

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

**THE IMPACT OF PROCUREMENT PRACTICES ON COMPETITIVE ADVANTAGE:
MODERATING ROLE OF SUPPLIER DEVELOPMENT AMONG SMES IN GHANA**

By

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DECLARATION

I hereby declare that this submission is my own work towards the Master of Science in Procurement and Supply Chain Management Degree and that, to the best of my knowledge and belief, it contains no material previously published by another person nor material that has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text.

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DEDICATION

The LORD is my light and my salvation. My help in ages past, in the present and in years to come.

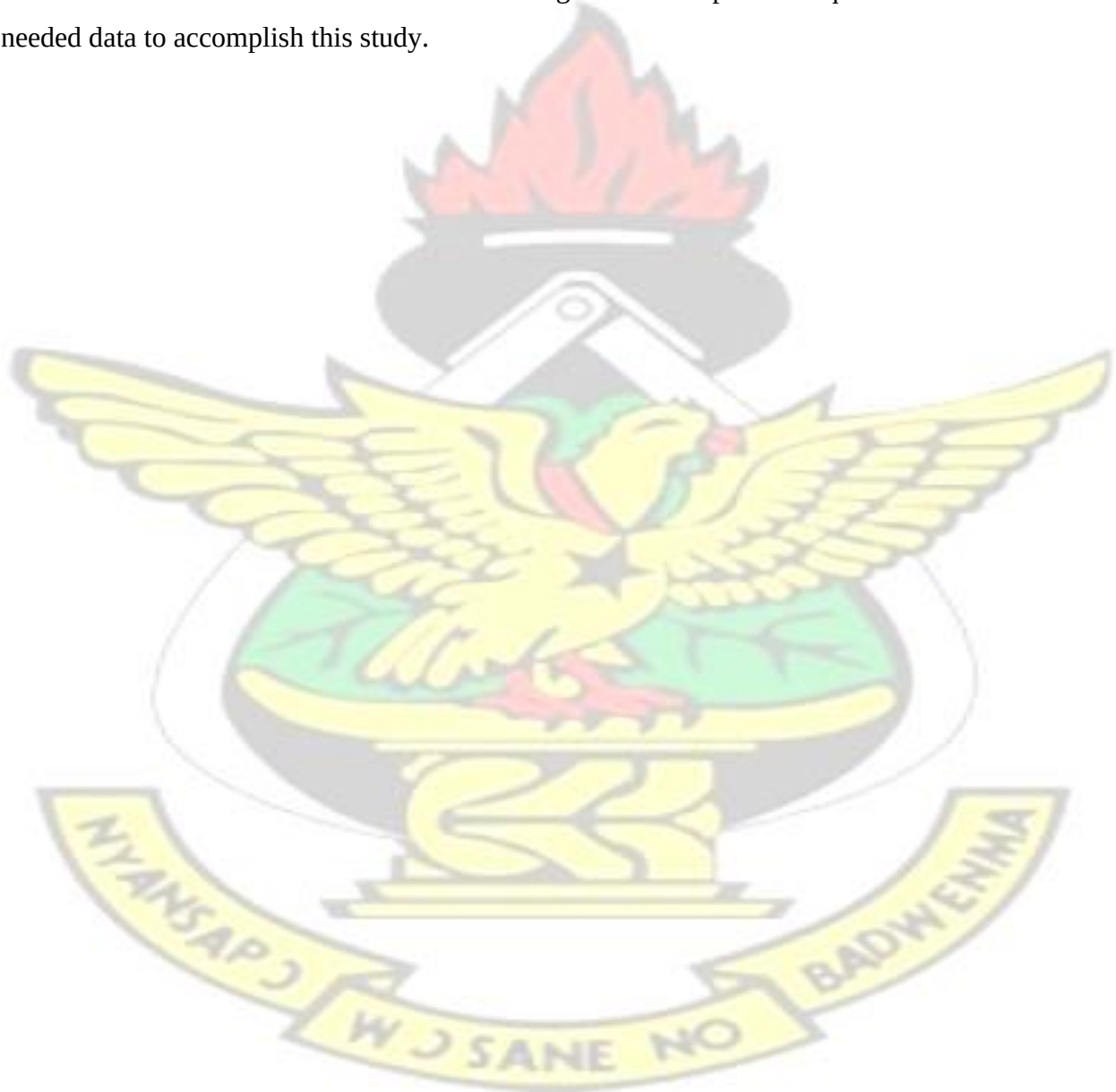
With profound pleasure, I dedicate this work to my supervisor, Dr. Emmanuel Quansah, my wife, my sweet daughters, my mother for her fervent, persistent and consistent prayers for me and my family.



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I would like to thank God Almighty for helping me go through this thesis successfully. I also wish to acknowledge the invaluable, selfless support and dedication of my supervisor Dr. Emmanuel Quansah for his keen interest, inspiring guidance, constant encouragement with my work during all stages to bring this thesis into fruition.

I am indebted to all beneficiaries whose willingness to complete the questionnaire offered the needed data to accomplish this study.



ABSTRACT

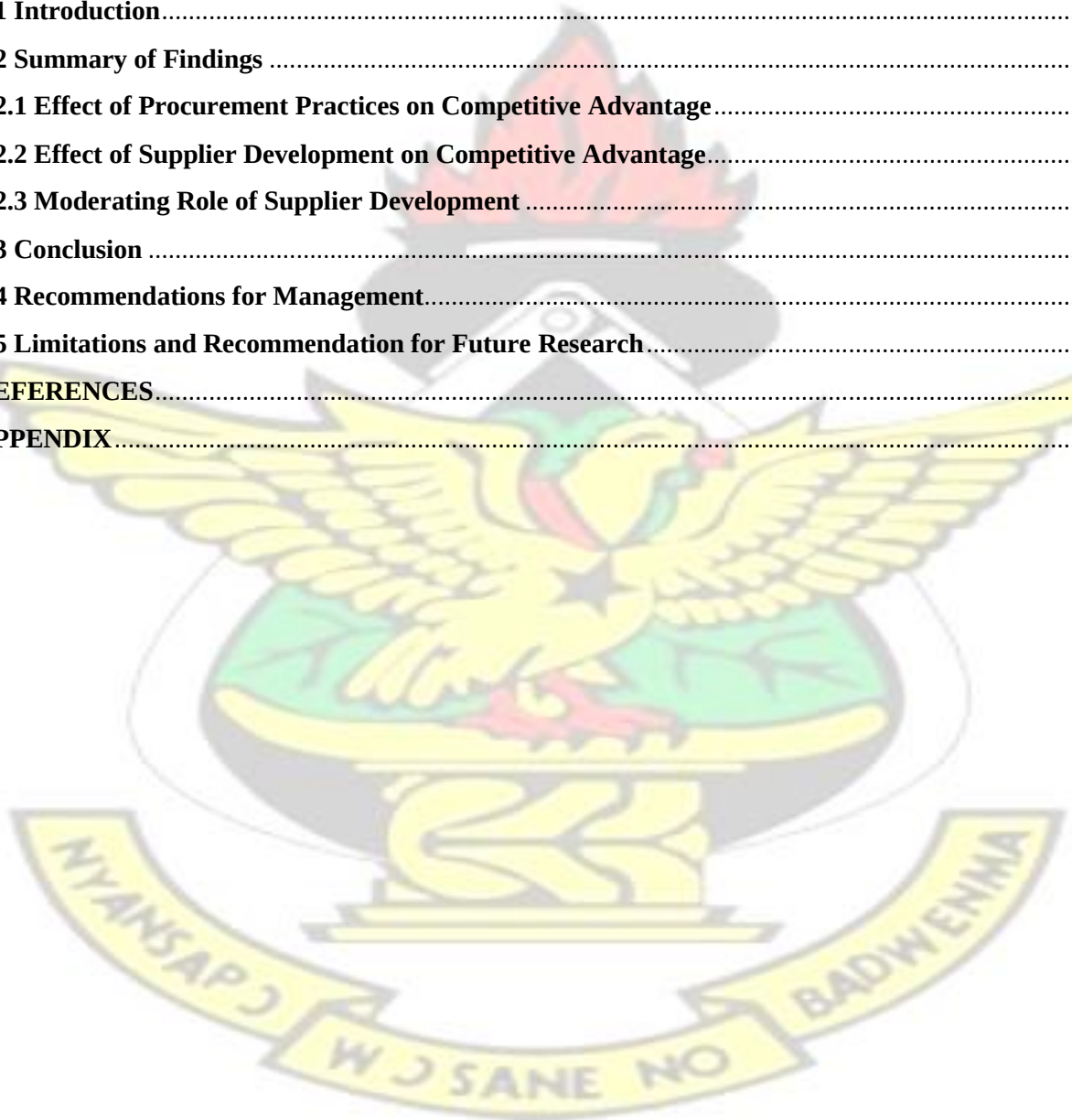
This research set out to establish how procurement practices will influence competitive advantage among SMEs in Ghana, with an emphasis on the role of supplier development. The specific objectives of the study were: to examine the relationship of procurement practices on competitive advantage, to assess the relationship of supplier development on competitive advantage, as well as evaluate the moderating effect of supplier development on the relationship between procurement practices and competitive advantage. The blessing of procurement practices and its implementation in Ghana's SME sector has not been adequately realized and underestimated. Despite the recognition of procurement practices, most of the studies indicated above did not consider the competitive advantage consequences of procurement practices in an extremely uncertain environment such as the SMEs from the Ghanaian perspective. Moreover, understanding procurement practices in terms of its influence on competitive advantage among SMEs is inadequate, and there is a scarcity of information about how supplier development analysis affects the activities of procurement practitioners and other stakeholders working with SMEs. A quantitative method was employed and a sample size of 384 was chosen using a purposive sampling technique. The findings of the study show that procurement practices have a positive and significant relationship with competitive advantage. Also, the result indicates that supplier development positively influenced competitive advantage. Finally, findings indicate that supplier development positively moderates the link between procurement practices and competitive advantage. The study therefore concluded that managers should consider supplier development of providing guidance and technical assistance, revealing best practices, facilitating knowledge flow, and promoting collective problem-solving among suppliers in order to lower costs, enhance quality, and improve delivery.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Small and Medium Scale Enterprises (SMEs) play essential support to the socio-economic development of many nations. The role these businesses play in developing nations cannot be underestimated (Azumah et al., 2021). Despite the contribution of SMEs to national development, they face numerous challenges. In the midst of these challenges faced by SMEs, the needs of consumers are progressively extending from just quality to incorporating sustainability, competitive prices and value for money (Tell et al., 2016). This necessitates the need to reduce waste along the production system and produce products that meet the demands of the consumer. This is vital to embrace critical changes in the journey to upgrade operational proficiency (Dania et al., 2018). Meanwhile, SMEs noted faces multiple constraints including operational and financial constraints (Hessel and Parker, 2013; Clegg, 2018). Which directly or indirectly affects the competitiveness of firms.

Competitive advantage refers to a superior position in the marketplace that enables a firm to outperform its rivals (Porter, 1985; Chao-Hung, 2019). To achieve a competitive advantage, the firm must create positive value which equals or exceeds that of competitors. This value may be difficult to be created without an efficient procurement system. Meanwhile, SMEs operate in a complex, fast-changing environment (Chen et al., 2013; Haleem et al., 2018; Wiengarten et al., 2016), and they increasingly rely on complex networks of supply chain partners to deliver goods and services in the right quantity, at the right time, and in the right place, all while facing constant cost and quality pressures. To obtain a competitive advantage, companies are increasingly

employing advanced operations tactics such as procurement practices (Blome and Schoenherr, 2011; Kauppi et al., 2016).

Prior to (Dutta et al., 2020; Mishra et al., 2021) studies have also indicated that though SMEs contribute immensely to the development of many economies, its operational performance is a challenging issue that needs to be addressed. Despite the numerous interventions by many governments to improve and sustain competitive advantage in the highly competitive global market environment, especially in the context of SMEs, procurement remains a fundamental strategy to improve operational performance. The role procurement management constitutes as stimuli for development has been an issue of particular interest over the past decade (Odero and Ayub, 2017; Liu et al., 2019; Patrucco et al., 2019; Raj et al., 2020). Procurement provides varied contributions among countries, regions as well as sectors to underlying operations including SMEs (Lember et al., 2014; Edquist, 2015; 2016; Maria et al., 2019). Procurement, therefore, plays an integral role in any establishment whether public or private. According to OECD (2017) procurement constitutes approximately 15% - 20% GDP of developed economies. In both developed and developing economies, less attention has been paid to the issue of procurement despite its role in achieving competitive advantage.

The outbreak of the Covid-19 pandemic dampened worldwide sustainable development efforts, hurting all economic sectors, organizations, and industries, including Ghana's small and medium scale businesses. Prior to the outbreak of the epidemic, SMEs in Ghana were already facing difficulties. The importance of procurement practices (PPs) and their adoption in the industry to revitalize the sector is undervalued. Procurement practices and their integration to improve the alignment of competitive advantage among SMEs in Ghana have received little attention. As a result, the country's SME performance has decreased and fluctuated. If this is left unconcern, the problem will persist and the

impact of the current level of procurement practices on CA will continue to derail the socio-economic development of Ghana and thereby losing its pride of place SMEs in socio-economic development. This is a source of worry and concern to the collaborative process within the chain members that need urgent attention.

