# Knowledge-Based Dynamic Capabilities and Competitive Advantage: In Case of Commercial Bank of Ethiopia

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#### Abstract

The main goal of this study was to understand how knowledge-based dynamic capabilities contributed to Commercial Bank of Ethiopia's competitive advantage from the perspective of practitioners. Consequently, a qualitative interpretive and cross sectional research design were used. Also semi-structured in-depth interview were made with nine district human resource directorate managers to collect data. Data obtained from interview were analysed based on the thematic methods of the areas. The findings of the study shows that knowledge based dynamic capability can enhance the competitive advantage of an organization by combining the dimensions of knowledge capability and dynamic capability. Lastly the study suggested that knowledge based dynamic capability has to be extensively researched to fill the evidence based literature gap.

Keywords: knowledge process capability, dynamic capability, knowledge based capability & competitive advantage

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#### 1. Introduction

In the today's competition, how firms create and sustain a competitive advantage has become an increasing field of interest for both scholars and practitioners. Firms are told to increase and improve their intangible-based elements to remain competitive, so they must pay particular attention to issues such as knowledge management, intellectual capital, core competences, dynamic capabilities or competitive intelligence.

Meanwhile, the theoretical foundations of research on competitive advantages have covered a variety of approaches. Some of them have used the Barney's (1991) discourse of sustained competitive advantage based on a combination of resources and capabilities. Some others have approached from the Grant's (1996) knowledge based view of the firm that posit that firms holding a superior ability to use and deploy knowledge-based resources quicker and faster than competitors are those that will sustain a competitive advantage over time.

In the fast changing business environment, knowledge has become the mainstay of every organization in creating and sustaining competitive differentiation. In recent times a new branch of management has emerged as knowledge management (Hicks, 2006). It serves as the source and stock of knowledge and the flow of knowledge that knowledge creation, sharing and application to create and/or sustain organizational value and competitive advantage (Liew, 2007). Knowledge management has also been treated as an essential strategic initiative of sustainable competitive advantage for firms (Grant, 1996). Firms can gain a competitive advantage by possessing and managing unique, difficult to-imitate, and hard to substitute resources (Barney, 1991).

In addition to Knowledge management, dynamic capability interaction has contribution on for firms performance; Teece et al., (1997) argue that in order to create sustainable performance, firms have to build the ability to create new forms of competitive advantage by appropriately adapting, integrating, and reconfiguring organizational skills, resources, and competencies to match the requirements of an everchanging environment.

In the quest for a competitive advantage, these schools of thought have been treated as distinct and applied in isolation, but they are actually interconnected. The idea of dynamic capabilities has its roots in the resource-view, but it also seems to be closely related to the knowledge-view of strategic management (Acedo, Barroso& Galan, 2006). It has been suggested that a focus on knowledge processes alone is insufficient to generate a consistent flow of knowledge to and from the stocks of knowledge within a company. In contrast, an overemphasis on dynamic capabilities alone can cause issues in the absence of understanding of the intricate processes involved in managing knowledge effectively (Andersén, 2012; Nielsen, 2006).

Knowledge management (KM) and dynamic capabilities (DCs) have emerged as the twin touchstones in scholarly discussions on how to steer organizations towards success in dynamic environments (Easterby-Smith and Prieto, 2008). The genesis of these pivotal concepts lies in the knowledge-based view (KBV) (Grant, 1996) and the dynamic capability view (DCV) (Teece et al., 1997), respectively. Recently, the two fields have started acknowledging the importance of each other (Easterby-Smith and Prieto, 2008). Researchers have recognized that KM capabilities are dynamic in nature while DCs are inherently knowledge-based (Kaur and Mehta, 2016). Researchers with an interest in both fields have begun to combine resources from each and propose "knowledge-based dynamic capabilities" (KBDCs) as a way to bridge the two together (Zheng et al., 2011; Denford, 2013;

Kaur and Mehta, 2016). Thus, this study focuses on how the joint applications of the dyad of KM and DCs enhance organizational competitiveness.

As a result, finding ways for an organization to outperform competitors has become the ultimate aim of strategic management research (Helfat & Peteraf, 2009). Gradually, the focus shifted to the emergence of newer paradigms, including the Resource-Based View, Knowledge-Based View, and Dynamic Capability View.

