articles, government reports, and Internet sources relevant to the research topic, questions, and design. Total numbers in each category are: (a) 15 books, (b) 195 peer-reviewed journals and articles, (c) six government reports, and (d) 13

Internet sources. Of the 195 peer-reviewed journals and articles used to conduct this research, 177 (91%) of them were published within the last 5 years. The literature review section contains 96 references, and out of it 78 (82%) are peer-reviewed journals and articles.

The literature review included information on six themes: (a) RBV of strategy for information systems under which included the traditional RBV model, MBV model, and the extended RBV framework, (b) rival theories of the theoretical framework, (c) methodology review, (d) development of e-banking and competitive advantage, and (e) research gaps on literature in adoption and usage of e-banking in the sub-Saharan region. Following is a detailed discussion on each theme.

Resource-Based View of Strategy for Information Systems

Many researchers used the RBV as a framework to explore the role of organizational resources in creating competitive advantage and found mixed results. General resources such as high-quality human resource help commercial banks to internationalize their business (Panda & Reddy, 2016). Doherty & Terry (2013) noted information system makes an indirect contribution to improving the competitive organizational position. Organizational resources such as continuous innovation, stakeholder integration, shared visions, and early adoption is vital for Green IT performance (Abdulrahim & Abdulrahman, 2013). Resource-based co-innovation through a platform ecosystem appears a successful strategy for mobile payment service innovation (Zhong & Nieminen, 2015). Intraorganizational resources such as top management support and information technology are two vital enablers of supply chain

integration and thereby business performance (Xu, Huo, & Sun, 2014). Resource-based collaboration between international and local firms drives individual competitiveness, and the integration of the competitiveness of both partners facilitates innovation in marketing (Gupta & Malhotra, 2013). Specific capabilities at the firm level can sustain firms during the process of international expansion in emerging markets (Bortoluzzi, Chiarvesio, Di Maria, & Tabacco, 2014).

Barney and Clark (2007) used a resource-based view to examine the importance of IT to gain sustained competitive advantage. They focused on analyzing five attributes of IT: Customer switching costs, access to capital, proprietary technology, and technical IT skills. They found while other attributes of IT are important at least to generate a firm's competitive parity, IT managerial skills are the only likely source of sustained competitive advantage. According to Barney and Clark, managerial skills include management's ability to conceive of, develop, and exploit IT applications to support and enhance other business functions. Therefore, if managerial IT skills are valuable and heterogeneously distributed across firms, then they usually will be a source of sustained competitive advantage, since these relationships become developed over time, and they are socially complex and thus not subject to low-cost imitation. Barney and Clark suggested for researchers that the search for IT-based sources of sustained competitive advantage must focus less on IT per se and more on the process of organizing and managing IT within a firm.

Abdulrahim and Abdulrahman (2013), Burgelman et al. (2009), and Xu et al. (2014) also identified IT as a strategic resource to generate competitive advantage.

According to Burgelman et al. (2009), integrating technology into a firm's strategy, developing and exploiting a firm's capacity for technological innovation are the two key tasks of general managers to achieve sustainable competitive advantage. In line with that perspective, the issue of an IT-enabled business strategy becomes pervasive, and that leads firms to invest in it (Xu et al., 2014). According to Xu et al. (2014), IT indirectly influences business performance and needs. The use of information technology in itself, however, does not guarantee business success (Al-Mudimigh, 2015). In that case, having management skill to construct sound e-business strategy determines success. According to Al-Mudimigh (2015), the question of how banks can realize sustainable competitive advantage, using the Internet is becoming the center of information system research. The business value of investments in systems has become one of the major research topics for information systems researchers (Schryen, 2013).

Since the early 1980s, the question of how firms can integrate technology and business strategy to gain competitive advantage has become the central point of studies in strategic management (Burgelman et al., 2009). Bhatt and Grover (2005) found most of the scholarly thoughts on IT capabilities and their role in creating competitive advantage evolves from four perspectives: Classic (strategic positioning), economic value, complementary resource, and RBV. According to Bhatt and Grover, among the many facets of IT capabilities, relationship IT infrastructure can facilitate differentiation in the marketplace, and organizational learning is an antecedent to IT capability building. Bhatt and Grover (2005) also noted relationship IT infrastructure can facilitate differentiation in the marketplace, and organizational learning is an antecedent to IT capability building.

Dynamic learning capability most effectively mediates the influence of heterogeneous and immobility of IT resources on performance (Lin & Wu, 2014). Piccoli and Ives (2005) also pointed out IT-dependent strategic initiatives generate sustainable competitive advantage if a firm can create barriers to erosion and response lag drivers over its competitors. Chuang & Hu (2015) found technology strategy positively influences organizational performance both financially and non-financially. Azadi (2011) noted e-business managers should adopt appropriate strategies for meeting the unique challenges of e-business so that they can able to create competitive advantage. Pérez-Aróstegui et al. (2015) argued It strategy is a useful tool to improve organizational performance only when it combines with quality management practices.

A firm, therefore, must have appropriate e-business strategies to tap strategic values of IT, and thereby achieve higher performance and competitive advantage (Azadi, 2011; Chuang & Hu, 2015). Firm strategists should identify critical success factors supporting competitive advantage (Burgelman et al., 2009). Combining marketing strategy and technology strategy as a balanced force is crucial for innovation performance (Lattuch, Pech, Riemenschneider, & Weigert, 2013). In the field of strategic management at the broadest level, there are two explanations about why some firms persistently outperform other companies: Structure-conduct-performance (SCP) and RBV (Barney & Clark, 2007). According to Barney and Clark (2007), the SCP paradigm draws from the theory of industrial organization economics, which focuses on explaining the impact that a firm's market power has on the ability of a firm to raise prices above a competitive level. The RBV draws on neoclassical price theory and focuses less on industry structure

and market power and more on effectively and efficiently respond to customer needs.

Barney (1991) also used the MBV and RBV to identify organizational attributes which support competitive strategies. Both the RBV and MBV are common approaches in literature to assess the information systems strategy (Kuettner & Schubert, 2012).

The MBV of strategy mainly deals with how a firm can achieve a strategic position with its products and services in a market via increasing industry level barriers (Porter, 1985). Whereas the RBV is primarily concerned with how a firm can secure unique resources required to create core competencies and capabilities that serve to gain a sustainable competitive advantage (Burgelman et al., 2009). While the RBV is internal oriented, the MBV is market driven (Dwivedi et al., 2012). The RBV and MBV are rooted in a firm's capabilities and market-oriented perspectives of strategy respectively (Burgelman et al., 2009). According to Hinterhuber (2013), in both RBV and MBV cases, a firm's management should make strategic decisions, considering the following points: the company perspective (resources and capabilities), the competition perspective (competitive actions and reactions), and the customer perspective (customer needs). In this case study, I used the extended RBV, which combined the resource, competition, and customer perspectives to develop a research lens and inform the case under this study.

The traditional RBV model. Scholars intensively have used the RBV for many years to theorize links between resources and competitive advantage and superior performance (Hinterhuber, 2013; Kozlenkova, Samaha, & Palmatier, 2014). Several researchers use RBV as a theoretical framework to analyze a firm's resources and performance linkage (Knott, 2015). According to Barney (1991), the resource should

have attributes of value, rareness, inimitability, and non-substitutability (VRIN) to generate sustainable competitive advantage. According to Lengnick-Hall and Wolff (1999), the RBV of firms stems from the capability logic of strategy. Regarding the theory, firms must secure the resources that can create core competencies and capabilities, which in turn result in sustainable competitive advantage (Burgelman et al., 2009). Porter (1985) argued organizations should deploy resources so that they can generate rent (i.e. the extra amount earned by a resource) out of them. Because of Porter's critics and his observations, Barney and Hesterly (2015) modified the RBV for the second time to include organizational capabilities that required converting resources into rent. Barney and Hesterly suggested resources that are valuable, rare, and difficult to imitate, as well as organizational skills, which are a firm's capability to organize, exploit, and deploy resources, are the key drivers of sustainable competitive advantage.

The RBV of strategy stemmed from strategic management theory, and since the beginning of 1990, it became common to use in the information systems literature (Schryen, 2013). RBV is one of the theoretical lenses for information systems scholars to investigate the link between IT capabilities, resources, and a firm's strategy, performance, competitive advantages, and sustainable competitive advantages. Several scholars see IT as a resource and capacity that contributes to enhancing organizational performance. For example, Deivedi et al. (2012) identified six IT capability classes that contribute to increasing performance: IT business partnerships, external IT linkages, business-IT strategic thinking, IT business process integration, IT management, and IT infrastructure. Dwivedi et al. also defined IT resources as IT infrastructure, human IT

resources, and IT-enabled intangibles. Based on the RBV, IT resources must complement other resources to contribute to an increasing firm's performance, thereby generate competitive advantage (Porter, 2001). IT is a strategic resource, which can influence organizational competitive advantage if it is used combined with other strategic resources (Abdulrahim & Abdulrahman, 2013).

Few scholars, however, argue that IT could not be a source of competitive advantage (Chi and Sun, 2015). According to Chi and Sun (2015), even though IT can increase performance as well as have a high value for customers, there is no evidence to support it leads to highest business profitability. Carr (2003) argued since IT becomes a commodity, easily acquired and duplicated, the value goes away and no more competitive advantage comes out of it. However, Bhatt and Grover (2005) opposed Carr's point of view and argued firms can develop distinct capabilities in managing IT. According to Bhatt and Grover, a competitive advantage does not stem from the IT infrastructure itself but the company's capabilities in organizational learning intensity, IT business experience, and relationship infrastructure.

Another argument exists about the power of RBV in predicting the strategic value of information technology in line with the competitive advantage. Hinterhuber (2013) argued the RBV inherently to differentiate between valuable and less valuable resources and capabilities. According to Hinterhuber, its inherent limitation comes from the root assumptions of zero fixed cost and customer homogeneity. Hinterhuber criticized the traditional RBV's VIRO framework because the model neglected customers' need, and thereby lacks demand-based perspectives. The VIRO model has limited value in

informing strategic actions due to the resource selection difficulties and failure to evaluate resource disadvantages as well as its nature to draw users to the existing operations and business model (Knott, 2015). From the RBV framework standpoint, only the resources bases such as technology, skills, and capabilities drive firm's strategy (Lattuch, Pech, Riemenschneider, & Weigert, 2013). Lattuch et al. (2013) noted there is another school of thought namely the market-based perspective, which focuses on market opportunities that require a firm's strategy to change in line with market developments. According to Lattuch et al., the combined use of the two perspectives RBV and MBV provides full insight to devise effective strategy rather than focusing on either/or approach.

Market-based-view. Scholars use different terms to refer the term external view of firm's strategy. Burgelman et al. (2009) named as product-market-view, Barney (1991) and Lattuch et al. (2013) called as market-based-view, and Porter (1985) strategic positioning. The MBV refers to a conceptual paradigm that puts industry and markets have to come at the center of firm's strategic formulation process (Soh, Wong, & Chong, 2015). There are two best-known theories underpin the MBV of strategy theory: structure-conduct-performance framework (Chi & Sun, 2015) and Porter's five forces model (1985). According to Porter (1985), understanding and coping with competition is the key tenet of the strategy process. Porter sees technology as one of the change drivers in industry structure and firms must incorporate it into their strategy so that they can gain a competitive advantage by exploiting the market opportunity. IT is one form of the technologies that affect competitive advantage positively if it is well integrated into

firm's business strategy and enables a firm to achieve a low cost and differentiation through its value activities (Porter, 1985).

According to Dwiveldi et al. (2012), the term competitive advantage refers to the value, which a firm can create for its customer. It is also, what customers are willing to pay and exceeds the company's cost of producing it (Porter, 1985). As Porter noted, a firm can create superior value over its competitors when it can offer lower prices than competitors for equivalent benefits, or it provides unique benefits that more than offset a higher price. Porter proposed three general strategies to attain competitive advantage: cost leadership, differentiation, and focus. According to Porter, the focus strategy has two strands: cost focus and competitive scope (i.e. market segmentation). Firms applying these strategies can win a competition by offering unique products which are difficult to imitate; sell at lower cost; attract and retain many customers, and gain more profits than their competitors from a volume of sales generated (Dwiveldi et al., 2012).

Firms require technology strategy to pursue each of Porter's general strategy (Burgelman et al., 2009). According to Burgelman et al. (2009), management should take a right strategic decision on which technology either product or process technology or both to use in pursuing differentiation and cost leadership. According to Porter (1985), a firm can employ technology to gain a competitive advantage in two ways: to disrupt industry structure or affect the drivers of cost or uniqueness in a company's value chain. In the first case, for example, a firm can develop new technological innovation that may raise or lower scale economies, make new interrelationship, and create a first-mover advantage. In the second case, a firm can gain a technological advantage as a result of

other drivers, such as scale, timing, or interrelationship. Porter argues a firm can achieve sustainable competitive advantage through its technological change under the following conditions: (a) if the technological change itself leads to lower cost or make a differentiation, and a firm can protect its sources of competitive advantage from imitation; (b) if a firm is pioneering the technological change, and it can translate into a first mover advantage, and (c) a company could be able to shape the industry structure through its technological change.

Consequently, in this day's businesses, technology becomes a strategic tool. Burgelman et al. (2009) noted to use technology as strategic tools firm's management must choose an appropriate technology to invest, and ensure technology to business strategy alignment across a company's value chain. Porter (1985) also noted firms must design technology strategies based on how each technology to be used for competitive advantage and make or buy decision. According to Porter, firms should decide its information technology (IT) investment regarding its role in competitive advantage that is technology portfolio and business portfolio analysis.

Technology strategy can enable firms to achieve sustainability of business (Li-Hua & Lu, 2013). According to Li-Hua and Lu, firms use technology strategy to leverage the creation of the five qualities, which underpin business sustainability: superiority, inimitability, durability, non-substitutability, and appropriate ability. Mohapatra (2011) pointed out business managers need to engage in IT investment decisions; ensuring IT-business strategy alignment, and managing technological trends. Therefore, management should understand its strategic role in gaining competitive advantage. Mohapatra advised

three tips on how managers can best use technology to maintain a competitive edge. First, managers need to understand the industry in which a firm operates and the role of information technology (IT) in it. Second, managers must recognize the change in business models due to the change in technology thereby establish collaboration within and outside the industry. Third, managers should understand technology adoption is about change management thus devising a plan to implement. Finally, managers should exploit IT to create a learning organization.

Nevertheless, the strategic positioning perspective on information technology (IT) and competitive advantage have an inherent limit (Bhatt & Grover, 2005). According to Bhatt & Grover, the strategic positioning perspective assumes firm's structure as static and companies as a homogenous entity in their activities. Bhatt and Grover also (2005) argue the RBV can be better than strategic positioning to strategize IT for competitive advantage. The choice of the strategic positioning or RBV depends on the context in which companies compete (Barney & Clark, 2007). According to Barney and Clark, for example, while the strategic positioning framework is useful when the firm is operating in a competitive industry, the RBV (i.e., efficiency) framework is helpful when the level of competition in an industry is relatively low. Kim and Hoskisson (2015) suggested firms should focus on devising and implement external resource-oriented strategies (i.e., resource environment view) to create competitive advantage.

Although the RBV is one of the most widely accepted theories of strategic management, it also becomes the subject of significant criticism (Shafeey & Trott, 2014). Shafeey and Trott identified 13 limitations of the VRIO framework in predicting firm's

competitive advantage and thereby required to extend the framework. While strategic positioning (Porter, 1985) suggest that companies excel because of what they do the RBV (Barney, 1991) suggests companies excel because of what they are. However, the two frameworks (i.e., RBV and MBV) complement each other (Torres et al., 2014). Knott, 2015; Lattuch et al. (2013) noted having a balanced view, which involves market and technology drivers is vital in shaping an innovation strategy. Therefore, there is a need to extend the RBV theory to take into account the contribution of all kinds of resources to performance (Acar & Polin, 2015; Weppe & Lecocq, 2013; Xu et al., 2014).

The extended resource-based view framework (VRIOLU). Hinterhuber (2013) suggested the new RBV model (i.e., VRIOLU framework) extended its predecessor VRIO framework developed by Barney (1991). He combined the traditional RBV with the MBV to mitigate the weak points in each theory. Regarding the new framework, resources and capabilities should be sufficiently large enough and enable a company to address customers' unmet needs so that it can achieve competitive advantage. According to Hinterhuber, business strategist should use the extended RBV framework – considerations of customer value, market segmentation, and price elasticity – in complement to listening to client needs and leverage technological competencies. Knott (2015), Lattuch et al. (2013), and Xu et al. (2014) also reinforced Hinterhuber's point of view the importance of integrating both RBV and MBV to building a global vision on firm strategy. Torres et al. (2014) also suggest that an integration of the RBV and MBV theories is vital to explain value creation in virtual markets. Figure 1 presents the VRIOLU framework of the extended RBV theory as follows.

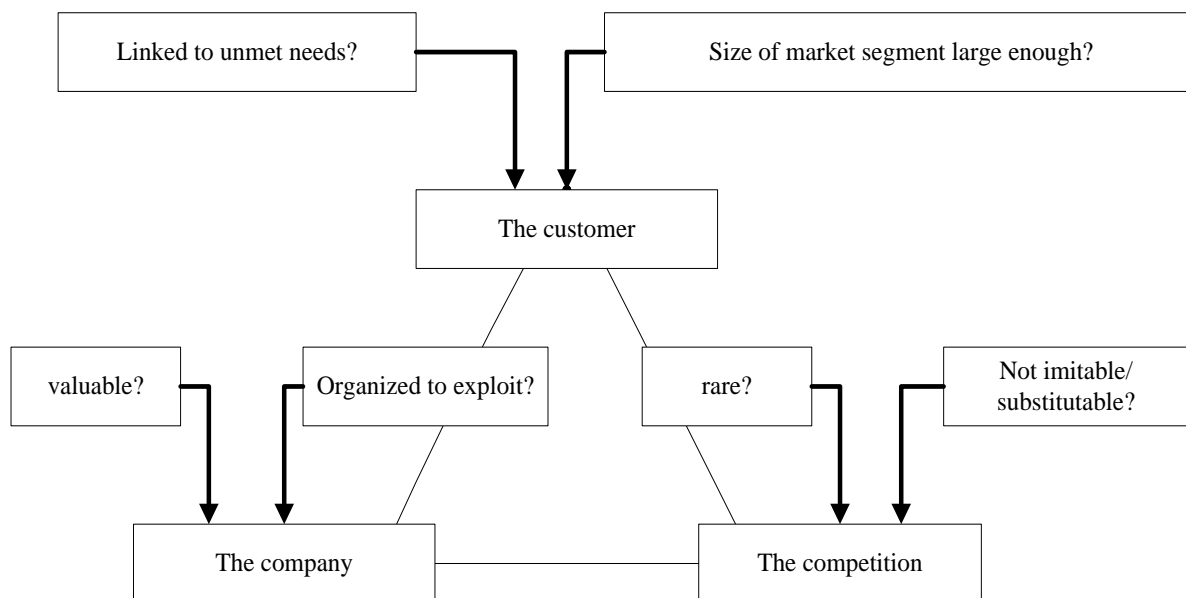


Figure 1. The extended RBV Framework. Adapted from www.emeraldinsight.com. Case studies towards a predictive definition of competitive advantage in the resource-based view of the firm by A. Hinterhuber, 2013. *Management Decision*, 51, p. 808.

The extended RBV framework in figure 1 depicts three categories of decision process perspectives: the customer, the company, and competition. The customer perspective helps business leaders to understand if their products or services link to customers' unmet needs (U) and if the size of the market segment is large enough (L) to cover their costs before they decide which products or services go to market. The company perspective enables business leaders to assess their resources to what extends it can generate rents (V) to the company, and the shape of the company to exploit the resources under its control. Finally, the competitive perspective gives business leaders to assess if the resources under their control are hard enough to make a copy (I) and rare to replace by substitution (R) in the competition. In general, the framework helps firm

leaders to guide their managerial actions, which are required to generate competitive advantage and to distinguish more valuable resources and capabilities from other, less valuable ones. According to Hinterhuber, understanding of unmet customer needs is the key limiting factor of the extended RBV model.

I used the extended RBV framework to understand strategies that bank managers use to adopt e-banking services in the Ethiopian context. The extended RBV helped me to explore if the bank managers under this study focus on building distinct capabilities to implement e-banking channels. As Bhatt and Grover (2005) noted, distinct IT capabilities, in this case, include IT managerial skills, technical expertise, as well as the IT –business strategy alignment (i.e. the extent to which their IT plan reflects their plan of activities). Approaches to examine e-banking strategy and its alignment with business strategy in the context of a commercial bank are vague (Howell & Wei, 2010). Howell and Wei developed a commercial bank electronic strategy model (CBESM) based on the strategic value chain to demonstrate how information technology supports the commercial banking business. Using the CBESM model, Howell and Wei classified all primary activities in the value chain into the following five categories: Business to business (B2B), business to customer (B2C), customer to business (C2B), business to government (B2G), and Business to internal (B2I). Howell and Wei also identified 78 e-business implementable items along with their distribution in each classification as follows: B2B (15 items), B2C (28 items), C2B (six items), B2G (seven items), and B2I (22 items). Out of the 78 implementable items, Howell and Wei (2010) pointed out the e-outbound logistics, e-customer services, e-firm infrastructure, and e-strategy decisions are

the principal activities where bank managers can differentiate their services using e-strategy. Furthermore, commercial bank managers must use similar e-business solutions to cooperate each other thereby prevent losses and become more convenient to the customer. Howell and Wei argued commercial banks should offer the most valuable combination of attractive charge rates, useful product mix, and superior customer service to their customers to gain sustainable competitive advantage out of the e-banking channels.

