

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

KNUST SCHOOL OF BUSINESS

DEPARTMENT OF MARKETING AND CORPORATE STRATEGY

**EFFECT OF ORGANIZATIONAL LEARNING CAPABILITY ON PERFORMANCE:
THE ROLE OF MANAGERIAL DYNAMIC CAPABILITY AND MARKET
TURBULENCE**

By

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(DOCTOR OF PHARMACY)

A THESIS SUBMITTED TO THE DEPARTMENT OF MARKETING AND CORPORATE
STRATEGY, KNUST SCHOOL OF BUSINESS, KWAME NKRUMAH UNIVERSITY OF
SCIENCE AND TECHNOLOGY, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE OF

MASTER OF BUSINESS ADMINISTRATION

NOVEMBER, 2023

DECLARATION

I hereby declare that this submission is my own work towards the award of a Masters of Business Administration (Strategic Management) and that to the best of my knowledge, it contains no material previously published by another person or any material which has been accepted for the forward of any other degree of the University, except where due acknowledgement has been made in the text.

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DEDICATION

To my husband, Mr Ebenezer Kofi Darko for his unwavering support, my sister, Keziah Dwomoh Nkrumah for her prayers encouragement and to myself for never giving up.



ACKNOWLEDGMENT

I would like to express my deepest appreciation to the almighty God for his grace, mercy and protection all these years of my education. Glory be unto his name. I would also like to express my deepest appreciation to my family for their prayers and support. I am also profoundly grateful to my eminent supervisor **Prof. Ahmed Agyapong** of the Kwame Nkrumah University of Science and Technology for spending substantial part of his time reading my entire dissertation, and providing corrections that have helped me improve my knowledge in research. I also extend my appreciation to my sister, Keziah Dwomoh Nkumah, Mr. Ekow Dum Andoh and my husband Mr Ebenezer Kofi Darko.



ABSTRACT

Under this current dispensation of global competition, organizational learning still remains a hot debate as it enhances on firm performance. The purpose of this study is to assess organizational learning capability on firm performance, mediated by managerial dynamic capability and moderated by market turbulence. The study was conducted using the manufacturing sector as a case. Primary data was utilized with questionnaires at the main data collection tool for the study. The data were analysed quantitatively with the help of SPSS. Descriptive statistics, correlation and Ordinary Least Square (OLS) regression were used to describe and analyze the data. The study utilized the Cronbach's alpha to assess the internal consistency of the measuring constructs. Findings of the study revealed a positive and significant relationship between organizational learning capability and firm performance. The findings of the study revealed that MDC failed to mediate the relationship between OLC and firm performance. The second hypothesis of the study is not supported. It was further revealed that market turbulence failed to moderate OLC-performance nexus. The study recommends to management to place extra priority on openness and experimentation, risk-taking, and respond to the stimuli from the external environment, among others. The study further recommends that organisations should strive to acquire, transfer, and utilize the information required for successful adaptation to rapidly changing environments due to the overriding importance of knowledge in strengthening the competitive advantage of firms.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The concept of organizational learning capability (OLC) is on ascendancy as a result of its strategic implication among firms. Recent studies argue that organizational learning is a must for businesses (Garcia-Morales et al., 2007) and that it represents a modern approach to management that could solve many problems which businesses encounter (Aydemir, 2000, Santos-Vijande & Alvarez-Gonzalez, 2007). Many studies have confirmed that firms that utilize OLC are able to compete, survive and improve their performance in the long-run (Huajing, 2015). Organizational learning capacity has not received the same degree of attention provided to organizational learning, a closely related term. Organizational learning capability is characterized in management literature as an organizational ability that makes successful organizational learning possible by managing the organizational learning process (Gomez et al., 2005).

Organizational learning capability refers to patterns that enable an organization to process knowledge and experience, produce new knowledge on the basis of existing knowledge and experience, and store knowledge for later use when the need arises (Garbi, 2008; Ussahawanichakit, 2018). The capacity of a company to recognise deficiencies and correct them for potential action plans is the first organizational learning skill. The lack of this ability results in frequent errors and incorrect learning (Fiol and Lyles, 1985; Garbi, 2008). Garvin suggests that companies ought to undertake comprehensive evaluations of their accomplishments and shortcomings in order to learn better (Lynn et al., 2000).

According to Teece (2007), dynamic capability emerged from the resource-based view and place much emphasis on how modern organizations in this changing environment can sustain and enhance their competitive advantage. The concept of managerial dynamic capability has place extra role on managers to build, develop and create resources for the organization (Adner and Helfat, 2003). Following Helfat and Martin (2015), the concept of dynamic managerial capability directs attention to the role that managers play in building competitive advantage and enhancing the performance of firms. As argued by Adner and Helfat (2003), managerial dynamic capability is at the core of strategic change that enable managers to build and integrate the resources of the organization to enhance firm performance. In this study, the researcher argued that managerial dynamic capability enables managers to build the resources of the organization to enhance firm performance through organizational learning.

Generally speaking, market turbulence is seen as a critical external factor that enhance the uncertainty and risk in the processes of organizations (Wang, 2015) and the link between strategy and performance of firms. From the perspective of Atuahene et al. (2006), a market that is turbulent is tagged by frequent and unpredictable changes in terms of customer needs and their preferences in products. In turbulent markets, organizations attempt to comprehend changes in market trend in order to come up with new products to satisfy customers. Based on this notion, many firms collaborate in order to seek profitable ideas from various partners. Nevertheless, this associated risks trigger firms to seek innovative ways and also learn to benefit their organization (Wang, 2015).

Organizational learning capability requires the generation and use of new information that enhances organizational efficiency. Learning is essential for speed and flexibility in the process of

product development, and systematic learning on the basis of past experiences is important in the first stages of product development process (Nederhof et al., 2002). An enterprise that is capable of creating new information and combining it with existing knowledge using various approaches is expected to perform well in terms of product creativity and manufacturing process. In addition, the method of creating new goods involves continuous organizational renewal (Calantone et al., 2002). In this sense, learning capacity is seen as a crucial element for an organization to innovate (Jerez, 2005; Alegre & Chiva, 2008).

Most studies on organizational learning capabilities which are well documented in management were conducted in advanced countries, with a dearth of studies on developing countries (Ozlem & Kurt, 2016). In addition, many of such studies has been biased due to the neglect of other variables such as market turbulence. It is therefore imperative to conduct a study of this nature by introducing such variables to reflect the true findings and generalizability of the concepts. Within this framework, this present study aims to examine the role of market turbulence and managerial dynamic capability on the relationship between organizational learning capability and firm performance of manufacturing companies within the Ashanti Region of Ghana.

1.2 Problem Statement

Increasing global competition is changing the nature of knowledge necessary for survival in the world of business (Birdthistle, 2006). Under this current dispensation of global competition, organizations are striving to sustain themselves in globalized and competitive environment. Firms are facing ambiguity, complexity and challengeable situations in their business operation (Slater et al., 2014). Due to intensive economic pressure and competitive environment firms are facing greater challenges and they are probing different ways to enhance their core competencies with a

view to gain competitive advantage. One aspect many sectors such as the banking institutions have looked at is to adopt IT to enhance their performance (Kwarteng et al., 2019).

The concept of IT is on ascendancy as a result of its strategic implication in the world of business. Its impact on business operations has received considerable attention and has also piqued the interest of scholars and academicians with various studies linking it to the performance of firms (Agustia et al., 2022; Chege et al., 2020; Feng and Jiang, 2020; Ramadani et al., 2019; Xu et al., 2019; Corral et al., 2019; Wadho and Chaudhry, 2018; Zhang et al., 2018). Some studies on innovation have revealed a positive impact on performance (Kiss et al., 2022; Zhang et al., 2019; Ismanu and Kusmintarti, 2019). Other studies have revealed no significant impact on firm performance (Wadho and Chaudhry, 2018). In line with the findings from previous studies stated above, there is a clear illustration that the relationship between innovation and performance is inconclusive and therefore calls for further studies to examine their relationships.

Previous studies on organizational learning capabilities and product innovation have been conducted by taking into consideration only the bivariate link. Findings from these studies have resulted in two major outcomes; positive impact (Gomez, 2015; Alegre et al., 2012; Migdadi, 2021); and no impact (Ussahawanitchakit, 2008). The outcomes from these studies are an indication that the relationship between these variables is inconclusive. That is, other essential variables might be omitted in such studies. According to Patky (2020), the inconsistencies in the positive and no significant outcomes from previous studies is due to the omission of several important variables by these researchers. It is to address these gaps that a study of this nature purports to analyse the mediating role of design management capability in the relationship between organizational learning capability and product innovation.