According to the resource-based perspective, the main sources of competitive advantage are resources that are simultaneously valuable, rare, imperfectly imitable, and non-substitutable (VRIN) (Barney, 1991; Senaji & Nyaboga, 2011). However, further research revealed that having resources is an essential but not sufficient requirement for competitiveness (Allred, Fawcett, Wallin & Magnan, 2011). Additionally, it was found that the Resource-Based View (Garg & De, 2012) was a static view, which is insufficient for framing corporate strategy in the current dynamic environment (Barrales-molina, Martnez-lópez & Gázquez-abad, 2014). Two offshoots of the economizing approach—Dynamic Capability View and Knowledge-Based View—emerged as a result of the potential to treat Resource-Based View as a process-oriented dynamic approach (Ray, Barney, Muhanna, & Muhanna, 2004; Wilkens, Menzel, & Pawlowsky, 2004). The ability of the company to combine, develop, and reconfigure internal and external competencies to address rapidly changing environments is referred to as a firm's "dynamic capabilities" (Teece, Pisano & Shuen, 1997). Although the idea of dynamic capabilities was introduced in the 1990s, there is still disagreement among researchers regarding the precise nature of the relationship between dynamic capabilities and a firm's competitive advantage. According to some authors (Lee, Wu, Kuo, and Li, 2016; Li & Liu, 2014; Wang, Senaratne, and Rafiq, 2015), dynamic capabilities are the key to achieving competitive advantage. However, according to others (Easterby-Smith & Prieto, 2008; Eisenhardt & Martin, 2000; Ogunkoya, Hassan, & Shobayo, 2014), dynamic capabilities cannot be a source of competitive advantage because they do not exhibit the characteristics of heterogeneity (Nieves & Haller, 2014).

In a similar fashion, a more systematic modelling approach for the Knowledge Management Process Capabilities framework is required (Ouyang, 2015). Also the method by which knowledge management techniques result in competitiveness has remained a totally unclear and understudied area (Abas & Jali, 2015; Hegazy & Ghorab, 2014; Kimaiyo et al., 2015; Liu & Deng, 2015; Mohammad et al., 2014; Sandhawalia & Dalcher, 2011; Shahzad et al., 2016). Furthermore, the study of knowledge management process capabilities has not yet combined knowledge acquisition, knowledge combination, and knowledge protection into a single framework.

The Dynamic Capability View and Knowledge Based View, which were previously treated separately, can now be used together to further the ultimate goal and increase the likelihood of outperforming competitors. To truly create the KBDC, higher order dynamic capabilities and knowledge process capabilities should be combined.

The focus of majority of studies has been on explanation of factors contributing to sustainability of Competitive Advantage thereby ignoring how Competitive Advantages can actually be gained at the first place (Andersén, 2012). For instance, the domain of Knowledge Management Process Capabilities in general and the mechanism through which Knowledge Management practices yield Competitiveness in particular have been termed as vague and understudied areas in strategic management research (Shahzad et al., 2016). Furthermore, literature has still not adequately addressed the specific impact of each Knowledge Management Process independently on Competitiveness of a firm (Hegazy & Ghorab, 2014). This gap in research has translated into lack of proper understanding on the part of managers with regards to the ways in which knowledge, as a resource, can be leveraged (Foss & Pedersen, 2004; Kaur & Mehta, 2016). The specific gap in literature when addressed through the present study can lead to better comprehension of component parts and processes of knowledge which can thereby facilitate management of corporations in gaining Competitive Advantages.

Similar to this, dynamic capabilities research is still in its infancy (Castiaux, 2012; Wójcik, 2015). As a result, there are a number of issues that are limiting the Dynamic Capability Approach's potential contribution, including an inadequate theoretical foundation, a lack of empirical evidence, an unclear value-added in comparison to existing concepts, (Breznik & Lahovnik, 2014; Garg & De, 2012; Ljungquist, 2014; Michailova & Zhan, 2014; Zhan & Chen, 2013). There is no consensus among researchers regarding the role of Dynamic Capabilities in achieving Competitive Advantage by firms (Chaharmahali & Siadat, 2010) which presses upon the need for such empirical research to establish the correct nature of this role. Researchers argue that if a theoretical and empirical foundation for the Dynamic Capability View is not developed soon, the focus of strategic management may soon shift away from the promising concept (Arend & Bromiley, 2009; Breznik & Lahovnik, 2014).