Customers are a primary source of a firm's revenues (Gupta & Malhotra, 2013). Organizations need innovation to address customers' unmet need. According to Lattuch et al. (2013), if firms failed to understand their market dynamics the product or service they offered would crash and conversely, organizations focusing purely on market insights risk confine their innovation efforts with demands they can never satisfy. Therefore, firm managers must use a dual strategy of market and technology drivers when attempting to innovate (Lattuch et al., 2013). Torres et al. (2014) identified three dimensions of e-business strategies, which determine firm's performance: differentiation via innovation, differentiation via marketing, and cost leadership strategy. According to Torres et al., firms should focus on commercialization and innovation factors of the e-business strategy so that they can create a positive impact on the variability of corporate performance.

From the above discussion, I can draw a lesson that commercial banks also should use the appropriate customer-centric e-business model to gain competitive advantage from the electronic banking services. A customer-centric e-business model

comprises the service provider brand, deposit custodian, payment structure, cash in/cash out channels, transaction scopes, service pricing and opening charges, and documentation (Mishra & Bisht, 2013). Customer-oriented bank managers have the following key attributes: (a) An in-depth customer understanding (Munari, Ielasi, & Bajetta, 2013), (b) awareness on the determinants of satisfaction with e-banking (Andaleeb, Rashid, & Rahman, 2016; Liébana-Cabanillas et al., 2013), (c) communication management in electronic banking (Kirakosyan & Dănăiață, 2014), and (d) The four marketing mix configuration and uses of Porter's five competitive forces (Azadi, 2011). Banks managers also should consider users as innovators but not as passive subjects in the diffusion of e-banking services (Boor, Oliveira, & Veloso, 2014).

Rival Theories of the Theoretical Framework

There are five theoretical frameworks commonly used in e-banking adoption related studies: Technology acceptance model, diffusion of innovation, the theory of planned behavior, the theory of reasoned action, and the technology-organization-environment framework other than the RBV of competitive strategy. Hoehle et al. (2012) assessed 130 journal articles of electronic banking to identify the theoretical lens used by the authors. They found all authors rooted their research in the five theoretical lenses mentioned above. According to Hoehle et al., authors of 35 studies used the diffusion of innovation (DOI) model; 48 employed the technology acceptance model (TAM); 30 applied the theory of reasoned action (TRA), 10 used the theory of planned behavior (TPB), and seven used Inhibitors. The result of the study also shows TAM is the most

preferred model to deal with research at the individual level of e-banking adoption and use.

In the information systems research field, there are various theories other than the RBV, which applies, including lifecycle and business value. For example, the ISWorld wiki listed 87 such theories and models used in information systems research (Dwivedi et al., 2012). According to Dwivedi et al., researchers use these theories to understand how information systems can be effectively deployed in today's digital world at three abstraction levels: industry, firm, and individual levels. Dwivedi et al. also presented 43 theories and models in information systems research and classified them into the following four categories: life cycle, strategic and economic theories, socio-psychological theories, methodological theories. The RBV model is among the ten theories and models grouped under the strategic and economic theories. The technology-organization-environment (TOE) framework by Tornatzky and Fleischer (1990) and diffusion of innovation (DOI) by Roger (1962), for example, are the two among the ten theories and models researchers use to understand the determinant factors in technology adoption process. The TOE framework is an organization level theory, which explains how the three – technology, organization, and environment – dimensions of firm's context influence adoption decisions. The diffusion of innovation (DOI) theory deals with how, why, and at what rate new ideas, technologies, and process innovation spread through an organization, society, or country. While TOE focuses on firm's context, DOI concerns on perceived attributes of innovation. Both the TOE and DOI, however, lack to explore in e-business strategies from management's strategic perspective as the main problem for this

study. Therefore, I found the extended RBV model was suitable to assess how the banks' e-business strategy was designed to exploit firm's internal and external resources in achieving competitive advantage.

Development in Electronic Banking and Competitive Advantage

As in all business happens, revolution is under progress in the financial industry since the advent of information communication technology (Mishra & Sigh, 2015). The proliferation and advance in technology have led to the disruptive change in how financial service providers do business with their customers – business-to-business and business to customer interactions (Jovarauskiene & Pilinkiene, 2015). E-banking, for example, is the result of the technological innovation, which refers to the provision of financial services through digital channels (Adewoye & Omoregie, 2013; Ayo, Oni, Adewoye, & Eweoya, 2016; Kaur, 2013). The digital channels, in this case, included: mobile banking (Baptista & Oliveira, 2015; Lee, Harindranath, Oh, & Kim, 2015; Moser, 2015; Wonglimpiyarat, 2014), Internet banking (Hanafizadehet al., 2014), and of course the old fashion automatic teller machine (ATM) based transaction (Adewoye & Omoregie, 2013). IT has led to increased customer satisfaction, improved operational efficiency, reduced transaction time, and gives banks a competitive edge in reducing the running cost by quick responses in the delivery of services (Murari & Tater, 2014). In the modern market, the positive rewards of e-banking services on business and customers' value do not seem questionable but the issue of its adoption (Abu-Assi et al., 2014; Chuang & Hu, 2015).

Bank clients can access financial services (i.e. whether it is transactional or non-transactional) through online channels from anywhere at any point of time (Liébaná-Cabanillas, Muñoz-Leiva, and Rejo'n-Guardia, 2013). E-banking channels enable individuals to make real-time financial decisions conveniently independently of time and location (Sikdar, Kumar, & Makkad, 2015). Mishra and Bisht (2013) pointed out electronic banking enables customers to access financial services without limit in time, place, and the type of agents they use. The core use of online banking, therefore, are convenience and low-cost advantage thereby customer satisfaction (Aliyu, Rosmain, & Takala., 2014; Liébaná-Cabanillas et al., 2013). The provision of electronic banking becomes a lucrative business and the area where companies compete to gain competitive advantage and increase efficiency (Dauda & Lee, 2015). Mobile banking technologies combining with smart technologies create opportunities for Africa to leapfrogging the traditional ways of delivering banking services (World Bank, 2013). It uses as a catalyst to speed up the pace of change in financial services thereby achieve financial inclusion and to overcome geographical barriers (Baptista & Oliveira, 2015). Hence, to tap the unleashed potential of technological innovations, the issue of digital banking becomes a topic of great interest to the business strategists of financial institutions (Liébaná-Cabanillas et al., 2013).

The usage and adoption rate of the digital services widely differs among the developed and developing as well as the type of technologies used (Mishra & SinghBisht, 2013). For example, online banking in developed countries becomes a commodity type services and creates the highly competitive market for the financial and non-financial

industries (Atay & Apak, 2013). Continuous advancements in mobile technology created the dynamics of competition and collaboration among mobile carriers, banks, and other related parties for mobile banking services (Lee et al., 2015). Zhong and Nieminen (2015) pointed out in China mobile payment market, there are three players namely Alipay (third-party actor), Bestpay (mobile operator), and UnionPay (banking). Apple not a bank but provide payment technology, *ApplePay*, for its mobile iPhone users and competes with the large banking service providers (Hornblass, 2014). Google Wallet also enables customers to perform mobile payments (GSMA, 2014). According to Mishra and SinghBisht (2013), market players use different types of models such as bank led, telecom operator led, and the third party led or the combination of the three combined to operationalize mobile banking. The three actors: banks, telecom operators, and third parties collaborate in different ways. For example, in China, they create co-innovation through platform ecosystem (Zhong & Nieminen, 2015), and in South Korea, they form actor-network through joint standard (Atay & Apak, 2013). This implies that online banking is becoming the dominant channel in the developed market. Demirgüec-Kunt, Klapper, Singer, and Oudheusden (2015) found 50% or more customers have a positive experience with their banks in the developed nations such as United States, Canada, and Australia. Further, by 2017, World Bank expects fewer customers in most of the developed regions will use the branch and the ATM.

Markets globally fall into four levels of online banking adoption: devotee, advanced, intermediate, and undersized (Datamonitor, 2014; PRNewswire, 2013). As to the report indicated, factors such as consumer attitudes, existing online services, and the

state of the Internet infrastructure underpin the success or failure of online banking adoption strategy. In this case, the online banking adoption level in the sub-Saharan region such as Ethiopia may fall under the fourth level - undersized. As compared to the developed market, hence, the pace and scale of adoption and usage of electronic banking channels in developing countries remained immature and resulted in notable financial exclusion (World Bank, 2014; Yang, Pang, Liu, Yen, & Tam, 2015). In India, for example, awareness, self-efficacy, ease of use, usefulness, and security were the criteria responsible for making ATM, the most preferred channel for adoption (Mishra & Singh, 2015). Lie ´bana-Cabanillas, Muñoz-Leiva and Rejo ´n-Guardia (2013) identified accessibility, trust, ease of use and usefulness as the main determinants of user experience with a specific institution's e-banking products.

The adoption levels, however, varies not only between developed and the developing world but among the developing countries themselves. For example, in its policy research paper, the World Bank (2013) noted African enterprises and households are less likely to use electronic financial services than their peers are in other developing countries. Despite the opportunities in mobile technology, the financial exclusion is, however, worst even in the case of the Sub-Saharan region except in Kenya – the success case with M-PESA (World Bank, 2013).

There are few studies at the macro level on the possible causes of financial exclusion in the Sub-Saharan region. World Bank (2014) pointed out the lack of demand for financial services, and barriers such as cost, travel distance, and the amount of paperwork are the key drivers to the lack of financial inclusion. Further, the World Bank

(2013) reported findings of its study on the case of banking in Africa that encompasses macro level and micro levels, as well. In the case of household access to financial services, for example, the bank identified lack of money, lack of personal identification, prohibitive costs, and geographic barriers, lack of necessary documentation, and lack of trust as the main causes respectively for not having an account. According to the World Bank, informational asymmetries related to the absence of reliable methods for personal identification and lack of collateral and credit histories are the key challenges to financial inclusion. World Bank recommended that banks should expand their branches; use agent banking such as in the case of equity bank in Kenya; implement biometric identification methods as tested in the paprika farmers in Malawi, and invest in technological innovation similar to in the case of M-PESA in Kenya to enhance financial inclusion.

The World Bank (2013) identified three focus areas to solve the challenges to financial inclusion: technological innovation, business models and product design, and financial literacy. New technologies such as mobile and smartphones are becoming an opportunity to leapfrog the financial exclusion barriers in Africa (GSMA, 2014). The Kenyan mobile network operator, Safaricom has demonstrated the best example in this case (Mishra & SinghBisht, 2013). According to the World Bank's report, Safaricom launched the M-PESA mobile payments wallet project in 2007 and had acquired 15 million registered users along with a network of 35,000 cash-in/cash-out agents by early 2012. M-PESA registered this remarkable achievement when the country's mobile phone penetration rate was only about 20 percent (World Bank, 2014). The World Bank claims the existence of the competitive market is the key driver of the technology adoption and

usage success. Regardless of the success, however, M-PESA is not limitation free. World Bank pointed out affluent Kenyans are the most benefited out of M-PESA transactions, but the poor remain far from intensive use.

Regardless of such limitation exists; however, mobile financial services seem the best fit and prospect for African context to reduce financial exclusion. In 2014, for example, mobile financial services such as payments, transfers, insurance, savings, and credit were available in over 60% of developing markets (GSMA, 2014). According to the GSMA, mobile network operators are becoming the key player in providing mobile money services. Even though, 300 million mobile payment accounts globally registered in the year of 2014, only 103 million accounts were found active as of December 2014 (GSMA, 2014). That shows the issue of adoption and usage remain a hot area for research.

Methodology Review

I used the qualitative methodology to explore strategies used by the bank managers in Ethiopia to advance the adoption of electronic banking services. Recent studies show the increased use of the qualitative method in exploring issues related to management (Guercini, 2014; Lincoln, 2015). According to Guercini, qualitative method contributes to reduces the distance between researcher and practitioner's context. Lincoln (2015) argued vitality of the field and the development of new approaches making attractive to use qualitative methods in management research. Qualitative research methods help to gain a better understanding of the performance management system in their natural setting (Cohanier, 2014). Reflexivity will be central to the future

development of qualitative methods and their acceptance in top-tier journals (Duberley, 2015). Rosenthal (2016) noted while a qualitative research enables to explore the perception of participants through identifying themes; a quantitative research commonly displays data and numbers. Kaivo-oja (2016) pointed out integrating common themes generates a reflective perception of the participants.

The purpose of this study was to explore the strategies bank leaders used to adopt e-banking channels. Potential themes emerged from understanding what participants describe as strategies in e-banking adoption by collecting data using semi-structural interviews. Henry, Dymnicki, Mohatt, Allen, and Kelly (2015) noted clustering of common themes help researchers to understand prior preconceptions about the topic under investigation when making sense of the data. This case study aimed to provide insights from the perceptions of multiple top-level bank managers participants, which may have important implications for bank leaders in their efforts to support the e-banking adoption and implementation process. Literature show using qualitative method is common to explore factors affecting e-business adoption and technology diffusion.

Chatzoglou and Chatzoudes (2016) found Factors such as firm size, firm scope, IT infrastructure and internet skills are the most important e-business adoption drivers, while chief executive officers (CEOs) knowledge, adoption cost, and competitive pressure do not seem to play a major role in the e-business adoption decision. Cagliano, Marco, Rafele, Bragagnini, and Gobbato (2015) found the efficiency and reliability of the service drive its diffusion among producers and consumers, who in turn persuade retailers to adopt. Sang-Gun, Chang-Gyu, and Eui-Bang (2015) found that innovation effects gain

influences on ICT product diffusion. Yee-Loong Chong, Ooi, Bao, and Lin (2014) found knowledge management processes such as knowledge acquisition and knowledge application were significant in affecting Malaysian small and medium enterprises' decision to adopt e-business in their supply chain but not Knowledge dissemination.

Research Gap on E-Banking Adoption

Many researchers focused on exploring the introduction and usage of electronic banking services at the individual level. The bodies of research significantly vary in their scope, focus, methods, and theories used to study the adoption, utilization, and resistance of electronic banking channels (Hoehle et al., 2012). For example, Hoehle et al. (2012) reviewed 247 peer-reviewed articles, which deal with the adoption and use of e-banking channels spanned the year from 1984 up to 2010, which was the time in which e-banking started. According to Hoehle et al.(2012) findings, the 186 out of 247 research publications were focused on the issue of Internet banking and 56 on mobile banking, which in aggregate covers the 98% of the studies. The 148 research papers were conducted using a quantitative approach, but only 22 were qualitative. Furthermore, the 48% of the studies were focused on three countries: USA, UK, and Finland, and the rest other European countries, and there was no single peer-reviewed article about e-banking adoption and use in Africa out of the 247 articles.

In recent years, research on the adoption and use of electronic banking channels in developing countries have grown substantially, but most of them scoped to the Asian countries (i.e., such as India, Iran, Jordan, Oman, Thailand, Malasia, & China) other than Africa. Regardless of the tremendous potential of technologies to overcome the financial

exclusion in Africa, studies regarding the adoption and use factors are scarce thereby leave the region-unexplored area of research (Baptista & Oliveira, 2015). Out of the 100 peer-reviewed articles that spanned from 2013-2016, which I retrieved from ScienceDirect and Emerald, for example, I found only three articles titled as consumers' attitude towards e-banking services in Islamic banks of Sudan (Mansour, Eljelly, & Abdullah, 2016); investigating e-banking service quality in one of Egypt's banks (Hussien & Abd El Aziz, 2013), and factors influencing the adoption of internet banking: a case of commercial banks in Mauritius (Juwaheer, Pudaruth, & Ramdin, 2013). There are few recent studies about the adoption and use of e-banking in the Ethiopian context. Results of the studies showed security risk, lack of trust, lack of legal and regulatory framework, Lack of ICT infrastructure, the absence of competition between local and foreign banks, and customers' illiteracy are the key hindering factors (Bambore, 2013; Bultum, 2014). The studies focused on the behavioral and exogenous factors (i.e., customer perspective, technology, and government role) other than managerial challenges thereby lack to see the problem from a strategy perspective.

From the literature search, I observed that barrier to electronic banking adoption and uses significantly differ among the developed and developing countries. Factors such as security, trust, privacy, value, and risk are, for example, critical concerns of the developed market (Adapa & Rindfleish, 2013; Hoehle et al., 2012; Mangin, Bourgault, Porral, Mesly, Telahigue, Trudel, 2014; Miguens, Vázquez, & Turnes, 2014). In the case of developing countries, different authors identified different challenges against technology adoption and use. For example, NikolaosBasias, Themistocleous, & Morabito

(2013); Andaleeb, Rashid, and Rahman (2016) identified lack of customer and service-centric approach. Ayo, Oni, Adewoye, and Eweoya (2016) identified demographic factors such as age, gender, and education as critical barriers. Baptista and Oliveira (2015) pointed out culture as an obstacle to adoption. El-Qirem (2013), and Bucevska and Bucevska (2013) noted the lack of convenience, accessibility, service delivery, design, the simplicity of the banking website, anxiety, lack of reliability, e-service quality, and high charge as challenges. Shaikh & Karjaluoto (2015) found that most of the mobile banking adoption literature commonly relies on the technology acceptance model and its modifications. According to Shaikh & Karjaluoto, compatibility with lifestyle and device, perceived usefulness, and attitude are the most significant drivers of intentions to adopt m-banking services in developed and developing countries.

Recent literature on e-banking adoption also emphasizes on theoretical models such as consumer's acceptance (Sikdar, Kumar, & Makkad, 2015), culture and security (Baptista & Oliveira, 2015; Mortimer, Neale, Hasan, & Dunphy, 2015)), technology, organizational, and environmental factors (Aboelmaged, 2014). The influence of E-business strategies on the electronic banking adoption and use in the case of developing countries such as Ethiopia, however, has received less attention in most of the works of recent literature. Exploring the approaches that banks pursue to mobilize existing customers toward the use of electronic banking applications was, therefore, valuable. In this case study, I focused on understanding the banks' current e-banking strategies bank managers use to advance the pace and scale of e-banking adoption in the Ethiopian context. I used the extended RBV framework as a conceptual lens to explore the e-

business strategy. Hence, in this case, study, I may contribute to filling the gaps in the previous research.

Transition

In this qualitative case study, I intended to explore the business strategies that bank managers in Ethiopia use to advance the adoption pace of electronic banking services. Section 1 is an overview of the foundational concepts of the study including the problem and purpose statements, nature of the study, and the research question. Section 1 also established the conceptual framework and review of the literature pertained to the research topic and conceptual framework to hinge my research to the previous works. Section 2 contains the methodology and design chosen for this study. The section addresses the role of the researcher, study participants, and ethical procedures. It also includes detail discussion on the research method and design, population and sampling methods, data collection instruments, data organization and analysis techniques, concluding with reliability and validity.

Section 2: The Project

In Section 1, I provided the foundational concepts of the study. In Section 2, I focus on the details of the project. This section consists of the structure of the main project, which includes the purpose statement, the role of the researcher in the study, and participants of the study. It also includes procedures for gaining access to participants, the research method and design, the population and sampling procedure, the data collection methodology, data organization and technique, and reliability and validity.

Purpose Statement

The purpose of this qualitative single case study was to explore e-business strategies that bank managers use to promote the adoption of electronic banking services. The study population included 12 experienced bank leaders from one commercial bank in Addis Ababa, Ethiopia. Experienced bank leaders with decision-making authority can meet the information requirements for this study in sharing their real-life experiences. Bank managers can benefit from the results of this case study by having a better understanding of e-business strategies to enhance the scale and pace of adopting electronic banking services. The implication for positive social change could include the potential for some bank managers to accelerate the adoption of e-banking services in the Ethiopian market, resulting in increasing financial access and reducing risks and inconvenience to the unbanked population.

Role of the Researcher

In a qualitative study, the role of the researcher includes selecting participants, gathering information accurately, reporting all data collected and identifying shared lived

experiences (Cseko & Tremaine, 2013; Yin, 2014). Kyvik (2013) identified six academic researcher roles: networking, collaboration, managing research, doing research, publishing research, and evaluation of research. Researchers play an insider-outsider role in qualitative methodologies (Cui, 2015). Researchers play an insider role if they are part of the profession under study, otherwise outsider role. Ritchie et al. (2013) noted qualitative researchers play a role in studying subjects in their natural settings and attempting to make sense of phenomena regarding the meanings people bring to them. In this case, study, I played a significant role in data collection, compiling, coding, analyzing, and interpreting the data by serving as the primary instrument.

Bryman (2012) noted qualitative researchers should explain whether their role is as an insider or outsider. Unluer (2012) pointed out there are no overwhelming advantages to being an insider or an outsider, but researchers should take ethical consideration into account in both cases. Collins and Cooper (2014) noted emotional intelligence could strengthen the ability to connect with participants when the researcher is an outsider. Ritchie et al. (2013) noted qualitative researchers should consider the nature of the relationship between them and the topic under study to be conscious of their values and assumptions underpinning the data collection effort. I did not have a prior connection with the banking industry, the topic under this study, or the participants.

Halpern and Leite (2015) and Nelson, London, and Strobel (2015) noted researchers' responsibility is to strive for neutrality, ensure that the research data are reliable, and analyze and interpret the data in an ethical manner. All research involving human subjects must carry out in an ethical manner (Belmont Report, 1978). The basic

principles of the Belmont report include respect for people, beneficence, and justice (Ritchie et al., 2013). I treated all participants as autonomous agents, imposed no harm, and protected their rights during this study as identified by the Belmont Report protocol. I collected data in a trustworthy manner and adhered to the protocols as required by the Belmont Report, in addition to mitigating potential bias.

Case studies are prone to bias (Yin, 2014). Bias is an inevitable problem in a qualitative study and may misrepresent the assessment of information (Leedy & Ormrod, 2015). According to Unluer (2012), outsider researchers may face biases, which stem from a lack of depth of knowledge about the topic and its context. I played an outsider role in this case study. In that case, Bryman (2012) recommended qualitative researchers should ask probing questions, and then listen, think, and then ask more probing questions to get to deeper levels of conversation. I also used a wide variety of sources and peer-reviewed journals to discuss the topic in this study.