As a result, the process of coordinating procurement practices (PPs) is seen as a critical factor in maintaining operational excellence across the supply chain among SMEs. It encompasses PPs actions and operations targeted at cost reduction, increased efficiency and effectiveness, value creation, and environmental sustainability, among other things. Many experts in the field of procurement management argue that supply chain collaboration improves the performance and competitiveness of the numerous enterprises involved in the supply chain. There has been a lot of empirical research in recent years to suggest that the successful deployment of procurement practices can increase organizational performance among firms (Bag, 2012; Foerstl et al., 2013; Mokogi et al., 2015; Kipkemoi, 2017; Bag et al., 2020; Ambekar et al., 2020; Nkrumah et al. 2020). Meanwhile, existing studies have under-explored the interrelationship between contemporary procurement practices such as supplier selection, supplier relations and supplier development and competitive advantage. This study examined the impact of procurement practice on competitive advantage among SMEs in Ghana.

1.2 Problem Statement

Despite several benefits of SMEs in Ghana's economy, the performance of firms in the domestic supply chain among SMEs in sub-Saharan Africa, especially, Ghana has been facing a myriad mainly due to lack of robust procurement practices resulting in slow growth of performance in this industry (Memia, 2018). Procurement is an important phenomenon that firms and

organizations cannot do away with. In Ghana, SMEs seem to implement few of these practices such as outsourcing, information technology systems and lean practices (Almutairi & Riddle, 2018; Cooper, 2017; Shale, 2015) leaving out other contemporary practices like supplier selection, supplier relations and supplier development (Marshall, 2015; Zhu et al., 2016; Das, 2018) which may add value and improve the competitiveness of SMEs. Due to little attention paid to these practices by professionals and academicians, Moenga (2016) argued that organisations in the supply chain continue to appreciate procurement, but putting into practice is a myriad. The essence of procurement practices and its implementation in Ghana's SME sector has not been adequately realized and underestimated. The outcome is very devastating to the SME industry and the total economy of the country as a whole (Otchere et al., 2013).

Furthermore, various research studies conducted by Gunasekaran et al. (2017), Abd Aziz and Samad (2016), and Chen (2018) in the context of competitive advantage (CA) in supply chain management and logistics. Gunasekaran et al. (2017), focused on the use of information technology in achieving CA, employing a systematic review methodology to evaluate the relationship between information technology and CA. Abd Aziz and Samad(2016), on the other hand, aimed to assess the impact of innovation on CA in Small and Medium-sized Enterprises (SMEs) in the food manufacturing sector, considering the moderating role of firm age on the relationship between innovation and CA. Chen(2018) delved into designing and testing a framework to evaluate the effect of supply chain agility on innovation, examining how information technology integration and trust in supply chain members contribute to innovation and subsequently promote a firm's CA.

Despite the growth in procurement practice discourse, literature doubts the direct impact of contemporary procurement practices in achieving competitive advantage (Thrulogachantar and Zailani, 2011). The current-day purchasing practices focus on supplier selection, supplier relations and supplier development to improve firm performance.

A study conducted by Awino (2011) indicated that lack of establishment of effective supplier relationship management contributes to 61% of losses made in procurement bids. Many procurement audits especially in Sub Sahara Africa revealed huge losses through irregular procurements. Earlier studies have also indicated inefficiencies in procurement processes in SSA (Martin et al., 2013; Oromo and Mwangangi, 2017). This raises questions on the level of performance of procurement, especially in private sector organizations in SSA, of which Ghana is no exception. Though the concept of the supplier-buyer relationship is not new, existing literature has largely examined the role of the supplier-buyer relationship in advanced economies (Benton and Maloni, 2005; Kataike et al., 2019; Awan and Khan, 2021; Lu et al., 2021; Mallet et al., 2022; Glavee-Geo et al., 2022). A literature review conducted by the researcher shows large concentration of existing studies (Mofokeng and Luke, 2014; Patrucco et al., 2016; Kakwezi and Nyeko, 2019; Changelima et al., 2020) on barriers in procurement processes while few (ie. Blind et al., 2020) focused drivers of companies' success in public procurement. This defines a huge gap that need to be explored as the concept of procurement practice though recognized as a critical driver of organizational competitiveness and enhancing service delivery, the concept is under-explored in academic literature, especially in Sub-Saharan Africa, a developing region where a lot of procurement is done in the effort to provide products and services.

Although procurement practices have been acknowledged in existing studies, the essay highlights that the competitive advantage consequences of these practices in highly uncertain environments, particularly within Ghanaian Small and Medium-sized Enterprises (SMEs), have not been thoroughly explored. Additionally, there is a lack of understanding regarding how procurement practices influence competitive advantage among SMEs, and there is limited information on how supplier development analysis impacts the activities of procurement practitioners and other stakeholders within SMEs. In response to these gaps, the essay proposes the current study as an attempt to bridge contextual limitations by investigating how supplier development moderates the relationship between procurement practices and competitive advantage among SMEs from the Ghanaian perspective.

1.3 Objective of the Study

This study was conducted to examine the impact of procurement practices on competitive advantage; the moderating role of supplier development SMEs in Ghana. To achieve the purpose of the study, the research envisages;

1. To examine the influence of procurement practices on competitive advantage among SMEs.
2. To assess the extent to which supplier development affect competitive advantage among SMEs.
3. To evaluate the moderating role of supplier development on the link between procurement practices and competitive advantage among SMEs

1.4 Research Questions

In order to achieve the main objective of the study, the research seeks to answer the following:

1. What is the relationship between procurement practices and competitive advantage among SMEs?
2. What is the relationship between supplier development and competitive advantage among SMEs?
3. What is the moderating role of supplier development on the link between procurement practices and competitive advantage among SMEs

1.4 Methodology

The study employs a positivist research approach which will make use of a quantitative methodology. Again, the study uses both descriptive and explanatory research designs. Combining these two designs enabled the researcher to describe the study variables in the Ghanaian context and also explore the relationship among the variables at the aggregate level. The study population comprised all senior managers and owners of SMEs. A sample of 150 SMEs will be included in the study. After selecting the organization, the researcher will further use the purposive sampling method to select individuals that are directly involved in the subject under investigation (procurement managers and officers). The study conducted an extensive literature review to help to discover the academic writings supporting the relevance of the topic and the research hypotheses. Again, the study used primary source of data to validate the results produced in literature through field survey using questionnaires adopted from previously validated instruments. After the data collection, the primary data that has been gathered from the field will be vetted for accuracy and reliability. The questionnaires that have been adequately filled will be coded into excel for analysis. This study will employ two data analysis approaches i.e. descriptive and

inferential analysis using multivariate data analyzes such as Structural Equation Modelling (SEM) and factor analyzes in order to fulfil set objectives in chapter one. Descriptive analysis will be based on information provided by respondents concerning their organization (demographical data), which include profile of the organization and the respondents. The essence of the descriptive analysis is to test for normality and this included frequencies, percentages, means, skewness and kurtosis statistics. The motive of this analysis is to ensure that data gathered are suitable for covariance based-SEM analysis. It is done to check for missing data, outliers, and data distribution (Hair et al., 2017). Inferential analysis will be used to test the hypothesis in the study.

1.5 Significance of the Study

This study offers multiple contributions. Notwithstanding the numerous researches on procurement practices and competitive advantage is uncertain. Therefore, the researcher contends that, when the procurement practices are well managed, it will improve the firm performance which will translate into a competitive advantage. The study will also extend the knowledge of the model by the individual contribution of the procurement practices to competitive advantage. This expunction and operationalizing of the model will add to the existing body of knowledge on procurement and subsequently benefit the academic community.

The study will also contribute to theory building in procurement practices by investigating the relevance of Dynamic Capability Theory (DCT) and Relational View Theory (RVT) in describing the effects of PPs on CA. Past studies investigated Resource Base View (RBV) (Sundram et al., 2016; Bagheri et al., 2014), in explaining the relationship between procurement practices and organizational performance. Incorporating DCT and resource-based view (RBV) theory in this study is a considerable contribution to literature in the area of procurement management field.

These theories will be applied to explain the interrelationship between procurement practices and competitive advantage.

1.6 Scope/Limitation of the study

The study investigates the relationship between procurement practices and competitive advantage and the moderating role of supplier development among SMEs in Ghana. Although there are several dimensions of procurement practices, this study focuses on supplier selection, supplier relations as procurement practices (independent variables) and supplier development as moderating variable, which has not been adequately explored. Also, reviewed literature identified that supplier selection and supplier relations have not yet been tested within the SME setting. The study employed the Dynamic Capability Theory (DCT) and Relational View Theory from which the variables of the study are drawn.

The study has some limitations. Though prior studies recommend the use of single respondent in a study of this nature, however, in practice no single person controls or manages the entire SC, this study, therefore, is limited by using a single respondent.

1.7 Organization of the Thesis

The study is structured into five chapters. The Chapter One introduces the background to the study, the research problem, research objectives, research questions, justification or significance of the study, scope of the study, limitations of the research and overview of the research methodology. The Chapter Two, reviews relevant literatures related to social capital theory, innovation and firm performance. The literature review encompasses both theoretical and empirical sections. The various concepts about the study will also be reviewed in the Chapter Two. The Chapter Three elaborates on the research methodology. The chapter discusses the study design, population of the

study, sampling, data collection, data processing, data analysis and ethical consideration. The Chapter Four of the study present analyses the data and discuss the result. The Chapter Five summarizes the research result, make the necessary conclusions and recommend appropriate and feasible policy and managerial measures for improving procurement in Ghana.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter has six sections. They are conceptual review, theoretical review, empirical review, conceptual framework, hypothesis and literature table which are presented in this paper chronologically.

2.2 Conceptual Review

The conceptual review section contains the definitions, operationalization and how the variables have been used in this study. Under this section, there are two main variables (procurement practices and competitive advantage) to be operationalized.

2.2.1 Procurement Practices

Procurement practices (PP) have been noted to increase performance and CA. PP are managerial activities that are done to enhance performance of combined supply chain (Musasizi, 2019). PP is defined as actions undertaken by an organization to meet needs for goods, utilities and work in a way to attain (Iles and Ryall, 2016) high standards of performance. PP is also defined as the activities done within an organization to obtain products, goods and services from market supply to make sure business and production events are carried out successfully (Helmold and Terry, 2016). Brata et al. (2017) claim that PP is a broad range of activities carried out by SMEs to get products and services. PP is defined as actions taken to acquire commodities and products from outside sources (Van Weele and Van Raaij, 2014). Knowledge management, customer focus, information sharing, and strategic supplier partnerships were named as PP by Li et al. (2014). This

study will define PP as management actions carried out to improve performance and acquire goods and services (Musasizi, 2019).

2.2.1.1 Supplier Selection

Supplier selection is an important phase in supply chain management since it significantly affects how successfully and efficiently a corporation performs its operations (Chai and Ngai, 2020). Discovering and evaluating potential suppliers in light of a variety of criteria is necessary to identify the finest and most reliable partnerships for purchasing and sourcing activities. A philosophical review of the process offers comprehensive understanding of the key concepts, theories, and numerous impacts in supplier selection (Stevi et al., 2020). The primary objective of the supplier selection process is to identify suppliers that can meet the organization's specific requirements in terms of quality, affordability, availability, and support (Taherdoost and Brard, 2019). A variety of theoretical models and frameworks have been developed to aid with supplier selection. The need of weighing both quantitative and qualitative factors while evaluating potential suppliers is emphasized by these paradigms (Cavalcante et al., 2019).

One widely used paradigm for choosing suppliers is Total Cost of Ownership (TCO). In addition to the amount paid for the product or service in issue, total cost of ownership (TCO) covers the whole cost of the entire acquisition process, including shipping, distribution, quality standards, and after-sale support (Chen et al., 2020). This concept emphasizes that the lowest purchase price does not necessarily equate to the lowest overall cost and calls on businesses to thoroughly investigate providers. An important aspect of the procurement process is evaluating and monitoring the efficacy of the providers (Haeri and Rezaei, 2019). This requires grading suppliers based on a variety of criteria, such as their level of financial stability, quality control systems,

manufacturing capacity, technical proficiency, responsiveness, and environmental policies. Using tools like the Scorecard and Key Performance Indicators (KPIs), businesses may set objective standards and metrics to assess performance results (Hosseini et al., 2019).

The identification of hazards is a crucial consideration when selecting a supplier. Any risks associated with suppliers, such as supply chain disruptions, quality issues, ethical quandaries, and regulatory obligations, must be identified and evaluated by businesses (Tirkolaee et al., 2020). Utilizing the concept of threat assessment and countermeasures, businesses may identify and manage risks related to suppliers. Cultural and ethical factors may have a significant impact on the choice of suppliers. Companies are increasingly taking into account a supplier's knowledge and improvement, moral beliefs, and socially responsible practices when making sourcing decisions. According to Gupta et al. (2019), this entails assessing suppliers' adherence to moral conduct standards, inclusive and diverse cultures, equal employment opportunities, and sustainability pledges.

A constructivist supplier selection paradigm generally provides a viewpoint on the most critical ideas, concepts, and elements involved in this crucial process. It highlights the need of taking into account a variety of factors, including total cost of ownership, supplier evaluation and performance monitoring, risk reduction, and ethical and moral issues. By understanding and putting these ideas into practice, businesses may improve their supplier selection processes, streamline the functioning of their supply chains, and finally raise their overall profitability (alk, 2021).

2.2.1.2 Supplier Relationship

Managing supplier relationships, which is an essential part of supply chain management, is focused on creating and maintaining successful relationships with suppliers (Sharma et al., 2022). A supply

chain-focused project can help you gain the knowledge you need to comprehend the fundamental concepts, philosophies, and factors that influence the patterns and outcomes of these interactions.