According to the literature, traditional conceptions of strategic management and their variations are no longer relevant in the current new economy (Wójcik, 2015). As a result, new paradigms are required to explain competitive advantage in the current environment. Researchers have suggested integrating the Dynamic Capabilities Approach with the Knowledge Based View of the Firm as a future area of research to move in that direction (Hong, Kianto & Kyla, 2008). Future research and testing on the idea of knowledge-based dynamic capabilities will be necessary (Zheng et al., 2011).

Prior studies in the area have mainly concentrated on companies that operate in developed countries (Li & Liu, 2014).

There are many differences between businesses in developed and developing countries, which raises concerns about the strategy theory's theoretical completeness and exposes a significant gap in the literature. Thus this study focused in Ethiopia particularly concentrating on Commercial bank of Ethiopia to explore the concepts of both Knowledge & dynamic capability views which have not yet been combined into a single framework. By addressing the following research question, the current study aims to close the gaps that have been found.

- 1. How Knowledge Process Capabilities affect firm's Competitive Advantage?
- 2. How Higher-Order Dynamic Capabilities (Adaptive Capability, Absorptive Capability and Innovative Capability) affect firm's Competitive Advantage?
- 3. How Knowledge-Based Dynamic Capabilities achieve Competitive Advantage for CBE?

The study's primary goal is to assist organizations in achieving competitive advantage for CBE by emphasizing on knowledge-based dynamic capabilities; that combine two distinct perspectives on superior capabilities—dynamic capabilities and knowledge-based approach—into one. Specifically, to explore how Knowledge Processes capabilities (Acquisition, Combination and Protection of Knowledge), and Higher-Order Dynamic Capabilities (Adaptive Capability, Absorptive Capability) affect firm's Competitive Advantage. Also it discovers how Knowledge-Based Dynamic Capabilities achieve Competitive Advantage for CBE.

#### 2. Review of related literature

#### 2.1. Competitive advantage

More quickly than ever, the world is changing. Consequently, managers and other staff members across an organization must continuously perform at higher and higher levels. Organizations competing on a domestic and international scale have become increasingly competitive over the past 20 years. Today's managers react instead of innovating as a result of their failure to learn from and adapt to changes in the global environment, and their businesses frequently fail and become uncompetitive (Jones & George, 2008).

On the other hand, managers who acquire new skills, adjust to changes in the external environment, and effectively and efficiently manage their knowledge base gain a competitive advantage. When an organization outperforms its rivals in terms of superior goods and services, it has a competitive advantage (Agbim & Idris, 2015; Jones & George, 2008). Competitive advantage, as seen by the customer, is the ability of a business to outsell its competitors by appealing to its customers more (Chan et al., 2004).

It is also viewed as any company's dimensions or diversity of features that allow it to outperform competitors in terms of providing services to customers (Hao, 1999). It describes a situation in which businesses respond to external environmental dynamism, while continuing to offer customers products that are superior to those of other industry players and satisfy their needs (Li & Liu, 2014). The only businesses that have the potential to gain a competitive edge are those that generate or acquire new knowledge, disseminate it throughout the organization, and quickly transform it into new technologies and products.

# 2.2. Knowledge process capabilities:

Knowledge management and its related processes have been represented as the First-Order Capabilities (Easterby-Smith & Prieto, 2008; Garg & De, 2012; Gold et al., 2001) which contribute to the reconfiguration of other organizational resources (Nguyen & Neck, 2008). Knowledge Process Capabilities are comprised of acquisition and conversion processes as well as protection processes. Knowledge Acquisition and Conversion Processes mainly deal with the accumulation of knowledge (Gold et al., 2001) and facilitate the flow of knowledge from external stocks into the internal knowledge stocks of a firm (Nguyen & Neck, 2008; Nielsen, 2006) while integrating, distributing and transferring such newly acquired knowledge within the boundaries of a firm (Nguyen & Neck, 2008). Knowledge Protection Processes strive for maintaining the proprietary nature of a firm's knowledge assets and include seeking their legal protection through the means of patents, trademarks and copyrights (Nguyen & Neck, 2008). There has been no consensus among researchers in defining various dimensions of Knowledge Management Process Capabilities. Nonetheless, out of all the afore-mentioned frameworks, the classification proposed by Gold et al. (2001) is the most widely applied framework in the studies of Process Capabilities which classified Knowledge Management Process Capabilities into four broad dimensions namely. Knowledge Acquisition, Conversion, Application and Protection (Agbim & Idris 2015; Davari et al. 2015; Dehghani, Hanaeinezhad & Aboofazeli, 2014; Fan et al. 2009; Fattahiyan et al. 2013; Gold et al. 2001). However, these four dimensions can be merged into three dimensions namely Knowledge Acquisition, Knowledge Combination and Knowledge Protection. Knowledge Acquisition and Protection remain same as the original components in the framework of Gold et al. (2001) but Knowledge Conversion and Application can be merged into a single capability, which is similar to Knowledge Combination Capability.