An interview protocol helps a researcher to identify key information, essential background, and contextual information (Ceunynck, Kusumastuti, Hannes, Janssens, & Wets, 2013; Onwuegbuzie & Byers, 2014). Moreover, it serves as an effective guide to bridge the interaction between the interviewer and interviewees (Bryman, 2012; Ceunync et al., 2013). According to Bryman (2012), the interview protocol for the semistructured interview includes a list of issues to be addressed and questions to be asked. Halpern and Leite (2015), and Oates and McDonald (2014) noted an interview protocol consists not only a set of questions but also a procedural guide for directing a researcher in the research process. According to Halpern and Leite (2015), the procedural guide includes

the details of what the researcher will say before and after the interview, prompts for the interviewer to collect informed consent, and prompts to remind the interviewer the information that is targeted in collecting. I followed an interview protocol to ensure that I use the same interview questions with each participant, ask all interview questions the same way, and cover the same topics in every interview to mitigate bias. The interview protocol included six steps: (a) Reminders of the purpose of the research, (b) an opening statement as an icebreaker, (c) open-ended face-to-face interview questioning, (d) notation and clarification of any non-verbal communication, (e) probing questions, and (f) recorded reflective notes throughout the entire interview process (see Appendix B).

Participants

Participants in this study were the commercial bank's top-level executive managers. Factors such as study characteristics, study population characteristics, participant's willingness to participate, participant's workload, context, and participant's characteristics were part of the research participant recruitment process (Arends et al., 2014). According to DeFeo (2013), researchers should use eligibility criterion to select participants for the qualitative study. Reybold, Lammert, and Stribling (2013) noted researchers who use the purposive selection strategy should choose participants regarding criteria that will allow them to answer the research question as well as relate to information-rich cases. In this case study, I involved participants who are commercial bank managers, top managers who devise e-business strategies, willing to participate and have relevant knowledge and experience regarding e-business strategies.

The qualitative researcher needs to be able to negotiate, establish, and maintain access to participants (Peticca-Harris, deGama, & Elias, 2016). According to Peticca-Harris et al. (2016), gaining access to the participant is a dynamic game that requires flexibility and balance. Peticca-Harris et al. recommended three ways to access participants: Locating someone you already know, approaching an informant, and finding an informant through a go-between or gatekeeper. Monahan and Fisher (2015) presented nine strategies for securing access to secretive organizations: Attending industry or government conferences, finding the names and making cold calls, communicating legitimacy, reducing the perception of threat, exploiting chance and making barely announced visits, mobilizing indirect access, filing freedom of information requests, triangulating internet data, and initiate and follow-up on multiple leads simultaneously. Developing and maintaining trust between researchers and gatekeepers is a key strategy to gain access to participants (Landers, McCarthy, & Savage, 2012). Therefore, I used the following strategies to establish a working relationship with participants: First, I communicated to the bank's president about the objectives and purpose of the study and obtained a letter of cooperation (Appendix D). Second, I had a single point of contact within the organization to determine the number and name of interviewees, e-banking adoption strategies related documents and annual performance reports to review, the schedule for the interview, place, and the way how to share the findings. Third, I made clear the conditions about issues of anonymity and confidentiality to participants and received their consent by signing the nondisclosure agreement. Finally, I requested each

participant their consent via an informed consent letter (see Appendix A) before they participate in the case study research.

Leedy and Ormrod (2016) recommended three strategies for establishing a working relationship with research participants: Find a suitable location, get written permission, and create and maintain rapport. Trust underpins effective communication (Ritchie et al., 2013). Potential participants should be given adequate time to review material and make an informed choice (McDonald, Kidney, & Patka, 2013). Therefore, I established and maintained rapport with the gatekeeper as well as each participant, and received written permission from each participant in the form of the informed consent form. I conveyed the purpose and benefit of this study, ensured all procedures, which required protecting each participant's anonymity, involved the eligible participants and those who signed the consent letter. I assigned letters and numbers to maintain their confidentiality during coding and analysis, and excluded all personal information during the data collection process and kept all recordings and documents in a safe place to protect participants' rights.

Research Method and Design

In this study, I used the qualitative method and a single case study design. The updated RBV was used as a conceptual framework to support understanding of e-business strategies the bank leaders engaged in for the successful adoption of electronic banking channels. The qualitative case study enabled me to investigate evidence in natural environments.

Research Method

The method I used in this case study was qualitative. The qualitative method focuses on understanding participants' perspective, experiences, decision making, and phenomena (Kaczynski, Salmona, & Smith, 2014). Qualitative research becomes a useful research method in the interdisciplinary research setting of information science (Cibangu, 2013). Marshall and Rossman (2014) noted the qualitative method is a better approach than the quantitative method in gaining a better understanding of the complexity of human experiences or phenomena. Leedy and Ormrod (2015) also mentioned the qualitative method is useful in a situation when variables are unknown, little information exists on a topic, and there is an inadequate or missing relevant theory base. Furthermore, Leedy and Ormrod noted the qualitative approach provides a comprehensive option for a researcher to choose one or more of the following purposes: exploration, description, verification, theory development, evaluation, or problem understanding. Zahir Irani, Basias, Themistocleous, & Morabito (2013) pointed out qualitative research enables researchers to understand, explain, explore, discover and clarify situations, feelings, perceptions, attitudes, values, beliefs, and experiences. I used an exploratory research approach in this case study.

Exploratory research often relies on secondary research such as available literature related to the subject under study, or qualitative approaches such as discussions with employees and management and more formal approaches through in-depth interviews, focus groups, projective methods, case studies, or pilot studies (Zahir Irani et al., 2013). Exploratory studies help a researcher gain initial insights into a topic which

has previously been little studied (Leedy & Ormrod, 2015). It is useful to investigate little-understood phenomena and identify relevant categories of meaning, as well as generate hypotheses for further research (Marshall & Rossman, 2014). Ahrens and Khalifa (2013) pointed out qualitative research is suitable for researching the lived experience of people who involve in corporate governance. According to Ahrens and Khalifa, while quantitative researchers seek causal determination, prediction, and generalization of findings, qualitative researchers seek instead illumination, understanding, and extrapolation of similar situations. In this case study, I used the qualitative method to explore the e-business strategies the bank leaders engaged in for the successful adoption of electronic banking channels.

Quantitative research methodology uses statistical analysis to validate the outcome of previous studies (Kaczynski et al., 2013). A quantitative method is not suitable to conduct this study due to the following reasons. Yilmaz (2013) argued the quantitative study is not a preferable approach when a researcher wants to explore a problem in depth, develop hypotheses or theories, research complex issues, and understand the meaning of particular events or circumstances. According to Kaczynski et al. (2014), in a quantitative study, the researcher needs to be as detached from the research subject as possible. It also requires using mathematically based methods, in particular, statistics, to analyze the data, which is only practicable in the case of availability of numerical data (Yilmaz, 2013). The quantitative study requires numerical data to measure social reality (Chen, Zhang, Bond, & Gan, 2015). According to Wang, Bhanugopan, and Lockhart (2015), in the case of complex social phenomena, it is hard to

apply numerical data to measure social reality. Therefore, it was difficult to measure the subject of study objectively without considering its context and the participants' as well as the researcher's subjective interpretation. In this case, the reality is a relative concept that depends on the lens through which the observer sees the phenomena.

The mixed methods research methodology works well when neither a qualitative nor a quantitative approach is adequate as a stand-alone method to conduct a study (Kaczynski et al., 2013; Palinkas et al., 2013). Researchers can consider mixed methods to conduct a study's breadth and depth as well as causality and meaning (Makrakis & Kostoulas-Makrakis, 2016). However, considering that I was a novice researcher. I did not choose mixed method

Research Design

There are several qualitative designs, but I considered three designs including phenomenology, ethnography, and case study. The objective and foci of the three designs are different (Lewis, 2015; Pfadenhauer & Grenz, 2015). While phenomenological researchers concentrate on understanding, the essence of participants' lived experiences (Cibangu & Hepworth, 2016), researchers using an ethnography design seek to describe and interpret a culture-sharing group (Lewis, 2015; Simpson et al., 2014). The purpose of this study was not to seek the essence of participants' lived experience or to interpret group's culture but understanding the phenomenon. Thus, the phenomenology and ethnography designs were not appropriate for this study.

For this study, I used a qualitative single case study design to explore the e-business strategies that the bank managers are using to adopt e-banking channels for

Ethiopian context. I chose the single case study design over the other types of qualitative study designs because it is useful to understand the phenomenon within its context. The qualitative case study allows researchers to conduct an in-depth research of a phenomenon within its real-world context using multiple sources of evidence (Yin, 2014). Leedy and Ormrod (2016) pointed out a case study is useful in situations when the research aimed at answering *how* or *why* questions; the focus of the study is a contemporary phenomenon, and the researcher has little or no control on behavioral events. Furthermore, Yin argued the essence of the case study is to illuminate a decision. This case study was, therefore, in line with Yin's argument, which focuses on exploring the banks' decision on strategies – what strategies were chosen to advance the adoption of e-banking services, why the strategies were selected, how they are implemented, and with what result.

I used the explorative single case design (i.e., basic case study) with holistic data collection strategy. A single case design is among the best-known studies in business and management research (Runfola, Perna, Baraldi, & Gregori, 2016; Yin, 2014). According to Yin, a case can be a single organization, a single location, single event, or a single person. The subject of my study was a single commercial bank, which operates in the Ethiopian market context. Making a simple or theoretical generalization is difficult out of a single study (Yin, 2014). A case study design enabled me to generate specific recommendations that may trigger for further studies in the issue of e-banking adoption strategies.

As Yin (2014) noted the single-case study design requires prior knowledge of the outcomes and to put theoretical propositions before conducting any data collection, which was difficult in my case. According to Yin, an explorative single-case design is worthy of learning more about little known or poorly understood situations the same as to this case study. I built my theoretical bases from the literature review to minimize the shortcomings from the absence of explicitly stated propositions. In addition, conducting a case study may require extensive resources and time beyond a single student's capabilities (Leedy & Ormrod, 2015). Therefore, I should manage this challenge with putting a proper plan in place.

According to Leedy and Ormrod (2015), the other designs differ from a case study in objective and their foci. Ethnography aims at describing and interpreting a culture-sharing group (Lewis, 2015). Ethnography is the study of cultural groups in a natural setting over a prolonged time (Cruz & Higginbottom, 2013). According to Cruz and Higginbottom, data collection within the culture occurs through observation, interviews, and documents such as maps, and records that provide an understanding of the community of the culture to the researcher (Cruz & Higginbottom, 2013). In my case, the study of strategies of e-banking expands beyond the organizational culture, hence forfeiting the ethnography design.

Phenomenological researchers aim at understanding the essence of the live experience (Lewis, 2015). A goal of the phenomenological researchers is to describe the lived experiences of participants (Roberts, 2013). Phenomenology may not be helpful in analyzing the intricacy of a successful e-banking adoption strategy. A case study is useful

to conduct in-depth research on particular individual, program, activity, process, or event, which bounded in time and space (Leedy & Ormrod, 2015; Yin, 2014).

The decision on qualitative research design includes the issue that how a researcher can reach data saturation (Fusch & Ness, 2015). Saturation occurs when a researcher cannot obtain any new information from the research participants (Marshall, Cardon, Poddar, & Fontenot, 2013; Morse, 2015; Shen et al., 2014). According to Fusch and Ness, measuring quality in qualitative research relates to the issue of data saturation. The saturation point is an integral part of the qualitative research methodology (Bradley, Getrich, & Hannigan, 2015; Finfgeld-Connett, 2014; Morse, 2015). According to Marshall et al., researchers may reach to the level of data saturation in the condition when there is enough information to replicate the study, the ability to obtain additional new information has been attained, and further coding is no longer feasible. Sample size in a qualitative study with open-ended questions relies on the principle of data saturation (Tran, Porcher, Tran, & Ravaud, 2016). Marshall et al. (2013) argued the sample size of a study has more to do with saturation than representation. According to Tran et al. (2016), and Bernard (2013), determining the point of data saturation is vague concept because researchers have information on only what they have found. When and how researcher reaches saturation varies based on the research design. Tran et al. noted the decision to stop data collection is solely dictated by the judgment and experience of researchers. Different authors suggest different approach to assess the point of data saturation: resampling methods and mathematical models (Tran et al., 2016); methodological triangulation (Joslin & Müller, 2016), data triangulation (Fusch & Ness, 2015), and

further interviews until no new additional themes emerge (Finfgeld-Connett, 2014; Shen et al., 2014). I conducted further interviews until no new additional themes emerged to ensure data saturation in my study. I also applied method triangulation to enhance the quality of the study.

Population and Sampling

Choosing an appropriate sampling method enhances the trustworthiness research (Robinson, 2014). As Robinson (2014) suggested four steps of sampling for qualitative research: defining a sample universe, deciding upon a sample size, selecting a sampling strategy, and sample sourcing. Trotter (2012) identified five factors to consider in sampling process: sampling strategy, the ideal sample size, the approach whether explorative or confirmatory, the measures of the qualitative reliability test, and the generalizability of the data. Researchers use a purposive sampling technique to choose participants based on their fit with the purpose of the study (Ritchie et al., 2013). Ritchie et al. defined purposive sampling as criterion-based sampling. For this case study, I used the purposeful non-probabilistic sampling technique to select participants from the target population. The target population, in this instance, included one commercial bank's executive-level leaders located in Addis Ababa, Ethiopia. I excluded the bank managers below the executive level from this study because they were more useful to understand the execution of strategy rather than designing it.

Regarding the sample size, there is no single formula or criterion to use in the qualitative study rather depends on the research objective, method, and available resources (Boddy, 2016). There are no also practical guidelines for estimating sample

sizes for purposively sampled interviews (O'Reilly & Parker, 2013; Emmel, 2013).

O'Reilly and Parker also noted qualitative researchers should take two considerations to guide their sampling methods: appropriateness, and adequacy. Scholars have different views on the adequacy of sample size, which is required to reach a saturation level.

Ritchie et al., (2013) pointed out, in general, the qualitative research method requires smaller sample size than the quantitative research method because qualitative research more focuses on gathering an in-depth understanding of a phenomenon rather than breadth. Molenberghs, Kenward, Aerts, Verbeke, Tsiatis, Davidian, and Rizopoulos (2014) argued a small sample is perfectly acceptable in a case study. The determination of the sample size in a case study depends on the nature of the study (Yin, 2014). Sample sizes as low as one can be justified (Boddy, 2016). In this case study, therefore, twelve bank top-executives participated in the interview process to discuss their life experience in electronic banking strategies. The participants served as respondents to provide expert information on the topic under this study. I focused on conducting explorative research. A researcher using explorative research seeks to develop a better understanding of population related to the phenomenon (Ritchie et al., 2013).

A small sample may lead a researcher to have incomplete data and inconsistency (Molenberghs et al., 2014). Nonprobability sampling typically relies on the concept of saturation (Rowlands, Waddell, & McKenna, 2015). Rowlands et al. noted theoretical saturation was originally introduced in grounded method and it is now widely used as a fundamental concept in any interview-based qualitative study. Theoretically, the size of the purposive sample should be established inductively, and sampling continues until

theoretical saturation (Emmel, 2013). In practice, qualitative researchers should estimate the point at which saturation is likely to occur prior to their proposal stage (O'Reilly & Parker, 2013). According to O'Reilly and Parker, data saturation is the appropriate strategy to achieve rigor in another type of qualitative research other than grounded study. O'Reilly and Parker defined data saturation as a continuation of data collection until nothing new is gathered. With regards to the small sample size, it is hard to reach a saturation level of information about the targeted research topic (Ritchie et al., 2013). O'Reilly and Parker noted, the qualitative researcher should understand that achieving the richness of information and depth of analysis is vital than involving many participants. Rowlands et al. (2015) emphasized researchers should use a suitable strategy to ensure rigor and quality. Different scholars recommend different approaches to ensure quality in qualitative research. Joslin and Müller (2016) recommended using triangulation and longitudinal research; Houghton, Casey, Shaw, and Murphy (2013) and Fusch and Ness (2015) suggested applying member checking; and O'Reilly and Parker advised describing transparency of process. In this case study, I used the method triangulation and member checking strategies to achieve the quality of data collection. In this single holistic case study, the issue of data generalizability is a little bit difficult as noted by Yin (2014).

In a nonprobability sample, researcher deliberately chooses participants based on the characteristics of the population for study (Bryman, 2012; Leedy & Ormrod, 2015). Under the purposive sampling strategy, researchers should set out criteria to select participants in the sample size (Chidlow, Plakoyiannaki, & Welch, 2014; Palinkas et al., 2013). Palinkas et al. pointed out using the purposeful sampling researchers should

choose elements of the population because their accessibility, homogeneity that requires using small sample size and small spatial distribution thereby demands few resources to complete the study. For this case study, I chose the top-level bank leaders based on their roles they hold, which enabled me to conduct detailed exploration and understanding of the strategy to advance the adoption of electronic banking in the Ethiopian context. To be included in this case study: participants should be bank leaders, have knowledge and expertise relevant to the purpose of the research, have to tenure at the bank's headquarter environment and are willing to sign the letter of informed consent. I conducted an initial face-to-face meeting with each participant to convey and explain the purpose of the study and by then dispatches a written consent to obtain his or her consent. In the process to select individuals for the interview, the bank's top leaders helped me as a gatekeeper to have their authority for the data collection process and recommending participants that fit my research purpose.

Ethical Research

Bryman (2012) noted in social studies; researchers need to address four key issues to fulfill ethical standards: harm to participants, informed consent, an invasion of privacy, and deception. Belmont Report (1978) emphasized that any research, which involves human subject must be conducted when adequate standards for informed consent are satisfied. According to the Belmont Report, informed consent process consists of three elements: information, comprehension, and voluntariness. Nishimura, Erwin, Tilburt, Murad, and McCormick (2013) noted the information element aims to assure that subjects are given sufficient information and must include specific items such as research

procedure, their purposes, risks and anticipated benefits, and a statement offering the subject the opportunity to ask questions, and to withdraw at any time from the research in line with the Belmont Report. Researchers are responsible for adapting the presentation of the information to the subject's capacities and establishing that the subject has comprehended the information (Drazen, Solomon, & Greene, 2013). Voluntariness requires conditions free of coercion and undue influence (Fisher, 2013). Therefore, gaining informed consent is one of the critical tasks to fulfill an ethical standard in this case study. I informed participants about their at-will participation in this study. Participants were able to withdraw from the study at any time without providing any reason. The consent form clearly outlined that participants could withdraw from the study at any time by expressing their wish to withdraw, either orally or in writing without any negative consequence.

I also ensured that each participant was over 18 years of age and met minimum criteria for participating in the study. The interview process was not started until Walden University's Institutional Review Board (IRB) approval. Adhering to Walden University's IRB guidelines, I conducted every interview while focusing on Participants. The Walden University IRB approval number for this study was 05-11-17-0379671.

According to Stephen, Jane, and Ashely (2013), participants have the right to receive adequate information so that they can be able to make the decision whether or not to take part in a study. Festinger, Dugosh, Marlowe, and Clements (2014) organized the informed consent process into two parts: creating a consent form and presenting the content information to research participants. I used a consent form using simple English

to ensure that participants with varying levels of education can easily comprehend the interview questions (Festinger et al., 2014). I identified the qualified participants and I provided them with a copy of the consent form and review each item in detail.

Individualized consent form review may be necessary because not every participant will read the entire consent form (Festinger et al., 2014; Frankfort-Nachmias et al., 2015).

Participants can exit the interview at any point in time during the process by ending the interview session without penalty. There were no incentives offered for participation in the interview.

In this qualitative case study, there was no need to conduct any form of experiment and covert observation as well. Therefore, harm to participants seems almost hard to predict. Privacy and confidentiality should be at the core of every study (Faden, Beauchamp, & Kass, 2014; Frankfort-Nachmias, Nachmias, & DeWaard, 2015). Detail reporting of contexts or detail report on participants' position regarding the case under study may breach confidentiality (Stephen, Jane, & Ashely, 2013). To ensure confidentiality, I used fictitious names for study participants and their affiliated organizations. The study was not included any attributes that may lead to an indirect discovery of study participants or organizations. I took notes on a notebook, recorded the interview process to ensure data collection accuracy, and repeat answers during the interview. I collected and stored all the research-related documents in a password-protected area of my personal computer hard drive. Any physical documents will remain stored inside a locked drawer at my residence for a period of 5 years. Finally, I will

destroy all research-related data after 5 years, in keeping with the Walden University IRB guidelines.

Data Collection Instruments

In qualitative studies, a researcher is the primary instrument of data collection, analysis, and reporting (Frels & Onwuegbuzie, 2013; Leedy & Ormrod, 2015). Yin (2014) identified six sources of evidence for qualitative case study: documentation, archival records, interviews, direct observations, participant observations, and physical artifacts. A qualitative interview is a suitable method for a more flexible response (Comi, Bischof, & Eppler, 2014). Nguyen (2015) researcher can collect accurate data using semi-structured interview if there is trust between the researcher and participants. In this study, I used a semistructured interview as the principal data collection method for retrieving participant perceptions and document review as a supplementary source.

A semi-structured strategy captured insights into how research participants view the world (Ceunynck, Kusumastuti, Hannes, Janssens, & Wets, 2013). Semistructured interview enables a researcher to ascertain participants' perspectives regarding an experience pertaining to a research topic (Nguyen, 2015). Bryman (2012) argue the semi-structured interview process should be flexible, but the emphasis must be on how the interviewee frames and understands issues and events. Likewise, Englander (2012) noted the interview must allow the participant the freedom to describe the phenomenon under investigation. For this case study I used nine steps to conduct the semi-structured interviews: (a) Contact the respondent and explain the goal of the interview, obtain his/her permission, schedule an appointment, and agree on the site where the interview

takes place; (b) start the interview with an introduction of myself, and the research topic as well to establish a bond with participants and to ease their comfort; (c) introduce and explain the consent form (Appendix A) and allow time for clarification, questions, and signature; (d) present the recording device, scribe-writing folder; (e) start the interview with a general, open-ended question and follow the steps as per the interview protocol (Appendix B); (f) review the questions, pursue clarification as necessary, and summarize each answer for clearness during the interview;. (g) emphasize confidentiality throughout the interview; (h) encourage participants to respond to the questions freely and finally (I) acknowledge the participants for their time participating in this study.