Moreover, most studies have been conducted on these variables outside Ghana. Notable among such studies are Gunsel et al. (2011); Bess (2011); Salim & Sulaiman (2011); Onag et al. (2014), and Khalib et al. (2015). Therefore, this study attempts to close the context gap by examining the role of DMC on the relationship between OLC and performance. Currently, knowledge on the effect of OLC on performance remains minimal. There is a lacuna of studies that have assessed the impact of design management capabilities on product innovation performance. To add to the existing literature, this study seeks to investigate the role of design management capabilities and market turbulence on the relationship between organizational learning capabilities and performance from the context of Ghana.

1.3 Objectives of the Study

The main objective of this study was to analyse the role of managerial dynamic capability and market turbulence in the relationship between organizational learning capability (OLC) and performance. Specifically, the study seeks to achieve the following objectives:

1. To examine the relationship between OLC and performance.
2. To examine the mediating role of managerial dynamic capability in the relationship between OLC and performance.
3. To examine the moderating role of market turbulence on the relationship between OLC and performance through managerial dynamic capability.

1.4 Research Questions

The study sought to answer the following questions:

1. What is the relationship between OLC and performance?

2. Does managerial dynamic capability play a mediating role in the relationship between OLC and performance?
3. Does market turbulence play a moderating role in the relationship between OLC and performance through managerial dynamic capability?

1.5 Scope of the Study

The study covers organizational learning capability, firm performance, managerial dynamic capability and market turbulence. The geographical scope of the study is limited to Ashanti Region. The study covers some selected manufacturing firms within the Ashanti Region of Ghana due to proximity and the concentration of many manufacturing industries within the region.

1.6 Significance of the Study

This study is timely and imperative for several reasons. This research can be justified in theoretical and practical terms. The theoretical contribution includes a better understanding of the strategic importance of organizational learning capabilities, managerial dynamic capability and market turbulence, areas in which empirically tested studies are scarce. Moreover, the theoretical contribution helps researchers to advance knowledge in the areas of organizational learning capabilities and firm performance. In addition, considering the ever-changing nature of the business environment, the survival and also performance of firms becomes dependent on the ability of managers to develop appropriate strategies. The practical contributions are beneficial to practitioners and the policy-makers who wish to improve firms' competitiveness and performance through managerial dynamic capability. In addition, a study of this nature will add to the frontier of knowledge and thus, provide a lead for future studies.

1.7 Overview of Methodology

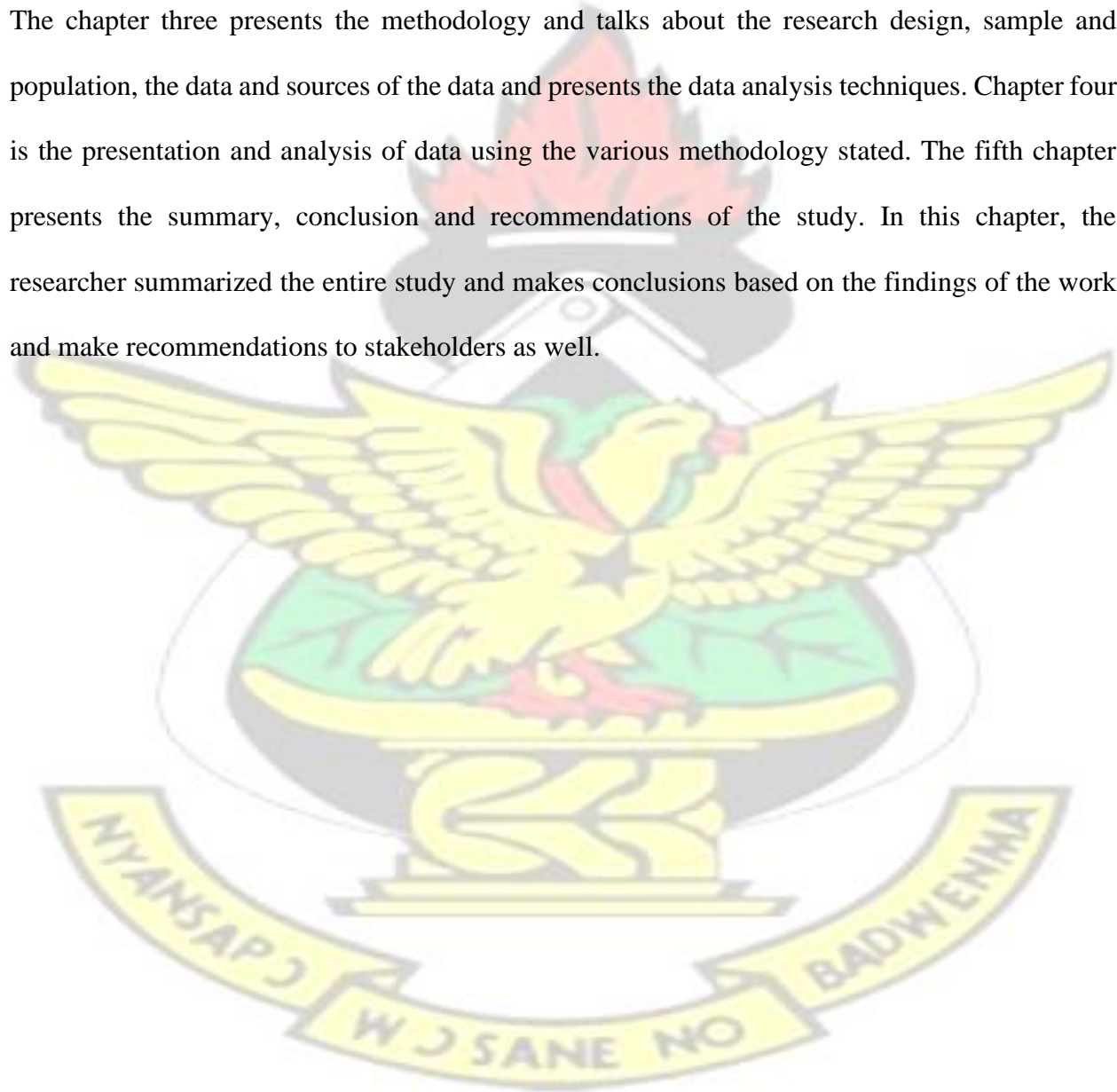
The main objective of the study is to examine the role of managerial dynamic capability and market turbulence on the relationship between organizational learning capabilities and firm performance. In order to achieve this, the study uses a quantitative research approach and an explanatory research design. The explanatory research design was chosen because it would help the study explain the relationship that exists among the individual variables being researched. The study utilized structured questionnaire to gather data from the 150 respondents to achieve the objectives of the study. Data gathered were be coded and analyzed quantitatively using the Statistical Package for Social Sciences (SPSS). Descriptive analysis such as means, standard deviations, frequencies, and percentages were be utilized to analyse the data. The study will employ Regression analysis to find the relationship between the variables. In addition, the study employed Pearson correlation matrix to test for the presence of multicollinearity among the predictive variables.

1.8 Limitations of the Study

This study chose to limit the population of the study to manufacturing companies within the Ashanti Region. The sample size of 150 respondents is relatively small considering the number of manufacturing companies within the Ashanti Region. It cannot be said with certainty that the sample is an exact representation of the study population in this study. This could also bias the result of the findings and limit its generalizability. The availability of time and adequate budget were some of the variables affecting the sample size and therefore the reliability of the results. In addition, some respondents were reluctant to partake in the study.

1.9 Organisation of the Study

The research is group into five main chapters. The first chapter provides the background to the research, the problem statement, the objectives of the research, research hypothesis, significance of the study and an overview of the methodology. The second chapter, which is the literature review, present theories backing the research and empirical review in relation to the study area. The chapter three presents the methodology and talks about the research design, sample and population, the data and sources of the data and presents the data analysis techniques. Chapter four is the presentation and analysis of data using the various methodology stated. The fifth chapter presents the summary, conclusion and recommendations of the study. In this chapter, the researcher summarized the entire study and makes conclusions based on the findings of the work and make recommendations to stakeholders as well.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review on the role of managerial dynamic capability and market turbulence in the relationship between organizational learning capability and firm performance among manufacturing firm in Ghana. This chapter has presented the review of literature into four main sections. These sections include conceptual, theoretical, empirical, and conceptual framework model and hypotheses formulation. This chapter begins with conceptual literature review.

2.2 Conceptual Review

This section of the study presents the review of literature on the various concepts employed. These concepts include organizational learning (OL), organizational learning capability (OLC), managerial dynamic capability (MDC), and firm performance, among others. In addition, the five dimensions of OLC were reviewed.

2.2.1 Organizational Learning

The endeavour to establish strategies for the development and practical management of organizational knowledge is referred to as organizational learning (Calantone et al., 2012). OL is a process in which employees have the ability to influence the company's development skills and behavior by combining their common experiences with their knowledge of new information development. (Slater and Narver, 1995). There are four sub-processes in this process. The first step is to gather information. During this process, the company obtains information. The second

process is information distribution, in which employees share information within the organization. The third process is information interpretation, which involves humans interpreting data and converting it into new common knowledge. The data that is gathered in order to create organizational memory and documents is saved for future use. Organizational learning is a critical factor in achieving a long-term competitive edge and improving overall performance (Kalmuk and Acar, 2015).