Thus, the three Knowledge Management Process Capabilities are: Knowledge Acquisition, Knowledge Combination, and Knowledge Protection form the subject of discussion in the present study. Knowledge processes as dynamic capabilities are considered to be a key component in the pursuit of competitive advantage (Nguyen & Neck, 2009; Verona & Ravasi, 2003; Wang & Ahmed, 2007). Organizations can discourage imitation by

competitors through continuous recombination and application of knowledge and these superior stocks and flows of knowledge are likely to result into sustained advantage for an organization (Sandhawalia & Dalcher, 2011). Knowledge process capabilities aid in increasing organizational effectiveness and gaining competitive advantage (Paisittanand, Digman, & Lee, 2009).

# 2.3. Higher-Order Dynamic Capabilities:

Dynamics signify environmental change necessitating tactical responses, whereas capability is defined as "the ability of an organization to perform a coordinated set of tasks while utilizing organizational resources in order to achieve a specific end result" (Helfat & Peteraf, 2003, p. 999). The most crucial industry-level dynamic capabilities that go beyond firm-level dynamism are those that are adaptable, innovative, and absorbent (Wang & Ahmed, 2007). "A Higher Order construct comprising of three Dynamic Capabilities, namely Adaptive Capability, Absorptive Capability, and Innovative Capability," is how higher-order capabilities are defined (Kaur & Mehta, 2016, P. 98).

Adaptive Capability refers to the proficiency of a firm to rapidly reconfigure and coordinate resources in response to swift environmental changes (Gibson & Birkinshaw, 2004). It encompasses the ability of a firm to reconfigure resources and coordinate processes promptly in order to develop more successful products and seize the opportunities emerging in the market (Hofer, Niehoff & Wuehrer, 2015).

**Absorptive Capability** refers to a firm's ability of identifying, assimilating and applying valuable external information towards commercialization (Helfat & Peteraf, 2003). It exemplifies learning processes which includes ability to identify, grasp and employ knowledge (Lane et al., 2006).

**Innovative Capability** refers to the firm's ability to venture into new products or new markets, by aligning strategic orientation with processes (Wang & Ahmed, 2004). Innovation can be classified into product innovation, process innovation, and managerial innovation (Tsai, Huang, & Kao, 2001). Once knowledge is integrated into a firm's knowledge base, it serves as an incentive to develop a greater ability to adapt to changes by encouraging the employees of an organization to be innovative and to take initiatives in seeking methods of adapting to new techniques, technologies and approaches (Monferrer et al., 2015).

Moreover, literature suggests that the ability to capture, absorb and make use of external knowledge facilitates the process of innovation (Monferrer et al., 2015; Su et al., 2013).

# 2.4. Organizational Knowledge and Higher-Order Dynamic Capabilities

Once information has been incorporated into a company's knowledge base, it can be used as a motivator to help that company's employees become more innovative and proactive in seeking out ways to adapt to new methods, technologies, and perspectives (Monferrer et al., 2015). According to the literature, acquiring both internal and external knowledge is crucial for the development of absorptive capability (Adeniran & Johnston, 2012). According to Liao et al. (2009), organizations with higher knowledge acquisition competency have higher levels of absorptive capacity, and sharing this knowledge can help a firm's absorptiveness develop and improve (Liao et al., 2007). The development of such abilities can be aided by the efficient management of knowledge resources through the processes of knowledge generation, access, integration, and exchange (Monferrer et al., 2015). Thus, it can be concluded that knowledge processes improve a firm's capacity for absorption (Kheng, 2008; Zheng et al., 2011).