The trustworthiness of results is the bedrock of high-quality qualitative research. Member checking is a technique for exploring the credibility of results (Birt, Scott, Cavers, Campbell, & Walter, 2016). According to Birt et al., member checking is one in the list of validation techniques. Member checking offer participants the opportunity to correct, improve and further discuss previously collected data (Caretta, 2016). Member checking is a quality control process in qualitative studies to improve accuracy, credibility, and validity by participant verification of the collected data (Harper & Cole, 2012). I applied the member checking strategies to ensure quality. I returned results to participants to check for accuracy and resonance with their experiences. I engaged each participant in the peer debriefing in a phone and in-person conversation to discuss if each question was easy to understand and in line with the purpose of the study. I reviewed the questions based on the feedbacks from each peer for reliability and also collected documents and reports on electronic banking adoption strategy from the bank's top

leadership that helps to enhance the reliability of data from the interview. I triangulated the two data sources to demonstrate an additional confidence in the validity.

An interview protocol helps a researcher to elicit useful data (Ceunynck et al., 2013); facilitate human intelligence sources' recollections of meetings (Leins, Fisher, Pludwinski, Rivard, & Robertson, 2014), and provides the interviewers with all the information they need to carry out the interview (Comi, Bischof, & J. Eppler, 2014). For this study, I developed the interview protocol (Appendix B) and interview questions (Appendix C). I also delivered the same interview questions to all participants to enhance the reliability and to expand the depth of the discussion during the interview

Data Collection Technique

I used the face-to-face interview and document review to collect evidence for this case study. Interviews allow researchers to conduct guided conversations (Dolci, Maçada, & Grant, 2014; Sutherland, 2016; Gill, 2014; Yin, 2014). Yin (2014) discussed three types of case study interviews: prolonged case study interviews, shorter interviews, and survey interviews. Prolonged case study interviews enable an interviewer to conduct the interview in a flexible manner (Yin, 2014). Yin stressed that under the prolonged case study interviews, data collection activities can occur over an extended period or several settings. The extended interview helps a researcher to shared meanings with participants (Comi, Bischof, & J. Eppler, 2014; Nguyen, 2015). Prolonged engagement helps a researcher to enhance rigor in the qualitative case study (Houghton et al., 2013). I chose the prolonged case study interviews over the other so that I can gain in-depth insights related to the electronic banking adoption strategies from the key informants. I used

recording device as per the informants' consent (Appendix A) to record all conversations during the interview process. I also collected documents and reports on electronic banking adoption strategies from the bank during the first interview to corroborate the insights from the informants. In case, if the bank's management that I chose for this case study would not allow me to have access to its sensitive documents, I planned to collect secondary data from the regulatory body – NBE – or change my target population to another bank, which may have an open policy for academic research.

The semistructured interview technique has its strengths and weaknesses. It enables a researcher to have a focus directly on the case study topics and allows gathering participants' in-depth insights (Bryman, 2012; Yin, 2014). An interview allows the participant freedom to describe the event under investigation (Englander, 2012). Its weakness is associated mainly with bias and flexibility (Bryman, 2012; Yin, 2014). According to Bryman (2012), bias can be generated due to the poorly articulated questions and participants' unreliable response. Interviewees also may give what a researcher wants to hear. Researchers use member-checking strategy to verify accuracy, provide completeness, improve validity, and create therapeutic benefits for research participants in different ways (Harper & Cole, 2012). Member checking uses not only for the purpose of verifying information but also for the follow-up study to ask participants about their reactions to the write-up (Koelsch, 2013). I will apply member-checking strategy to avoid misrepresentation. The sole purpose of using member checking was only to verify information accuracy and improve validity. At the near end of the research

project, I gave the report and findings to only to the top leadership of the bank to review for the authenticity of the work.

Data Organization Technique

Data organization refers to the process of making qualitative data manageable (Bryman, 2012). Ritchie et al. (2013) outlined five steps of the data organizations process: familiarization, constructing an initial thematic framework, indexing, and sorting, reviewing data extracts, data summary, and display. Using qualitative data analysis software can facilitate rigor and reliability in research (Tummons, 2014; Woods, Paulus, Atkins, & Macklin, 2016). NVivo 11 is data organizational and analytical software, allowing researchers to analyze research data (Castleberry, 2014; Gould et al., 2015). The NVivo software captures specific information and determines if a theme and trend in other responses occur (Bryman, 2012). I used NVivo 11 to organize the raw data. I also used Zotero software to organize data that pertaining to my research references. Zotero software helps researchers to collect, organize, cite and share resources efficiently (Idri, 2015). I stored data from each interview response, transcripts, and the documents on the external hard drive. Researchers must keep the qualitative data in secure ways during and after the collection phase to protect participants' privacy (Bryman, 2012; Leedy & Ormrod, 2015; Ritchie et al., 2013). I also managed the hard drive in secure ways for five years and after that delete its content permanently to protect participants' privacy and security. The key informants in this case study do have a right to receive a copy of the completed results of the study.

Data Analysis

Yin (2014) noted the aim of data analysis is to understand, characterize, and interpret the data then produce quality findings. A qualitative data analysis is an ongoing and iterative process (Spencer, Ritchie, Ormston, O'Connor, & Barnard, 2013). According to Spencer et al., the formal analysis, however, involves the following two key stages: managing the data and making sense of the evidence through descriptive or explanatory accounts. Ritchie et al. (2013) identified four functions of qualitative research analysis: contextual, explanatory, evaluative, and generative. Yin recommended four general strategies for data analysis: relying on theoretical propositions, working their data from the ground up, developing a case description, or examining rival explanations. Yin also identified five specific techniques to data analysis that researchers can use any of them in any combination of the four generic strategies: pattern matching, explanation building, time series analysis, logic models, and cross-case synthesis. Using contextual and pattern matching strategies were appropriate for this case study. I also focused to rely on the research questions and conceptual framework as well as the contextual research function to conduct data analysis. The contextual research aims at describing phenomena as experienced by the study population and exploring how the phenomena (i.e., e-business strategies in this case) are understood by those connected with them (Ritchie et al., 2013; Yin,2014).

Selecting an appropriate method for data analysis enables the researcher to address interview questions and provide thorough results (Hamersly, 2015). I utilized several methods to analyze research data to generate comprehensive results that can

identify attributes for successful e-banking adoption strategy by commercial bank leaders in Ethiopia. Triangulation was one of the research analysis strategies, which involves using multiple data sources to reach a conclusion (Davey, Davey, & Singh, 2015; Franco, Santos, Ramalho, Nunes, 2014). There are four types of triangulation, including (a) data triangulation, (b) investigator triangulation, (c) theory triangulation, and (d) methodological triangulation (Davey et al., 2015; Franco et al., 2014). According to Davey and Franco, the four types of triangulation help researchers to check out the consistency of findings generated: by different data collection methods, various lines of evidence from within the same approach, using multiple analysts to review findings, and using multiple theoretical perspectives to examine and interpret the data. I used methodological triangulation in my research study. The data collection methods I triangulated included interviews, document review, and casual observations. Methodological triangulation involves the use of multiple collection methods producing comprehensive data and providing confirmation of data (Davey et al., 2015; Houghton et al., 2013; Walsh, 2013; Wilson, 2014). Researchers involve methodological triangulation to increase the validity of inference in qualitative and quantitative research (Flick, 2017; Kern, 2016). According to Flick (2017), there are three rationales for using triangulation: completeness, contingency, and confirmation.

Data analysis process requires a mix of creativity and systematic searching (Roberts, 2013; Spencer et al., 2014). It varies upon the chosen strategy and techniques for the particular research design (Yin, 2014). There are no clear-cut rules developed to conduct qualitative data analysis (Bryman, 2012). Spencer et al. (2014) proposed three-

stage generic processes: organizing, describing, and explaining. Bryman (2012) proposed three-stage generic processes: coding, turning data into fragments, and meaning extraction. Yin (2014) identified the following four steps in data analysis process in a case study: (a) transcribing interviews, (b) reading the transcribed notes to get the general meaning of the data, (c) coding the data and arranging it into manageable themes, and. (d) interpreting the sense of the case study. In this study, the logical steps, which I followed for the data analysis was: transcribing interviews; member checking the transcribe; identifying themes out of the transcribers; document review; extracting themes referencing the research question; triangulating themes extracted from the interviewees and the examination of documents.

There is various computer-assisted qualitative data analysis software, for examples, such as HyperRESEARCH, Nvivo, and Ethnography (Brian, 2012; Ritchie et al., 2013; Yin, 2014). The value of these packages is, however, not more than assisted tools (Yin, 2014). In this case study, I used NVivo version 11 software to analyze and organize data gathered from the interviews NVivo helped me to identify themes and common notations and to complete the analysis of the study. NVivo software assisted researcher with the identification and organization of themes in qualitative data (Bryman, 2012). NVivo software could take qualitative data analysis much further than is possible manually, by assisting in recording, storing, indexing and sorting the data (Castleberry, 2014; Gould et al., 2015). However, the software does not analyze the data; rather assists in visualizing the relationships within the data. Erlingsson and Brysiewicz (2013) found NVivo software enables researchers to do open coding of the data, which lead to the

development of patterns and analysis. According to Erlingsson and Brysiewicz, NVivo software supports a researcher to restructure the information and categorize data according to different concepts. Throughout the analytical process, the value of using the NVivo software will depend on the ability to ensure the coding remains consistent (Castleberry, 2014). I loaded the interviews transcribe into the NVivo software to label, categorize, and identify themes and common notations. The coding of patterned themes illustrates the stories express by the participants. The identification of themes from the contributors provided me insights into the perceptions of the strategies bank leaders use to adopt electronic banking services.

I assessed documents about e-banking strategy following the completion of the interview process. Examination of the bank's strategic plan for similar themes took place in the NVivo package. Data coding technique enables researchers to interpret and organize data concerning the conceptual frameworks they have chosen and key themes extracted from the literature review (Glaser & Laudel, 2013). Data saturation helps researchers to ensure the emerged themes add meaning to the subject with enhanced knowledge (Emmel, 2015; Finfgeld-Connett, 2014). Qualitative researcher uses a triangulation technique to make sure that interpretation is rich, robust, comprehensive, consistent and well-developed (Kern, 2016). I used data coding, data saturation and triangulation of sources so that I can be able to focus on the key themes during the analysis. I also examined the findings using the RBV as a conceptual framework and generated a recommendation in strategies that bank leaders can use to accelerate the adoption of electronic banking channels in the Ethiopian context.

Reliability and Validity

As a researcher is a key instrument in a qualitative study, bias can adversely affect the quality of data collection, which the researcher needs to minimize by planned strategy (Frankfort-Nachmias, 2015; Leedy & Ormrod, 2015). Safeguarding the reliability and validity of research is a vital part of the qualitative research that supports the readers to confirm the trustworthiness of the study (Nummela, Saarenketo, Jokela, and Loane, 2014). There are no universal standards for evaluating the trustworthiness of qualitative studies (Bongoni et al., 2015; Noble & Smith, 2015). While researchers should embrace the flexible nature of qualitative case study, they should also use criteria and identify strategies to ensure the rigor of such a study (Houghton, Casey, Shaw, & Murphy 2013). Houghton et al. (2013) noted trustworthiness and authenticity are key criteria to assess the rigor of qualitative research. Trustworthiness consists of four criteria: credibility, transferability, dependability, and, confirmability (Bryman, 2012; Houghton et al., 2013). I used the trustworthiness criteria to control the quality of the study. Trustworthiness is the most applicable criteria in qualitative research especially in a case study (Bryman, 2012; Houghton, 2013; Yin, 2014). Bryman interpreted the four criteria under the trustworthiness as equivalent as to the four validity and reliability tests in the quantitative study. According to Bryman, credibility refers to the value and believability of the findings (i.e., validity). Dependability focuses on how stable the data sources are (i.e., reliability). Confirmability refers to the neutrality and accuracy of the data, and transferability refers to the generalizability of findings to another similar context or situation. Specific strategies for ensuring rigor in this case study are required. According

to Houghton et al. (2013) and Leedy and Ormord (2015), the five specific strategies for each criterion under trustworthiness include: (a) Credibility, which requires involving prolonged field engagement, triangulation, peer debriefing, and member checking, (b) dependability, which includes performing audit trail and reflexivity strategies, and (c) confirmability and transferability that include the reflexivity and thick description strategies respectively.

For this case study, ensuring the credibility and dependability were essential components among the others. Because, achieving confirmability and transferability are almost unfeasible in a single case study (Bryman, 2012; Houghton, 2013; Yin, 2014). Validity and reliability link with different forms of generalization – theoretical, inferential, and representative generalization (Ritchie et al., 2013). I did not apply any of the three generalizations. I attempted to generate issues, which may inform for further research. The section details the steps I took to ensure reliability (dependability) and validity (credibility) of this study.

Reliability

The purpose of reliability in a qualitative study is to generate understanding (Noble & Smith, 2015) and to ensure dependability (Cope, 2014). According to Houghton et al. (2014), the member checking technique enables researchers to ensure the dependability of data and to verify the information gathered from the interviewees. Othman and Rahman (2014) suggested using triangulation to intensify the dependability and confirmability of the collected data from multiple sources. In this case study, I used data triangulation and member checking as specific strategies to ensure credibility. The

six tools used to enhance the reliability of this case study are: using the same questions for all interviews, sharing my interpretation with the participants to ensure its accuracy, completing member-checking to correct errors and challenge the information and offer them to add additional information, utilizing a consistent data analysis process with NVivo software, using triangulation to connect themes from participant interviews and document review, and ensuring replication of the study by providing explicit explanation of the data collection and technique process.

Validity

Qualitative research validity refers to the credibility, transferability, and confirmability of the findings (Cope, 2014; Teusner, 2015). Validation is one of the crucial components for bringing confidence to qualitative studies (Reilly, 2013; Teusner, 2015). Houghton et al. (2013) noted member checking is one of the validation tools, which allows participants to discuss the preliminary findings as well as to assess data adequacy. Harper and Cole (2012) noted utilization of member checking helps researchers to define validation in qualitative methodology.

Credibility. Credibility refers to the stability and consistency of the data and it is parallel to internal validity (Bryman, 2012). Richardson et al. (2014) noted credibility bolstered by the use of multiple methods as a valid means to explore and collate data. Combining different approaches to data gathering helps a researcher to gain an in-depth insight and completeness into the case and its context (Houghton et al., 2013). Member checking is also another strategy to ensure credibility (Fusch and Ness, 2015; Houghton et al., 2013). The credibility of the analysis depends on the inclusiveness and

representativeness of the data as a whole when there is only one researcher analyzing the data (Elo et al., 2014). Yin (2014) recommended having key informants review draft case study report is important to ensure credibility. Nummela, Saarenketo, Jokela, and Loane (2014) advised researchers should make additional telephone calls after the collation of the participants' feedback to appraise the intended meaning of the participants' response. Thoroughly reading the interview transcripts allows the researcher to establish credibility (Cope, 2014; Teusner, 2015). In this case study, I applied triangulation and member checking as specific strategies to ensure credibility. I conducted data gathering activities from the interviewees and document review (i.e., strategy, plan, reports, and business model) as well as casual observation to confirm findings from each source perspective. The interviewees will reflect their perceptions of the e-business strategy as well as factors that are facilitating or hindering the e-banking adoption processes. In parallel, I collected strategic plan and reports, which were related to the bank's e-business strategy and compared its consistency with the response from the interviews. I also noted my casual observation to help me understand the context of interview data. In line with Fusch and Ness (2015) three steps took place to conduct member checking: review and interpret the interview transcripts, write synthesis and provide a printed copy of the synthesis to the participant, and ask participants if the synthesis represents the answer or if there was additional information and continue member checking process until there was no new data to collect.

Transferability. Transferability refers to the applicability of the study results from one study to another (Cope, 2014). Erlingsson and Brysiewicz (2013) suggested

researchers should encourage the participant to respond to the interview with concentrated, rich description to ensure transferability in a similar context by using procedures to ensure accurate information for credibility. Houghton et al. (2013) recommended using audit trail to ensure research transferability. Poortman and Schildkamp (2012) pointed out researchers should take notes during the interview from facial, body language, and attitudinal expressions to enhance the understanding of the phenomenon. According to Cook, Mott, Lawrence, Jablonski, Grady, Norton, (2012), information regarding the researcher, population studied, sampling and coding decisions provides to assure transferability of the study. In line with Cope, Elo et al., and Teusner suggestions, I will focus on selecting appropriate study participants, providing detailed demographics information, performing extensive data analysis, and presenting results in an intuitive format to increase the transferability of my study. I recorded and maintained comprehensive notes related to the contextual background of the case as well as the rationale for all methodological decisions if in case. As this study was an exploratory case study, the goal of the analysis was not to generalize the study but to develop ideas for further research.

Confirmability. Confirmability refers to researcher's ability to show that the research data is the actual interpretation of study participants without biases (Teusner, 2015). According to Teusner, researchers have to make conscious efforts to listen to each interviewee and record their thoughts, insights, and biases. Triangulation helps qualitative researchers to strengthen the construct validity of their case study (Yin, 2014). Methodological triangulation involves utilizing multiple data collection techniques for

providing confirmation of study findings (Houghton et al., 2013; Walsh, 2013).

Researchers should use data saturation to enhance conformability (Teusner, 2015). I used methodological triangulation strategy, data saturation, literature review, and member checking to ensure confirmability.

Transition and Summary

The purpose of this qualitative case study was to explore the strategies that bank managers use to adopt electronic banking in the Ethiopian context. Section 2 detailed the role of the researcher, participants involved in the study, ethical issues, research method and design, population and sampling, data collection details, and strategies to ensure the validity and reliability of the study. I analyzed data collected using the three methods: semi-structured interview, document review, and my casual observation based on the design specified in section 2. The information in Section 3 will include the research findings, application to professional practice, the implication for social change, recommendation for action and further study and a conclusion in self-reflection of the research experience.

Section 3: Application to Professional Practice and Implications for Change

In Section 3, I provide a summary of the findings of my study. The section includes the presentation of the research findings, applications to professional practice, social change implications, recommendations for action, and recommendations for further research, reflections, and a conclusion. In this section, I also include information regarding my personal experiences with the research study.

Overview of Study

The purpose of this qualitative comparative case study was to explore strategies bank leaders use to adopt e-banking channels in Ethiopia. The research question that guided this study was as follows: What e-business strategies do bank managers in Ethiopia use to promote the adoption of electronic banking services? The research participants included 12 bank leaders from one commercial bank in Addis Ababa, Ethiopia. I also reviewed the bank's strategic plan documents and annual performance reports of e-banking services and triangulated the data from interviewees.

Each participant responded to seven open-ended questions in a semistructured interview format. After transcription and coding of the participants' responses, a thematic analysis revealed five key themes: Ensuring leadership and management commitment, creating accessibility, fostering acceptability, leveraging unique features and large resource base, and tuning to emerging strategy. The next subsection includes a detailed analysis of each theme.

Presentation of the Findings

The main research question that guided the study was: What e-business strategies do bank managers in Ethiopia use to promote the adoption of electronic banking services? I was able to obtain relevant information and data for the study by purposefully sampling a commercial bank in Ethiopia for the study. The sample size for the study and method triangulation was used to achieve data saturation (Fusch & Ness, 2015).

Participants met the research criteria of being leaders in a commercial bank at the top level and experienced in devising and implementing e-banking adoption strategies for several years in Ethiopia. The participants lived in Addis Ababa, Ethiopia. Twelve Ethiopia-based bank managers participated in the semi-structured interviews.

I sent an authorization request letter to the bank's president for permission to have access to relevant documents for the study and then received the signed permission letter before sending the consent letter to each participant. I sent to each participant an invitation letter to participate in the study as well as the consent form. Each participant responded to my consent letter by signing the letter. I conducted all interviews in a three-week period, and each interview lasted no more than 50 minutes. After the transcription of each interview recording, I interpreted the participants' responses and conducted member checking by requesting personal feedback from each participant during and after the interview to enhance the validity of the results.

I used an assigned code from P1 to P12 to identify each participant. After completion of the interviews, I reviewed documents about the bank's e-banking adoption strategy to ensure methodological triangulation. I loaded the transcription of each

interview and other relevant documents into NVivo 11 software to facilitate coding and analysis of themes. In the following section, I have presented the key themes and the findings from each interview question.

Based on the central research question, data analysis of participants' responses led to the identification of five core emergent themes: Ensuring leadership and management commitment, creating accessibility, (c) fostering acceptability, (d) leveraging unique features and large resource base, and tuning to emerging strategy. The next component includes a detailed analysis of each theme. According to the extended RBV of strategy theory, a firm's strategy leads to sustainable performance if it is valuable, rare, inimitable, organized, and addresses unmet customer needs in market segments large enough to cover organizational fixed costs (Hinterhuber, 2013). The themes emerging from this study may reflect a common set of characteristics and strategies that Ethiopia-based commercial bank leaders may need to conduct sustainable businesses.

Theme 1: Ensuring Leadership and Management's Commitment

Ensuring leadership and management's commitment is at the core of the bank's e-banking strategy. Leadership and management here refer to the bank's board of directors, process council members, middle management, and branch level executives. A thematic analysis of the participants' answers to interview questions 2 and 6 showed leadership and management commitment are key strategic resources to adopt e-banking strategies in the Ethiopian market (See Table 1).