One of the main objectives of managing supplier relations is to create long-lasting relationships with significant suppliers. Companies try to build relationships based on open communication, shared values, and trust (McMaster et al., 2020). As a result, better communication, information sharing, and collaborative problem-solving increase the supply chain's effectiveness. Managing supplier relationships is supported by theories from several domains. The agency costs accounting theory recommends that organizations form long-term relationships in order to reduce the costs and risks associated with finding and switching suppliers (Schmidt and Wagner, 2019). Resources' interdependence and power fluctuations, in accordance with the concept of resource reliance, influence supplier interactions (Cavalcante et al., 2019).

The primary goals of supplier relationship management strategies are the creation and use of processes that promote collaboration and value creation. These strategies include effective communication, cooperative scheduling and forecasting, vendor efforts, effectiveness assessment and evaluation, and others (Nasiri et al., 2020). The examination examines a number of strategies and tools that companies may employ to strengthen their supplier relationships. Good supplier relationship management has several benefits. Improved quality, shorter lead times, operational opportunities, and greater creativity are all advantages for businesses that actively manage their supplier network. According to research by Mohammed et al. (2019), strong strategic connections may save costs, enhance risk management, and boost customer satisfaction.

The benefits of effectively managing supplier relationships are numerous. Businesses that actively manage their supplier base get better quality, shorter lead times, operational possibilities, and

greater innovation. Strong strategic connections have been demonstrated to raise client happiness, enhance risk management, and save expenses (Mohammed et al., 2019).

In conclusion, a study paradigm for managing supplier relationships provides comprehensive understanding of the key concepts, ideologies, and factors that influence the vitality and outcomes of supplier partnerships (Alzoubi and Yanamandra, 2020). It highlights the value of cooperation, mutual respect, and gain for both parties in forging enduring bonds. By understanding and putting effective cooperation with suppliers approaches into practice, businesses may improve the efficiency of their supply chains, reduce costs, and strengthen their market position (Munir et al., 2020).

2.2.1.3 Order Processing

An important phase in the process of managing the supply chain is order processing, which is the methodical management of customer orders from receipt through execution (Siarohin et al., 2019). A variety of duties are included in it, including order entry, confirmation, allocation, choosing, packaging, and shipping. An in-depth understanding of the fundamental elements, challenges, and methods of order processing is provided by a constructivist paradigm (Townsend, 2021). The importance of order processing in meeting customer requests and ensuring prompt product delivery is discussed in the article. It is aware that good order processing directly affects customer satisfaction, organizational performance, and overall business profitability. Relationships with clients, lean manufacturing, and other conceptual frameworks all assist the metacognitive awareness of processing orders (Xu et al., 2019).

The process for processing orders involves a number of processes beginning with the initial receipt of the customer order (Alalwan, 2020). The evaluation examines the significance of properly and

promptly entering orders, which requires gathering all pertinent data, verifying it, and addressing any potential discrepancies (Soto-Acosta, P., 2020). It examines order entry's challenges, such as delays, insufficient information, and order input errors. Order authentication is a critical step in the online reservation process since it guarantees that the order complies with all pertinent requirements and standards. According to the study's findings Elmouatamid et al. (2020), indicated that order verification processes including credit checks, product existence checks, and pricing confirmation are extremely important. It examines how to speed up order verification to decrease errors, improve delivery efficiency, and accelerate processing times. Allocating inventories or other resources to orders includes carrying out this process. The study examined a number of resource distribution methods, including dynamic allocation, first-come, first-served deployment, and priority-based deployment. It discusses the challenges of inventory distribution, such as limited accessibility, overstocks, and competing needs, and makes recommendations on how to choose wisely (Agha et al., 2020).

Picking, packing, and shipping are essential phases in order processing to guarantee that client things are appropriately constructed and delivered on time (Dodge et al., 2020). The study examines various picking methods, such as batch picking and area picking, as well as strategies for efficient packing and transportation, including branding, package innovation, and logistics companies. It underlines the need of order monitoring and dispatch monitoring for effective order management (Reeves et al., 2020). Order processing problems including refunds, order suspensions, and delayed order fulfillment are all covered in the research. Some of the methods for improving transaction processing efficiency that are described in this chapter include automated testing, system integration, and transaction processing management practices. It

emphasizes how leveraging computer networks, order business applications, and real information processing may increase order processing performance (Purwins et al., 2019).

In conclusion, a constructivist paradigm for order processing clarifies its key elements, challenges, and potential solutions. The success of order processing is a key factor in determining customer satisfaction, operational excellence, and overall corporate performance. Businesses may enhance order processing and strengthen their competitive position by streamlining order input, confirmation, assignment, picking, packaging, and shipping processes (Chang et al., 2019).

2.2.1.4 Supplier Evaluation & Appraisal

Vendor selection and evaluations are crucial to provide logistical services since businesses depend on their suppliers to generate goods and products that satisfy their demands for performance, cost, and delivery (Dobos and Vörösmarty, 2021). A conceptual study of supplier evaluation and appraising may provide in-depth understanding of the key elements, methodologies, challenges, and benefits of assessing performance results (Ramakrishnan and Chakraborty, 2020). The report emphasizes how important it is to evaluate and rate suppliers in order to build a reliable and enduring supplier base. It recognizes that effective supplier evaluation helps organizations to identify and select the finest suppliers, stay informed of their accomplishments, and make decisions about whether to continue working with them or part ways with them based on that information. Managing vendor relationships and thorough quality assurance are two theoretical methods that promote the critical thinking skills of supplier assessment and appraisal (Chauhan et al., 2020).

Quality, price, delivery, availability, and economic stability are just a few of the criteria used to assess a supplier's abilities (Wachiuri, E.W., 2019). The investigation looks at several assessment

criteria and indicators, including product quality, on-time delivery, lead time, pricing, customer service, regulatory and standard conformance, that organizations use to evaluate the accomplishments of their suppliers. It is covered how to ensure that evaluation criteria are in line with the goals and objectives of the firm as well as the challenges of generating measurable assessment criteria (Zheng et al., 2022). The evaluation of a company's financial performance is a continuous process that calls for continuing monitoring and comparison of the supplier's efficiency to establish benchmarks. The research examines several methods and tools, such as supplier performance measures, effectiveness monitors, and recurrent supplier audits, for assessing suppliers. The benefits of supplier assessment are discussed, including the ability to identify areas for improvement, support continuing sourcing plans, and promote supplier collaboration and innovation (Yazdani et al., 2020).

Finally, a conceptual model of supplier evaluation and appraisal provides information on its key elements, strategies, challenges, and benefits. Effective supplier evaluation and appraising are essential for businesses to identify, analyze, and improve suppliers' efficiency in order to increase the effectiveness and efficiency of their whole supply chain (Prior et al., 2022). By applying appropriate evaluation criteria, using trustworthy appraisal tools, and forming cooperative relationships with their vendors, businesses may improve the processes for choosing, developing, and managing the performance of their suppliers (Hawkins et al., 2020).

2.2.1.5 Clear Communication

Clear communication is essential for the efficient transfer of requirements and purchase orders (POs) (Correa et al., 2020). It requires effectively and completely sharing knowledge in order to ensure that everyone involved is aware of the needs and desires. Businesses that place a high

priority on interaction clarity may decrease errors, get rid of misunderstandings, and speed up operations. When communicating unambiguous needs, it's important to provide specific and clear understanding (Tredinnick and Laybats, 2020). This entails organizing the specific details, such as product details, quantity, quality standards, delivery dates, and any other relevant information. Clear specifications eliminate room for subjectivity, which reduces the likelihood of errors or disagreements (Kassis et al., 2019).

In order to develop good communication while delivering POs, the following important considerations must be made: POs should contain all pertinent information on the acquisition, including the terms and conditions, quantities, unit pricing, fee schedules, transportation requirements, and any other relevant details (Hildenbrand, 2022). By providing a complete overview, both the client and the supplier may have a clear understanding of the business. Use a consistent and well-organized structure for POs to guarantee clarity. Add headings and divisions with clear labels to categorize different types of content. This helps the receiver identify and grasp the important information quickly, minimizing misinterpretation or neglect (Adeniran, 2022).

When delivering specifications or buy orders, it's important to use language that the recipient can understand. Avoid using any technical jargon or business-specific words unless absolutely necessary. It is feasible to ensure that everyone involved in the process will grasp the information without any difficulty by employing this method (Assenmacher et al., 2021). Prior to mailing, thoroughly review specifications or orders to ensure that they are precise and complete. Make sure to double-check everything, including the precise goods, quantities, pricing, and any special instructions. Checking the statement's accuracy before submitting it reduces the possibility of errors and potential hitches in the buying process (Patnaik and Mohanty, 2019).

The channels of contact between the provider and the buyer should be clearly stated. Ask both stakeholders to provide clarification if any part of the specs or POs is unclear so that it may be understood. This proactive approach promotes effective communication, prevents misunderstandings, and improves corporate operations (Hyland-Wood et al., 2021). Utilize technology to improve the clarity of conveyed requirements and purchase orders. Electronic technologies, including enterprise resource planning (ERP) software, aid in speeding up the purchasing process by expediting data entry, creating consistent PO forms, and providing adequate description (Wilkinson and Little, 2021). Additionally, modern forms of communication like email or specialized shopping websites might assist efficient and verified information exchanges (Wakeham, 2022).

In general, clear communication while giving specifications and POs is essential for successful business operations. By providing clear, thorough, and reliable information, using a structured format, attempting to avoid using technical language, confirming accuracy, encouraging clear dialogue, and investing in research and development, businesses can improve comprehension, reduce errors, and encourage cooperation throughout the purchasing process (Singh and Malik, 2022).

2.2.1.6 Procurement Planning

Planning for purchases is a crucial phase in the process of developing an operational strategy for any firm (Siminică et al., 2020). It comprises selecting and acquiring the necessary goods, services, or jobs to properly and proficiently satisfy the needs of the organization. Understanding the fundamental elements, benefits, and challenges of procurement planning is essential to a thorough analysis of the topic. The initial step in the purchase planning process is identifying the company's

purchasing requirements (Freeman, 2022). This process involves keeping an eye on current inventory levels, evaluating project requirements, and taking into account factors including financial constraints, industry best practices, and delivery dates. By having a thorough understanding of the organization's goals, strategic sourcing makes it possible to guarantee that the necessary goods or services are obtained at the proper moment (Tenywa, 2021).

The process of arranging a purchase involves several different steps, including market research. Making informed decisions requires knowing more about potential suppliers, evaluating their skills, and investigating market trends (Tyagi, 2019). The selection of suppliers affects the performance, reliability, and overall performance of the acquisition process, making it a vital phase. The best suppliers may be picked by anticipating to be treated with respect and in accordance with aspects such as price, quality, reputation, and location. Effective procurement planning must include monitoring and forecasting costs associated with the purchase process (Barkatullah, 2022). It comprises calculating the necessary financial resources, such as the expenses associated with acquiring goods or services as well as any operational, processing, or other expenditures. By accurately predicting costs, businesses may allocate resources efficiently and avoid unplanned expenses (Phanindra, 2021). Creating buying plans based on the organization's objectives, the status of the market, and the specifics of each project is part of the process of planning purchases. Bulk purchases, long-term contracts, strategic alliances, or procurement methods that are beneficial to the environment are a few examples of such tactics. A successful procurement strategy adds value to the business and supports its goals (Laurense, 2020).

Every stage of procurement planning includes a risk analysis. It involves identifying potential risks and developing mitigation strategies to decrease their consequences. Risks that might arise during the procurement process include supply chain disruptions, supplier non-compliance, quality issues, and unexpected price adjustments (Gbasakollie, 2021). By foreseeing possible risks through contingencies, alternative sourcing options, or binding contracts, businesses may mitigate the consequences and ensure efficient procurement procedures. The creation of the product, management, and business partners are among the key stakeholders that must collaborate on the procurement strategy (Diallo, 2020). Early inclusion of stakeholders in the planning stage ensures their collaboration throughout the whole purchasing lifecycle and assists in tying procurement initiatives to the larger business strategy. Effective coordination, cooperation, and engagement of relevant stakeholders enhance collaborative supply chain results (Yahaya, 2020). Planning for purchases is an iterative process that requires ongoing assessment and improvement. The utilization of key metric analysis, stakeholder feedback, and ongoing supply chain flexibility monitoring helps to identify areas for improvement. By constantly reviewing and upgrading purchasing strategies and processes, businesses may increase productivity, reduce expenses, and maximize procurement results (Saeed, 2020).

By proactively planning their purchasing efforts, businesses may negotiate better prices, benefit from bulk orders, and discover cost-saving possibilities. Through procurement planning, workflow is streamlined, lead times are decreased, and delays are reduced, increasing the efficiency of purchasing jobs (Azam, 2019). Planning promotes communication, cooperation, and long-term partnerships with suppliers, creating linkages that are beneficial to both sides. By identifying and resolving potential risks, businesses may prevent disruptions, provide redundancy, and enforce

industry best practices. Effective procurement planning promotes transparency, moral conduct, and conformity to applicable laws and regulations (Gelgelu, 2019).

In conclusion, preparing for purchases must be a part of the planning process for firms. It requires identifying requirements, conducting market research, establishing budgets, developing strategies, assessing risks, cooperating, and continuously improving processes. Businesses that adopt procurement methods can improve efficiency, increase outcomes, and reduce costs (Takau, 2020).