2.2.2 Organizational Learning Capability (OLC)

Organizational learning capacity is one of the arrays of capabilities available to modern organizations that has the power to serve as a performance determinant. Basically, the term OLC improves firm performance and is seen as the process of developing the human capital aspect of the workforce through knowledge creation, sharing and acquisition (Lopez et al., 2015). The intellectual capacity of the entire workforce in an organization can be enhanced when they foster OLC, which in turn develop their capacity and ability to expand their knowledge for the organizational success. Following Lonial and Carter (2015) OLC is in tandem to DMC and they both relate positively to product innovation performance. Hence, at the individual and organizational level, advancing organizational learning through knowledge and acquisition is inevitable.

Jo and Joo (2011) were of the view that the strategic thinking level of the employees which expand their scope of the job is enhance through OLC. Hooi (2019) contributing to the discussion revealed that expand workers perspective beyond their current task and encourage them to help their fellow workers at the workplace in circumstances when the performance level of the organization is threatened. OLC, as conceptualized by Jerez-Gomez et al. (2005) is the way by which firms learn to act on changes that are inevitable at the organization to improve outcomes. According to Goh

et al. (2012), firms that are in support of learning at the workplace attain high level of profitability as well as job satisfaction and work performance.

2.2.2 Dimensions of OLC

The dimensions of OLC discussed in this study include managerial commitment and empowerment, openness and experimentation, risk-taking, interaction with the external environment, and knowledge transfer and integration. These dimensions are discussed in the next sub-section.

2.2.2.a Managerial Commitment and Empowerment

Managers acknowledged the importance of learning and established a culture that emphasizes knowledge acquisition, invention, and transfer as important sources of innovation (Jerez-Gómez et al., 2013). According to Law and Gunasekaran (2009), in order to build a “successful OL” model, top management must drive and obtain commitments from all levels of the company. Managers should foster a supportive and participatory culture that encourages employees to take risks, contribute new ideas, and participate in decision-making (Peris-Ortiz et al., 2018). They should put up with new beliefs that would help comprehend reality in the past but are now perceived as roadblocks since they serve to perpetuate assumptions that are no longer valid (Jerez-Gómez et al., 2013).

2.2.2.b Openness and Experimentation

Openness and experimentation of new ideas are required for generative learning. Experimentation benefits from openness to new ideas because it entails the quest for inventive and flexible solutions to the organizational challenges (Migdadi, 2021). Experimentation, according to Nevis et al.

(1995), entails trying out new ideas or making modifications to work processes. Experimentation necessitates a culture that encourages risk-taking and creativity (Jerez-Gómez et al., 2014). As a result, if companies want to learn, they must experiment with new ideas in order to gain experience. Experimentation is described as the attentiveness to and sympathetic treatment of fresh ideas and proposals (Chiva et al., 2007).

2.2.2.c Risk Taking

Risk taking involves tolerance uncertainties and errors (Camps et al., 2011). Hedberg (1981) advocated a number of mechanisms to aid OL, including the creation of circumstances that encourage risk-taking and acceptance of errors. If businesses want to learn, they must be willing to take risks and accept new ideas. Sitkin (1996) asserted that failure is a necessary component of effective OL and investigated the benefits and drawbacks of success and errors. Risk tolerance stimulates attention to organizational challenges and the quest for solutions as well as the ease of problem discovery are all advantages brought about by error (Sitkin, 1996). This means that rather than fear, the organizational atmosphere must be one of trust, faith that being honest and acknowledging mistakes will not result in personal harm. As a result, in order to admit a mistake, people must believe that doing so will benefit them more than not admitting the mistake. Management must set an example by identifying their own errors and lead the business to center on learning in order to create an environment of trust (Migdadi, 2021).

2.2.2.d Interaction with the External Environment

Interaction with the external environment entails the range of connectivity with the external environment. Because the organization strives to adapt in tandem with its changing environment,

relationships and connections with the environment are critical (Camps et al., 2011). The dimension is made up of factors that deal with gathering and reporting data from the outside world. Environmental factors play a vital part in learning, and several scholars have looked into their impact on OL (Bapuji and Crossan, 2004). Learning-based knowledge indicates an increase in reaction capability as a result of a larger comprehension of the environment (Dodgson, 1993). Learning-oriented businesses can swiftly change their architecture and reallocate their resources to capitalize on emerging opportunities or challenges due to their inherent flexibility. As a result, Hedberg (1981) believed the environment to be the primary driver of OL.

2.2.2.e Knowledge Transfer and Integration

The creation of organizational knowledge, which is based on the transfer of acquired information, is an important aspect of the OL process (Nonaka and Takeuchi, 1995). Jerez-Gómez et al. (2013) define transfer as "the internal spread of knowledge, primarily through dialogues and interactions among individuals through communication and discussion." For OL to work, proper processes must be in place to transfer learned knowledge from individual employees to teams, and then from teams to the entire business (Uurlu and Kurt, 2016). The ability of a firm to transmit knowledge across world was mentioned by the majority of writers (Goh, 2013). As a result, if knowledge acquired is not transferred, it will remain unrealized (Cohen and Levinthal, 1990). Organizations that are effective at gaining information, according to Andreeva and Kianto (2011), have a more diverse knowledge base; this diversity of ideas drives creativity.

2.2.3 Managerial Dynamic Capability (MDC)

The term managerial dynamic capability was coined by Adner and Helfat (2003). One form of dynamic capability is the managerial dynamic capability (Martin, 2011). DMC is based on the duties of the manager to transform the organizational resources to develop competitive advantage and to enhance performance. To achieve this goal, managers must seize available opportunities to transform the resources of the firm (Ambrosini and Altintas, 2019). MDC is defined by Adner and Helfat (2003) as “the capabilities with which managers build, integrate and reconfigure organizational resources and competencies”. With this definition, some scholars see MDC as key to the performance of the organization. DMC is central to the success of the organization and as such, it is seen as a vital component to the organization. The strongness of DMC is witnessed only when members have “social equivalence”. Following Helfat and Martin (2015), firms whose managers possess high dynamic capability can successfully adjust their strategy than firms that do not. In literature, three (3) set of managerial assets have been identified to underpin MDC. These include managerial cognition, managerial human capital and managerial social capital (Tai et al., 2019). These variables, when combined enables the manager to transform the firm’s resources to achieve the corporate objectives.

2.2.4 Market Turbulence

Calantone et al. (2002) explained turbulence to mean any form of change featured by changes in technology and unpredictable market turmoil. When firm faces any form of turbulence, Hender et al. (2017) revealed that it takes the company’s creativity to anticipate through the development of strategies. This in effect, provides value for the firm as well as the customers to keep the company on tract in the midst of the changing business environment. Under conditions of market turbulence,

Easterby-Smith (1997) revealed that it is crucial for firms to create and develop strategies to counter any change in the environment. Therefore, management needs to be alert in managing the firm whenever they anticipate changes in business that are fast and difficult to control. In turbulent market, new knowledge can be created through organizational learning (Eisenhardt, 2000). Market turbulence, as defined by Jaworski and Kohli (1993) is a change in the composition and preferences of customers. There is intense competition in turbulent market and as such, to react to the changes in the environment, organizational change is carried out. This requires managers' progress to communicate effectively and disseminate information always to employees in the organization (Hirst et al., 2004).

2.2.5 Firm Performance

Following Gunasekaran et al. (2004), the success and survival of a firm depends on its performance. The criteria used to assess a company's financial performance are always determined by the analyst's justification and preference. According to Bourne and Franco (2003), a good indicator of firm financial performance should reflect the characteristics of a broad-based assessment, as well as be able to satisfy the required results and provide feedback. Empirical literature revealed that proxies such as ROA, ROE, EPS, NIM, and market share, among others are proxies used to assess the performance of firms.

According to Appiah et al. (2017), the performance of firms is at the center and heart of stakeholders such as the shareholders, government, employees, suppliers, and the community as well. Any attempt that will jeopardize the performance of these firms will have dire repercussions on the above-mentioned stakeholders. Within a specified accounting year, firms are mandated to assess their performance for the benefit of all the stakeholders involved. Corporate governance

practices mandate firms such as banks to render account of their operations by publishing their annual financial statements. This is a sign that depositors funds are being taken good care of. As revealed by Hunjra et al. (2020), investors usually prefer to invest their hard-earned funds in firms that are performing and are optimistic that they will provide a good return in the long run.

Organizational performance is critical to any business since it is the only way for companies to objectively measure the results of combining financial and non-financial resources to achieve their objectives. Measurement of firm performance assists them in determining whether or not established targets were met (Zeng et al., 2010) and developing plans to improve or maintain it in order to strengthen and sustain the company's going concern feature. Due to their primary goal of increasing profit margins and providing value to shareholders' money, organizational performance has traditionally been judged from a financial perspective.