Table 1

Leadership and management commitment (Interview Question 6)

Participants' answers to interview question #2	Interpretation and analysis	Emergent themes
P1 "... The management spends a lot of time in the monitoring and evaluation of the system." P1 "... we have Identified the good KPI's that is very critical for that matter in any business."	Several participants related management's strong monitoring and evaluation of the system to success the adoption of e-banking.	The willingness to managing strategic execution leads to the success of e-banking adoption.
P7 "...maybe the management willingness to invest in technology is critical. So whenever we take any new initiatives any ideas of implementing new technologies to the management; we will get acceptance." P2 "...We don't have a reservation as long as it serves our purpose CBE has got an appetite for IT investment which others don't have this is the critical success factor for CBE's e-business strategy implementation." P12 "...The critical one is as I mentioned previously all the management is committed to bringing this result."	Participants consistently asserted that management's willingness to invest in technology is key success factor to the bank's e-banking strategy.	Management willingness to invest in technology is key to implement e-banking strategy.
P2 "...the critical success factors for the achievement that we made so far is the clear strategy that we have drawn." P8 "...As a strategy, we have also chosen low-cost strategy as a Bank. So, it will align to	Participants frequently mentioned having clear e-banking strategy and its alignment with the corporate strategy is a critical attribute for the success of e-banking adoption.	Having clear e-business strategy and its alignment with corporate strategy leads to success in e-banking adoption.

(Table continued)

our corporate strategy also.”

P9 “...We have also strong political will from the government. That is also success factor. Our board members are supportive. Sometimes we have many lessons to take from them when we are developing our strategies. They provide us an oversight support.”

The data analysis revealed also that participants consistently related the success of the bank’s e-banking adoption related with the strong support of leadership from the board of directors.

Striving to lead from the board fuels the adoption of e-banking strategy.

In the data analysis, I used NVivo 11 to generate word clusters and tree projection of the dominant perceptions of participants on the role of leadership and management commitment to adopt e-banking strategies (see Figure 2). The core themes from data analysis revealed the following four perceived commitments for the participants involved in the study: leading through strategy and ensuring strategic alignment, striving to lead, willing for investment on e-banking adoption, and managing the implementation of e-banking channels. Burgelman et al.(2009) argued management’s commitment and skill to integrate technology strategy with the firm’s strategy and develop and exploit a firm’s capacity for innovation lead to competitive advantage. Findings showed a significant relationship between the strategies adopted by firms and their respective performances (Afande, 2013).

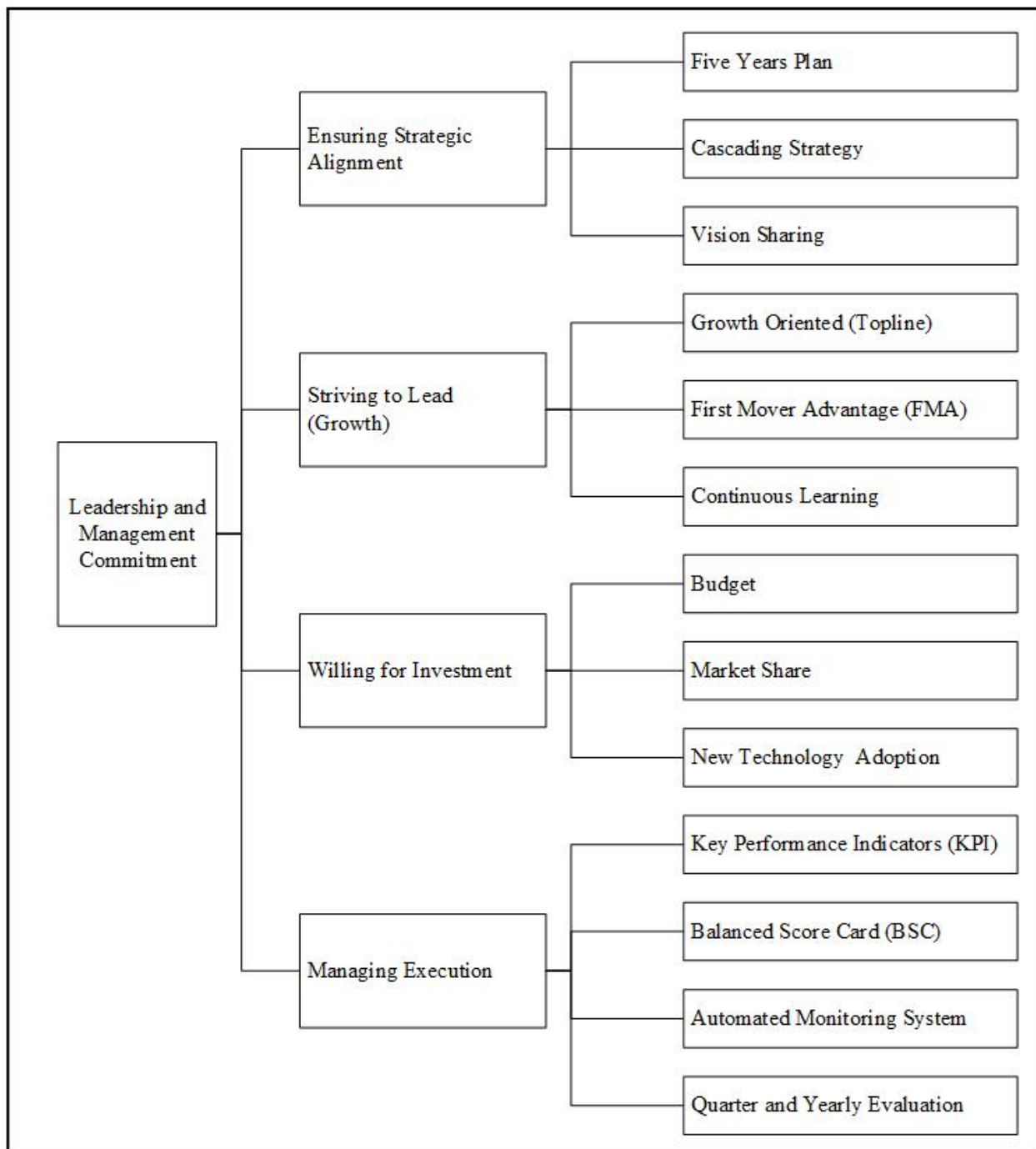


Figure 2. Word clustering on leadership and management

Twelve participants (Table 2) representing the highest frequency of occurrence, perceived strategy, and strategic alignment led to successful e-banking adoption. The

perception of these 12 participants is congruent with the view of Haag and Cummings (2008). Haag and Cummings argued business strategy drives technology decision, not the reverse. According to Haag and Cummings (2008), ensuring alignment between business strategy and selection of technology enable the organization to achieve its business objectives. The authors also pointed out strategic alignment can be achieved if business organization performs four steps: Understanding the industry in which it operates, deciding business strategies critical to address competitive pressures, identifying an important business process to support its chosen business strategies, and finally, aligning technology tools with those important business processes. The issue of leading through strategy and ensuring strategic alignment is the highest priority of the bank's leadership. P2, for example, stated:

The bank's business strategy for electronic banking emanates from its corporate strategy. The bank's five years corporate strategy is already formulated. The e-banking strategy is part and parcel of the corporate strategy. It is cascaded down to all units of the bank.

According to the bank's five-year corporate plan, ensuring resource mobilization, business growth, and operational excellence are the overarching goals on which all initiatives depend on. Resource mobilization here refers to deposit and credit mobilization. As per the description in the bank's five-year plan, business growth relates to the bank's enhanced role towards national development and sustainable profit. The bank's goal for operational excellence focuses on creating efficiency and effectiveness. From the findings, it appears that the bank's management designed and monitored the e-

banking adoption strategies in line with the bank's corporate strategic goals. The bank's management pays strong attention to make sure that the e-payment strategy will support its corporate strategy.

Fifty-Eight percent of the participants (see Table 2) claimed that the bank's management strives to ensure leadership advancement through focusing on fast growth strategies such as offering new products and services, pioneering in e-banking technologies, utilizing the first mover advantage, and involving continuous learning. P2, for example, stated, "The bank's main objective is to bring business growth and operational excellence which particularly cannot be attained without the implementation of e-payment, which is the crucial strategy of the bank." The claim of these seven participants is congruent with the view of Haag and Cummings (2008) in firm's strategic focus. Haag and Cummings argued the focus of firms, which use a top-line and growth strategic framework, is to increase revenue as well as maintain a bigger segment of the budget in a way that increases market reach, reaches new customer segments, expands market share, offers new products and services and cross-selling related services, offers complementary products and so on.

The bank also is utilizing its financial and leadership strength to be a pioneer in adopting e-banking channels and gaining first-mover advantage by introducing new products and services to market. P1 mentioned that "In terms of accessibility, our e-banking is far better than any our competitors and first of all, we are the pioneer who introduced e-banking to Ethiopia by deploying I think 8 or 9 ATMs in 2001 or 2002." Literature, however, shows mixed results on the pioneering and first mover advantage to

the business. According to Nishida (2017), first entrants have a positive market-share advantage over later entrants and specifically, physical distribution, measured by the number of outlets in a market, drives most of the advantage. Markides and Sosa (2013) argued pioneering has both advantages and disadvantages, which will depend largely on the business model that the pioneer utilizes to exploit the FMAs, associated with early entry, the business models that late entrants adopt to attack the pioneers, and the business model that the pioneer uses to respond to these attacks.

Continuous learning is one of the key attributes of the management's striving to lead. P5 witnessed the management's learning capability and readiness to change as follows: "We are revising our strategy, based on a continuous and thorough assessment of our internal and *external* situations using the strength weakness opportunity and threat (SWOT) framework, as a result of that the issue of e-payment system is now we are pushing to become a national agenda."

Nine participants (see Table 2) believed the bank's management's will for investment enabled advancing e-banking channels adoption thereby gain high market share. For example, according to P12, "the bank invests 20% of its annual budget on digitalization and e-banking technologies. As a result of this commitment, the bank has achieved to recruit more than 3.5 million e-banking service users out of its 13 million account holders in the last five years". The claim of the nine participants is congruent with the annual report of the National Bank of Ethiopia, who published as of December 31, 2016. The report shows all commercial banks in Ethiopia in aggregate have registered about 5 million e-payment card holders, 2 million mobile banking users, and about 68000

Internet banking users. Out of that figure, about 3.7 million cardholders, 1.7 million mobile banking users, and the 35000 Internet banking users belong to the bank under this case study. In this case, comparing to the other banks, therefore, the bank has registered remarkable achievement. The question here is why the bank persistently outperforms others. Most of the participants believe that the bank's leadership willingness and management competencies in executing the right strategy are the source of its success. For example, P2 stated, "One of the critical success factors for the achievement that the bank made so far is the clear strategy that has drawn." Almost all participants in this study mentioned the leadership commitment to invest on the e-banking adoption and readiness to deploy new technology is the sources of its success. P7 stated that "Despite other issues, our management is so flexible to deploying and ready to adopt a new technology that can enhance the banking or financial services."

Six of the participants (see Table 2) mentioned the bank's management capabilities for managing execution of the e-banking services adoption process are one of the attributes of the leadership commitments. According to the six participants, the management uses four ways to monitor the implementation: Balanced scorecard, KPI, automated system, and quarter and year based evaluation. The bank focuses on five attributes to measure its progress: Number of cards produced and distributed to customers, the number of active users, the size of a transaction conducted via the channels, and level of products association. The balanced scorecard system (BSC) serves to ensure strategic alignment through cascading targets from the top to down the branches level managers. The bank also uses an automated system to monitor ATM uptime rate so

that it can take measure to adjust it if there is any problem. Most of the participants in this study mentioned the bank's performance management system shows management's commitment and the key to success.

For example, according to P9, the management has set automated performance management systems for the e-banking channels, especially for the ATM network. Performances are measured against predetermined targets. For example, the 80% of the bank's traditional account holders should be e-banking services users. Now 23% are active e-banking services users and so the gap remains high. Another target is for ATM that is to achieve more than 80% times up. There is an automated system, which namely Gasper to collect and measure data against the target. BSC is another tool for the performance management. Every annual and quarterly corporate plan is cascaded down to the low level of the bank's structure in the way that success can be measured easily. The management also has established IT governance at the corporate level.

Moreover, leadership commitment to adopt e-banking channels comes from not only the management but also the bank's board of directors. P9 put his personal observation on the role of leadership as follows.

We have also strong political will from the board of directors. That is also the key success factor. Our board members are supportive. Sometimes we have many lessons to take from them when we are developing our strategies. They provide us an oversight support. Investing in technology is not an easy job. They have the commitment to decide and give direction as quickly as possible." Thus,

management commitment and skills can enable organization persistently outperforms others.

The perception of these 12 participants (see Table 2) is congruent with the view of Barney and Clark (2006) on sources of competitive advantage. Barney and Clark (2006) noted that management skills and commitment could be a source of competitive advantage if it is socially complex (and thus imperfectly mobile).

Table 2

Frequency distribution of leadership and management

Leadership and management commitment	N	% of Participants
Leading through strategy and strategic alignment	12	100
Striving to lead (growth)	7	58.3
Willing for investment	9	75
Managing execution	6	50

In the data analysis, I used the text search query of NVivo 11 to generate the word clustering and tree projection of participants' on management commitment (see Figure 3). The result is depicted as follows.

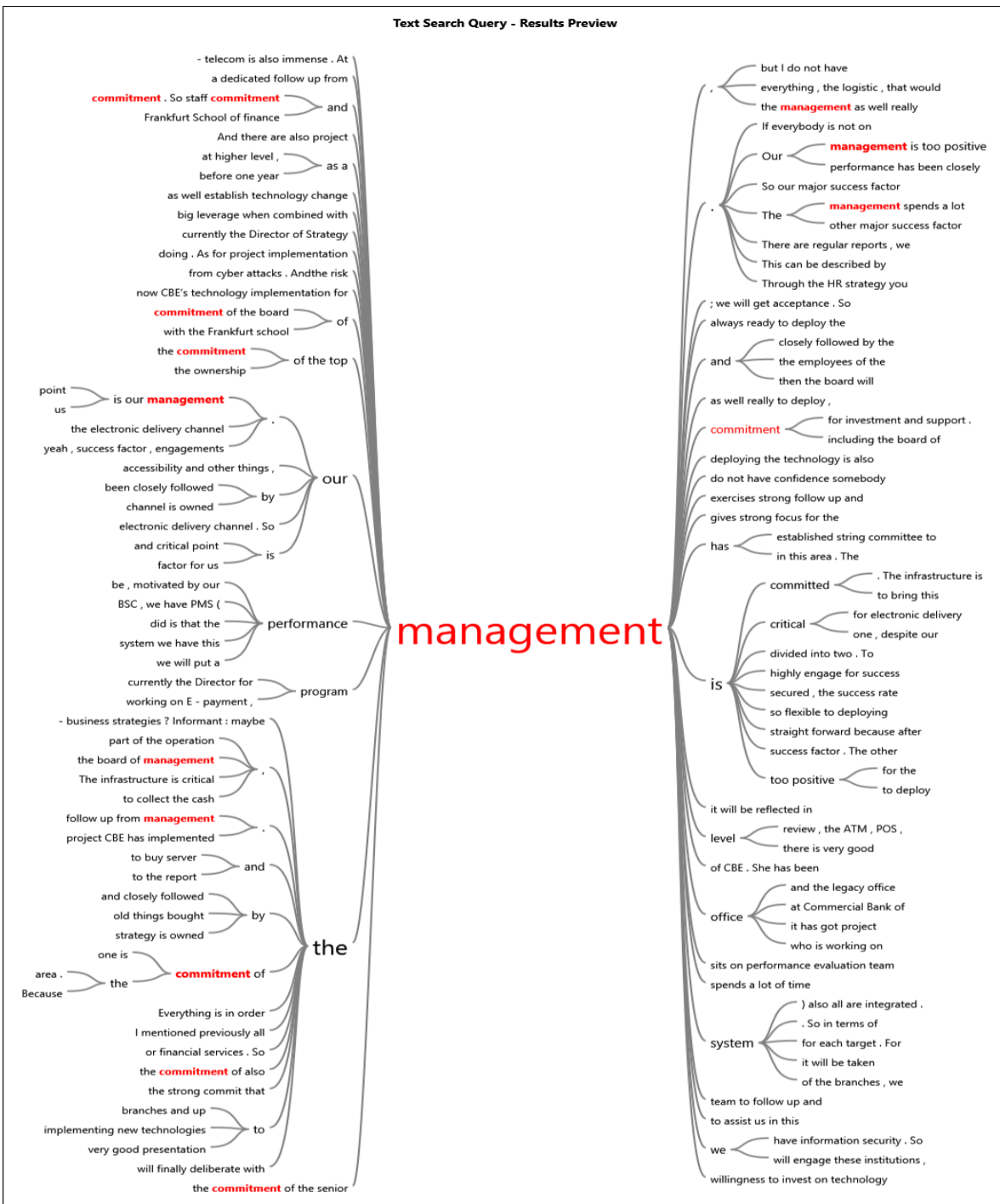


Figure 3. A word tree of leadership and management

Theme 2: Creating Accessibility

Making the e-payment channels accessible to users is one of the key strategies the bank is implementing to adopt e-banking services. A thematic analysis of the participants' answers to interview question 1 and 7 portrayed creating accessibility is key strategic resources to adopt e-banking strategies in Ethiopian market (See Table 3). According to the participants, ensuring service visibility is the ultimate objective of accessibility. The visibility here refers to ensuring convenience and service assurance for the customer. P11 claimed, "Aggressive deployment of the digital infrastructures in all places where convenience to the customers' awareness campaigns are the ways the bank is using to achieve its services visibility."

Table 3

Creating accessibility (Interview Question 1)

Participants' answers to interview question #1	Interpretation and Analysis	Emerging Themes
		<i>(Table continued)</i>

<p>P1 “We are expanding our ATM infrastructure now reaching 1200 ATMs throughout the country and we frequently make technical evaluations on our ATM machines so as to increase their service reliability.” P2 “...the e-payment strategy focuses on increasing e-payment accessibility and also e-payment acceptability, increasing e-payment service availability and also includes service literacy and visibility programs.” P4 “our strategy is enhanced availability and accessibilities, one of our strategies.” P7 “And the other thing we are doing is the entire system we have must be available 24/7.”</p>	<p>Participants concisely viewed aggressive multi-channel deployment and ensuring its 24/7 availability enhances the accessibility thereby easy for e-banking adoption. They also stressed using ATM as a complementary channel to the bricks and mortar facilitates adoption by illiterate customers.</p>	<p>Multichannel deployment, ensuring availability and using the digital channels as complementary to the branches enhance accessibility.</p>
<p>P2 “objective of the bank’s e-banking strategy includes enabling multichannel integration (ATM, the point of sale, Internet banking, mobile banking, Branches), and enabling platform for government and bill payment so this is specific objectives of the e-payment strategy. When I say multi-channel strategy down the line for the years to come we have to serve the people with the physical branch and other digital channels, like ATM, POS, Mobile banking internet banking and agent banking.” P3 “We</p>	<p>Participants emphasized channels integration with the bank’s core banking and national billing system is critical success factor to enhance service accessibility.</p>	<p>Channels integration can create service convenience and efficiency.</p>

(Table continued)

do that through the deployment of ATMs, a large number of ATMs; POSs. We also work on expanding mobile services and internet services. In that way, we increase the accessibility of E-payment service of the Bank. And the other is increasing E-payment acceptability.” P1 “We frequently make technical evaluations on our ATM machines so as to increase their service reliability.” P3 “...The Bank E-payment process has to efficient and effective. So we have to regularly review the E-payment process and do improvements.”

P2 “...It has also another objective of enabling a platform for government and bill payment so this is specific objectives of the e-payment strategy.” P1 “... if we are successful to deploy these API’s public API’s so that developers can develop their application and integrate it with our system.” P3 “...we plan to create national Billing system enabling environment. When we say that, we want to work with concerned Stakeholders, in that regard, and we actually are referring to tax collections, utility payments, salary and pension payments.” P5

Most of the participants believe the bank’s e-banking channels should be integrated with other service providers to make the services efficient and convenient for customers.

Service integrating the e-banking channels with other service providers such as bill payment systems can advance the adoption and usage of e-banking services.

(Table continued)

“...when we have such infrastructures in all places the visibility of the e-business infrastructure will be known to the customer. The other visibility comes from through marketing exercises through awareness campaigns which make the e-business as visible as the branch banking.”

P3 “...The other strategy is customer enrollment. We have to expand our customer base.” P4 “.... We are not yet segregate our customers. We try to reach all our customers and be like as long as they are ready to use our payment cards as well mobile and internet banking; all conventional customers become our electronic payment customers. Recruiting more customers is critical for usage, activation, and availability of electronic payment channels.”

Most of the participants consistently viewed customer enrollment is a critical strategy for the success of the e-banking adoption.

Customer segmentation & recruitment is a vital strategy to advance the adoption of e-banking channels.

I identified five perceived attributes of accessibility (see Figure 4): multi-channel deployment and complementing, service availability, efficiency and visibility, customer segmentation & recruitment, and service providers' integration. P7 pointed out the bank has supply side and demand side categories of activities used to create accessibility. While the supply side deals with tactics and activities to adopt e-banking channels, the demand side focuses on understanding and attracting customers for the e-banking channels. Regarding the demand side of accessibility strategy, the bank's management strives to deploy and configure e-banking channels in a way that customers can access them at their preferred time, place, form, and contents to advance the adoption rate. Martey and Gligah (2016) found convenience and accessibility have a significant and positive relationship with adoption rate. Creating accessibility, trust, ease of use and usefulness has a significant relationship with customers' satisfaction thereby makes increasing customers' adoption rate of e-banking channels (Liébana, Cabanillas, Leiva, and Guardia (2013).