2.2.1.7 Risk Minimization

Risk mitigation is a crucial component of effective risk management inside businesses (Arjovsky et al., 2019). It comprises identifying, assessing, and putting into practice defenses against potential dangers and negative impacts. An understanding of the fundamental principles, tactics, and benefits of risk minimization is necessary for a conceptual study of the topic. The first step in risk reduction is the identification and assessment of potential threats (Rosenfeld et al., 2020). This requires meticulously identifying and assessing risks that could have an effect on the business's operations, procedures, or initiatives. The likelihood of each risk and its impacts may be determined with the use of threat assessment techniques including hedging methods, credit risk management, and either statistical or qualitative analysis (Ahuja et al., 2020).

By adopting proactive measures, risk reduction aims to reduce or diminish the likelihood and consequences of risks. To avoid or lessen the occurrence of risks that have been identified, this may include putting in place preventative measures, such as dependable processes, norms, and laws (Huang et al., 2020). By reducing risks at their source, businesses may reduce the likelihood of undesirable outcomes. Risk reduction requires the creation and application of risk mitigation methods. These strategies are meant to mitigate the impact of any potential risks, should they show

up. Countermeasures include the use of risk transfer strategies, such as insurance or legally enforceable contracts, or efficient preventative strategies, such as redundancies, diversification, or the implementation of safety regulations. Risk mitigation is a continuous process that requires ongoing assessment and monitoring (Lugosi and Mendelson, 2019).

Systems must be put in place by businesses to monitor the effectiveness of damage reduction policies, identify emerging risks, and assess how the risk environment is changing (Berner et al., 2020). Through regular assessments and reviews, organizations are able to modify their risk reduction strategies as necessary. Effective risk reduction requires the involvement of stakeholders and open communication (O'Malley, 2019). Companies must make sure that relevant stakeholders are promptly and transparently informed about risks. Participating stakeholders in the risk management process helps to acquire useful data, win support, and cultivate a sense of shared responsibility for risk mitigation (Winterhalder, 2019).

Successful risk reduction puts businesses in a better position to seize opportunities and gain a competitive edge (Zimon and Madzk, 2020). By efficiently reducing risk, businesses may increase their efficacy, trustworthiness, and efficiency. A proactive and planned approach to managing risks inside of enterprises is risk minimization. Finding, analyzing, and implementing mitigation strategies can help businesses become more resilient, save costs, attract attention, engage stakeholders, and acquire a competitive edge (Perdomo et al., 2020).

2.2.1.8 Focusing on Total Cost of Ownership (TCO)

Total Cost of Ownership (TCO) is a strategic strategy used by firms to assess and manage the costs associated with acquiring products and amenities, maintaining and utilizing property, and owning and using property (Lizot et al., 2021). The total cost of ownership (TCO) takes into account both

the upfront cost and recurring costs paid during the asset's lifecycle. A philosophical analysis of focusing on TCO includes addressing its key components, benefits, and challenges (Jedliski and Sowa, 2021). TCO considers a variety of costs associated with an investment or a purchase decision. These factors often include the costs of buying the item, using it, paying for repairs and maintenance, and discarding it after its useful life. By accounting for all of these costs, businesses are able to fully understand the financial impact of their purchases or vendors (Hoek, 2020).

TCO is prioritized when a holistic strategy is used rather than only focusing on the upfront cost (Gray et al., 2020). From acquisition to disposal, it considers every phase of an asset's or purchase decision's lifecycle. This broader viewpoint helps businesses make sensible judgments by looking at the long-term financial repercussions and evaluating services based on their overall cost-effectiveness. By focusing on TCO, organizations may discover potential for cost savings (Lee et al., 2021). It enables them to evaluate numerous scenarios and calculate the item's lifetime costs. As a consequence of this analysis, one may choose assets or suppliers with reduced maintenance and operation costs, or employ energy-efficient practices that reduce long-term expenditures (Hagman, 2020).

TCO analysis is essential for selecting and assessing suppliers. It enables companies to assess costs for ongoing maintenance, warranties, dependability, and administration in addition to the price of the initial purchase (López-Ibarra et al., 2020). By considering these factors, businesses may choose suppliers that provide the best value and support their overall cost-saving objectives. The TCO emphasis includes evaluating and lowering risks associated with asset ownership or purchase decisions. Assessing potential risks that can have an impact on expenses, such as unplanned maintenance costs, market volatility, or legislation changes, is part of this process. By including

risk management into their TCO evaluation, businesses may create efficient risk mitigation strategies and make better informed decisions (Roda and Garetti, 2020).

2.2.1.9 Contract Management

A well-thought-out approach is needed in order to manage contracts successfully from the beginning through the clearance sale (Zhang et al., 2023). A few of the tasks include contract creation, negotiation, implementation, monitoring, and compliance. A thorough evaluation of contract management includes identifying its key components, benefits, and challenges (Changalima et al., 2023). The initial stage in contract management is the creation and negotiation of contracts. All parties must be fully informed of the agreements, rules, and obligations. Well-crafted and negotiated contracts will be in accordance with the organization's goals, eliminate risks, and lay the foundation for a successful long-term commercial relationship (Zheng, 2022).

After a contract is signed, contract management focuses on its control and implementation. This involves keeping track of important dates and accomplishments as well as assessing success in light of contract terms. With the use of effective contract management, businesses may ensure that all information is accurate and address any issues or deviations from the agreed-upon terms (Haidar, 2021). Controlling interactions with each party to the agreement is necessary to maintain a contract. In order to ensure that all parties are aware of and respect their contractual obligations, this requires maintaining contact channels, resolving conflicts, and fostering collaboration. Successful client management supports contract implementation and fosters long-term collaboration between stakeholders (van Triest, 2021).

Delivering the project includes both assessing the efficacy of the contract and identifying potential future adjustments. This requires assessing the effectiveness of the contract terms, closely examining significant performance indicators, and identifying opportunities to optimize the contract's relevance and outcomes (Rendon and Snider, 2019). Businesses that engage in continuing improvements can enhance their contracting processes and get better outcomes. The primary objective of procurement procedures is to identify and minimize risk factors associated with contracts (Ogembo and Muturi, 2019). This requires locating and regulating legal, financial, operational, and reputational risks. Contractual provisions, insurance, supervisory processes, or backup plans are examples of mitigation techniques. Effective risk control within the procurement processes reduces the possible negative effects of risks on the organization (Musiimenta, 2019). Planning a project ensures compliance with contractual obligations as well as statutory, policy, and regulatory requirements. This process includes duties for reporting, contract condition monitoring, and legal and regulatory compliance. It is essential to accurately record contractual activities, revisions, and communication for honest representation, audits, and potential legal issues (Lee et al., 2019).

By following contractual terms and regulatory requirements, good contract management lowers the risk of non-compliance and the associated penalty (Davis and Rhodes, 2020). By effectively applying compliance with the conditions and preserving relationships, businesses may improve performance, reach project goals, and deliver superior outcomes. Senior management's support in detecting and reducing contract-related risks has reduced the corporation's exposure to potential liabilities and legal concerns (Bolhassan et al., 2022). Effective contract management strategies increase resource allocation, streamline processes, and reduce administrative difficulties. This might lead to decreased costs and enhanced operational excellence. Effective contract

administration strengthens stakeholder participation, trust, and openness, which fosters stronger and more successful partnerships (Salleh et al., 2020).

2.2.2 Competitive Advantage

Performance improves when there is a competitive advantage (CA) (De Guimaraes et al., 2016). CA occurs when a company offers a service, product, or item that other market consumers believe to be superior to the goods and services offered by its rivals (Chen, 2018). In order to be more competitive than other businesses, SMEs must be able to cut costs and create unique goods and services (Porter, 2011). According to De Guimaraes et al. (2016), CA is also described as actions and managerial decisions that boost an organization's performance in comparison to its rivals. When rivals cannot copy or reproduce their goods, SMEs are considered to have CA (Chen, 2018). The capacity of SMEs to cut costs, create unique goods, and demonstrate a better level of competitiveness in comparison to other businesses is defined as CA in this research (Porter, 2011). According to Peterson, (2021) competitive advantage in procurement practices are achieved in the following ways;

1. Reduced total cost across the value chain: Delivering value is a procurement organization's main objective. By acquiring materials and services at the lowest possible cost, a successful procurement department reduces operational expenses. Using the best procurement procedures enables the company to benefit from warranties and/or discounts that are frequently overlooked or improperly managed. An efficient procurement process encourages complete transparency into an organization's spending for all purchasing activity, which enables you to lower procurement costs, strengthen ties with stakeholders, and monitor purchasing trends to generate long-term financial gains. One can increase the cost-competitiveness of their items after costs are under control.

2. Greater efficiency: The primary goal of all sourcing and procurement activities is to achieve a competitive advantage by making the best possible use of the external market and suppliers. Every item or service sourced should advance competitive positioning, whether directly or indirectly. When a business has an efficient procurement process, procurement may streamline operations, encourage teamwork, and identify high- and low-performing suppliers. A business may benefit from economies of scale thanks to an effective procurement process, which lowers costs and boosts production, giving it a competitive edge.

3. Embrace innovation: In order to obtain a competitive edge, procurement professionals are today expected to be inventive in addition to having the skills essential to provide cost reductions, meet social responsibility goals, manage supplier relationships, and manage risk. Because 70% to 80% of the cost of a product or service is established during the design or specification phase, which directly affects the organization's competitive edge in the marketplace. Thus, procurement can contribute to innovation during the product development phase.

4. Mitigate supplier risk: This is important. Events related to supplier risk can occur in four categories: financial, operational, compliance, and strategy. Risk avoidance, risk reduction, and risk sharing are all parts of risk mitigation, which should be ongoing and ever-evolving in order to manage all the risks connected to the companies' past, present, and future actions. An efficient procurement procedure must include a long-term approach to detecting, evaluating, and resolving supplier concerns. The outcomes can have an influence on an organization's capacity to compete when a lack of readiness in risk management does not match the pattern of a company's possible vulnerabilities.

5. Support supply chain resiliency: A procurement process should provide contingency plans and remedies for unforeseen circumstances including economic turbulence, labor market volatility, and natural calamities. Due to difficulties, procurement departments have had to change their strategy for controlling supply and cash flow interruptions while continuing to serve their stakeholders.

2.2.3 Supplier Development

Supplier participation is the process of working directly with rivals to improve their capabilities, performances, and significant approach to the distribution network (Subramaniam et al., 2020). It involves taking a calculated approach to forging enduring relationships with suppliers and enhancing their ability to meet the needs and specifications that the company has. A conceptual analysis of the subject can help one gain a complete understanding of the objectives, strategies, and outcomes of supplier development (Jharkharia and Das, 2019). The fundamental objective of supplier assessment is to improve suppliers' capabilities and performance so they can effectively meet corporate expectations. It recognizes that supply chain collaboration has a direct impact on the efficiency of the distribution network as a whole. Through supporting supplier economic growth, corporations want to improve the quality and efficiency of their distribution networks, reduce costs, and promote innovation (Govindan et al., 2021).

Conceptual frameworks like the resource-based approach and the social exchange theory assist supplier development (Parkouhi et al., 2019). The strategic relevance of supplier assets and expertise in gaining an advantage over rivals is heavily emphasized from a resource-based approach. The social exchange theory emphasizes the mutual benefits and cooperation that exist in supplier-buyer relationships, where supplier development is a tactic for creating income for both parties. Approaches for supplier development include a wide range of activities aimed at increasing

the capacity and effectiveness of suppliers. These strategies could include providing guidance and technical assistance, revealing best practices, facilitating knowledge flow, and promoting collective problem-solving. The investigation looks at a number of supplier development strategies, such as joint improvement initiatives and systems for supplier accreditation (Adesanya et al., 2020).

Having effective procurement and marketing processes has several advantages. Strong supplier capabilities may lead to better goods or services, shorter lead times, more dependable deliveries, and more responsiveness to changing market demands (Wu et al., 2019). Additionally, supplier development fosters enduring relationships, mutual respect, and commitment between suppliers and buyers, which leads to additional acquisitions, mergers, and win-win results. A successful supply chain growth is strongly dependent on organizational factors, such as support from senior management, resource allocation, and internal cooperation. The evaluation examines the relevance of assets to the organization, institutional congruence, and effective modes of communication with the aim of starting and maintaining supplier training programs (Mina et al., 2021).

Ethical concerns are essential to supplier growth (Giannakis et al., 2020). Businesses must uphold fairness, transparency, and moral conduct in their interactions with suppliers. The study examines the impact of supply chain supervision, compliance with rules and regulations, and ethical sourcing on efforts to find new suppliers (Rahayu and Ardi, 2020). In conclusion, a theoretical perspective on supplier development provides valuable data on its objectives, strategies, and outcomes. By actively supporting their growth, businesses may improve supplier performance, create supply chain connections, and enhance supplier capabilities. Successful supplier development initiatives

increase a company's competitiveness, enhance the efficiency of its supply chain, and foster long-lasting relationships with its suppliers (Taherdoost and Brard, 2019).

2.3 Theoretical Review

2.3.1 Resource-Based View Theory

Wernerfelt introduced the resource-based view (RBV) idea in 1984. In order to boost a company's profits, the idea concentrated on its resources, distribution, and development (Fahy, 2000). Each and every SME has both tangible and intangible resources (Saeidi et al., 2019). According to Mahoney and Pandian (1992), resources may be both tangible (financial assets, physical assets) and intangible (management, practices, leadership, a favorable social reputation, market adaptability, and human resource capabilities). (Hart, 1995) said that while rivals may quickly acquire tangible resources, they only provide a business with a transitory competitive edge in the market. On the other hand, since intangible resources are acquired via expertise, rivals find it difficult to acquire them. According to Barney (1991), if resources cannot be replaced, transferred, or imitated, they provide CA and allow SMEs to preserve their competitive advantage. Additionally, when PP is used and implemented, SMEs profit, and other businesses cannot have such advantages (Saeidi et al., 2019). RBV theory states that SMEs may achieve CA by effectively utilizing and deploying PP as intangible resources. SMEs need effective and efficient PP to boost CA and outperform their rivals (Younis et al., 2016). Additionally, SMEs are better equipped to handle risks if they are more aware of them than their rivals are (Saeidi et al., 2019). According to Russo and Fout (1997), a company may outperform its rivals if it implements the right PP. Therefore, PP can benefit CA by fostering more competition (Wijethilake, 2017). The theoretical framework for this study is provided by the theoretical lenses (RBV) that have been reviewed.