Innovativeness refers to an organization's capacity to continuously transform knowledge into new products and procedures (Lawson & Samson, 2001; Manuj et al., 2013). It is the result of the renewal of organizational strategies and processes as well as the synthesis of recently acquired knowledge (Augier & Teece, 2008). According to a claim made by Monferrer et al. (2015), the ability to capture, absorb, and use outside knowledge speeds up the innovation process. This suggests that knowledge capabilities can increase a company's capacity for innovation (Su et al., 2013). Utilizing strategies to promote the integration of outside knowledge speeds up research and development, which enhances a company's capacity for innovation (Monferrer et al., 2015). Additionally, prior research suggests that continuous innovation necessitates concurrent processes of knowledge creation, absorption, integration, and reconfiguration (Verona & Ravasi, 2003; Monferrer et al., 2015). Additionally, it has been suggested that maintaining innovative performance requires the flow of knowledge and the accumulation of knowledge (Jantunen, 2005; Monferrer et al., 2015). Innovation depends on an organization's existing knowledge because it involves using existing knowledge to gain new knowledge (Gold et al., 2001; Schienstock, 2009). Knowledge is said to be an organization's input and innovation capability its output if it is viewed as a system (Liao et al., 2009). It can be assumed that knowledge capabilities are closely related to innovation because knowledge is necessary for ongoing innovation (Liao et al., 2007). Thus, it can be said that knowledge process capabilities precede innovation capability (Adeniran & Johnston, 2012; Monferrer et al., 2015).

Organizational knowledge is therefore thought to encourage the development of dynamic capabilities (Zollo & Winter, 2002), as its possession makes it easier to reconfigure a firm's resource base, which in turn is a requirement for creating such dynamism capabilities (Eisenhardt & Martin, 2000; Gibson & Birkinshaw, 2004;

Liao et al., 2009). One important resource that can be used as a foundation for developing many other abilities is knowledge (Alfirevic & Talaja, 2013; Manuj et al., 2013). The Knowledge-Based View asserts that knowledge processes like knowledge creation, integration, and reconfiguration serve as the foundation for the development of high order capabilities and that organizations are knowledge carriers (Kheng, 2008; Prieto & Easterby-Smith, 2006; Schienstock, 2009; Verona & Ravasi, 2003). Thus, the three dynamic capabilities of adaptability, absorption, and innovation can be seen as Higher-Order Capabilities supported by Knowledge Processes (Verona & Ravasi, 2003; Nielsen, 2006).

# 2.5. Knowledge-Based Dynamic Capabilities

Knowledge-Based Dynamic Capabilities are those higher-order dynamic capabilities that an organization can develop to address changes in the business environment by acquiring, converting, applying, and protecting knowledge resources (Zheng et al., 2011). Knowledge processes that involve change, regeneration, and exploitation of a firm's knowledge resources serve as a representation of knowledge-related dynamic capabilities (Nguyen & Neck, 2008). According to several sources (Andersén, 2012; Nielsen, 2006; Nguyen & Neck, 2008), knowledge processes that adapt, renew, and use an organization's knowledge resources can be seen as dynamic capabilities. The development of dynamic capabilities is thought to be highly associated with knowledge (MacPherson et al., 2004; Zollo & Winter, 2002), and it can be assumed that the development of the former precedes and therefore contributes to the development of the latter (Ali & Christofferson, 2011; Lee et al., 2011; Nieves & Haller, 2014). The four firm-level dimensions of knowledge process capabilities—knowledge acquisition, application, as well as conversion (combination), and protection—can assist in generating flows to and from a firm's knowledge stock, which can facilitate the development of higher-order dynamic capabilities, as knowledge processes are essential for the development of dynamic capabilities of a firm(Nguyen & Neck, 2008; Nguyen, 2010). Theoretically, knowledge processes can be used to develop higher-order dynamic capabilities (Theriou et al., 2009; Zollo & Winter, 2002).