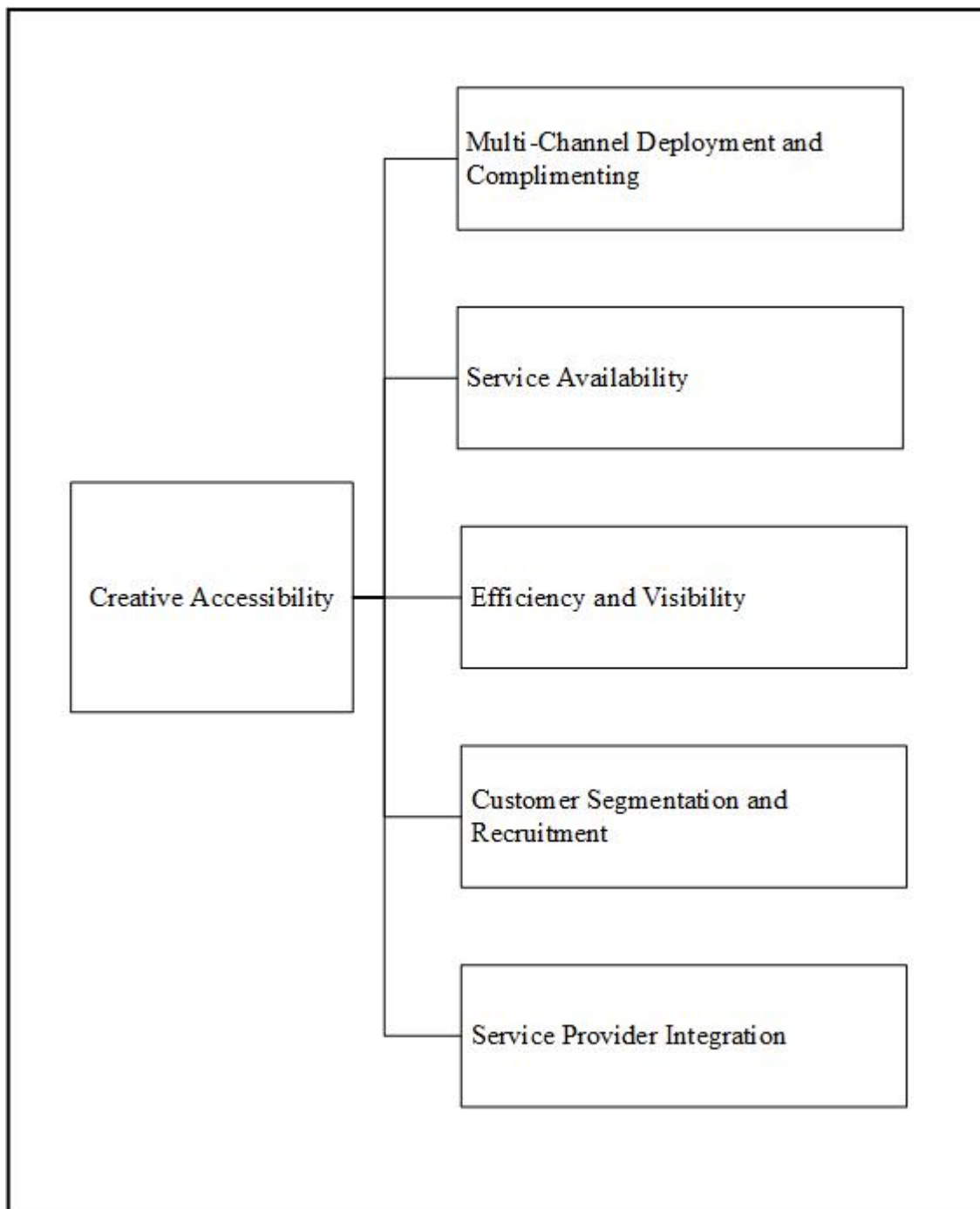


Figure 4. Word clustering on accessibility

Supply-side strategies. From the supply side, the bank's management devised and applied four major approaches to creating accessibility: aggressive multi-channel

deployment, maximize resources advantages and complement with existing channels, ensure services availability and enhance service efficiency. Six participants (see Table 5) emphasized the importance of multi-channel approach at addressing services accessibility. For example, P10 stated:

When I say multi-channel strategy down the line for the years to come we have to serve the people with the physical branch and other digital channels, like ATM, POS, Mobile banking internet banking and agent banking. We have to do it side by side with the physical branch. We have to leave the choice to the customer. We have to create convenience for all channels.

P7 reinforced P10's perception, "The bank's management is undertaking aggressive investment to procure, develop, and deploy the multi-channel e-banking services." The data from the bank's annual report (See Table 4) is congruent with the claim of the six participants on the bank's multichannel growth trend. As it can be seen in table 4, the bank started its e-banking initiative using 50 ATMs and seven POSs seven years ago. The mobile banking and Internet banking initiatives started two years late of the ATM initiative. Regardless of the edge in the market, among all channels, the adoption of mobile banking is growing exponentially and ATM follows. This shows the high penetration of mobile phone in the country is encouraging young users to join e-banking services. When it comes to the POS, however, its adoption is slow, therefore, a new strategy is required.

Table 4

The number of channels deployed by Bank A

Particulars	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17^a
ATMs	50	58	258	433	644	889	1335
POSS	7	32	206	244	1886	6229	6696
MB subscribers (000)			9	111	545	1,140	1,765
Active MB user (000)			NA	NA	286	716	1,257
IB subscribers (000)			0.2	1.6	4.6	24	35
Active IB users (000)			NA	NA	2.3	13.7	20.9

^a Refers to the period of time from July 2016-March 2017 (9 Months) *Note.* Production Year (Ending June 30)

The bank also focuses on leveraging and complementing the existing resources with the digital channels to increase accessibility. For example, According to the data in the bank's strategic plan, the bank has set a target to add 100 bricks and mortar channels per a year and as of 2017 reaches, its total branches number to 1186. The ATM channels are integrated via core banking technology in line with each branch so that it can be able to provide seamless alternative services for its customers. P6 stated, "The bank also co-locating its ATM channels along with fuel and gas stations and other stores to create easy access." Moreover, as of this year, the Ethio-Telecom recruited more than 50 million

mobile subscribers throughout the country (Ethio-telecom, 2017). The bank seized the penetration of mobile phone across the country as an opportunity to expand its mobile banking services. Now, it is striving to introduce mobile cash to access the unbanked population, who resided in the rural area via agent banking. P5 perceived, “Using the ATM with traditional branch channels as complimentary service is, however, creating duplication and encourages customers to continue with the face to face service habit rather than transition to the cashless state.” P10 enforced the point raised by P5:

In many areas, the bank deployed the bricks and mortar channel, POS, and ATM at the same point in a duplicative manner. In that case, customers prefer to continue with the branch. When we ask them why? Customers say that ‘why should I use the ATM when the branch is there? Why should I use the mobile bank when the ATM is there or the branch is there?’, therefore, this shows the bank’s product mix in terms of location does not seem coherent to its overarching business strategy.

Table 5

Frequency distribution of distribution of service accessibility

Dimensions of creating service accessibility	N	% of participants
Multichannel deployment and complementing	6	50
Service availability	12	100
Efficiency and visibility	5	41.7

Customer segmentation and recruitment	5	41.7
Service providers integration	7	58.3

The perception of the six participants on the channels integration is congruent with the view of Herhausen, Binder, Schoegel, and Herrmann (2015), who noted that online-offline channel integration leads to a competitive advantage and channel synergies rather than channel cannibalization.

Twelve participants (see Table 5) highlighted the availability of quality infrastructures such as telecom network and power are critical to ensuring e-payment availability. As the participants mentioned, however, power and telecom services in Ethiopia are prone to frequent interruption. The absence of quality infrastructure the bank's dependability on third party services providers, therefore, is creating service disruption thereby discouraging e-banking service adoption efforts. Participants' view about the challenge of infrastructure is aligned with the view of Bultum (2014), who identified infrastructure as a key hindering factor against the adoption of e-banking services in Ethiopia. All participants in this study mentioned the bank's management is using three ways to address the challenges ensure availability: stakeholder management, alternative power sources, and 24/7 operation and maintenance capabilities. P7 stated, "Apart from signing a service level agreement (SLA) with Ethio Telecom, both the bank and the Ethio -Telecom have established a common technical team to serve as a bridge between the two companies. The bank procured and deploy power generators to use as a

backup during the power interruption. It also trained, organized, and deployed an operation and maintenance team to ensure the 24/7 operations for business continuity.”

According to the five participants (see Table 5) and information from the bank’s five years e-payment plan, continuous improvement on service efficiency is one of the highest priority in the management’s agendas to ensure accessibility. P6 explained, “The bank’s management strives to bring process integration, to build proactive support systems, designed and deploy e-payment infrastructure.” P9 mentioned, “ERP is deployed to create seamless support of the internal functions and the bank procured and placed state of the art core banking platform and interfaced with all processes including the e-payment systems.” P5 also stated, “The bank also invested in deploying the enabling infrastructures such as data center, disaster recovery, switches, security monitoring center, and so on to enhance e-banking services efficiency and visibility.” The participants’ view on the accessibility matched with a view of Liébana-Cabanillas, Muñoz-Leiva, and Rejón-Guardia (2013), who identified accessibility, trust, ease of use and usefulness as determinant factors of satisfaction with electronic banking.

Demand-side strategies. Demand here refers to the market (i.e., the customers). The Bank focuses on three areas to foster a market for its e-payment services: customer segmentation and product mix, customers recruitment, service providers integration. Five participants (see Table 5) believe the customer segmentation & recruitment strategy played a vital role in advancing e-banking adoption. According to the five participants, the bank does not apply customers segmentation method but classified its customers into broad categories based on required skills to access the e-banking channels. P8 perceived,

“The ATM and mobile banking are deployed for universal access, the POS for the merchant and business, Internet banking for corporate users and diaspora.” P1 mentioned that “In the bank’s strategy, the ATM channels are considered as an interim mechanism to make a shift from the cash-based to the cashless transaction.” P7 stated, “ It is the most adopted channel than the others and provided in different packages such as normal ATM, ATM centers, forex ATM, community ATM, and so on.” P10 furthered P7’s point of view “ The bank also developed various product mixes to attract and recruit customers from the pool of its existing saving account holders and the new ones as well.”

Seven participants (see Table 5) also consistently asserted that service providers integration into the e-banking channels is a key enabler to advance accessibility. P2 said, “ The issue of integrating service providers into the bank’s e-payment system deals with bill payments.” I will discuss all these issues under the acceptance strategy later. I used the text search query of NVivo 11 to generate the word clustering and tree projection of participants’ on service accessibility (see Figure 5). The issue of accessibility is referred repeatedly by the participants as indicated in the following figure.

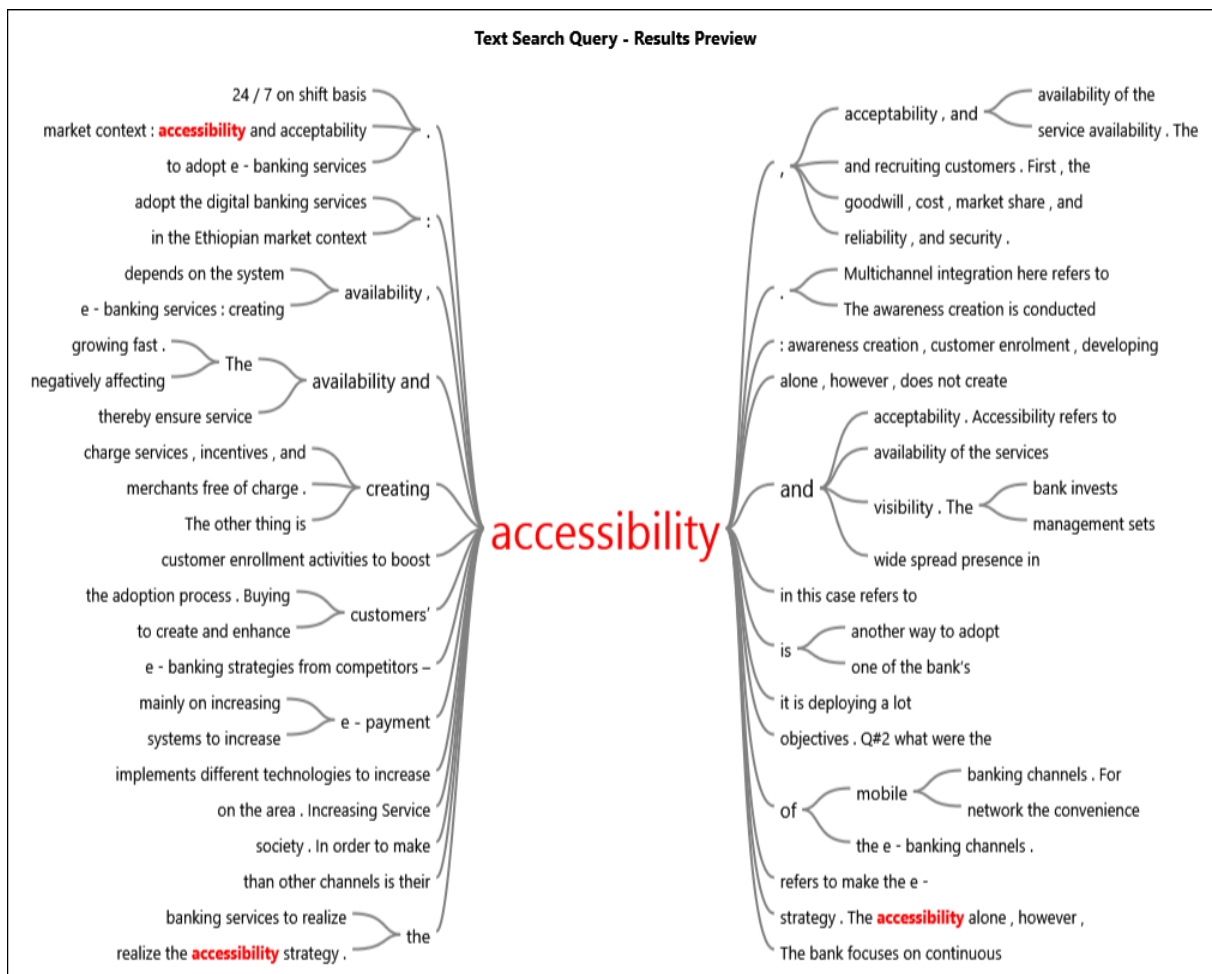


Figure 5. A word tree of accessibility

Theme 3: Fostering Acceptance

Investing to foster customer acceptance was another major theme that emerged from the data analysis in terms of frequent occurrence as shown in Figure 6. A thematic analysis of responses to the semi-structured interview questions 1, 3, 4, and 6, and documents review revealed three sub-themes for fostering users' acceptance to adopt e-banking channels: education and awareness, promotion and incentives, recruitment (see Figure 6). Understanding of the main determinants of customers' acceptance of e-banking

services is critical for banks (Akinyemi, Asani, & Adigun, 2013). According to Akinyemi et al., the sources of customers' acceptance of e-banking services has been argued by many researchers to depend partly on the quality of the banking services but more especially on customer preferences and satisfaction.

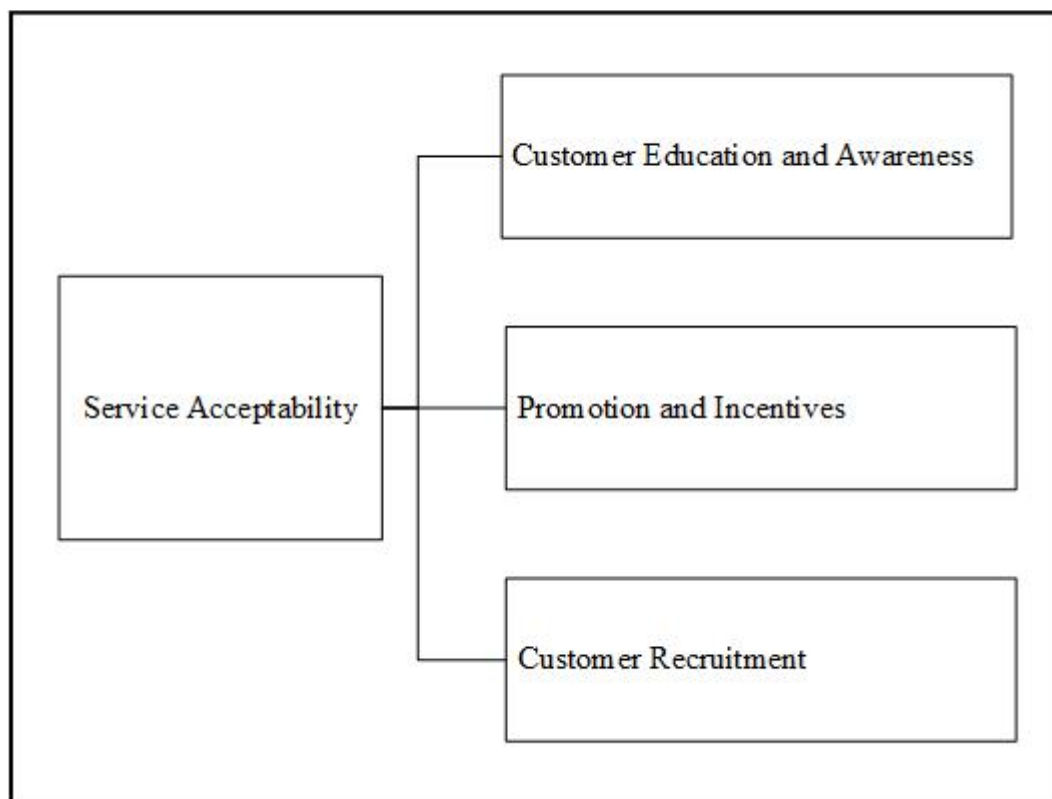


Figure 6. Word clustering on service acceptability

Table 6 depicts the theme that emerged from the analysis of participants' reflections, in responding to interview questions 1, 3, 4, and 6, regarding e-banking strategies, barriers, and success factors.

Table 6

Creating acceptability

Participants' answers to	Interpretation and Analysis	Emerging Themes
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interview question #1, Q#3,
Q#4, Q#6

<p>P11 "...The first barrier is the awareness level of the society is/was very low." P12 "...So we develop a major strategy to change the behavior of our customers from cash society to cashless society so we have to invest a lot to educate our customers the benefits of electronic banking systems rather than using cash." P1 "...We changed our ATMs and implemented an aggressive campaign on card distribution. We were able to increase our ATM user base upward to 3.4 million active ATM card users." P2 "...Awareness creation and customer educations come as one critical area of focus." P10 "...well we use all the Medias from the center. All the TV Medias, Radios and websites we have is also in use. We also aggressively distribute printed materials on E-banking or E-payment products, E-banking products services."</p>	<p>Participants concisely viewed aggressive campaign in education and customers' awareness enhances the adoption speed of e-banking channels. The bank is using all channels to change cash-based customers' behavior into the cashless transaction.</p>	<p>Customer education and awareness creation program is enhancing customers' acceptance of e-banking services.</p>
<p>P12 "...We give some incentives when they are using E-payment channels E-banking channels so that the customer prefer rather than using cash notes, E-payment channels." P11 "...we try to incentivize</p>	<p>Participants emphasized promotion and incentive schemes played a critical role in advancing e-banking adoption.</p>	<p>Incentive schemes can encourage customers to adopt e-banking channels.</p>

(Table continued)

<p>our services. We try to give customers a prize like we introduce a cash back incentive program.” P1 “...as part of our promotion strategy we use lottery advertising with many rewards for our ATM customers.” P6 “...The bank provides incentives. For example, if you are going to use a POS, we are cash back, some percent of the cash is back to a customer who is using a POS. and also on the merchant side, we are going to keep a POS without payment, just freely.” P7 “...So we do a lot of promotions and incentives for the public to get acceptance for this E-payment service.”</p> <p>P2 “...Increasing customer enrollment will be one area to mitigate the barriers which I mentioned earlier.”</p> <p>P10 “we use our 30,000 employees to conduct customer recruitment.”</p>	<p>Most of the participants consistently viewed customer enrollment is a critical strategy for the success of the e-banking adoption.</p>	<p>Customer recruitment program can advance the adoption and usage of e-banking services.</p>
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Table 7

Frequency distribution of service acceptability

Dimensions of creating service acceptability	N	% of participants
Customer Education and	12	100

Awareness		
Promotion and Incentives	9	75
Customer Recruitment	12	100

Twelve participants, as indicated in table 7, confirmed aggressive campaign for customer education and awareness creation played a critical role in the success of e-banking adoption. All participants in this case study claimed the bank's acceptance and usage strategy is stemmed from an understanding of customers' problem. For example, P10 mentioned, "We do some customer satisfaction surveys. Through these surveys, we try to obtain their feedback and identify the key problems to be solved." P1 said, "The bank's management launched aggressive awareness creation and promotion programs. P7 stated, "We use all channels and an integrated approach to implementing the awareness creation program. In the bank's five years strategy it is clearly stated that the bank should design and implement an integrated and interactive promotional campaigns based on target customer with a combination of above the line (ATL), below the line (BTL) marketing strategies, and digital media that support the activation and usage of E-payment products and channels. In the bank's strategic document, above the line (ATL) is defined as advertising activities where mass media such as television and radio advertising, print as well as the internet is used to promote brands and reach out to the target consumers. Below the line (BTL), advertising refers to the one to one communication, which involves the distribution of pamphlets, handbills, stickers; promotions, brochures placed at point of sale, on the roads through banners and placards,

and involve product demos and samplings at busy places like malls and marketplaces or residential complexes. P7 mentioned, “The bank also uses its 30,000 employees as agent and explains to promote its e-banking products.” P3 said, “All the branch network that we have, and the large employees base is also an important asset in explaining this product to the public/customer.”