2.3.2 Dynamic Capability Perspective

The Dynamic Capability Perspective (DCP) is frequently used to describe how businesses in competition function differently from one another (Chen 2018). According to Vahlne and Johanson (2013), dynamic capability is the ability of SMEs to integrate, develop, renew, acclimatize, and reconfigure their resources in response to dynamism in the changing environment. According to the DCP hypothesis (Teece, 2007), SMEs accumulate CA over time. According to Salvato and Rerup (2011), dynamic capability is a high-level standard routine that is used to modify capabilities and operational procedures in order to build unique A number of academics have proposed that SMEs' capabilities might be understood in a hierarchical manner, with a higher order competence emerging from a series of lower order capabilities (Kraaijenbrink et al., 2010). Agility and creativity are these. According to Swafford et al. (2008), agility is a type of operational competence that refers to SMEs' ability to carry out operational events in conjunction with channel partners in order to quickly adapt to or respond to changes in the market. Innovativeness is the ability of SMEs to develop novel ideas (Hult et al., 2004), introduce new processes and products (Azadegan and Dooley, 2010), provide quick customer feedback (Tavani et al., 2013), increase capacity to outperform competition (Porter, 2011), and foster customer satisfaction (Simon and Yaya, 2012). According to Chen (2018), innovation and agility are both higher order characteristics that allow SMEs to take use of already-existing lower order capabilities. Therefore, according to recent research, PP may be viewed as a lower order capacity that aids SMEs in developing higher order capabilities like agility and creativity as well as dynamism in product manufacturing, all of which are necessary for CA (Chen, 2018). According to DCP, this study suggests that by using PP to obtain higher order skills, PP has a good influence on CA.

2.4 Empirical Review

This section focuses on related studies on PP and CA.

Saeidi et al. (2019) performed a study in order to determine the influence of enterprise risk management on CA and the moderating impact of information technology dimensions including information technology structure and information technology strategy. To conduct the study, the researchers used a quantitative research approach. Financial institutions in Iran conducted the study. Participants in the study were surveyed to gather data. Enterprise risk management is favorably correlated with CA, according to the data. The results also demonstrated that the link between enterprise risk management and CA was moderated by information technology structure and strategy and had an effect on CA. Future study should focus more on corporate risk management in underdeveloped countries, the researchers advised. Chen (2018) performed research to build and test a framework to assess the impact of supply chain agility on innovation and how it promotes the CA of a business. The study also looked at how innovation and trust in supply chain members are obtained through information technology integration. The study was conducted using a quantitative research methodology. The investigation was conducted in Taiwan's manufacturing firms. Chen selected a sample of the firms' senior personnel and gathered information from them. The findings indicated that innovation and supply chain agility are supported by confidence in supply chain participants and information technology integration, which also has an impact on a firm's CA. The researcher suggested that the study be conducted in several other countries.

Bag et al. (2020) did research to look at the relationship between digital transformation and procurement 4.0 and how it affects the desire to improve the procurement process in the circular economy. To conduct the study, the researchers used a quantitative research methodology. South

Africa was the location of the study. The findings demonstrated that the intents of a buyer are impacted by procurement 4.0, which improves business operations. Future study should be done, according to the researchers' recommendations, to determine how to evaluate and quantify production planning in the 14.0 age.

Abd Aziz and Samad, (2016) also investigated CA. The goal of the study was to assess how innovation affects CA in SMEs that produce foods and how age of the business affects the link between innovation and CA. To conduct the study, the researchers used a quantitative research approach. The study was conducted in Malaysia. For the purpose of obtaining data, a random sample of SMEs in the food manufacturing industry was chosen. The findings demonstrated how innovation benefits CA. The findings also indicated that business age dampens the impact of innovative CA. The investigation should, according to the experts, be conducted in Malaysian sectors other than those that produce food.

Molina-Azorin et al. (2015) conducted a study to assess the relationship between environmental management, quality management, and CA desired by hotels. To conduct the study, the researchers used both a qualitative and a quantitative research approach. The study was conducted in Spain by the researchers. In-depth interviews were used to gain qualitative information, while questionnaires were used to collect quantitative information. The research results showed that environmental and quality management enable CA to be improved in terms of both distinctiveness and costs. The researchers suggested that longitudinal studies be conducted on the topic as part of future research.

Bienhaus and Haddud (2018) conducted study to look at how digitization affects procurement and its function in supply chain management. The study was conducted by the researchers using a

quantitative research approach. Europe was the location of the research. 414 people were included in the research sample. Primary data from the individuals were gathered through questionnaires. According to the research, digitalization has an impact on procurement. They suggested that further studies be conducted in other places.

Kwak et al. (2018) conducted study to examine the beneficial impact of supply chain innovation on management capability and how the capabilities will improve CA in South Korea. The study was conducted using a quantitative research methodology. For the study, the researchers used a sample of 174 businesses. Information was gathered via questionnaires. The findings shown that supply chain innovation has a favourable impact on all facets of risk management competence, which also has an impact on the promotion of CA. To improve the generalizability of the findings, the researchers advised using numerous nations in future studies.

Gunasekaran et al. (2017) carried out research on CA. The study looked at how information technology was used in supply chain management and logistics to achieve CA. In order to evaluate the association between information technology and CA, the researchers used a systematic review methodology. For the research, they only used works that were written in English. For the research, they used a total of 100 papers during a ten-year period. The results showed that CA is influenced by information technology. They suggested that future study on the use of information technology for supply chain advantage and logistics should include panel discussions.

Also, Saeidi et al. (2015) carried out a cross-sectional study on CA. The goal of the study was to investigate the mediating effects of reputation, customer happiness, and sustainable CA on the relationship between a firm's performance and corporate social responsibility. To conduct the study, the researchers used a quantitative research approach. The study was conducted in Iran. The

results showed that companies with greater CA perform better. Future studies should be conducted in other underdeveloped areas, the researchers advised.

Papadas et al. (2019) carried out a study to examine the relation between internal green and strategic marketing and company competitiveness. Papadas et al. conducted the investigation in Greece using quantitative techniques. 700 businesses were chosen for the study using a stratified sample approach. Participants in the study were surveyed to collect data. The research results showed that the internal green market has an impact on sustainable CA. Future study should be done, according to the researchers, on the elements that influence CA and their significance in comparison to tactical green marketing.

Leal Filho et al. (2019) conducted a study to examine the challenges and driving factors faced by institution of higher education in endorsing sustainable PP. To conduct the study, the researchers used a quantitative research approach. Participants in the study were surveyed to acquire data. The study's conclusions showed that sustainable purchasing practices (PP) at higher education institutions measure acceptable purchases that follow industry best practices, processes, laws, and standards.

Chan et al. (2018) conducted a study on PP. The aim of the study was to identify recent green PP in manufacturing companies that manufacture furniture. To conduct the study, the researchers used a quantitative research approach. The research was carried out in Malaysia. There were 118 participants in the research who were chosen at random. Data gathering involved the use of questionnaires. According to the findings, contemporary green PP in the furniture manufacturing sectors include ensuring that suppliers' sites are run safely and moving goods to facilities. Future research on the topic, according to the researchers, should be undertaken over a longer time span.

Musasizi (2019) conducted a study to evaluate the impact of PP on performance of local governments. To conduct the study, the researchers used a quantitative research approach. The research was carried out in Malaysia. There were 118 participants in the research who were chosen at random. Data gathering involved the use of questionnaires. According to the findings, contemporary green PP in the furniture manufacturing sectors include ensuring that suppliers' sites are run safely and moving goods to facilities. Future research on the topic, according to the researchers, should be undertaken over a longer time span.

Kilonzi and Mwikali (2022) conducted a study to determine the determinants affecting green PP adoption in energy sector. The study was carried out using both quantitative and qualitative research methods. Kenya served as the site of the study. They took a sample of 75 people from the Kenya Pipeline Company. The study found that technological adoption has an impact on green PP. Since their study was conducted in the private sector, the researchers advised that future research be conducted in the public sector.

Trigan et al. (2020) conducted a research on CA and purchasing strategy. The study's goal was to evaluate how top management commitment affected CA promotion through enterprise resource planning and buying strategy. To conduct the study, the researchers used a quantitative research approach. The study was conducted in Indonesia. The study's subjects were Indonesian industrial companies. For the study, the researchers used a sample of 49 manufacturing companies. The study's findings indicated that top management commitment has an impact on CA as well as enterprise resource planning. Additionally, CA is impacted by the integration of corporate resource planning and buying strategy. Additionally, Trigan et al. discovered that the integration of buying

strategy and enterprise resource planning mediates the impact of top management commitment on CA.

Luzzini and Ronchi (2016) conducted a survey on procurement (purchasing) strategy and performance. Their survey's objective was to assess how much the buying function contributes to improving corporate performance. For the survey, the researchers used quantitative methodologies. Ten countries participated in the poll. Information was gathered via questionnaires. The results demonstrated that buying habits had an advantageous impact on business success. Future study should evaluate the effects of purchasing status and habits on other performance characteristics using longitudinal datasets, the researchers said.

Walsh and Dodds (2017) conducted research on creating CA. The study's goal was to examine why hotels use environmental sustainability techniques and how doing so affects a hotel's capacity to remain financially viable. The study's quantitative design was used by Walsh and Dodds. The study was conducted in North America. The study used 276 hotel executives as its sample size. They discovered that the use of strategic CA had no discernible influence on environmental practices. They recommended that bigger sample sizes be used in future studies and that the research be conducted in other organizations.

Renukappa et al. (2015) conducted a study to examine the impediments and driving factors related with the successful combination of sustainable procurement initiatives into construction business frameworks that exists. The study was carried out using a mixed-methods research approach. The investigation was carried out in the UK's construction industry. 53 participants' information was acquired through questionnaires, while 17 officials' qualitative responses were obtained through interviews. They discovered that CA is influenced by sustainable procurement. Future study

should be done, according to the experts' advice, to explore the intricate problems associated with implementing procurement programs that are sustainable both inside and beyond the range of possible business frameworks.

2.5 Conceptual Framework

The key pillars of the theoretical models of Resource-Based View and Dynamic Capabilities Perspective were employed (see Figure 2.1). The conceptual framework below depicts the direct relation between PP and CA. Tarigan et al. (2020) stated that appropriate purchasing strategy influence CA. According to Musasizi (2019), PP influences performance of SMEs. In this study, two types of variables were employed thus procurement practices being independent and competitive advantage being the dependent variable. It is proposed that PP will impact CA positively in SMEs. PP are managerial activities that are done to enhance performance (Musasizi, 2019) and obtain products and services. Studies have shown that PP influence performance (Musasizi 2019; Luzzini and Ronchi, 2016). CA the ability of SMEs to reduce cost, design distinct products and services to show higher extent of competitiveness as compared to other firms (Porter, 2011). A study carried out by Papadas et al. (2019) to examine the relation between internal green and strategic marketing and company competitiveness found that internal green market influenced sustainable CA. Tarigan et al. in 2020 found that appropriate purchasing strategy influence CA. Hence, it is anticipated that PP will affect CA positively through supplier development in this study.