2.3 Theoretical Review

This study is anchored on the Knowledge-based view (KBV). The KBV of the firm is a modern extension of the RBV theory of the company, and it provides a theoretical framework for scholars in the fields of organizational learning capabilities. The next sub-section review literature on this theory and how relevant it is to the study.

2.3.1 Knowledge-Based View (KBV)

In business, the knowledge era has altered the core values and key resources needed to gain a competitive. Knowledge, according to the KBV, is a priceless resource for gaining a long-term competitive advantage. Organizations strive to acquire, transfer, and utilize the information

required for successful adaptation to rapidly changing environments due to the overriding importance of knowledge in strengthening the competitive advantage of firms (Cheng et al., 2014).

Organizational knowledge may be better managed, according to Chang and Ahn (2005), by knowing how it contributes to performance and modifying it to serve the firm's goals. The foundations for the KBV perspective were laid by Grant (1996) and Teece (2007). They underline the importance of businesses as knowledge creators and implementers. This strategy has ultimately resulted in the widespread belief that businesses should transform into learning organizations in order to maximize their knowledge base.

These knowledge bases, such as staff know-how and market expertise, are essential resources that help businesses gain long-term competitive advantages. Indeed, an essential approach to organizational learning is the knowledge-based view of organizations. This viewpoint also encourages businesses to adopt a learning mindset, which has an impact on organizational performance. According to this viewpoint, organizational learning improves the effectiveness of organizational knowledge acquisition and creation, which allows innovation in the development of new services/products and so ensures the firm's survival (Vincenzo et al., 2012).

2.4 Empirical Review

The effect of organizational learning capability on firm performance has mostly been examined in the global context among developed and developing countries. Among these studies, Ugurlu & Kurt (2016) examined the effect of OLC on product innovation performance in Turkey. After employing 120 firms registered with the Istaanbui Chamber of Industry, their findings revealed a positive association between OLC and performance. Kalmuk & Acar (2015) analyse the role of

OLC on the nexus between innovation and firm performance among Turkish firms. Their findings show that OLC impact positively on innovation and firm performance, and that OLC is closely related to new product development process.

Patky (2020) also examined the influence of organizational learning performance and innovation. The researcher observed in his study that turbulent environment moderates the relationship among OL, innovation, and firm performance. Gomes & Wojahn (2016) also conducted a study to assess OLC, innovation and performance among SMEs. Their study was analysed using structural equation modeling (SEM) and found that OLC impact the innovative performance of SMEs. In addition, Alegre et al. (2012) studied on OLC, product performance and export intensity and found that organizations with high OLC tends to be more innovative, and base on this, they are more likely to export a larger quantity of their production.

Sequel to the above, Tohidi & Jabbari (2012) investigated the main factors of OLC on performance and introduced the five main dimensions of OLC on performance. Their study revealed that talent and innovation are powerful resources that organizations need to survive under this turbulent environment. Alegre & Chiva (2013) analyse the role of OLC and performance on the nexus between entrepreneurial orientation and firm performance. After employing SEM technique to test for the hypothesis, their study suggests that managers should enhance OLC and performance for a more positive outcome.

A study by Farzaneh et al. (2021) sought to analyse the contributing role of dynamic capabilities in the relationship between OL and performance within the pharmaceutical industry using a time-lagged and survey-based research design. Their study confirmed that OL relates positively with

dynamic capabilities. In addition, their findings revealed that innovative culture moderates the dynamic capability and performance nexus. In another study, Tohidi & Jabbari (2012) studied on the evaluation of OLC and performance and revealed that organizations under this current dispensation of global competition need talent and innovation to survive. Also, Migdadi (2021) also conducted a study to assess the relationship among OLC, innovation, and organizational performance. After using SEM to test for the hypothesis, their findings revealed that OLC impact on innovation and innovation intends impacts on organizational performance.

Hung Tsai (2009) in his study on collaborative networks and performance examines how absorptive capacity impact on the association between different types of partnership and product innovation performance. His findings revealed that absorptive capacity inversely impact on the relationship between customer collaboration and the performance. Secondly, his findings revealed that absorptive capacity moderate the impact of vertical collaboration and technologically improved products. Fernandez-Mesa et al. (2013) employed SEM to test the relationship between DMC and product innovation in SMEs. Their findings revealed that design management capability mediate the relationship between OLC and product innovation. Lastly, Alegre & Chiva (2008) assessed the impact of OLC on performance. Their result provides empirical evidence that OLC improve performance.

Learning is key for speed and flexibility in the process of product development, and systematic learning on the basis of past experiences is critical in the first stages of product development process (Nederhof et al., 2002). An organization that is capable of generating new knowledge and integrating it with existing knowledge using different methods is expected to perform well in terms of product innovation and manufacturing process. In addition, the process of developing new

products requires continuous organizational renewal (Calantone et al., 2002). In this context, learning capability is seen as a key factor for an organization to innovate (Jerez, 2005; Alegre and Chiva, 2008; Sinkula et al. 1997; Calantone et al. 2002). A learning-focused company would have the knowledge and skills to understand and meet customer needs, to better analyze rivals' strengths and weaknesses, and to be more effective in drawing lessons from failures and successes. Such companies would also be more effective in making innovation compared to their competitors, and make more innovations (Garcia- Morales et al. 2007).

There are other studies in the literature examining the relationship between organizational learning capability and performance. Lynn et al. (1999), for example, found that higher levels of organizational learning were associated with higher levels of success in product performance. In other words, an increase in organizational learning capability is accompanied by a parallel increase in innovation capability which impact on firm performance (Hsu and Fang, 2008; Ussahawanitchakit, 2008; Akgün et al. 2007; Phromket and Ussahawanichthakit, 2009).

2.5 Hypothesis Formulation

Based on review of literature, three (3) testable hypotheses emerged for the study:

2.5.1. Relationship Between OLC and Firm Performance

There is a general assumption that OLC leads to organizational performance through behavioural change within the organization. From the perspective of Nafei (2015), organizational learning indirectly enhance performance. A number of literatures has confirmed the positive impact of OLC on firm performance (Alegre and Chiva, 2008; Garcia-Morales et al., 2007). Several scholars have also integrated the concept of OLC to impact on both performance and knowledge stocks.

Knowledge gained through OL produces high knowledge which enhance firm performance (Lemon and Sahota, 2004). Since OLC deals with changes in the environment, it is seen as a critical predictor of organizational performance. Specific knowledge, competencies and organizational strategies are expected by management to enhance firm performance (Mills and Smith, 2011). Following Junni et al. (2013), organizational ambidexterity positively enhances organizational performance. Based on this argument, the first hypothesis emerged for the study:

H1: There is a significant positive relationship between OLC and firm performance.

2.5.2 Mediating Role of Managerial Dynamic Capability

The concept of managerial dynamic capability has place extra role on managers to build, develop and create resources for the organization (Adner and Helfat, 2003). Following Helfat and Martin (2015), the concept of dynamic managerial capability directs attention to the role that managers play in building competitive advantage and enhancing the performance of firms. As argued by Adner and Helfat (2003), managerial dynamic capability is at the core of strategic change that enable managers to build and integrate the resources of the organization to enhance firm performance. In this study, the researcher argued that managerial dynamic capability enables managers to build the resources of the organization to enhance firm performance through organizational learning. Under conditions of market turbulence, Easterby-Smith (1997) revealed that it is crucial for firms to create and develop strategies to counter any change in the environment. Based on this argument, the study hypothesized that:

H2: Managerial dynamic capability mediates the relationship between OLC and performance.

2.5.3 Moderating Role of Market Turbulence

Companies should monitor their environment and have a clear understanding of their consumers taste and preference in order to create advantage for the organization (Grant, 2010). Companies requires innovative strategies and activities when they have a high level of turbulent market (Hult et al., 2014). Many studies have evaluated the impact of market turbulence on firm performance. Notable among such studies are (Bakar et al., 2012; Ebrahimi et al., 2018). Empirical literature has revealed the moderating role of market turbulent in OLC-firm performance nexus (Ebrahimi et al., 2018). The study of Hanvanich et al. (2006) revealed that under low environmental turbulence, organizational learning relates to innovation. Likewise, the study of Cambra-Fierro et al. (2012) revealed market turbulence moderate the nexus between organizational learning and market orientation. Based on this argument, we hypothesized that:

H3: Market turbulence moderate the relationship between OLC and firm performance through managerial dynamic capability.

2.5.4 Conceptual Framework Model

This section of the study presents the conceptual framework model guiding the study. The framework depicts the role of managerial dynamic capability and market turbulence in the relationship between OLC and firm performance. In this study, the dependent and independent variables are represented by firm performance on OLC respectively. The study is mediated by managerial dynamic capability and moderated by market turbulence. The study is controlled by firm operating years and number of employees. Three (3) testable hypotheses emerged for the study. The conceptual framework model presented in figure 2.1 highlights on the variables employed in the study.