Nine participants (see Table 7), confirmed the bank also induced incentive packages to promote and advance its products adoption process. The nine participants noted the bank’s incentive packages included prepaid card issuance and distribution, loyalty program, free of charge offer, and cash back policy. P3 stated, “The issuance of the prepaid card is identified as a powerful tool to draw more funds into the banking stream using co-branding of gift cards targeted the chain department stores.” P2 added, “The bank introduced a loyalty program with the prize-linked mechanism on usage level like use your cards 3 times a month for 6 months and win some prize.” P8 stated the following points about the bank’s incentive system:

It also offered free of charge products including providing POS terminals for merchants to encourage quick adoption. The free of charge offer is reinforced by the cash back policy especially for the case of POS adoption. P1 stated whenever customers bought on a card or pay on a card the bank just try to give 2% of the value of that purchased back to them in a sense that they will get a discount for a purchase on the card.

The nine participants (see Table 7) mentioned the bank also tried to use third-party agent to promote and sell its POS terminals to the merchants. However, P4 said,

“With regards to the merchants, the e-banking adoption is failed.” P1 perceived, “Merchants do not want to adopt POS terminals, because if they do that their transaction will be tracked by the customs authority and become subject to taxation. Merchants fear that custom will control them if they use electronic transactions so in one way every transaction and every activity of a person are traceable.” According to the nine participants, customers’ behavior towards the use of ATM and mobile banking is growing fast. P8 stated, “The bank, for example, within the nine months of the year 2017, have performed about 8 billion birr transaction via mobile banking.”

Twelve participants (see Table 7) perceived that the awareness creation and incentive strategies are backed by the intensive customer recruitment strategy. P4 said, “Customer recruitment is one of everyday task of the bank’s staff at each branch.” According to all participants, the bank used two categories of customers to be recruited: new and existing customers. P2 said, “As of 2017, the bank has more than 13 million saving account holders of them only 3 million customers, which is less than 15% are e-banking service users.” All participants in this case study believe the bank’s management sees the large customer base as an opportunity to adopt e-banking products. P9 stated, “The gap between the customer base and a number of e-banking users is, however, wide thereby needs continuous effort to recruit.” According to the 12 interviewees in this case study, targeting the existing customers for the acquisition will also help to build a relationship with customers and add value to them. Moreover, P11 said, “The bank uses the optional participation marketing strategy to recruit new customers.” At the time of new account, opening customers will be given the option of E-payment services as a

package to their accounts opening. I also observed that the bank leverages its old trust relationship as vital resources to attract new customers as well as existing traditional customers into e-banking channels. When it comes to the issue of adoption rate, however, the 12 participants responded there are mixed results. All participants perceived comparing to the bankable population and the penetration of mobile phones, which is more than 50 million the e-banking adoption rate is at its infant stage. Comparing to other banks the bank under this study registered remarkable outcome – nearly above 3.6 million e-banking users. According to P10, a survey done a year and a half ago, for example, showed that people about 6% are aware of mobile banking service, but the adoption rate is about 20%. When asked the non-adopters, the feedback was that “there are alternatives; there is the branch, the ATM. Therefore, why should I use a mobile banking when I can use ATM?” Therefore, there is a need to do some more public education and deeper awareness creations along to our customers.

According to the participants, the laggards in the adoption process are merchants. Nevertheless, the young generation and big international business firms are early adopters. P7 said, “If you go to merchants, retail merchants normally, you cannot find a single transaction in most of the merchants we have. But we do some assessments we found the young and those educated are most important customers of e-banking businesses, and only those international standard hotels like Hilton, Radisson, and Marriott are willing to use our POS.” In summary, as P11 stated, “The bank puts three-phase of e payment adoption strategy, which starts from recruitment or customer accusation then activation then usage level. Right now, the bank’s management assumed

it is in phase one, where it is focused on recruitment and customer onboarding phases.”

According to P11, phase one is going very well and the bank managed to recruit a good number of customers but in the other three phases, it is at an early stage.

Nonetheless, I could not find a written and well-communicated formal e-banking adoption processes (Framework). The bank’s management might need a comprehensive framework to use as a decision-making tool through which can manage the adoption process. Basias, Themistocleous, and Morabito (2015) pointed out numerous banks fail to achieve successful service-oriented architecture (SOA) adoption for one main reason: the lack of a methodological framework that would explain factors affecting SOA adoption in e-banking, and define the SOA adoption process in e-banking. The adoption of e-banking also depends on cultural context and personalization. National culture was found to impact key antecedents that lead to the adoption of m banking (Mortimer, Neale, Hasan, & Dunphy, 2015). Moreover, personalization leads to increased performance expectancy and decreased effort expectancy, which in turn leads to increasing intention to continue to use e-banking services (Wang, Cho, & Denton, 2017). It is important, therefore, the bank to have e-banking adoption framework tailored to the Ethiopian market context.

The participants’ perception in fostering customers’ acceptance strategy is congruent with the view of Martins, Oliveira, and Popovič (2014), who found the most important factor, is behavioral intention such as performance expectancy, effort expectancy, and social influence, and the role of risk as a stronger predictor of intention to use Internet banking. However, on the contrary, Ayo, Oni, Adewoye, and Eweoya

(2016) argued perceived e-service quality has a strong influence on customer satisfaction and use of e-banking services. According to Ayo et al., the competence of e-service support staff, system availability, service portfolio, responsiveness, and reliability, in that order, were found to be most significant in rating e-service quality. Further, Hanafizadeh, Behboudi, Koshksaray, and Tabar (2014) found constructs such as perceived usefulness, perceived ease of use, need for interaction, perceived risk, perceived cost, compatibility with lifestyle, perceived credibility and trust successfully explain the adoption of mobile banking among Iranian clients. The bank's aggressive campaign to foster customers' acceptance is congruent only with the three resource attributes of the VIROLU framework (Hinterhuber, 2013), which are organizational capability, addressing customers' unmet need, and large size of market, but not in line with the resource attributes of value, inimitability, and rareness of the approach to gain sustainable competitive advantage (Barney, 1991).

Theme 4: Leveraging Unique Features and Large Resource Base

The issue of leveraging organizational capacity was the fourth major themes that emerged from the thematic analysis in terms of frequency of occurrence as shown in figure 7. The data analysis revealed the following seven perceived sub-themes of organizational capability: Large customer base, financial strength, large employees base, large channels footprint, reputation, new products, and market share (See Figure 7).

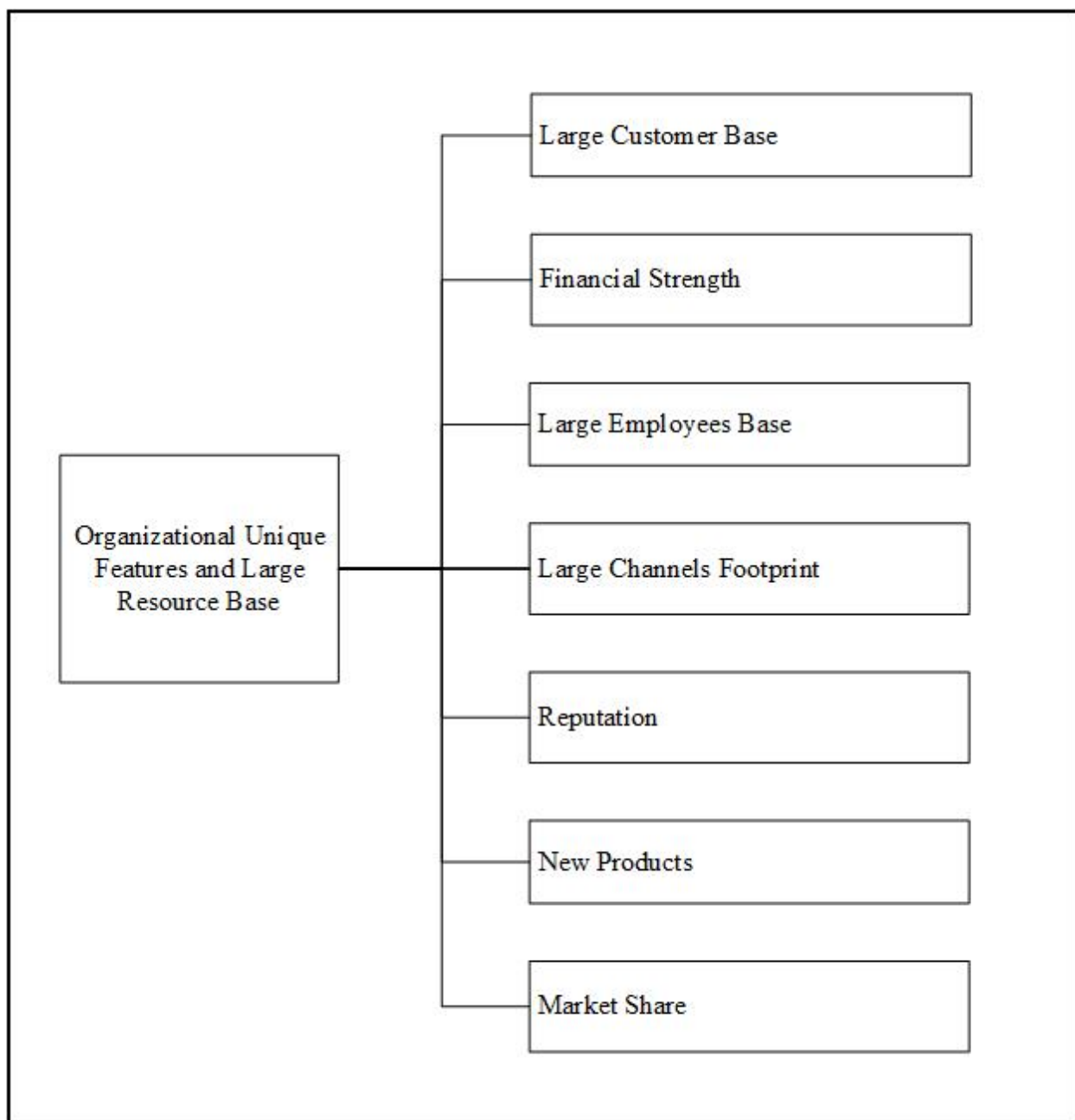


Figure 7. Word clustering leveraging unique organizational capabilities

Table 8 shows a depiction of themes that emerged from the analysis of participants' perceptions, in responding to interview question 2 and 6, regarding the success factors in adopting e-banking channels in Ethiopia.

Table 8

Unique Organizational Capability

Participants' answers to interview question #2 and question #6	Interpretation and analysis	Emergent themes
<p>P1 "...we have 30 thousand employees if each employee is able to recruit ten twenty a minimum somebody can recruit in very short period of time twenty thirty customers." P9 "...our 30,000 employees are critical actually because E-banking channels' products require face to face awareness creation." P5 "...So we consider our human resources as a key competitive advantage."</p>	<p>Several participants related the large employee-base to success the adoption of e-banking services in Ethiopia.</p>	<p>Bank leveraged its large employees-base to advance e-banking adoption.</p>
<p>P1 "...Also, we have a different feature I mean 1200 branches we use also these 1200 branches to leverage the service." P10 "...We have actually a vast e-banking network, branch networks as well. Also our capacity in terms of deploying point of sale machines throughout the country and also deploying ATM machines etc. we have this capacity, so which is a unique feature compared to other competitors." P7 "...We are also better in terms of the number of resources we have, the</p>	<p>Participants consistently referred that the bank's large channels footprint is key success factor to the bank's e-banking strategy.</p>	<p>The bank leveraged its wide presence of branch networks to adopt e-banking channels.</p>

number of ATM, the number of POS and even the number of mobile and internet subscribers.”

P10 “...Another feature is we have also vast customer base and currently over 3 million and but 70% of them are active.” P6 “...we do have around 13 million account holders. So we are using these customers to associate with this E-banking.” P2 “...13 million customers that we have already captured. These customers it gives you leverage to transform them to digital for e-business. You can consider them as a free customer base.”

P10 “...So customer preference and public confidence etc. is very high in the bank.” P4 “...critical one for the adoption of electronic banking is our goodwill or the people who have trust on our bank.” P3 “...The first thing is the culture of the Bank.”

P7 “...there are also project management office who is working on new innovation on E-payment.” P6 “...we are using or producing a new product, for example, IFP, interest-free banking, youth, woman, we associate these with a card payment.” P8 “we have the capacity to

Participants frequently mentioned the bank’s existing large account holders (i.e. customer-base) enabled the bank to adopt e-banking services is.

The data analysis revealed also that participants consistently related the customers’ confidence in the bank leads to fast adoption thereby gaining high market share.

Participants frequently mentioned the bank’s management capability and structure enabled the bank to innovate new products and adopt e-banking services is.

The bank leveraged the traditional large customer-base to diffuse e-banking channels. (*Table continued*)

Organizational reputation is utilized to adopt e-banking services by the bank under this study.

Management capability to introduce new product fostered the e-banking adoption process.

<p>introduce new products/service in this E-Banking.” P5 “...So we will use this strong financial capacity to procure state of art and modern procurement system.” P4 “...our management is so flexible to deploying and ready to adopt a new technology that can enhance the banking or financial services.”</p>	<p>Participants stressed the bank’s financial capability enabled the bank to invest in e-banking technologies.</p>	<p>Financial strength helped the bank to invest in technologies and adopt e-banking.</p>
<p>P5 “...we have a strong financial capacity.” P3 “...We are strong enough in finance we can invest in whatever we believe it is appropriate for the Bank.” P2 “...financial strength we are able to commit the financial resources that big IT investment requires that is also one of critical success factors that can be considered.”</p>	<p>Participants perceived large market share can help to build customer trust, thereby leads to e-banking acceptance.</p>	<p>Large market share may help the bank to introduce e-banking channels.</p>

Twelve participants, as indicated in table 9, perceived that large customer-base helped the bank to diffuse the e-banking channels. For example, P6 stated, “We do have around 13 million account holders. Therefore, we are using these customers to associate with this e-banking services.” P2 also reinforced P6’s idea “The large customer base gave

us leverage to transform them to digital channels. You can consider them as a free customer base.”

Eight participants (See table 9) claimed the bank’s 30,000 employees gave advantage the bank to advance its e-banking channels adoption thereby create competitive advantage. P1, for example, mentioned that “We have 30 thousand employees if each employee is able to recruit ten to twenty a minimum somebody can recruit in very short period of time twenty thirty customers.” Further, P5 also claimed, “So we consider our human resources as a key competitive advantage.”

Eleven participants (See Table 9) also emphasized on the bank’s wide channels footprint as one of the sources its competitive advantage. P1 noted, “ We have 1200 branches throughout the country and we use these branches to leverage the service.” P10 claimed that “Also, our capacity in terms of deploying point of sale machines and ATM throughout the country is a unique feature compared to other competitors.”

Eleven participants (See Table 9) stressed that the bank’s capability to introduce a new product is one of the key resources to gain competitive advantage. The 11 participants perceived that the bank’s management capability in terms of structure and financial strength are the key attributes to create new products and make them available to the market. P6, for example, said, “We are using or producing a new product, for example, interest-free banking, youth, woman, we associate these with a card payment.” P5 also stated, “ we use our strong financial capacity to procure state of art and modern procurement system.” Moreover, P7 claimed, “ There is also project management office who is working on new innovation on E-payment.” Data from the interviews showed the

bank has four elements, which is their task is related to e-banking adoption: e-payment, information systems, project office, and business development. The bank launched an initiative called process integration to ensure seamless flows of values among the various organs. P3 mentioned, “We have to work in collaboration so that the customers get a seamless service without attributing a fault to each of us.”

Seven participants (See Table 9) stressed the bank’s financial capability as a key enabler of the bank to invest in e-banking technologies. P3 claimed, “ We are strong enough in finance we can invest in whatever we believe it is appropriate for the Bank.” P2 strengthen P3’s point of view “ we are able to commit the financial resources that big IT investment requires that is also one of critical success factors that can be considered.”

Reputation is another sub-theme emerged from the data analysis. As indicated in table 9, five participants consistently emphasized on the customers’ confidence in the bank leads to fast adoption thereby gaining high market share. For example, P10 said “So customer preference and public confidence etc. is very high in the bank.” P4 also noted, “Critical one for the adoption of electronic banking is our goodwill or the people who have trust on our bank.” As perceived by the 5 participants, the bank is utilized its long history in the bank industry to gain reputational capital from the public and its worldwide customers. The participants believed that the bank was pioneered to introduce modern banking to the country in terms of talents, technology, management, and process as well. It builds trust among the public and its customers.

Ten participants (See Table 9) referred large market share as a source of the bank’s competitive advantage to adopt e-banking services. For example, P4 perceived,

“Our market share with compared to others is great. More than 60% of the market belongs to still with CBE.” P1 claimed, “ the bank’s large market share helps the bank to build customers confidence thereby enhance digital channels adoption rate.” According to (National bank of Ethiopia, 2017) the bank under this case study is able to control about 50% of the total market share. Data from the central bank shows the bank’s deposit balance is almost 65% of the overall deposit, all banks considered in total. Moreover, its share of funding/financing the economy is 55%. Moreover, in terms of the e-payment market share the bank holds more than 50% of the market such as the number of POS 77.37%, the number of payment card 74.54%, the number of mobile banking users 80.87%, and the number of transactions by Internet banking users 94.39%. The perception of these 10 participants is congruent with the view of Mwando (2013), who found that increased market share allowed a bank to achieve greater scale in its operations which generally improved its profitability.

The perceptions of the 12 participants (See Table 9) in this case study on leveraging organizational capabilities as a unique feature to adopt e-banking channels are aligned with the view of Basics, Themistocleous, and Morabito (2015), who argued technology adoption rate relies on factors such as human capital and organizational capital. Firms obtain competitive advantages by implementing strategies that exploit their internal strengths, through responding to environmental opportunities, while neutralizing external threats and avoiding internal weaknesses (Barney, 1991). I have observed that the bank is exploiting its resource base as economies of scale to offer low price in its e-payment products thereby encourage fast adoption. From the point of view of the

conceptual framework of this study, however, not all-organizational capabilities create a sustainable competitive advantage (Hinterhuber, 2013). According to Hinterhuber, organizational capabilities should be valuable, inimitable, rare, well utilized by the organization, to address customers' unmet need, and covered large market to cover the production cost.

Table 9

Frequency distribution of unique organizational capability

Organizational unique features and large resource base	N	% of Participants
Large customer base	12	100
Financial strength	7	58.3
Large employees base	8	66.7
Large channels footprint	11	91.7
Reputation	5	41.7
New products	11	91.7
Market share	10	83.3

Theme 5: Tuning to Emerging Strategy

Emerging strategy is the fifth core theme emerged from the data analysis.

Through the thematic analysis, three major sub-themes emerge as shown in Figure 7.

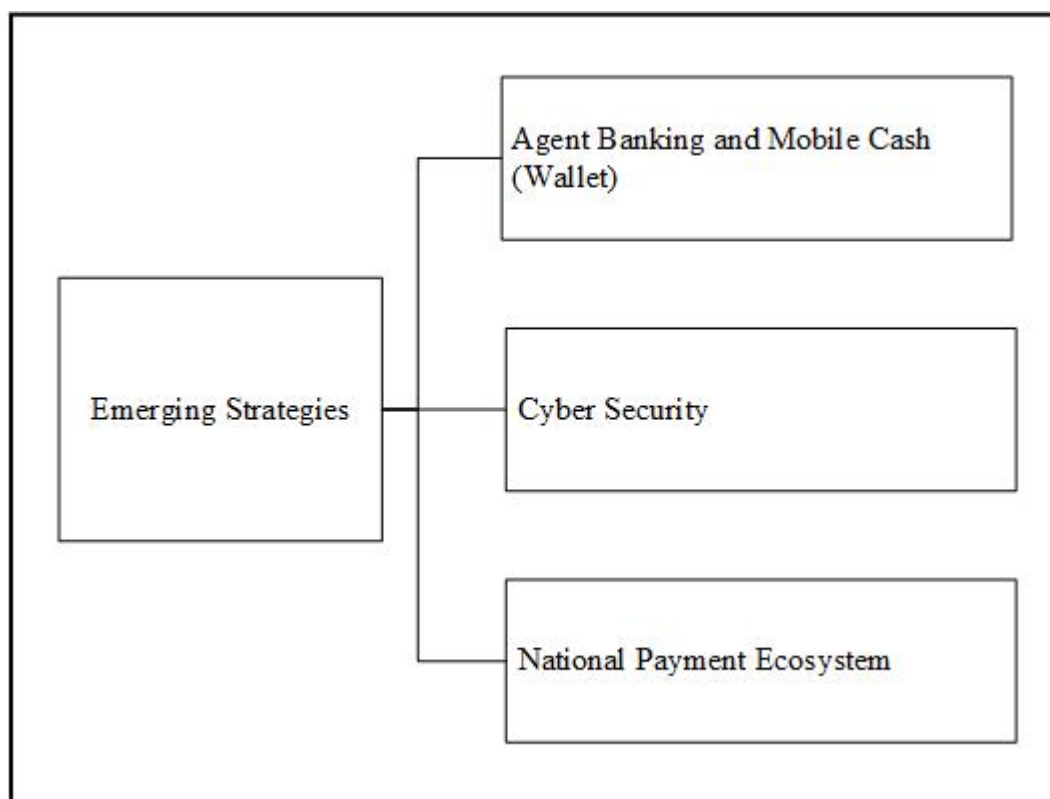


Figure 8. Word clustering emerging strategy

Table 10 portrayed themes that are emerged from the analysis of participants' perceptions, in responding to interview 7, regarding the future focus

Table 10

Emerging Strategy

Participants' answers to interview question #7:	Interpretation and Analysis	Emerging Themes
P1 "...Another initiative we are implementing now is Mobile-Wallet solution, equivalent to M-Pesa. We are hoping to reach the unbanked segment of the country through our Mobile wallet solution." P2 "...We are only targeting the bigger	Participants stressed the bank is preparing to retuned its customers target to include the unbanked mass living in the rural area of the country through agent banking model and mobile cash.	Agent banking and mobile cash are emerging as the bank's strategy.