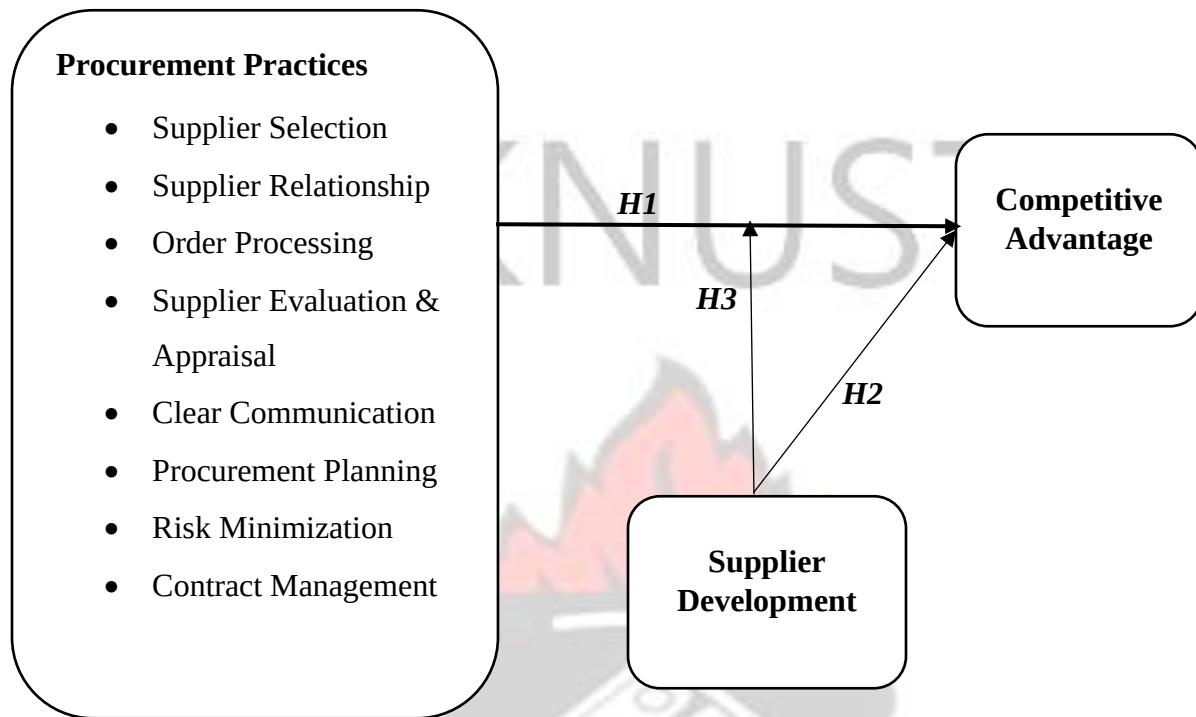


Figure 2.1 Conceptual framework

2.5.1 Procurement Practices and Competitive Advantage

Delivering value is the procurement function's main objective. By acquiring goods and services at the greatest price, you may save operational expenses when your procurement department is working efficiently. By managing discounts and warranties more effectively—or, worse, forgetting about them altogether your company may benefit from them. Numerous competitive benefits are given to your firm by having a clearly defined procurement procedure. It promotes greater efficiency in the delivery of products and services, fosters innovation, assists in controlling supplier risk, and ultimately boosts supply chain resiliency (Bledron, 2021). When the capable suppliers are evaluated in an appropriate manner before being selected, it contributes to the efficiency and responsiveness of the firm in question. Communication is very crucial when it comes to supplier-buyer relationship. To ensure effective communication and information flow,

there must be a conscious effort and a well-designed structure to for engaging with supplies to enable the firm eliminate variabilities that may arise. Increased cooperation and partnership benefit both parties. It is simpler for suppliers to expand their company with an existing customer than to go for a new one. Additionally, if you are a supplier's top client, they will be more likely to present you with their most recent advancements so you can maintain your competitiveness (Stephen, 2021). Based on the aforementioned, the current inquiry may make the following hypotheses:

H1: Procurement practices are expected to be positively related to competitive advantage.

2.5.2 Supplier Development and Competitive Advantage

Organizations may create a competitive edge by developing their suppliers. A new product for sale, a new, more efficient procedure, or the adoption of a new standards are some examples of how this may seem. Suppliers provide a substantial and frequently underutilized resource for cost-cutting, continuous improvement, and innovation. Companies may significantly improve their bottom lines by realizing this potential (Webb, 2017). Effective supplier development ensures consistent input supply, enhanced product quality, and lower prices for the goods and services of a buying organization (Ecel et al., 2013). According to Ochido (2013), fostering collaborative relationships allows businesses to gain a competitive advantage because they increase customer satisfaction by lowering costs, increasing access to new technologies, improving quality, and lowering risk. Given the foregoing, the current study could posit the following:

H2: Supplier development have a positive relationship with competitive advantage

2.5.3 Supplier Development as a Moderator

The goal of supplier development is to benefit both suppliers and customers. Supplier development strives to educate suppliers in a systematic manner to continue driving continuous improvement from the supplier's viewpoint, while from the customer's perspective it aims to lower costs, enhance quality, and improve delivery (Ahmed & Hendry, 2012). According to Wagner and Krause (2019), a buying company might assess its efforts to enhance the supplier by gauging how well they execute for their clients. Additionally, they cited the benefits of improved supplier skills, including better managerial ability, product development, and operations know-how, as well as performance gains in the form of cost, quality, and delivery performance. Successful supplier development may provide a company a competitive edge. The introduction of procurement processes and how they are maintained are also critical to the success of supplier development (Makumbila, 2017). As a result, this study posits that:

H3: Supplier development significantly moderates the relationship between procurement practices and competitive advantage.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This Chapter provides the methodology that was followed to address the research questions. The sections give the choices of methodologies and the justification for the choices. The chapter is organized under six key headings. The chapter starts with an introduction, followed by the research design and approach, study population, sample size, sampling technique, research instrumentation and data collection procedure, validity and reliability, and data analysis.

3.1 Research Design

The research design is the actual structure that indicates the time frame(s) in which data is collected, the type of study to be conducted, and how many groups are involved in the research study (Edmonds & Kennedy, 2012). The research design therefore serves as the roadmap that guides the researcher to achieve the research objectives and provide answers to the study's research questions. Research design according to Okesina (2020) has various components including the research purpose (descriptive, explanatory, exploratory or a combination of two or more purposes), research methods (quantitative, qualitative and mixed methods) and time horizon (cross-sectional or longitudinal). This study employed the survey method. The data collected was cross sectional, which means the author collected data at only one point in time. Zikmund et al. (2010) define survey as a research technique in which a sample is interviewed in some form or the behavior of respondents is observed and described in some way. The utilization of the quantitative technique was motivated by two distinct factors. Firstly, it ensures objectivity by removing the effect of the researchers' ideas on respondents' responses. Secondly, because of its structured methods.

Conditions for the collection and analysis of data were systematically arranged, with the aim of balancing the study's relevance to its objective and efficiency in procedures (Kothari, (2004).

The survey method was chosen for this study because the researcher intends to study how formal governance mechanism mediate the relationship between buyer dependence and supply chain coordination by collecting information from a non-partial sample of sachet and bottled water distributors through the use of a structured questionnaire. The study employed the cross-sectional survey design where deductive reasoning is applied to the quantitative data (Cohen, Manion, and Morrison, 2017). The survey design allows the collection of data from different units over a specific period. Since the study is conducted over a limited period, the cross-sectional survey is deemed more appropriate for examining the relationship between procurement practice and competitive advantage among SMEs in Ghana.

Considering the positivist approach used, the research design for the current study was explanatory as opposed to descriptive and exploratory. This is because the explanatory research design is characterised by hypotheses that predict the nature and direction of the relationship among the variables of study. While the descriptive describes the nature of procurement practice and competitive advantage among SMEs in Ghana. The explanatory research will also aid in examining the moderating role of supplier development in the relationship between procurement practice and competitive advantage among SMEs in Ghana. In addition, borrowing from Okesina (2020) the study is a cross-sectional one as opposed to longitudinal design since data was collected in a short space of time spanning one month.

3.2 Population of the Study

This section provides a description of the study population and the sample frame used in this study. Etikan, Musa and Alkassim (2016) defined population as the range of the instances, persons, or objects that are the focus of a study. Thus, the target population reflects the group or individuals the study intends to conclude about. Differently put, the target population consists of a diverse variety of persons from whom a sample should be drawn (Shamsuddin et al., 2017). The study's population of the study comprised owners, and managers of SMEs in Ghana. The sample frame refers to the list of individuals the researcher intends to collect the data from. Because owners, and managers of SMEs are many and the study cannot gather data from all, the study sets its sample frame to investigate the phenomena among owners, and managers of SMEs in Accra.

3.3 Sample and Sampling Techniques

The issue of sample and sampling technique has a long debate in the academic space, this is because the choice of sample and the procedure has serious consequences on the outcome of any scholarly research. According to Kothari (2012), the sample reflects the researcher's effort or strategy to determine the number of study participants who should be included in the sample. In obtaining the sample size in a given population, three main methods for estimating a sample size can be identified. Firstly, the sample size can be calculated by using formulas (Israel, 1992). Secondly the use of a published statistical table to estimate the sample size, for instance, the published statistical table of Krejcie and Morgan (1970) and Cohen et al. (2013). Lastly, a researcher can decide to utilize census methods by collecting data from the entire population which is known as the census. For this study, sample size determination will be established from Singh and Masuku (2014) formula of sample size determination. The choice of the Singh and Masuku

(2014) formula is justified by the fact that the actual population of SMEs is not known by the researcher. Hence the formula is given as

$$n = \frac{Z^2(P)(1 - P)}{C^2}$$

Where Z= the standard normal deviation set at a 95% confidence level

P=percentage picking a choice or response (50%)

C=Confidence interval

$$n = \frac{(1.96)^2(0.50)(1-0.50)}{0.05^2}$$

$$n=384.16$$

$$n \sim 384$$

Based on the formula, 384 managers of SMEs are drawn for the study. The processes used to choose a sample for a research endeavour are referred to as sampling techniques. Probability procedures and non-probability procedures are the two types of sampling procedures (Taherdoost, 2016). For this investigation, the convenience sampling technique will be used to select students who are available and ready to participate in the study.

3.4 Data Collection Tools/Procedure

A structured questionnaire will be used to source information from the respondents. This study dwells on the use of primary data that will be collected using a questionnaire. The questionnaire is designed into four sections. Section A sought data on respondent profile; section B sought data on procurement practices; section C sought to gather information on competitive advantage, whereas section D sought data on the moderating role of supplier development among SMEs.

In the survey, participants will be asked to choose a number from 1 to 5 that best represented their thoughts on each statement. The items used to measure the constructs are included in the appendix. Though the items were already validated and tested in previous studies, this study will also conduct different types of validity and reliability of the items to ensure the final results are reliable. To encourage participation, each questionnaire was accompanied by a cover note from the researcher clarifying the aim of the study as well as soliciting respondent involvement in the study; it as well assured the confidentiality of the selected participants and briefly introduces the research work.

3.5 Data Analysis/ Preparation Procedure

Data analysis is the process of using a systematic procedure to draw inferences from data gathered from the field as well as considering the various procedures that can be used to analyze the data (Churchill and Iacobucci, 2009). The researchers further suggest that the research design, kind of data and assumptions made in the research and concerns associated with the study will influence the suitability of a given technique. Data analysis may follow quantitative or qualitative procedure in scrutinizing the large volume of information obtained from the field. In the quantitative context, the procedure includes the use of statistical techniques to describe and examine variation in the quantitative measures. The quantitative approach emphasizes the use of either inferential or descriptive statistics (statistical techniques), to understand and establish relationships between constructs.

In this study Statistical Package for Social Sciences (SPSS) version 23 software will be utilized to conduct descriptive statistics and inferential statistics respectively. The data collected will be coded, cleaned, and prepared for analysis. The data will first be coded in Microsoft excel. In excel the data will be thoroughly checked to avoid possible data entry errors. After cleaning the data will

then be exported to SPSS. The data checks in SPSS include missing values, reliability, descriptive statistics, and test of assumptions for multivariate analysis.

To ensure external validity, participation in the study was purely voluntary. The selected participants were assured of the benefits of the study to the facility to ensure a minimum dropout rate. Both the content and the construct validity of this study were also ensured. The validity and reliability of a research study are two research criteria for consistency (Straus, 2017). An alpha coefficient of 0.70 is used as a cut-off point for assessing the internal consistency of the research item and scales to guarantee study reliability (Hair, Biasutti and Frate, 2017). To eliminate logical flaws and biases in the study, the researcher emphasizes the validity and reliability of the results. This was done by adopting all of the questions and conducting a pilot study using 10 respondents.



CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, AND DISCUSSION

4.1 Introduction

This section presents a summary of the information that was obtained in regard to the research questions that were asked for the study. A clear presentation is given of the demographic profile, descriptive statistics, regression analysis, and a discussion of the conclusions of the research.

4.2 Exploratory Data Analysis

First, the data were looked into. Experimentation with exploratory factor analysis was used to determine the data's reliability. SPSS was used to do it. The study examines common technique variation and the response rate in this article. The tests and interpretation of this fundamental data quality analysis are discussed in Sections 4.1.1, 4.1.2, and 4.1.3, respectively.

4.2.1 Response Rate

It is standard practice to report the percentage of the population that took the survey. By dividing the total number of surveys that were sent by the total number of responses, the percentage can be determined. Surveys with a response rate of at least 50% are uncommon. The information was collected between August 1, 2023, and August 13, 2023. The research was designed to include 384 participants in total. According to previous research (Sun et al. 2022; López, 2022; Lavidas et al, 2022), a response rate of 100 percent from a total of 384 questionnaires that were deemed relevant following evaluation is considered adequate for analysis.

Table 4.1: Data Response Rate

Distributed	Collected	Percentage of Usable
Response	384	100.0
Non-Response	0	0.0
Total	384	100.0

Source: Author's Construct (2023)

4.2.2 Test for Common Method Bias and Sampling Adequacy

Survey research must test for CMB in order to account for the possibility that relying on a single respondent can break the link between the dependent variable and predictors (Podsakoff and Organ, 1986; Bahrami et al., 2022). Consequently, incorrect assessments. Podsakoff et al. (2003) discovered CMB in social desirability or consistency. The Exploratory Factor analysis supported Harman's single-component method by demonstrating that a single factor could account for less than half of the variance. Principal component analysis was used to determine the cause of 55.7% of the variation.

Table 4.2: Test for Common Method Variance (CMV)

Component	Total	Initial Eight values		Extraction Sums of Squared Loadings		
		% of	Cumulative	% of	Cumulative	
		Variance	%	Total	Variance	%
1	20.598	55.671	55.671	20.598	55.671	55.671
2	2.204	5.957	61.628	2.204	5.957	61.628
3	1.196	3.231	64.860	1.196	3.231	64.860
4	1.124	3.038	67.897	1.124	3.038	67.897
5	.878	2.372	70.269			
6	.812	2.195	72.464			

7	.754	2.037	74.501
8	.708	1.915	76.416
9	.666	1.801	78.217
10	.582	1.572	79.789
11	.550	1.485	81.274
12	.504	1.363	82.637
13	.456	1.232	83.869
14	.414	1.118	84.987
15	.400	1.081	86.067
16	.385	1.040	87.108
17	.351	.948	88.055
18	.340	.919	88.975
19	.326	.881	89.855
20	.318	.860	90.715
21	.288	.779	91.494
22	.269	.728	92.222
23	.264	.713	92.935
24	.254	.686	93.621
25	.250	.677	94.297
26	.229	.619	94.917
27	.223	.602	95.519
28	.216	.584	96.102
29	.211	.571	96.674
30	.196	.529	97.203
31	.181	.489	97.692
32	.175	.474	98.165
33	.163	.441	98.607
34	.147	.399	99.005
35	.136	.369	99.374
36	.131	.355	99.729

37	.100	.271	100.000
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Extraction Method: Principal Component Analysis.