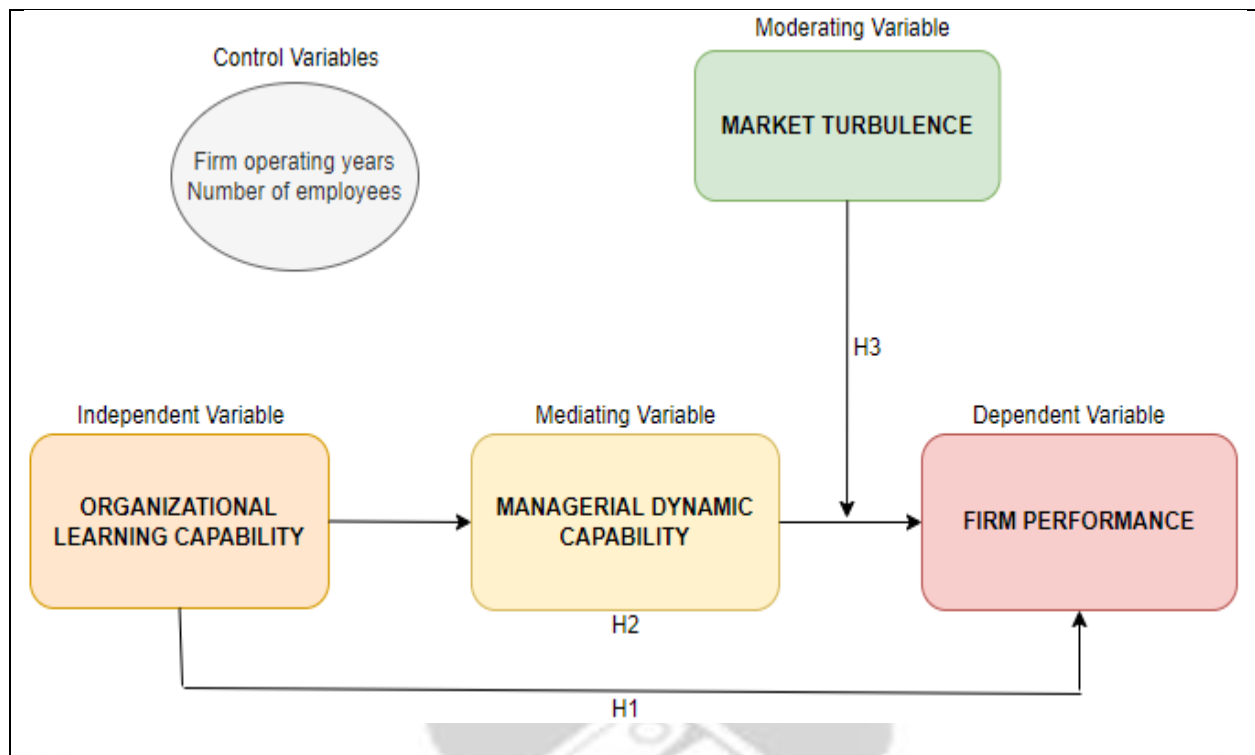


Figure 2.1 Conceptual Framework Model

Source: Researcher's Own Construct (2023)



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the research methods the researcher followed to analyse the role of managerial dynamic capability and market turbulence in the relationship between OLC and firm performance among manufacturing firm in Ghana. This chapter detailed the research design, population and sample size, data source, data collection tool and data analysis technique and ethical consideration.

3.1 Research Design

The type of research design that an author selects for a study is determined by the study objectives (Creswell, 2011). According to Yin (2013), the most well-known types of research design include qualitative and quantitative approach. The mixed method approach, a third strategy, has been expanded to complement the first two (Creswell, 2009). Statistical techniques are typically used in a quantitative way to investigate and measure variables through the collection of data (Davis, 2003). For a study that relies on non-numeric datasets, a qualitative technique which entails in-depth interviews, focus groups, and observations is employed. The qualitative and quantitative elements are combined in a mixed method study (Creswell & Hirose, 2019). This research employed a quantitative approach. This will allow the author to use a variety of statistical tools to measure, describe, and analyse the variables under investigation. The quantitative approach will also enable the researcher to achieve the objectives of the study.

3.2 Research Purpose

The nature of a study can either take the form of exploratory, explanatory, and descriptive (Saunders et al., 2012). Descriptive study seeks to describe a particular phenomenon. An exploratory study seeks to gain more insight into about a phenomenon about which little research has been done (Saunders et al., 2012). Investigations attempting to establish causal relationships between constructions, according to Zikmundet et al., (2013), can be described as explanatory studies. This study adopts explanatory study approach to accomplish the objectives of the study. The explanatory study approach was chosen to enable the researcher to explain the relationships among OLC, firm performance, market turbulence and managerial dynamic capability.

3.3 Population

The population of this study is made up of manufacturing firms within the Ashanti of Ghana. The actual number of manufacturing firms within the Region is unknown, however they can number in the thousands. Because the entire population cannot be researched, it is reasonable to employ a systematic sampling strategy to select several respondents who can represent the entire population (Bhattacharjee, 2012).

3.4 Sampling Size and Sampling Technique

The researcher agreed to choose a large sample size as a result of the difficulty in ascertaining the exact number of manufacturing firms operating within the Ashanti Region of Ghana. To select the sample for the study, the researcher utilized a two stage non-probability sampling technique as a sample frame could not be designed for a study due to inadequate information on the number of manufacturing firms to be used for this study. To select a sample for the study, first the researcher

divided the region into major districts, and in each district, convenience sampling technique was utilized to select respondent cases. To ensure reliability, samples were drawn from each district within the region to partake in the study. Finally, a sample size of 120 were selected within the Ashanti Region after deliberating on the issue adequacy and the representatives of the study.

3.5 Source of Data

Two sources of data, primary and secondary sources are known. The main data source for this study is primary as it made use of structured questionnaire to gather data to achieve the objectives of this study. In addition, secondary data were also sourced from scholars' journals, documents, magazines, and books to comprehend the subject matter under study.

3.6 Data Collection Instrument

The measuring instrument used in the study was developed from the literature. As the primary tool for measurement, a questionnaire was introduced. While testing the elements of the questionnaire, the researcher conducted a pilot test. The degree to which a participant agrees or disagrees with each element in the model was measured using a five-point Likert scale, ranging from strongly disagree to strongly agree. All of the structures and their associated objects were adapted from previous studies. The questionnaires were developed in Google form to minimize the impact of the pandemic.

3.7 Data Analysis Technique

Due to the nature of this study, the data was analysed quantitatively. First of all, the researcher analysed the preliminary data which includes the descriptive statistics and the correlation analysis.

The researcher employed the means and standard deviation to analyse the descriptive statistics of the data. Pearson correlation matrix were used to test for the presence of multicollinearity among the predictive variables. After the preliminary analysis, the researcher employed regression analysis technique to assess the relationships among the variables, taking into consideration the dependent, independent and the control variables. In testing for the mediating role of design management capability, Baron and Kenny's (1986) approach was used. Afterwards, the researcher discussed the findings based on the results generated from the study. The data were coded and analysed with the help of SPSS v 21.

3.8 Validity and Reliability of Data

Validity is the degree to which a test measures what it should be measuring (Kazi and Khalid, 2012). Content validity, criterion-related validity, and validity construction are the three types of validity presented by the researchers. The questionnaires are subjected to a validation procedure, according to Kazi and Khalid (2012), to guarantee that they accurately measure what they seek to measure. To screen the data for appropriate statistical analysis, the researcher felt it was necessary to run a few tests. The researcher run validity and reliability tests to confirm the combined instrument's validity and reliability that is consistent with prior studies (Creswell, 2012). The constructs of the study were assessed for internal consistency using Cronbach's alpha technique.

3.9 Ethical Consideration

Ethical considerations must be taken into account while conducting a study. The researcher only approached respondents who are genuinely interested in participating in the study. All covid-19 safety protocols were duly observed during the data collection process. The respondents' data

security and confidentiality were guided throughout the analysis. In addition, all external information sources included in the analysis were properly cited and referenced by the researcher using Harvard referencing style. When assessing data, the researcher retained the utmost level of objectivity possible. Using provocative words that could sway respondents were refrained from. The researcher reported study findings with accuracy.



CHAPTER FOUR

PRESENTATION OF DATA AND ANALYSIS OF FINDINGS

4.0 Introduction

This section of the study presents the data and analyses the findings of the study. In this chapter, the researcher presents the descriptive statistics of the constructs, correlation analysis and also employed regression analysis to establish the relationships among OLC, market turbulence, managerial dynamic capability and firm performance. The study specifically utilised the OLS regression technique. Afterwards, the findings of the study are discussed in line with literature to confirm or refute the arguments made.