# 2.6. Knowledge-Based Dynamic Capabilities and Competitive Advantage

According to the definition of KBDC, higher-order dynamic capabilities are an organization's capacity to gather, combine, and safeguard knowledge resources in order to respond to changes in the business environment (Zheng, Zhang & Du, 2011). In the same way, adaptive capability is considered to be an organization's ability to sustain competitive advantage by modifying, reconfiguring or interconnecting resources and capabilities so as to quickly adapt to the fast-moving environment (Kaehler et al., 2014). Adaptability is more likely to lead to higher performance by directing a firm to use its operational and dynamic capabilities more effectively, thus forming a base for obtaining organizational advantage (Rouse & Ziestma, 2008). Capacity to absorb external knowledge plays a dominant role in renewing knowledge base of a firm and it provides a firm all the skills necessary to compete in changing markets (Zahra & George, 2002; Su et al., 2013). Absorptive capability can thus be a potential source of competitive advantage as it facilitates the transformation of the new or acquired knowledge into usable knowledge (Adeniran & Johnston, 2012; Cadiz et al., 2009; Zhou & Li, 2010). Firms with higher innovative capabilities outperform competitors, exhibit higher profitability and have higher survival probabilities as the competitive advantage of the firm increases with innovation (Adeniran, 2011). Innovative capability aids in distinguishing a firm from its competitors, which can help in gaining edge in the market (Adeniran, 2011; Adeniran & Johnston, 2012; Alfirevic & Talaja, 2013; Su et al., 2013). Thus it can be posited that Higher-order Dynamic capabilities viz. Adaptability, Absorptiveness and Innovativeness form the foundation for competitive edge of firm (Schienstock, 2009) and are vital in the quest for competitive advantage (Ambrosini & Bowman, 2009; Nieves & Haller, 2014; Prieto & Easterby-Smith, 2006; Zheng et al., 2011). Also, as in the above discussion it was also concluded that knowledge process capabilities considerably influence competitive advantage as well as the development of higher-order dynamic capabilities (Nguyen, 2010).

# 3. RESEARCH METHODOLOGY

#### 3.1. Research Design

The main goal of this study was to understand how knowledge-based dynamic capabilities contributed to Commercial Bank of Ethiopia's competitive advantage from the perspective of practitioners. Consequently, a qualitative interpretive strategy was used. An inductive or theory-building approach is the qualitative interpretive approach. It is one in which the researcher is considered a part of the research process and makes an effort to uncovers significance and comprehend broad interrelationships in the context they study.

By revealing meaning, you can better understand how and why things happen (Creswell, 2002,). In-depth interviews with CBE managers were conducted for the survey, and analytical techniques were used. Managers were chosen because they have a thorough understanding of the competitive and knowledge-based dynamic capability dimensions of the banks. A single case study and a cross-sectional field study were also used to accomplish the study's goal. Because using just one administration research tool, cross-sectional and specifically

sample survey studies are particularly helpful for obtaining a representation of the reality of a social structure.

#### 3.2. Sampling procedures and data collection method

Miles and Huberman (1994) emphasized that sampling for qualitative research should be "purposive" rather than random. Therefore, purposively the samples of a nine district Human resource directorate (Knowledge management team) managers of CBE located in Addis Ababa were taken. As a method of data collection, in-depth interviews are recommended if the purpose of the study is to understand an event, activity, process, or one or more individuals (Creswell, 2002). This suggests the suitability of in-depth interviews for this study. Thus, primary sources of in-depth semi-structured interview were made with these nine managers to get data from them.

# 3.3. Data analysis method

The data analysis in this study was done using thematic methods. For qualitative research in social studies, thematic analysis is a well-liked technique. It is described as "the method for identifying, analysing, and reporting patterns (themes) within data" (Braun and Clarke, 2006). To be more precise, identifying themes and codes will be applied to the raw data from the interviews before being processed and interpreted. The interview was completely converted into a record & the records were reviewed in detail and notes were taken. The comparison the thematic results were made by the author was with the theory framework of the literature review. The author examined whether or not these themes were associated positively or negatively with the theory and whether they did or did not support it. Finally, the author provided a formal written summary and presentation of the findings.

#### 4. Discussion of finding

**Knowledge Acquisition Themes:** Companies must have these processes in place that draw on the existing knowledge base to produce new knowledge if they want to build their knowledge acquisition capability. The acquisition of new knowledge within the confines of the companies can also be assisted by practices like job rotation, reviewing client feedback from prior projects, looking for ideas, and documenting employee knowledge. New knowledge can be acquired outside of organizations by interacting more with clients, vendors, and other business partners, working with companies with extensive knowledge bases, using competitive intelligence to gather market data, buying patented processes and databases, hiring new staff, and investing in the training and development of current staff. Companies can also focus on learning everything they can about their clients' business processes and IT infrastructure to boost their organization's competitiveness.