Source: Author's Construct (2023)

The KMO test and the Bartlett sphericity test were used to further assess the samples' accuracy. In light of the data in Table 4.3, the Kaiser-Meyer-Olkin Examining Sufficiency score was 96.6%, and Bartlett's test exhibited measurable importance ($X^2 = 12890.990$, df: 666, $p = 0.000$). This demonstrates that the sampling was carried out appropriately.

Table 4.3: KMO Test and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.966
Bartlett's Test of Sphericity	Approx. Chi-Square	12890.990
	df	666
	Sig.	.000

Source: Author's Construct (2023)

Table 4.4: Respondent's Profile

Variables	Categories	Frequency	Percent
Gender	Female	166	43.2
	Male	218	56.8
Age	25-35years	144	37.5
	36-45 years	169	44.0
	Above 45years	41	10.7
	Below 25 years	30	7.8
How long have you served in the current position	Less than 1 year	32	8.3
	1-5 years	167	43.5
	6-10years	140	36.5
	Above 10years	45	11.7
	JHS	1	.3

What is your highest level of education	SHS	14	3.6
	HND	95	24.7
	Undergraduate	165	43.0
	Masters	84	21.9
	PHD	13	3.4
	Professional/Vocational course	12	3.1
	Total	384	100

Source: Author's Construct (2023)

Table 4.4 revealed that 43.2% were females and 56.8% were from males. 37.5% were within 25 and 35 years old, 44% were within 36 and 45 years old, 10.7% were within over 45 years old, and 8.3% were below 25 years old. The table also look at the period the participants have served in the current position indicating 8.3% below 1 year, 43.5% between 1 – 5 years, 36.5% indicating 6 – 10 years, and 11.7% indicating more than 10 years. Finally, the result shows that 0.3% had a JHS level, 3.6% had an SHS level, 43.0% were undergraduate, 21.9% had a master's degree, 3.4% had PhD and 3.1% had Professional/Vocational courses.

4.3 Correlation Analysis

Data shown in Table 4.5 indicates that there are very significant correlations between the three variables of PP, CA, and SD ($r = 0.811$, $P < 0.05$; $r = 0.758$, $P < 0.05$; and $r = 0.780$, $P < 0.05$, respectively). For instance, a correlation value of 0.0 indicates that there is absolutely no link, 0.30 indicates that there is just a moderate correlation, and 0.70-0.90 indicates that there is a considerable association. There is a considerable relationship between all of the different factors.

Table 4.5: Correlation Analysis

Construct	PP	CA	SD
PP	1.000		
CA	.811**	1.000	
SD	.758**	.780**	1.000

** Correlation is significant at the 0.01 level (2-tailed).

Source: Author's Construct (2023)

4.4 Reliability Results

Cronbach's alpha for PP was 0.969, CA was 0.908, whereas that for SD was 0.932 (see Table 4.6 for details). The construct's alpha values are all over 0.6, which is the minimum acceptable number for survey research. Repeated measurements show that the created questionnaire is trustworthy and yields the same findings each time. A significance threshold of 0.6 is acceptable for survey research (Hair et al., 2014), but anything below 0.7 is often disregarded (Nunnally & Bernstein, 1994; Malhotra & Grover, 1998).

Table 4.6: Reliability Results

Construct	Number of Items	Cronbach's Alpha
PP	25	0.969
CA	5	0.908
SD	7	0.932

Source: Author's Construct (2023)

4.5 Effect of Procurement Practices on Competitive Advantage

The first goal is to assess PP influence on CA among SMEs. The research examined PP-CA relationships using linear regression. Tables 4.7–4.9 show regression findings. Table 4.7 presents the model summary, R-square (which indicates prediction accuracy), estimate error, and regression

analysis data. $R=0.811$ and $R\text{ Square}=0.658$ at 0.05. PP is projected to make up 65.8% of CA with an R^2 Square of 0.658. PP and CA connected positively (see Table 4.7).

Table 4.7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.811 ^a	.658	.657	.42582

a. Predictors: (Constant), PP

Source: Author's Construct (2023)

The probability value of 0.000 indicates the significance of the regression connection in predicting how PP will affect CA. At a 5% degree of importance, the F value was 734.141. See Table 4.8 for evidence of the model's overall significance.

Table 4.8: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	133.119	1	133.119	734.141	.000 ^a
	Residual	69.267	382	.181		
	Total	202.386	383			

a. Competitive Advantage (CA): Dependent Variable

b. Procurement Practices (PP): Predictors (Constant)

Source: Author's Construct (2023)

PP and CA are found to be significant in Table 4.9 ($B = 0.836$, $t = 27.095$, $P = 0.000$, and $\text{Sig} < 0.05$). Because the path coefficient was positive and the p-value for H1 was less than 0.05, PP had a positive effect on CA. PP improves CA. When PP increases by one unit, it is anticipated that CA will rise by 83.6%.

Table 4.9: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.706	.123		5.740	.000
	PP	.836	.031	.811	27.095	.000

a. Dependent Variable: CA

Source: Author's Construct (2023)

4.6 Effect of Supplier Development on Competitive Advantage

This research also examines how supplier development affect competitive advantage. Linear regression explored SD and CA. Tables 4.10–4.12 show regression findings. Table 4.10 shows the model summary, R, R-square, the estimate's error, and the regression analysis's number of observations. At 0.05, $R = 0.780$ and $R\text{ Square} = 0.608$. R^2 Square of 0.607 assumes SD makes up 60.8 percent of CA. Table 4.10 shows a positive association between SD and CA.

Table 4.10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780 ^a	.608	.607	.45563

a. Predictors: (Constant), SD

Source: Author's Construct (2023)

The probability value of 0.000 indicates the significance of the regression relationship in predicting how SD affects CA. The F was determined to be 592.910 at a significance level of 5%. This exhibits the meaning of the model in general as displayed in Table 4.11.

Table 4.11: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	123.085	1	123.085	592.910	.000 ^a
	Residual	79.301	382	.208		
	Total	202.386	383			

a. Competitive Advantage (CA): Dependent Variable

b. Supplier Development (SD): Predictors (Constant)

Source: Author's Construct (2023)

According to Table 4.12, SD has an effect on CA ($B = 0.735$; $t = 24.350$; $P = 0.000$; $\text{Sig} < 0.05$).

The path coefficient was positive and the p-value for H2 was less than 0.05, indicating that SD had a positive effect on CA. With SD, CA gets better. CA is anticipated to work on by 73.5% when SD goes up by one unit.

Table 4.12: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.077	.122		8.856	.000
	SD	.735	.030	.780	24.350	.000

a. Supplier Development (SD): Dependent Variable

Source: Author's Construct (2023)

4.7 Moderating Role of Supplier Development

This study's final goal is to examine how supplier development moderates PP-CA interactions. SD moderated PP and CA in a linear regression model. Tables 4.13–4.15 show regression results. Table 4.13 shows the model summary, the correlation coefficient (R), which measures the relationship's strength, the coefficient of the determinant (R-square), which calculates the

proportion of the model's total variation that can be attributed to the independent variable (a measure of the estimate's accuracy), the number of observations used in the regression analysis, and the estimate's standard error. Falk and Miller (1992) say that R^2 of 0.10 or greater is predictive. With 5% significance, $R = 0.825$ and $R^2 = 0.681$. If R^2 is 0.679, SD may explain 68.1% of PP and CA variation.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.825 ^b	.681	.679	.41176

a. Predictors: (Constant), PP × SD

Source: Author's Construct (2023)

A probability value of 0.000 shows the significance of the regression correlation in predicting how SD moderates the link between PP and CA. The F was determined to be 592.910 at a significance level of 5%. As can be seen in Table 4.14, this exemplifies the significance of the model as a whole.

Table 4.14: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	123.085	1	123.085	592.910	.000 ^a
	Residual	79.301	382	.208		
	Total	202.386	383			

a. Competitive Advantage (CA): Dependent Variable

b. Procurement Practices x Supplier Development (PP x SD): Predictors: (Constant)

Source: Author's Construct (2023)

PP and CA were affected indirectly by SD ($B = 0.107$; $t = 9.313$; $P = 0.000$; $\text{Sig} < 0.05$). SD positively moderates the link between PP and CA because the path coefficient was positive and the p-value for H3 was less than 0.05. 10.7% of the PP-CA link is moderated by SD.

Table 4.15: Regression coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	1.969	.146		13.506	.000
	IT $\times$ LOP	.107	.011	.747	9.313	.000

a. Competitive Advantage (CA): Dependent Variable

Source: Author's Construct (2023)

4.8 Hypothesis Testing

This study was focused on testing three major hypotheses where the first one was that procurement practices are expected to be positively related to competitive advantage; the second hypothesis was that supplier development have a positive relationship with competitive advantage The final hypothesis was that supplier development significantly moderates the relationship between procurement practices and competitive advantage. A summary of the relationships established are shown in Table 4.17. From Table 4.17, all three-hypothesis tested were supported. Therefore, procurement practices were found to have a positive and significant relationship with stakeholders' satisfaction ($\beta=0.811$, $t=27.095$, $p=0.000$). Moreover, supplier development was found to have positive and significant relationship with stakeholders' satisfaction ($\beta=0.780$, $t=24.350$, $p=0.000$). Again, supplier development was found to have a significant moderating influence on the relationship between procurement practices and competitive advantage ($\beta=0.747$, $t=9.313$, $p=0.000$).

Table 4.16 Hypothesis Testing Results

Hypothesis	Direct Relationships	Path Coefficients	T - Statistics	P - Values	Decision-Support or Not Supported
H1	PP → CA	0.811	27.095	0.000	Supported
H2	SD → CA	0.780	24.350	0.000	Supported
H3	PP x SD → CA	0.747	9.313	0.000	Supported

4.9 Discussion of Key Findings

By highlighting the moderating role of supplier development, this study aims to determine the influence that procurement practices will have on the competitive advantage of SMEs in Ghana's. In accordance with previous research and theories, the key findings have been discussed in this section.

4.9.1 Procurement Practices Effect on Competitive Advantage

The first objective is to examine the relationship between procurement practices and competitive advantage among SMEs. The result indicates that PP positively influenced CA since the p-value for H1 was less than 0.05 and the path coefficient was positive. PP enhances CA. CA is predicted to improve by 65.8% when PP goes up by one unit. This result concluded that management should make use of supplier selection, supplier relationship, order processing, supplier evaluation & appraisal. clear communication, procurement planning, risk management, and contract management in order to enhance greater efficiency by making the best possible use of the external market and suppliers, as well as supporting supply chain resiliency to provide contingency plans and remedies for unforeseen circumstances including economic turbulence, labor market volatility, and natural calamities. There are strong opinions in the existing procurement practices literature about the impact of PP on CA. Numerous competitive benefits are given to your firm by having a

clearly defined procurement procedure. It promotes greater efficiency in the delivery of products and services, fosters innovation, assists in controlling supplier risk, and ultimately boosts supply chain resiliency (Bledron, 2021). Increased cooperation and partnership benefit both parties. It is simpler for suppliers to expand their company with an existing customer than to go for a new one. Additionally, if you are a supplier's top client, they will be more likely to present you with their most recent advancements so you can maintain your competitiveness (Stephen, 2021).

4.9.2 Supplier Development Effect on Competitive Advantage

The second objective of this study is to assess the relationship between supplier development and competitive advantage among SMEs. The result indicates that SD positively influenced CA since the path coefficient was positive and the p-value for H2 was less than 0.05. With SD, CA improves. CA is predicted to improve by 73.5% when SD goes up by one unit. This result proves that managers should consider SD that fosters relationships with suppliers and enhances their ability to meet the needs and specifications that the company has. Previous studies states that Suppliers provide a substantial and frequently underutilized resource for cost-cutting, continuous improvement, and innovation. Companies may significantly improve their bottom lines by realizing this potential (Webb, 2017). Effective supplier development ensures consistent input supply, enhanced product quality, and lower prices for the goods and services of a buying organization (Ecel et al., 2013). According to Ochido (2013), fostering collaborative relationships allows businesses to gain a competitive advantage because they increase customer satisfaction by lowering costs, increasing access to new technologies, improving quality, and lowering risk.

4.9.3 Moderating Role of Supplier Development

The third objective of this study is to evaluate the moderating role of supplier development on the link between procurement practices and competitive advantage among SMEs. The result indicates that SD positively moderates the link between PP and CA. SD moderates 10.7% of the PP-CA link. This result concluded that managers should consider SD of providing guidance and technical assistance, revealing best practices, facilitating knowledge flow, and promoting collective problem-solving among suppliers in order to lower costs, enhance quality, and improve delivery. According to Wagner and Krause (2019), a buying company might assess its efforts to enhance the supplier by gauging how well they execute for their clients. Additionally, they cited the benefits of improved supplier skills, including better managerial ability, product development, and operations know-how, as well as performance gains in the form of cost, quality, and delivery performance. Successful supplier development may provide a company a competitive edge. The introduction of procurement processes and how they are maintained are also critical to the success of supplier development (Makumbila, 2017). In that regard, this study confirms that, for firms to be competitive through procurement practices, supplier development must be seen a reasonable factor for making it come true. Therefore, whilst companies try to place value on their procurement processes, they should equally ensure that their suppliers are in good standing and capable, so that they(companies) can be continuously hold majority of the market share.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The research is discussed, interpreted, and summarized in this section. It provides a summary of the findings in relation to the objectives of the research, just as it did with the empirical results in the chapter before it. The primary goal of this chapter is to provide a summary of the study's findings and draw conclusions about the study's contribution to the goal of understanding how procurement practices will influence competitive advantage among SMEs in Ghana with emphasis on the role of supplier development. Additionally, the chapter discusses the study's flaws and suggests additional research.