4.1 Response Rate

The study has a total population of 120. Out of the 120 targeted respondents, 107 of them partook in the study. This brought the response rate to 89.17%. The researcher arrived at the response rate by performing this simple calculation $(107/120 \times 100)$. A response rate of 89.17% is quite high and the researcher is optimistic that it can impact well on the findings of the study.

4.2 Demography of the Firms Under Study

In this section of the study, the researcher presents the background information of the firms that engaged in the study. Factors which include year of business operation, category of their business, organizational size, number of workers and income level were employed. The researcher deemed this section as important as it would provide useful information to augment the findings of the study. Table 4.1 present the background information of the responding firms.

Table 4.1 Demographic Information of the Responding Firms

Variables	Factors	Frequency	%
Firm Age	Up to 5 years	11	10.3
	6-10 years	36	33.6
	11-20 years	42	39.3
	Above 20 years	18	16.8
Firm Size	Small	15	14.0
	Medium	61	57.0
	Large	31	29.0
Category of business	Local	86	81.1
	International	26	18.9
	Multinational	-	-
Number of employees	Up to 20	6	5.6
	21-50	21	19.6
	51-100	25	23.4
	101-200	42	39.3
	Above 200	13	12.1
Annual Income	Up to GHS50,000	9	8.4
	GHS50,000-GHS1,000,000	54	50.5
	GHS1,000,001-GHS10,000,000	33	30.8
	Above GHS10,000,000	11	10.3

Source: Field Survey (2023)

From Table 4.1, it can be indicated that 11 (10.3%) of these firms have been in operation up to 5 years. 36 (33.6%) have operated from 6-10 years. In addition, 42 (39.2%) and 18 (16.8%) have been in operation from 11-20 and above 20 years respectively. The study further attempts to analyse the size of the firms engaged in the study. This include whether the firm is small, medium or large. The study revealed that 15 (14.0%) of these firms are classified under “small”, 61 (57.0%) are classified under medium, while the remaining 31 (29.0%) are large enterprises. In this study,

firms were categorized into local, international and multinational. From Table 4.1, it can be indicated that 86 (81.1%) of the firms engaged in the study are local businesses. In addition, 26 (18.9%) are international firms.

In addition, the study assessed the number of workers employed by these firms under study. Per available data, it was revealed that 6 (5.6%) have employed workers up to 20, while 21 (19.6%) have employees numbering between 21-50. 25 (23.4%) have employees between 51-100, while 42 (39.3%) and 13 (12.1%) have employed 101-200 and above 200 workers respectively. This study further assessed the monthly income of the firms engaged in the study. It was revealed that 9 (8.4%) of these firms have a monthly income of up to GHS50,000. 54 (50.5%) of them obtain a monthly income between GHS50,001-GHS1,000,000. In addition, 33 (30.8%) obtain a monthly income between GHS 1,000,000-GHS10,000,000, while 11 (10.3%) earn a monthly income of above GHS10,000,000.

4.3 Reliability of Measurement Constructs

To measure the internal consistency of the constructs (OLC, managerial dynamic capability, market turbulence, firm performance), the researcher employed the Cronbach's alpha tests. As noted by Pallant (2005), the averages of these constructs were taken to run the test. An alpha value of 0.7 and above is deemed significant. After the averages were taken, all the constructs were subjected to Cronbach's alpha tests. From Table 4.2, it is indicated that all the constructs have a strong internal consistency.

Table 4.2: Construct Reliability Results

Construct	Sub-construct	No. of items	Cronbach's alpha
OLC	Experimentation	2	0.711
	Risk-taking	2	0.765
	Interaction with external environment	3	0.811
	Dialogue	4	0.749
	Participative decision-making	3	0.799
Managerial dynamic capability	Integration capabilities	4	0.865
	Learning capabilities	5	0.785
	Reconfiguration capabilities	3	0.811
Market turbulence		9	0.778
Firm Performance		5	0.832

Source: Field Survey (2023)

4.4 Descriptive Statistics

In this section of the study, the researcher presents the descriptive statistics of the variables employed in the study.

4.4.1 Descriptive Statistics of OLC

In Table 4.3, the descriptive statistics of OLC construct is presented. The sub-constructs include experimentation, risk-taking, interaction with external environment, dialogue as well as participative decision making. The descriptive statistics of the data is essential in order to enable the researcher to achieve the study objectives.

The first construct measures the extent to which the firms under study engage in new ideas. The results on Table 4.3 indicates that firms under study encourages the presentation of new ideas in their business operations (Mean>4.00).

The second construct measures the extent to which the firms under study take risks. As indicated in Table 4.3, the construct mean obtained is an indication that the firms under study take risks in their operations.

The third construct measures the extent to which the firms under study interact with the external environment. The results of the data indicates that firms under study engage in an interaction with their external environment (Mean>4.00).

The fourth construct measures the extent to which the firms under study are open to dialogue. The results of the data indicates that firms under study communicate with all stakeholders involved (Mean>4.00).

The fifth construct measures the extent to which the firms under study are practice participative decision-making. From Table 4.3, the construct mean achieve is an indication that the firms under study engages all key stakeholders in their decision making.

Table 4.3 Descriptive Statistics Results of OLC

Construct	Mini	Maxi	Mean	Std. D
EXPERIMENTATION				
E1	3.00	5.00	4.13	0.515
E2	3.00	5.00	3.96	0.598
RISK-TAKING				
RT1	3.00	5.00	4.22	0.520
RT2	3.00	5.00	3.53	0.501
INTERACTION WITH EXTERNAL ENVIRONMENT				
IWEE1	3.00	5.00	3.99	0.591
IWEE2	3.00	4.00	3.61	0.491
IWEE3	3.00	5.00	4.27	0.576
DIALOGUE				
D1	3.00	5.00	4.19	0.569
D2	3.00	5.00	4.10	0.658
D3	3.00	5.00	4.02	0.598
D4	3.00	5.00	3.96	0.598
PARTICIPATIVE DECISION-MAKING				
PDM1	3.00	5.00	3.89	0.677
PDM2	3.00	5.00	4.12	0.696
PDM2	3.00	5.00	4.21	0.583

Source: Field Survey (2023)

4.4.2 Descriptive Statistics of MDC

In Table 4.4, the descriptive statistics of managerial dynamic capability construct is presented. The first construct measures the extent to which the firms under study engage in integrate technology to develop new products and also gather information for decision making. The results on Table 4.4 indicates that firms under study engage in integrative capabilities.

The second construct measures the extent to which the firms under study learn, manage and share knowledge. As indicated in Table 4.4, the construct mean obtained is an indication that the firms under study engage in learning capabilities

The third construct measures the extent to which the firms under study respond to market changes and competitors' actions. The results of the data indicates that firms under study engage in reconfiguration capabilities.

Table 4.4 Descriptive Statistics Results of MDC

Construct	Mini	Maxi	Mean	Std. D
INTEGRATION CAPABILITIES				
IC1	3.00	5.00	3.95	0.664
IC2	2.00	5.00	3.72	0.626
IC3	3.00	5.00	4.00	0.629
IC4	3.00	5.00	4.17	0.666
LEARNING CAPABILITIES				
LC1	3.00	5.00	3.87	0.533
LC2	3.00	5.00	4.04	0.672
LC3	3.00	5.00	3.86	0.606
LC4	3.00	5.00	4.00	0.673
LC5	3.00	5.00	4.02	0.614
RECONFIGURATION CAPABILITIES				
RC1	3.00	5.00	4.16	0.689
RC2	3.00	5.00	4.10	0.658
RC3	3.00	5.00	4.21	0.610

Source: Field Survey (2023)

4.4.3 Descriptive Statistics of Market Turbulence

In Table 4.5, the descriptive statistics of market turbulence construct is presented. This construct measures the extent to which the firms under study respond to certain changes in the market in

which they operate. The results on Table 4.5 indicates that firms under study respond to changes in the that occur in the external environment (Mean>4.00)

Table 4.5 Descriptive Statistics Results of Market Turbulence

Construct	Mini	Maxi	Mean	Std. D
MARKET TURBULENCE				
MT1	3.00	5.00	4.08	0.646
MT2	2.00	5.00	4.15	0.845
MT3	3.00	5.00	3.89	0.663
MT4	3.00	5.00	4.34	0.565
MT5	3.00	5.00	4.24	0.725
MT6	3.00	5.00	3.93	0.669
MT7	3.00	5.00	4.35	0.646
MT8	3.00	5.00	3.93	0.519
MT9	3.00	5.00	4.08	0.631

Source: Field Survey (2023)

4.4.4 Descriptive Statistics of Firm Performance

In Table 4.5, the descriptive statistics of firm performance construct is presented. This construct measures the extent to which the firms under study are performance in comparison to the major competitors in the industry. The results on Table 4.6 indicates that firms under study are performing better (Mean>4.00)

Table 4.6 Descriptive Statistics Results of Firm Performance

Construct	Mini	Maxi	Mean	Std. D
FIRM PERFORMANCE				
FP1	3.00	5.00	3.94	0.656
FP2	3.00	5.00	4.36	0.556
FP3	3.00	5.00	4.04	0.686
FP4	3.00	5.00	4.19	0.552
FP5	3.00	5.00	3.87	0.457
FP6	3.00	5.00	4.17	0.637
FP7	3.00	5.00	4.63	0.486
FP8	3.00	5.00	4.12	0.527

Source: Field Survey (2023)

4.5 Correlation Analysis

This section of the study measures the correlation of the study's construct. For a sound statistical analysis, the variables in a study shouldn't be highly correlated. In obtaining the scores for the constructs, the sum of these constructs was added and the average was taken as proposed by Pallant (2005). The inter item correlations of the sub-constructs is presented in Table 4.7. The table shows that there exists significant correlation among the variables under study.