(Table continued)

merchant's supermarkets, and oil companies and other big retailers. For targeting the lower end consumer we need to aggressively work for agent banking like the one we are trying to introduce like mobile-birr."

P4 "... We are also in process to deploy mobile money solution."

P1 "...As part of this project we are planning on expanding our agent network in the informal sector including small businesses to provide cash in and cash out services."

P5 "...security so that, our customers and the society will have confidence in the e-payment system."

P6 "...security becomes crucial and paramount importance in order to have belief and trust in using E-banking." P2 "...For such kind of lower businesses, you need to have a national ID. The bank does not bother customers by asking this KYC questions. KYC is very critical for such electronic businesses." P3 "...KYC is important for bank services enhancement."

P1 "...if we are successful to deploy these API's public API's so that developers can develop their application

Participants explained their concern on security should become the bank's priority.

Most of the participants consistently viewed the need for national integration is crucial to develop cashless society.

Cybersecurity is becoming as the bank's agenda.

The integrated national billing system is a key strategy to advance e-banking services.

and integrate it with our system.” P5 “...We have now at this point in time we have identified the gaps from our previous experience, especially with the whole payment ecosystem without support of the key stakeholders; the payment ecosystem like the central bank, the billing companies, Ethio Telecom, the Tax Authorities, and the Ministry of Finance, the key stakeholders, any other utility companies, our strategy will not be fruitful.” P8 “...a coordinated works of all stakeholders are very critical.” P9 “...Like I said before tax collection, the budget utilization and so and so, also can be done within the system.”

Currently, the bank’s management is revising its e-banking strategy based on lessons drawn from its experiences, industry assessment, as well as best practices of other countries such as India, Rwanda, Nigeria, and Kenya in the digital economy. The issue of financial inclusion is another driving factor pushed the bank’s management to devise a new strategy. National Bank of Ethiopia (NBE) in collaboration with the World Bank has set a new national strategy to develop a national retail payments system thereby ensuring financial inclusion (NBE, 2015). In that case, bank services digitalization has become a mandatory national agenda, hence all banks and financial institutions are subject to change their strategies.

As indicated in Figure 8, three major sub-themes are emerged as new strategies to adopt e-banking services. Twelve participants (see Table 11) representing the highest frequency of occurrence, mentioned the agent banking and mobile cash will enable the bank to address the objective of financial inclusion. The perception of these 12 participants is congruent with the view of Allen, Carletti, Cull, Qian, QJ, Senbet, and Valenzuela (2014), who claimed a recent innovation in financial services, mobile banking, has helped to overcome infrastructural problems and improve financial access. Moreover, the 12 participants' perception on agent banking also in line with the view of Mwando (2013), who found out that financial services accessibility by customers through baking agencies had a positive impact on financial performance of commercial banks in Kenya. From the findings, the agent banking and mobile cash strategy appear a core approach to advance e-banking adoption among the unbanked population. Table 11, indicates that 100% of participants hopped agent banking and mobile cash strategy will address the issue of financial inclusion. For example, P1 stated, "Another initiative we are implementing now is Mobile-Wallet solution, equivalent to M-Pesa. We are hoping to reach the unbanked segment of the country through our Mobile wallet solution." P2 responded, "In the previous strategy, we were only targeting the bigger merchant's supermarkets, and oil companies and other big retailers. For targeting the lower end consumer we need to aggressively work for agent banking like the one we are trying to introduce like mobile-birr." P6 also furthered the point "...we are planning on expanding our agent network in the informal sector including small businesses to provide cash in and cash out services."

Ten participants (See Table 11) claimed that without having an integrated national billing system the adoption of e-banking services cannot be realized. The 10 participants have strongly believed in the absence of national-level coordination is the key hindrance factor for slow e-banking adoption in Ethiopia. The participants' perception of the need for the integrated national approach is congruent with the view of Bultum (2014), who noted establishing a clear set of the legal framework on the use of technology in the Ethiopian banking industry is one of the key solutions to address slow diffusion of e-banking services in the country. From the findings, it appears that the adoption of e-banking channels in Ethiopia is suffered due to lack of sound regulatory framework and the absence of orchestrated effort among the stakeholders to build an integrated billing system. Table 11 shows 83% of participants stressed on the need to create nationally integrated e-payment ecosystem. For example, P8 said, "A coordinated works of all stakeholders is very critical." P5 stated the importance of stakeholders integration in advancing the e-banking adoption as follows:

At this point in time we have identified the gaps from our previous experience, especially with the whole payment ecosystem without support of the key stakeholders; the payment ecosystem like the central bank, the billing companies, Ethio telecom, the tax authorities, and the ministry of finance, the key stakeholders, any other utility companies, our strategy will not be fruitful.

Six participants (See Table 11) representing the lowest frequency of occurrence, related the cybersecurity to advance e-banking adoption. The perception of these 6 participants is in line with the view of Bultum (2014), who identified that security is one

of the major barriers Ethiopian banking industry faces in the adoption of Electronic banking. From the findings, it appears that the only 50 percent of participants recognized the importance of cybersecurity in advancing the e-banking adoption strategies. Table 10 indicates that the 50% of participants concerned with the absence of the national electronic identification number (NEID) hindered ensuring the know your customer (KYC) effort thereby exposed the bank to fraud. For example, P6 stated, “Security becomes crucial and paramount importance in order to have belief and trust in using E-banking.” P2 noted, “For such kind of lower businesses, you need to have a national ID. The bank does not bother customers by asking this KYC questions. KYC is very critical for such electronic businesses.” P3 perceived, “KYC is important for bank services enhancement.”

Furthermore, the participants’ perception is congruent with the view of Fonchamnyo (2013), who pointed out that finding revealed that perceived reliability, trust, security, and accessibility have a significant impact on the perceived usefulness of e-banking adoption. From my review of the bank’s strategic document, I understand that the National Bank of Ethiopia (NBE) put the know your customer (KYC) requirement on all banks as a precondition to open accounts and conduct the transaction. Banks also need authentication mechanism to open accounts and provide online services. There is no, however, national electronic ID and a central database to authenticate and serve customers. The existing ID system is too much venerable to make counterfeiting activities and fraud.

I also reviewed the bank's new e-banking strategic draft document. In the draft document, the bank's management has identified six strategic issues: increasing accessibility, acceptability, availability, literacy of e-banking services, enabling the creation of national billing system, and enabling the achievement of key corporate strategy elements. The new strategic draft document is basically a continuation of the previous strategy except with few incremental changes in customers focus, the integration of national payment system into its e-banking services, and new business model.

From the bank's draft strategic document and the interview with the participants, I observed that the bank needs to push aggressively in line with its past strategies in little tweaked way. Expanding the adoption of e-banking channels and ensuring quality service are the central points in the strategy. In the previous strategy, the bank had targeted on recruiting and mobilizing merchants and business firms (high-value customers), its old customers, and employees to adopt the e-banking channels. As a result of it, most channels are concentrated in the capital city Addis Ababa, Ethiopia. For example, according to the NBE (2016), out of the 1689 ATMs, 7787 points of sales (POS) the 887 ATMs, and 5803 POS are deployed in the capital city of Ethiopia. When it comes to mobile banking, however, out of 105 million users, only the 582,978 users reside in the capital city of the country (Ethio telecom, 2017). This data shows there is a need to target the unbanked mass resided in the rural areas of the country. To address the unbanked population requirements, the bank also decided to introduce new e-banking product namely mobile cash and new business model – agent banking as an intermediary. In this new solution, any person who has a mobile phone can be the bank's customer and

thereby it will help the bank to reach everywhere in the country. Furthermore, the bank has intended to introduce the integration of various billing systems into its e-payment systems. In the bank's draft strategy, billing systems such as utility payments, tax collections, road traffic fines and license renewal payment, and so on are candidates for the integration.

Finally, all participants in this case study recommended that the government should undertake nationwide initiatives to support the adoption of e-banking services thereby to create a cashless society. First, the development of national EID should become the highest priority of the government in order to resolve issues related to knowing your customer (KYC) requirements. Second, the adoption of e-banking channels should be considered as a national initiative and as an integral part of countrywide digitalization program. Third, especially the National Bank of Ethiopia has to take a major role in setting appropriate rules, directives, and frameworks that support the enhancement of electronic banking services and that restrict the cash movement in the country. Fourth, the government also should facilitate in setting up nationwide bill payment systems and platforms so that all service providers can be able to create common e-commerce environment. Finally, the national bank also should take a leading role in educating the use of e-banking services to the society.

In summary, the participants' responds to the interview questions supported the premise of the extended RBV theory, which was the conceptual framework for this study. The RBV of strategy acknowledges both in theory and in practice, as the most relevant tool for business to develop a strategy (Barney & Clark, 2007). The internal resource

drivers determine internationalization of commercial banks (Panda and Reddy, 2016).

Panda and Reddy found higher assets' size, higher human resources, private ownership, and higher organizational age led to the internationalization of commercial banks.

Continuous innovation, stakeholder integration, shared vision and early adoption, which were frequently highlighted in RBV studies, are found vital for Green IT performance (Rahim & Rahman, 2013). Hinterhuber (2013) argued firms should use the RBV combinedly with the market-based view in their strategies to gain a competitive advantage over their competitors.

Table 11

Frequency Distribution of Emerging Strategy

Emerging strategies	N	% of Participants
Agent banking and mobile cash (Wallet)	12	100
Cyber Security	6	50
National payment ecosystem	10	83.3

In this case study, I have learned the bank's management in general, as well as the participants in particular, believe the bank's large resource base creates their competitive advantage in adopting e-banking channels. The findings, however, appears some of the participants' perceptions are incongruent with the view of Barney and Clark (2007), who argued firm resources must be heterogeneous and immobile to create sustainable

competitive advantage. According to the extended RBV framework by Hinterhuber (2013), a company may gain a competitive advantage if its resources and capabilities are valuable, rare, and non-imitable, organized, and if these resources and capabilities address unmet customer needs in market segments large enough to cover organizational fixed costs. The bank's large resource bases and capabilities discussed above, therefore, should be examined based on the extended RBV to deploying them in such a way that the bank can reap a sustainable competitive advantage from the state of the art e-banking channels. I found the bank's highest resource base, organizational age, shared visions, early adoption, and strategic alignment led to gain comparative advantage in adopting the e-banking services. However, the important issue here is not gaining a competitive advantage but making it sustainable. From my observation, the bank lacks the customer-centric orientation, continuous innovation, and stakeholder integration, which are the main sources of sustainable competitive advantage. The bank's new draft e-banking strategy also focuses on making improvement rather than disruptive change. Commercial banks should focus on advancing transformative agenda based on developing a customer-centric business model and enabling innovation, and the capabilities required to foster it (Sullivan, Garvey, Alcocer, & Eldridge, 2016). In summary, the identified themes discussed above showed there is no one best strategy that can lead to an adoption of e-banking services for increased business performance. Bearing in mind the concepts of the extended RBV framework, commercial bank leaders may implement the actions outlined in the recommendation part of this study, combining with the strategies identified in the study, to advance the adoption of e-banking services for customers on a sustainable basis.

Applications to Professional Practice

National culture was found to impact key antecedents that lead to the adoption of e-banking (Gary Mortimer, Larry Neale, Syed Fazal E Hasan, & Benjamin Dunphy, 2015). The purpose of this qualitative single case study was to explore e-business strategies that bank managers use to promote the adoption of electronic banking services. The findings of this study indicated banks' top leaders must display commitment, shared vision, learning capabilities, integrative and innovative approach, and customer-centric strategy to overcome challenges against e-banking adoption. The strategies to advance the adoption of e-banking may include investing in research and development to introduce innovative products and following a transformative approach to become ready for international competition.

The finding of this study may apply to Ethiopian commercial banking industry residing in Ethiopia. Identifying the best practice in business strategies is vital to organizational success. The most significant contribution of this study is the focus on e-banking strategies that the management uses to advance the adoption of e-payment services and ensure financial inclusion.

I introduce potential applications to professional practice from findings of this study to address the gap in the existing literature on what strategies bank managers use to adopt e-banking services. Most of the participants in this study supported best practice strategies for the success of e-banking adoption. Identifying the themes from the interviews and documents was important to add consistency and reliability on the data for this study. This study contributes to bank managers and leadership by informing that on

which strategies they should focus to advance e-banking services. The application of this doctoral study may have implications for bank leadership success in e-banking adoption. Finally, the documented results serve as reference material for future studies.

Implications for Social Change

Almost more than half of Ethiopia's bankable population is unbanked (Getnet, 2014). As of first quarter of 2017, the aggregate number of e-banking users is not more than 6 million (NBE, 2017). The large section of the Ethiopian population, both urban and rural is a largely underserved market with a remarkable business opportunity (Getnet, 2014). The adoption of e-banking channels to the unbanked Ethiopia's population is increasing their access to financial services thereby enhance prosperity and contribute to social change. The introduction of the e-banking channels may foster financial inclusion. The National Bank of Ethiopia devised a national retail payments system strategy to ensure financial inclusion (NBE, 2016). In that strategy, the NBE announced a commitment to expand electronic money services and move to cashless society through the adoption of digital channels. The plan also targets to create more than 3 million jobs only mobile and agent banking (Getnet, 2014). My findings, therefore, may help bank managers to enhance their e-banking adoption strategies and meet national objectives thereby achieve financial inclusion and jobs creation.

Recommendations for Action

The objective of this qualitative study was to understand and explore what strategies bank managers utilized to adopt the e-banking services in Ethiopia. In my case study, I have identified five strategic themes: Leadership, accessibility, acceptability,

resource base advantage, and tuning to emerging strategy. One of my recommendations for action is, therefore, bank managers should ensure the use of these strategic issues as a springboard capability to the next transformational process.

The bank managers should also consider the new global trends, as well as domestic trends that call a breakthrough change in the retail banking landscape. Sullivan et al. (2016) noted global macro trends such as demographic change, technology disruption, social and behavioral change, and the rise of state-directed capitalism will shape the global financing landscape in 2020. Commercial banks, therefore, need to choose what posture to adopt this change: whether to be a shaper of the future, or a fast follower, or to manage defensively, or putting off change. Banks should be agile, open, and ready to explore different options in the uncertain world. Technology is becoming the key driver for change. disrupting technologies such as blockchain technology, artificial intelligence, mobile computing, cloud computing, big data analytics, and Internet of things (IoT) are changing money, business, and the World (Etro, 2017; Harvey, 2016; Shrier, Canale, & Pentland, 2016; Shrier, Iarossi, Sharma, & Pentland, 2016). For example, Shrier et al. (2016) noted the three rules of retail were location, location, location. In mobile money, however, they're partnership, partnership, partnership. Thus, banks need to create a mesh of partnerships covering various networks of relationships. Commercial bank leaders need to lead the way in the design and implementation of practice and strategies that address adoption barriers in e-banking channels and advance the quality of financial services.

I plan to publish my findings in e-banking research journals. Additionally, I would welcome the opportunity to share my information with others in e-banking or e-business workshops and conferences. This study makes an important contribution to research on the importance of optimizing the common strategies used by commercial banks in emerging markets to adopt e-banking channels to address the need of unbanked populations and ensure financial inclusiveness.

Recommendations for Further Study

Findings from this study could pave the way for conducting further research regarding the adoption of electronic banking in Ethiopia. In this study, I explored strategies that bank managers utilized in adopting the electronic banking service. The results provide a number of valuable conclusions for commercial banks in developing the market. Considering the significant role of e-banking in the economy, however, I recommend further study on the impact of culture on the pace and scale of adopting the e-banking channels. Future researchers could also examine the impact and influence of contextual conditions, such as regulations, infrastructure, and industry structure on the strategies the bank's managers are using to adopt e-banking services.

The study was limited to the data of a single commercial bank. Caution should, therefore, be exercised in generalizing the results. An additional limitation was that the sample size was limited to 12 bank top leaders in the single commercial bank. There was also a possibility that bank managers' understanding of the strategies may differ ones each other. Therefore, future researchers may consider exploring further research having

participants from all banks to develop a thorough understanding. Moreover, future researchers might consider expanding the sample size and to more banks in the country.

The research limitations also can be related to the research approach that I used in this case study. Quantitative researchers may examine the extent and nature of the relationship between the bank's e-banking adoption strategies and the performance of the bank. Furthermore, researchers could expand my case study findings by examining the effect of organization culture on the performance of e-banking adoption.

Reflections

Using a qualitative single case study, I focused on the exploration of strategies bank managers would use to adopt e-banking services in Ethiopia. The absence of my experience in the financial industry pushed me to strive for understanding about the industry through thorough reading and discussion with professionals. My 20 years of experience in the technology management, however, provided me with the background for exploring the adoption of strategies of new products for bank managers in Ethiopia. I think the distance of my professional experience helped me to stay objective in the process of my research. I had no preconceived conclusions about what the results would be and I bracketed personal presuppositions and biases to ensure participants freely and objectively expressed in-depth perceptions of the phenomenon. I mitigated personal bias by using member checking during the interview allowing the participants the opportunity to correct errors and challenge the information transcribed and the initial analysis of the overall themes. I provided participants with my interpretation of the narrative and themes of verifying plausibility, finding out whether the data analysis was congruent with the

participant's experience. I allowed participants to review the study results, hence, completing member checking. Additionally, I triangulated the qualitative data collected through interviews and the review of reports and strategic plan to substantiate the findings.

Reflecting back on my study, there were no challenges in obtaining the number of bank leaders to conduct the interviews. Most of the participants were able to recall their experiences in e-banking adoption. Only the participants can consent to their honesty and legitimacy of the information they provided. Retrospectively, I found the study to be beneficial in developing the themes and recommendations for bank leaders to move forward with the e-banking adoption process. I plan to publish the information in hopes of sharing my knowledge with others going through this process. Finally, I gained a true appreciation for all doctoral recipients, respect, and admiration for academia. I also gain a depth understanding of how strategic management of technologies can help the bank leaders to advance the e-banking channels adoption thereby gain a competitive advantage in the context of the developing market.

Summary and Study Conclusions

Hinterhuber (2013) noted firm leaders should identify ex-ante, those resources and capabilities leading to competitive advantage and superior profitability so that they can achieve high performance. According to Hinterhuber, the extended resource-based view of strategy may help firm leaders to incorporate the demand-based variables of customer needs and size of the addressable market segment in their definition of the resources and capabilities that enable competitive advantage and superior profitability.

The findings of this study, however, indicated bank leaders tended towards utilizing organizational capabilities to adopt e-banking services. Therefore, my findings indicated a need for bank managers to develop a customer-centric organizational posture and shift from the incremental approach to disruptive innovative approach, from product-oriented and siloed operations to solution-oriented and integrated operations of the e-banking services. Bank managers need to become proactive in their efforts to shape the industry and to build e-banking ecosystem inside and outside the country so that they can realize their vision to become globally competitors. The most significant contribution of this study to professional practice was the focus on e-banking strategies to advance the adoption pace and scale of the service thereby achieve financial inclusion and then elevate development.

The four recommendations embrace: maintaining and leveraging leadership to shape the banking industry in Ethiopia, focusing on transformation rather than incremental growth, utilizing the disruptive technologies as a leapfrogging capability to realize the vision, and investing in building the digital payment ecosystem. Further studies might strengthen opportunities to address the impact of the regulatory framework on the adoption pace and scale of e-banking services. Additionally, the findings might add information for the National Bank of Ethiopia to tailor its national retail payments system strategy to the banking industry.

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Appendix B: Interview Protocol

Date _____ Location _____

Institutions: _____

Interviewee (Title and Name): _____

Interviewer: _____

Introductory Protocol

To facilitate my note-taking, I would like to audio tape our conversations today. For your information, only researchers on the project will be privy to the tapes which will be eventually destroyed after they are transcribed. Thank you for your agreeing to participate. I have planned this interview to last no longer than one hour. During this time, I will have several questions that we would like to cover.

Introduction

You have been selected to speak with me today because you have been identified as someone who has a great deal to share about e-business strategies, which your bank uses to adopt e-banking services. My research project as a whole focuses on the understanding of what e-business strategies your bank is using to advance the adoption of electronic banking in the Ethiopian context. My study does not aim to evaluate your techniques or experiences. Rather, I am trying to learn more about the existing e-business strategies and hindering factors to implement the strategies thereby I can be able to contribute an idea on how to improve the e-banking adoption process.

Interviewee Background

How long have you been in your present position?

How long you serve at this institution?

Briefly, describe your role?

How are you involved in the e-banking strategy process?

Appendix C: Interview Questions

Research Question

The overarching question is: What e-business strategies do bank managers in Ethiopia use to promote the adoption of electronic banking services?

Interview Questions

- 1) What e-business strategies do you use to advance the adoption of the electronic banking services?
- 2) What were the critical features of your bank's e-business strategies to move the adoption pace of the e-banking services?
- 3) What barriers did you encounter in implementing your e-business strategies for increasing customers using e-banking services?
- 4) How did you address those barriers to implementing the e-banking strategy?
- 5) How do you assess the effectiveness of your e-business strategies?
- 6) What factors were critical in your success of implementing e-banking strategy?
- 7) What other additional information would you like to add to strategies to advance the adoption of electronic banking services?

Appendix D: Letter of Cooperation

Bank A

Contact Information

Date

Dear Teklebrhan Woldearegay Gebreslassie,

Based on my review of your research proposal, I give permission for you to conduct the study entitled E-business strategy to adopt electronic banking services in Ethiopia within the commercial bank of Ethiopia (CBE). As part of this study, I authorize you to conduct data collection through interviewing and document review, member checking and results in dissemination activities. Individuals' participation will be voluntary and at their own discretion.

We understand that our organization's responsibilities include: Providing access to the bank's annual reports and strategic documents related to e-banking adoption strategies; facilitating interview rooms and other resources at the need arises. We reserve the right to withdraw from the study at any time if our circumstances change.

The student will be responsible for complying with our site's research policies and requirements. 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,

Authorization Official

Contact Information