Knowledge Combination Themes: After acquiring knowledge, businesses must put it to use and convert it, or combine it, because doing so helps to increase organizational competitiveness. Participants noted that Knowledge Combination plays a significant role in fostering organizations' adaptability, absorptiveness, and innovativeness, which further strengthens their competitive advantage. Companies must effectively combine newly acquired knowledge with the existing body of knowledge in order to increase their Combination Capability. Additionally, businesses must integrate disparate, fragmented knowledge from across the organization into a cohesive knowledge base that can be used to launch new goods and services, address operational issues, support decision-making, automate routine tasks, and boost organizational effectiveness. Increased interactions between workers with different managerial/technical backgrounds can also make it easier to combine new ideas. Additionally, creating cross-functional teams can give businesses a platform for combining organizational knowledge. To gain access to these organizations' innovation and research facilities, businesses must also partner with other organizations. By collaborating with professionals from other companies, the companies can receive additional valuable inputs, ideas, and experiences. Collaborations with customers can be profitable for businesses as well. Additionally, more frequent interactions with industry specialists can assist businesses in obtaining industry-specific advice and persuade them in the direction of competitiveness. Frequent visits to businesses with cutting-edge technologies and expertise can also add to their knowledge bases and help them to be more valuable.

**Knowledge Protection Themes:** After successfully acquiring and combining knowledge, businesses must safeguard this information to preserve its specialized nature. Companies can assign employees to serve as knowledge gatekeepers to make sure Knowledge Capital is properly protected in order to strengthen Protection Capability. Companies must protect their intellectual property through the use of patents, trademarks, or copyrights. Strong daily procedures are also necessary to prevent unauthorized access to the confidential knowledge base by outsiders.

Additionally, businesses need to improve their internal controls to prevent knowledge theft and unauthorized use inside the company. Improved trade secret protection policies and practices must also receive special attention. Additionally, businesses must stress the value of knowledge protection to staff members and make it clear which information must remain internal only.

Adaptive capability Themes: Participants were questioned about how quickly their companies responded to opportunities and threats in their industry during the interview process. The majority of participants claimed that their companies responded quickly to market opportunities in response to the first part of the question. A large

majority of participants claimed that their proactive approach to management, technology, and the market allowed them to respond quickly to business opportunities. Participants also reported that while they were quick to recognize threats to their companies, they did not immediately take action. Instead, they stated that they are happy to analyse and monitor threats so they can respond later, after they have had more time to gather data on their effects.

The majority of participants stated that they empower, actively encourage, and provide their employees with the operational guidelines necessary to be successful in being adaptive. Employees of participant firms are urged to implement significant change whenever the chance presents itself. Many participants claimed that they gave their staff members the freedom and autonomy to take responsibility for their work, including direct customer contact. Due to the numerous market opportunities present in their industry, the majority of participants found it challenging to identify threats to their organization. Because their companies could quickly adapt and turn perceived threats into opportunities for their companies, some participants said they were generally tolerant of industry threats.

Absorptive Capability Themes: These themes demonstrate how participant companies improved their capacity to acquire, understand, and apply new information. The importance of learning new information to the success of their company was emphasized by the participants. Due to the fact that the majority of participants received information from informal learning communities, learning takes place gradually within their organizations through team meetings, practical training, top-down information dissemination, and internal communications. Participants likewise stated that their companies create goods and services to address the needs of their clients in order to take advantage of new information. Participants continuously search their business environment for information on new knowledge because change is a constant in the service industry.

Participants mentioned the ability to acquire, use, and profit from new knowledge and information as a crucial component of competitiveness in the banking sector. When the company acquired useful knowledge, it quickly turned it into an opportunity to assist current customers in solving their problems or used it to gradually improve their products.