Table 4.7 Pearson Correlation Matrix

Constructs	1	2	3	4
1. OLC	1			
2. MDC	0.165	1		
3. MARKET TURB	0.132	0.011	1	
4. FIRM PERF	0.121	0.030	-0.329	1

Source: Field Study (2023)

4.6 Regression Analysis

This section of the study employed the regression technique to establish the relationships among the study variables. The next sub-sections present the regression model results based on the objectives of the study.

4.6.1 Effect of OLC on Firm Performance

The first objective of the study was to analyse the impact of organizational learning capability on firm performance. To achieve this objective, a regression analysis was run with firm performance as the dependent variable and OLC as the independent variable of the study. The results of the OLS regression model are presented in Table 4.8.

Table 4.8: Effect of OLC on Firm Performance

Items	Firm performance	Sig.
	Beta (t-value)	
OLC	0.814(20.916)	0.000
Model Indices		
R Square	0.605	
F-statistics	1232.1243	

Source: Field Study (2023)

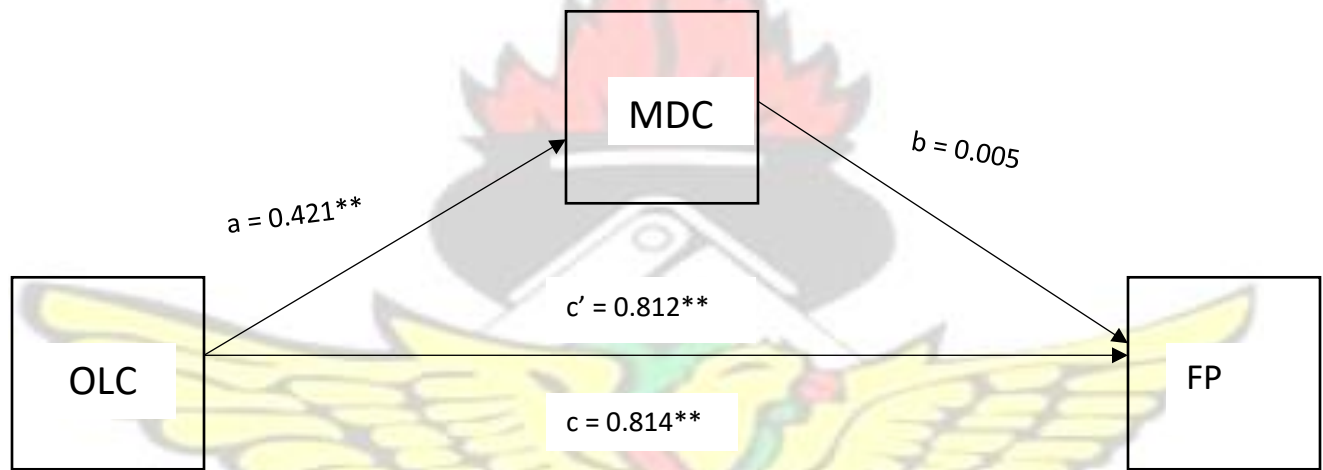
4.6.2 Mediating Role of Managerial Dynamic Capability

This study hypothesized that managerial dynamic capability plays a mediating role in the relationship between OLC and firm performance. However, given that the models used in making these predictions were all statistically significant, there exist a chance for mediation. The test for mediation in this study follows Baron and Kenny (1986) four steps to test for mediation.

Table 4.9 DMC as a Mediator

MODEL	PREDICTOR(S)	DEPENDENT	R ²	Beta (Unstandardized)	t	Sig.
1	OLC	FP	.605	.814	20.916	.000
2	OLC	MDC	.046	.421	3.684	.000
3	OLC MDC	FP	.605	.812 .005	20.303 0.263	.000 .793

Source: Researcher's Construct (2023).



Note: ** = significant at 5%.

Figure 4.1 Mediation path analysis

Source: Researcher's construct (2023)

4.6.3 Moderating Role of Market Turbulence

This section of the study presents the moderating role of market turbulence in the relationship between OLC and firm performance through MDC. The rule of moderation states that a significant interaction exists between the interaction term, and the dependent variable as well as the independent variable. The researcher obtained the interaction variable by multiplying OLC (independent variable) with market turbulence (moderating variable). The results obtained from

the model indicates that market turbulence failed to moderate the relationship between OLC and firm performance because the p-value of the interaction term is more than 0.05. Table 4.10 presents the regression model results.

Table 4.10: Market Turbulence as a Moderator

Model	Coefficient	Standard Error	t	Sig
Constant	12.538	15.431	2.621	0.041
OLC	2.028	3.588	3.339	0.001
Market Turbulence	-1.647	3.711	3.083	0.058
Interaction term	0.403	0.863	-8.846	0.064
R-squared=0.266				

Source: Field Survey (2023)

4.7 Discussion of Findings

Specifically, this section presents the discussion of findings. It was further backed with extant literature to refute or back the findings of the study.

4.7.1 OLC and Firm Performance

The first objective of this study was to analyse the impact of OLC on firm performance. To achieve this objective, the researcher run a regression model. The model obtained an R-squared of 0.605. This means that 60.5% of the variations in OLC can be explained by changes in firm performance. The regression out suggests the model is statistically significant at $p < 0.05$. The regression model suggests that the relationship between OLC and firm performance is positive and significant. The regression output obtained a constant of 1.534 Relative to the independent variable, the study found that OLC has a parameter estimate of 0.814, which is found to be statistically significant at 0.05 significance interval. The parameter estimates of 0.814 implies that a unit increase in OLC is

expected to enhance firm performance by 81.4%. The positive relationship between OLC and firm had been confirmed in literature (Mills and Smith, 2011; Junni et al., 2013). The significant relationship has also been confirmed by other studies (Chiva, 2008; Ugurlu & Kurt, 2016). The coefficient of the OLC is significant and positive under the estimation technique. The researcher interpreted this to mean that OLC impact positively on firm performance. My projection (Hypothesis H1) has been that OLC has a significant positive impact on firm performance. This has been confirmed.

4.7.2 Mediating Role of Managerial Dynamic Capability

The study followed Baron and Kenny's (1986) model. The test for mediation in this study follows Baron and Kenny (1986) four steps to test for mediation. Following Baron and Kenny (1986), if M mediates an X-Y causal relationship then:

- (1) X significantly predicts Y (path **c** is significant)
- (2) X significantly predicts M (path **a** is significant)
- (3) M significantly predicts Y in the presence of X (path **b** is significant)
- (4) When M is in the model, the effect of X on Y is reduced (**c'** is less than **c**). With complete mediation, path **c'** is zero.

In model 1, the researcher regressed OLC on firm performance. Statistical significance was achieved ($p = .000$). The 1st condition is satisfied, meaning path **c** (shown in the diagram below) is significant. In model 2, the researcher regressed OLC on MDC. Even though the effect size was low statistical significance was achieved ($p = .000$). This satisfy the 2nd condition, meaning path **a** is significant.

However, in model 3, while controlling for the effect of OLC, MDC did not significantly predict firm performance ($p\text{-value} > 0.05$). The proposed mediator has no significant effect on the dependent variable in the presence of the independent variable. This means that path b is not significant and thus there is no mediation. Condition 3 is not satisfied and so the conclusion is MDC does not function as a mediator in OLC-performance nexus.

4.7.3 Moderating Role of Market Turbulence

A moderating variable is a variable that affects the strength, direction and relationship between the dependent and independent variable (King, 2019). The third objective of the study was to assess the moderating role of market turbulence on the relationship between OLC and firm performance. In assessing the moderating role of market turbulence, the model revealed an R-squared of 0.226. This is an indication that 22.6% of the changes in market turbulence can be employed to explain the association OLC and firm performance. With moderating analysis, if the p-value is less than 0.05, it is an indication that there exists a significant effect between the interaction term, the dependent variable as well as the independent variable. Per the results of the regression model as indicated in Table 4.10, a p-value of 0.064 which is more than 0.05 was achieved. By implication, market turbulence failed to moderate OLC-firm performance nexus. My projection (Hypothesis H3) has been that market turbulence moderate OLC-performance nexus. Based on the findings, the third hypothesis of the study is not supported.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section of the study presents the summary of findings, conclusion and recommendations based on the study findings to appropriate stakeholders. The chapter further provides some directions for future studies. This chapter basically begins with the summary of key findings.

