

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

COLLEGE OF HUMANITIES AND SOCIAL SCIENCES

KNUST SCHOOL OF BUSINESS

**EXAMINING THE EFFECTS OF STAKEHOLDER'S INVOLVEMENT ON
PROCUREMENT PERFORMANCE IN THE SERVICE INDUSTRY BY**

APOTEY SELINA

(BSc. Procurement and Supply Chain Management)

**A THESIS SUBMITTED TO THE DEPARTMENT OF SUPPLY CHAIN AND
INFORMATION SYSTEMS, KNUST
SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE**

(IN PROCUREMENT AND SUPPLY CHAIN MANAGEMENT)

NOVEMBER, 2023

DECLARATION

I hereby declare that this submission is my own work towards the **Master of Science Procurement and Supply Chain Management** degree and that, to the best of my knowledge, it contains no material previously published by another researcher which has been accepted for the award of any other degree of the University, except where due acknowledgment has been made in the text’.

Apotey Selina
(PG9449321)

.....

Signature

.....

Date

Certified by:

Dr. Emmanuel K. Anin
(Supervisor)

.....

Signature

.....

Date

Prof. David Asamoah
(Head of Department)

.....

Signature

.....

Date

DEDICATION

This thesis is dedicated to God Almighty.

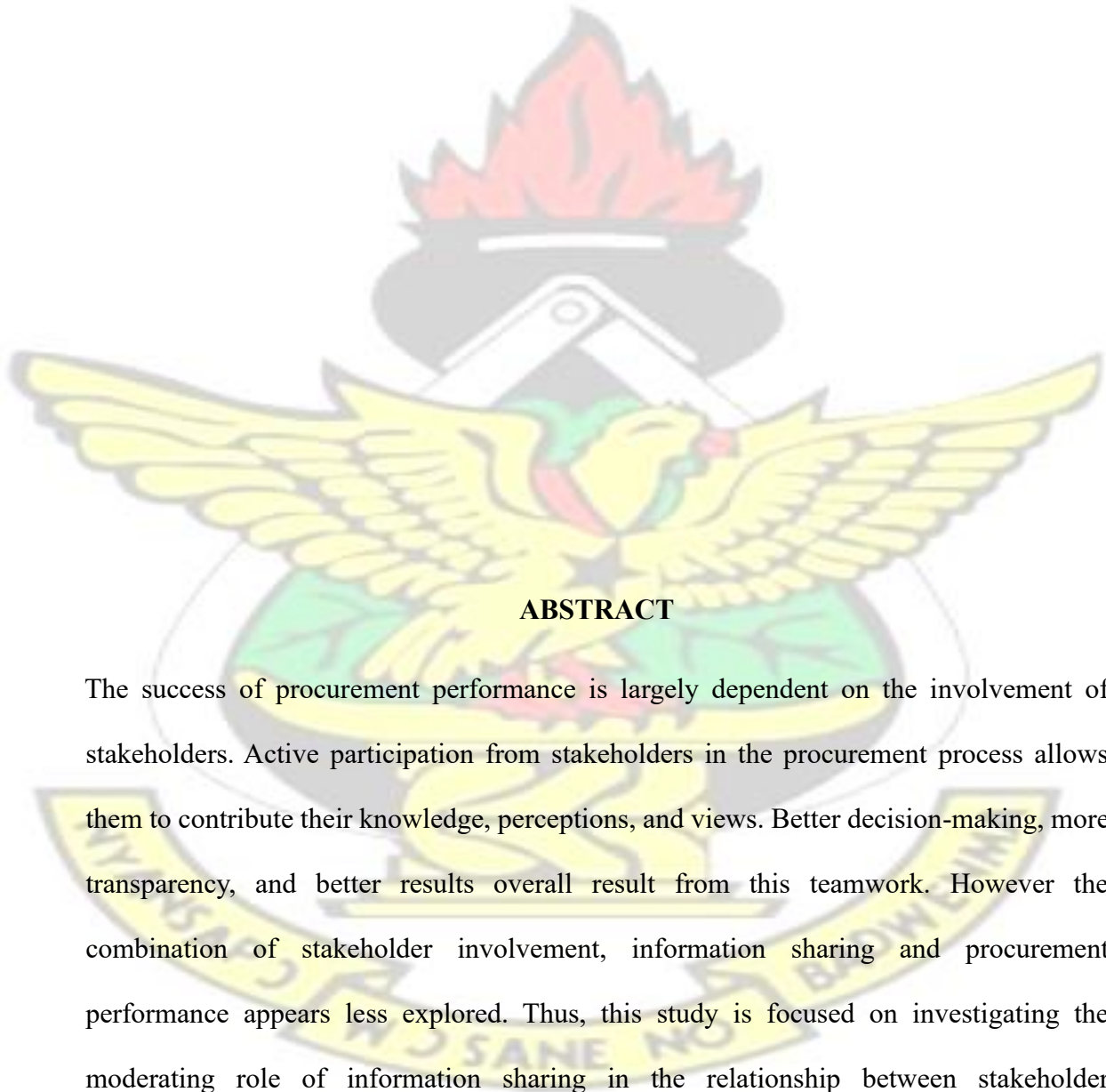
KNUST



ACKNOWLEDGMENT

I would like to thank the Almighty God for his grace, favor, and blessings. My gratitude also goes to my siblings for their immense support during this journey. My sincere thanks also go to my boss, Mr. Prince Ofosu Baakoh for his encouragement and support and also to my very close relatives for their immense support. May God bless him significantly. Also to my supervisor, Dr. Emmanuel K. Anin who played an instrumental role in helping me to complete this thesis successfully, all I can say is may the good Lord bless him.

KNUST



ABSTRACT

The success of procurement performance is largely dependent on the involvement of stakeholders. Active participation from stakeholders in the procurement process allows them to contribute their knowledge, perceptions, and views. Better decision-making, more transparency, and better results overall result from this teamwork. However the combination of stakeholder involvement, information sharing and procurement performance appears less explored. Thus, this study is focused on investigating the moderating role of information sharing in the relationship between stakeholder involvement and procurement performance. The study employed quantitative method with