**Innovative Capability Themes:** Many participants stated that they continuously seek to produce new knowledge, services, and products in order to remain competitive in their industry. By consistently seeking out novel ways to influence how technology is used now and in the future for the benefit of the bank, participants expressed that they are strategic in their use of technology. By developing services and products that can serve as the basis for later special services and products, participant firms' innovative capability is shown to create value for customers. Participants claimed that by meeting their customers' immediate needs today (meets customers' immediate needs), they are attempting to predict what their customers will want in the future. Participants used their capacity for innovation by looking into new ways to fulfil customers' future wants while also utilizing their internal systems to meet customers' immediate needs.

# 5. The study Conclusions

Organizations' capacity to acquire new knowledge, transform that knowledge, and apply that knowledge to the accomplishment of organizational goals determines their ability to gain a competitive advantage. When knowledge is employed to produce uniqueness, it must be kept out of the hands of unauthorized users. As a result, the knowledge process capability diminutions are crucial for enhancing an organization's competitive advantage, according to the interview's findings.

The same is true for the dynamic capability dimensions, such as absorptive, innovative, and adaptive capabilities, which are crucial for competitive developments. Additionally, combining knowledge capabilities dimensions with dynamic capabilities dimensions can strengthen the competitive advantage.

#### 6. Limitations and Suggestions for Future of research

The study has its own limitations and calls for additional research into the subject of knowledge based dynamic capabilities in the banking industry. First, there is still a lack of evidence-based research on the research topic. There is a clear gap in the literature currently available in this area of study. The knowledge based dynamic capability has not been extensively researched. Additionally, a single case study raises the issue of generalization, so it is advised that future researchers take into account multi-case studies.

Besides this, if another company proposes to compare or conduct this study on other sectors, the case company's findings might not be appropriate. Furthermore, because the study was cross-sectional and did not take into account gathering data at various points in time to see how it varied, a longitudinal study is advised. Finally, because this study is qualitative, it recommends that future researchers conduct mixed-methods studies.

# Table1: Summary of interview topic and interview responses

Table1: Summary of interview topic and interview responses	
Interview topic	Summary of interview response
Absorptive Capacity:	
How is your organization's ability to gain and use new knowledge? (Acquisition)	-internal communications are the methods used -experiential learning, top down communication, and team meetings. -Communities with customers, working groups
How learning takes place within your organization? (Transformation)	-continuously searching for new information within industry stakeholder groups
Adaptive Capacity:	0
How quickly your organization instigates and/or responds to change within your industry?	<ul> <li>Employees encouraged to try new ways of doing things</li> <li>Empower employee, Flexible process</li> <li>Reacting wisely to opportunities/threats.</li> <li>quickly take advantage of opportunities &amp; minimize threats within their industry.</li> <li>changing internal processes and serving customers by feeling accountability.</li> </ul>
Innovation Capability:	
How is your organization's ability to innovate or be innovative - Leveraging technological and intellectual assets in a new way to satisfy the needs and wants of the customer?	<ul> <li>Innovation is continuous process it isn't one-time event</li> <li>scan their business environment for new innovations</li> <li>searching and exploit innovative opportunities simultaneously</li> <li>creating customer value</li> </ul>
How does your organization manage their innovative process including finding new opportunities and managing the ones they already have? How important is innovation to your company?	
KM Process: Knowledge Acquisition:	
Does your organization have a strategy for capturing a new knowledge/ Acquisition Knowledge?	<ul> <li>Gathering valuable information from the env't.</li> <li>job rotation, evaluation of feedback of previous work,</li> <li>brainstorming and documentation of knowledge of employees.</li> <li>increased interaction with customers, suppliers and other business partners</li> <li>recruiting new employees and investing in training and development of existing employees</li> <li>-collaborating with organizations having rich knowledge base,</li> </ul>
How does your organization apply and convert knowledge i.e. <b>Combine</b> <b>Knowledge</b>	<ul> <li>increased interactions with experts in the field</li> <li>collaborate with other organizations to gain access to innovation and research</li> <li>working with other companies to get inputs, ideas and experiences</li> </ul>
How your organization does is working on <b>protecting knowledge</b> ?	<ul> <li>-hiring employees with the role of knowledge gatekeepers</li> <li>- use patents, trademarks or copyrights</li> <li>-legal protection of knowledge</li> <li>-prevent unauthorized access to confidential knowledge base by outsiders.</li> <li>-strong policies and procedures for protecting trade secrets</li> <li>- communicate employees on its importance of</li> <li>- aware employees about the knowledge that must not be shared with outsiders.</li> </ul>

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