5.2 Summary of Findings

The first objective of this study was to analyse the impact of OLC on firm performance. The regression model suggests a positive relationship between OLC and firm performance. The positive and significant impact between OLC and firm performance had been confirmed in literature (Junni et al., 2013).

The second objective of the study was to analyse the mediate role of MDC in OLC-performance nexus. The findings of the study revealed that MDC failed to mediate the relationship between OLC and firm performance. The second hypothesis of the study is not supported

The third objective of the study was to assess the moderating role of market turbulence on the relationship between OLC and firm performance through MDC. Per the results of the regression model, a p-value of 0.064 which is more than 0.05 was achieved. By implication, market turbulence failed to moderate OLC-performance nexus. Based on the findings, the third hypothesis is not supported.

5.3 Conclusion

This study analyses the role of MDC and market turbulence in the relationship between OLC and firm performance. The study was carried out using manufacturing companies in Ghana. Geographically, the study was specifically limited to Ashanti Region. The research utilised the descriptive and explanatory study approach. The explanatory study approach enabled the researcher to explain the relationships among the variables employed in this study. This study made use of questionnaires to collect data from 120 owners and managers of the selected manufacturing firms under study. Various descriptive and inferential statistical techniques were employed to analyse the data. The study employed a regression technique to analyse the relationship among the variables. The study found OLC to impact positively on firm performance. The study however conclude that MDC and market turbulence failed to play a mediating and moderating role respectively in OLC-firm performance nexus.

5.4 Implications and Recommendations of the Study

Based on the findings of the study, the following implications and recommendations have been suggested. In theory, this research has contributed to the body of knowledge on OLC, MDC, market turbulence and firm performance. Drawing on the knowledge-based view theory, a study of this nature has contributed to literature by demonstrating that organizational learning improves the effectiveness of organizational knowledge acquisition and creation by allowing innovation in the development of new services/products to enhance firm performance. In addition, OLC and market turbulence is inevitable in the operations of businesses. As firms' resources are scarce and associated with a high level of risk, the implication is that firms should make prudent use of their scarce resources and also employ strategies to deal with volatility in their business environment.

The study revealed a positive impact of OLC on firm performance. Based on this finding, we recommend to management to place extra priority on openness and experimentation, risk-taking, and respond to the stimuli from the external environment, among others. The study revealed that market turbulence is inevitable in the operations of businesses. Based on this, the study recommends that organisations should strive to acquire, transfer, and utilize the information required for successful adaptation to rapidly changing environments due to the overriding importance of knowledge in strengthening the competitive advantage of firms.

5.5 Direction for Future Studies

The study revealed that MDC and market turbulence failed to play a mediating and moderating role respectively in the relationship between OLC and firm performance. The researcher therefore recommends, based on this finding, that future studies should consider expanding the sample size and carrying out in different sector of the Ghanaian economy for comparison purpose. It is possible that when future studies are carried out in different sectors of the Ghanaian economy, MDC and market turbulence might play a role in the relationship between OLC and firm performance.

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APPENDIX
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF BUSINESS
QUESTIONNAIRE

Dear respondent,

This research is an academic exercise and it intends to study “the role of managerial dynamic capability and market turbulence in the relationship between organizational learning capability and firm performance among manufacturing firm in Ghana in partial fulfillment of a Master of Business Administration. Your responses and suggestions are very crucial to the success of the study. Please bear in mind that your suggestions will be guarded with outmost confidentiality and will be used for the intended purpose. Thank you.

DIRECTIONS: Please indicate your response to each question by selecting the most appropriate answer for each question.

SECTION 1

SECTION A: DEMOGRAPHIC BACKGROUND OF FIRMS UNDER STUDY

1. Number of employees

- A. 1-20 ☐
- B. 21-50 ☐
- C. 51-100 ☐
- D. 101-200 ☐
- E. Above 200 ☐

2. Operating Years

- A. 1-5 years ☐
- B. 6-10 years ☐
- C. 11-20 years ☐
- D. Above 20 years ☐

3. Category of Firm

- A. Local ☐
- B. International ☐
- C. Multinational ☐

4. Firm Size

- A. Small []
 B. Medium []
 C. Large []

Assess the importance of the following items in your organization (Chiva and Alegre, 2009a, b)

ORGANIZATIONAL LEARNING CAPABILITY

- Strongly disagree - 1
 Disagree - 2
 Neither agree nor disagree - 3
 Agree - 4
 Strongly agree - 5

EXPERIMENTATION		1	2	3	4	5
1	People here receive support and encouragement when presenting new ideas	1	2	3	4	5
2	Initiative often receives a favorable response here, so people feel encouraged to generate new ideas	1	2	3	4	5
RISK TAKING						
3	People are encouraged to take risks in this organization	1	2	3	4	5
4	People here often venture into unknown territory.	1	2	3	4	5
INTERACTION WITH EXTERNAL ENVIRONMENT						
5	It is part of the work of all staff to collect, bring back, and report information about what is going on outside the company	1	2	3	4	5
6	There are systems and procedures for receiving, collecting and sharing information from outside the company	1	2	3	4	5
7	People are encouraged to interact with the environment: competitors, customers, technological institutes, universities, suppliers etc	1	2	3	4	5
DIALOGUE						
8	Employees are encouraged to communicate	1	2	3	4	5
9	There is a free and open communication within my work group	1	2	3	4	5
10	Managers facilitate communication	1	2	3	4	5
11	Cross-functional teamwork is a common practice here.	1	2	3	4	5
PARTICIPATIVE DECISION-MAKING						
12	Managers in this organization frequently involve employees in important decisions	1	2	3	4	5
13	Policies are significantly influenced by the employees' view	1	2	3	4	5
14	People feel involved in main company decisions	1	2	3	4	51

Indicate the extent to which your firm is able to integrate, learn and configure resources (Lin and Wu, 2014)

MANAGERIAL DYNAMIC CAPABILITIES

Manages poorly	- 1
Manages averagely	- 2
Manages above average	- 3
Manages well	- 4
Manages extremely well	- 5

INTEGRATION CAPABILITIES		1	2	3	4	5
15	Customer information collection and potential market exploration					
16	Specialized organization to collect industry information for managerial decision					
17	Integrating industry related technologies to develop new products					
18	Recording and integrating historical methods and experiences in handling firm issues					
LEARNING CAPABILITIES						
19	Frequent anticipating industrial knowledge learning program					
20	Frequent internal educational training					
21	Knowledge sharing and learning groups establishment					
22	Frequent internal cross department learning program					
23	Knowledge management database for access					
RECONFIGURATION CAPABILITIES						
24	Rapid organizational response to market changes					
25	Rapid organizational response to competitor's actions.					
26	Efficient and effective communication with cooperative organization					

Assess the level of change in your business environment (Peters et al., 2019)

MARKET TURBULENCE

Strongly disagree	- 1
Disagree	- 2
Neither agree nor disagree	- 3
Agree	- 4
Strongly agree	- 5

MEASURES		1	2	3	4	5
27	It is very difficult to predict any customer changes in this marketplace.	1	2	3	4	5

28	In our kind of business, customers' product preferences change quite a bit over time	1	2	3	4	5
29	There are many, diverse market events that impact our business's operations	1	2	3	4	5
30	It is very difficult to forecast where the technology in our industry will be in two to three years.	1	2	3	4	5
31	The technology in our industry is changing rapidly	1	2	3	4	5
32	There are many, diverse technological events that impact our business's operations	1	2	3	4	5
33	It is very difficult to predict any changes in who might be our future competitors.	1	2	3	4	5
34	One hears of new competitive moves almost every day.	1	2	3	4	5
35	There are many, diverse competitor events that impact our business's operations.	1	2	3	4	5

Indicate the performance of your company compared to your competitors with regard to the following items

FIRM PERFORMANCE

Much worse	- 1
Worse	- 2
At the same level	- 3
Better	- 4
Much better	- 5

36	Industry leadership	1	2	3	4	5
37	Net profit	1	2	3	4	5
38	Liquidity ratio	1	2	3	4	5
39	Return on equity	1	2	3	4	5
40	Cost-income ratio	1	2	3	4	5
41	Overall response to competition	1	2	3	4	5
42	Success rate in new product/service launches	1	2	3	4	5
43	Overall business performance and success	1	2	3	4	5

THANK YOU FOR YOUR PARTICIPATION

KNUST