5.2 Summary of Findings

5.2.1 Effect of Procurement Practices on Competitive Advantage

The first objective is to examine the relationship between procurement practices and competitive advantage among SMEs. The result indicates that PP positively influenced CA since the p-value for H1 was less than 0.05 and the path coefficient was positive. PP enhances CA. CA is predicted to improve by 65.8% when PP goes up by one unit. This result concluded that management should make use of supplier selection, supplier relationship, order processing, supplier evaluation & appraisal, clear communication, procurement planning, risk management, and contract management in order to enhance greater efficiency by making the best possible use of the external market and suppliers, as well as supporting supply chain resiliency to provide contingency plans and remedies for unforeseen circumstances including economic turbulence, labor market volatility, and natural calamities.

5.2.2 Effect of Supplier Development on Competitive Advantage

The second objective of this study is to assess the relationship between supplier development and competitive advantage among SMEs. The result indicates that SD positively influenced CA since the path coefficient was positive and the p-value for H2 was less than 0.05. With SD, CA improves. CA is predicted to improve by 73.5% when SD goes up by one unit. This result concluded that managers should consider SD that fosters relationships with suppliers and enhances their ability to meet the needs and specifications that the company has.

5.2.3 Moderating Role of Supplier Development

The third objective of this study is to evaluate the moderating role of supplier development on the link between procurement practices and competitive advantage among SMEs. The result indicates that SD positively moderates the link between PP and CA. SD moderates 10.7% of the PP-CA link. This result concluded that managers should consider SD by providing guidance and technical assistance, revealing best practices, facilitating knowledge flow, and promoting collective problem-solving among suppliers in order to lower costs, enhance quality, and improve delivery.

5.3 Conclusion

The research intends to establish how procurement practices will influence competitive advantage among SMEs in Ghana, with emphasis on the role of supplier development. Descriptive and explanatory research designs were used in the study. The methodology used to conduct this survey was quantitative. Simple random technique was used to choose 384 participants. A prepared questionnaire was the main tool used for data collection. SPSS v23 was used for the statistical analysis. Both descriptive and inferential approaches were used to analyse the data. The result indicates that PP positively influenced CA. The result indicates that SD positively influenced CA.

The result also indicates that SD positively moderates the link between PP and CA. The study therefore concluded that managers should consider This result concluded that managers should consider SD by providing guidance and technical assistance, revealing best practices, facilitating knowledge flow, and promoting collective problem-solving among suppliers in order to lower costs, enhance quality, and improve delivery.

5.4 Recommendations for Management

These recommendations from stakeholders are informed by the findings of the research. These ideas need to be investigated by both management and academia.

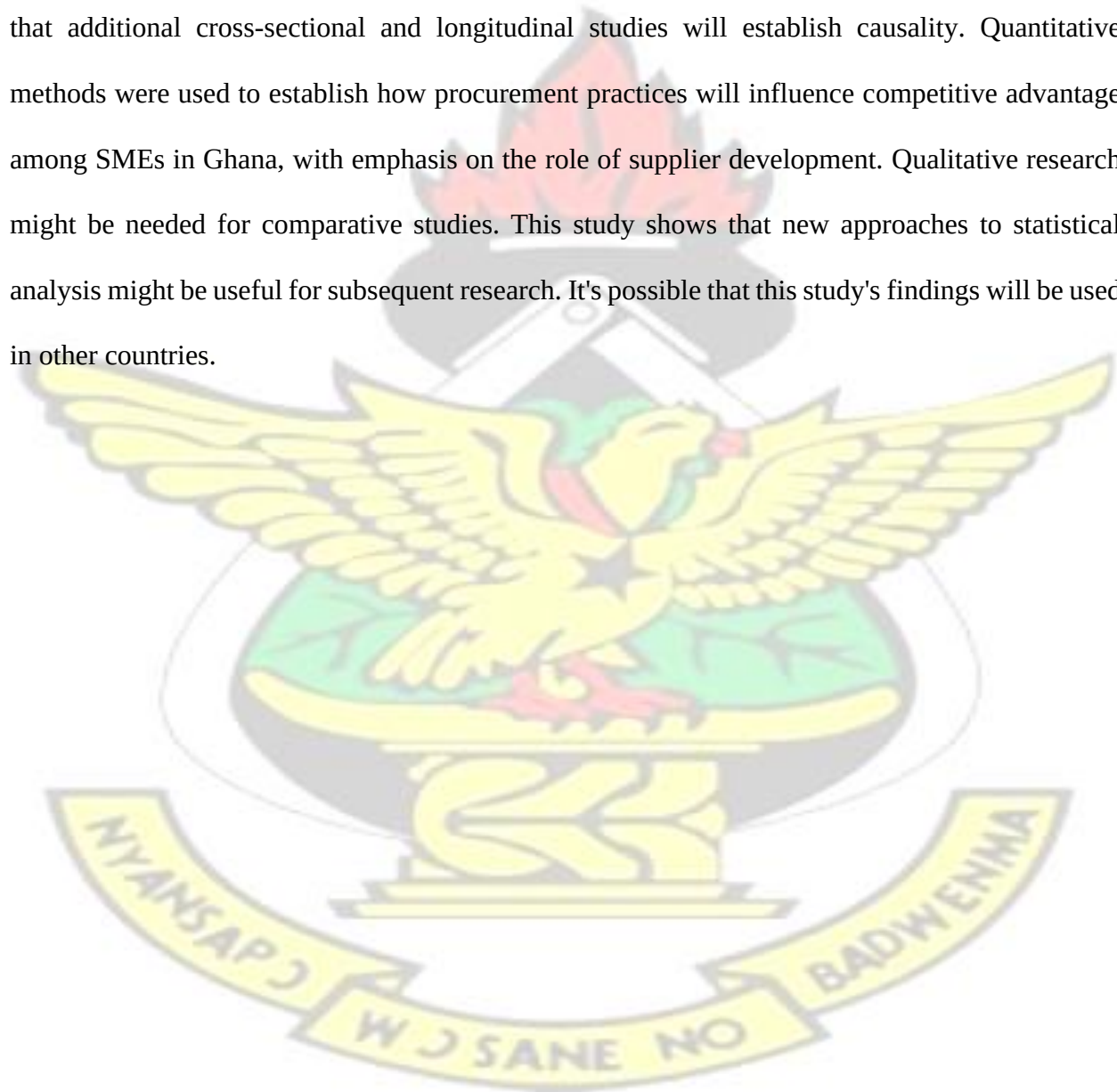
The result indicates that PP positively influenced CA. PP enhances CA. The study therefore concluded that management should make use of supplier selection, supplier relationship, order processing, supplier evaluation & appraisal. clear communication, procurement planning, risk management, and contract management in order to enhance greater efficiency by making the best possible use of the external market and suppliers, as well as supporting supply chain resiliency to provide contingency plans and remedies for unforeseen circumstances including economic turbulence, labor market volatility, and natural calamities.

Also result indicates that SD positively influenced CA. With SD, CA improves. The study, therefore, concluded that managers should consider SD that fosters relationships with suppliers and enhances their ability to meet the needs and specifications that the company has.

Finally, the result indicates that SD positively moderates the link between PP and CA. The study therefore concluded that managers should consider SD of providing guidance and technical assistance, revealing best practices, facilitating knowledge flow, and promoting collective problem-solving among suppliers in order to lower costs, enhance quality, and improve delivery.

5.5 Limitations and Recommendation for Future Research

This study limits the scope of subsequent research. To begin, a representative sample of managers from the organizations under consideration was selected. Consequently, an employee study's findings may be more applicable to the population as a whole. Utilizing an explanatory and descriptive research design makes it challenging to demonstrate causality. There is a possibility that additional cross-sectional and longitudinal studies will establish causality. Quantitative methods were used to establish how procurement practices will influence competitive advantage among SMEs in Ghana, with emphasis on the role of supplier development. Qualitative research might be needed for comparative studies. This study shows that new approaches to statistical analysis might be useful for subsequent research. It's possible that this study's findings will be used in other countries.



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KNUST



APPENDIX

QUESTIONNAIRE

I am a final year MSc. Procurement and Supply Chain Management student of KNUST. This survey instrument has been designed to enable me to carry out the research required for my Master's degree on the topic "The impact of procurement practices on competitive advantage: the moderating role of supplier development among SMEs in Ghana"

Any information provided will only be used for general information and will be treated as highly confidential.

SECTION A: DEMOGRAPHIC INFORMATION

INSTRUCTIONS: Please kindly write in ink in the box which corresponds to the statement, which in your opinion is the most appropriate answer to the related question. For the following questions, kindly select by checking (✓) all that apply.

Gender: Male ☐ Female ☐

Age: ☐ Below 25 years ☐ 25-35years ☐ 36-45 years ☐ Above 45years

How long have you served in the current position: <1 year ☐ 1-5 years ☐ 6-10years ☐
above 10years

What is your highest education? JHS ☐ SHS ☐ HND ☐ Undergraduate ☐ Masters ☐

PHD ☐ Some professional/ vocational courses ☐

SECTION B: PROCUREMENT PRACTICES

Using the 5-point Likert scale below, please indicate your level of agreement or disagreement with respect to the following statements on procurement practices in your organization.

1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree				
				1	2	3	4	5
Supplier Selection:								
PPSS1 The organization considers supplier selection as an important phase in supply chain management.								
PPSS2 The process identifies suppliers that can meet the organization's specific requirements regarding quality, affordability, availability, and support.								
PPSS3 Suppliers are graded based on their level of financial stability, quality control systems, manufacturing capacity, technical proficiency, responsiveness, and environmental policies.								
Supplier Relationship:								
PPSR1 The organization creates and maintains effective relationships with suppliers.								
PPSR2 The organization creates long-lasting relationships with significant suppliers.								
PPSR3 There is better communication, information sharing, and collaborative problem-solving increasing the supply chain's effectiveness.								
Order Processing:								
PPOP1 Orders are processed based on the initial receipt of a customer order(s)								

PPOP2 Pertinent data are gathered properly for promptly entering orders.					
PPOO3 Order verification processes such as credit checks, product existence checks, and pricing confirmation are extremely important to the organization.					
Supplier Evaluation & Appraisal:					
PPSEA1 The organization uses KPIs such as product quality, on-time delivery, lead time, pricing, customer service, and regulatory and standard conformance, to evaluate the accomplishments of their suppliers.					
PPSEA2 The organization ensures that evaluation criteria are in line with the goals and objectives of the firm.					
PPSEA3 The organization is able to identify areas for improvement through supplier assessment.					
Clear Communication:					
PPCC1 The organization places a high priority on interaction clarity.					
PPCC2 The organization ensures that knowledge is effectively and completely shared with everyone who matters.					
PPCC3 Purchase orders are consistent and well organized.					
Procurement Planning:					
PPPP1 Procurement plans are prepared annually.					
PPPP2 The organization's purchasing requirements are identified.					
PPPP3 The organization engages in procurement methods that are beneficial to the environment.					
Risk Minimization:					

PPRM1 Identify and assess risks affecting a business's operations, procedures, or initiatives.					
PPRM2 The likelihood of each risk and its impacts may be determined with the use of threat assessment techniques.					
PPRM3 Proactive measures are adopted to reduce or diminish the likelihood and consequences of risks.					
PPRM4 Preventative measures are put in place to avoid or lessen the occurrence of risks that have been identified.					
<i>Contract Management:</i>					
PPCM1 It creates and negotiates contracts.					
PPCM2 All parties are fully informed of the agreements, rules, and obligations.					
PPCM3 Well-crafted and negotiated contracts are in accordance with the organization's goals, eliminate risks, and lay a foundation for a successful long-term commercial relationship					

SECTION C: COMPETITIVE ADVANTAGE

Using the 5-point Likert scale below, please indicate your level of agreement or disagreement with respect to the following statement on competitive advantage in your organization.

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree
CA1 Reduction of total cost across the value chain.				
CA2 There is greater efficiency by making the best possible use of the external market and suppliers.				

CA3 Embracing innovation during the product development phase,					
CA4 Mitigate supplier risks such as financial, operational, compliance, and strategy.					
CA5 Supporting supply chain resiliency to provide contingency plans and remedies for unforeseen circumstances including economic turbulence, labor market volatility, and natural calamities.					

SECTION D: SUPPLIER DEVELOPMENT

Using the 5-point Likert scale below, please indicate your level of agreement or disagreement with respect to the following statements about supplier development in your organization.

1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree				
				1	2	3	4	5
SD1 The organization fosters relationships with suppliers and enhances their ability to meet the needs and specifications that the company has.								
SD2 There is an improvement in the quality and efficiency of distribution networks.								
SD3 Operational cost has significantly reduced.								
SD4 There is a promotion of innovation across-board.								
SD5 Quality goods or services are offered.								
SD6 Shorter lead times are exhibited.								
SD7 More responsiveness to changing market demands.								

Thank you for your contribution