cross-sectional survey design. Purposive sampling selected 384 individuals. Structured questionnaire was used to gather data. Data was analysed using descriptive and inferential statistics. The finding indicates that stakeholder involvement has an insignificant effect on procurement performance. The result also suggests a strong and statistically significant relationship between information sharing and procurement performance. Finally, the result indicates that information sharing significantly and negatively moderates the association between stakeholder involvement and procurement performance. This study provides valuable insights into the interactions between stakeholder involvement, information sharing, and procurement performance. These findings contribute to a deeper understanding of how organizations can strategically manage these aspects to optimize their procurement processes. Future research endeavours could further explore the mechanisms that drive the observed relationships and delve into potential strategies for effectively leveraging stakeholder involvement and information sharing to enhance procurement performance within various organizational contexts.

TABLE OF CONTENT

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGMENT.....	iv
ABSTRACT	v
TABLE OF CONTENT	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xi
CHAPTER ONE	1
INTRODUCTION	1

1.1 Background of the Study	1
1.2 Problem Statement	3
1.3 Research Objective	5
1.3.1 Main Objective	5
1.3.2 Specific Objectives	5
1.4 Research Questions	5
1.5 Significance of the Study	6
1.6 Overview of Research Methodology.....	6
1.7 Scope of the Study.....	7
1.8 Limitations of the Study	7
1.9 Organization of the Study	8
CHAPTER TWO	10
LITERATURE REVIEW	10
2.0 Introduction	10
2.1 Conceptual Review	10
2.2 Stakeholder Involvement and Procurement Performance	17
2.3 Information Sharing	27
2.4 Theoretical Review	28
2.5 Empirical Review	31
2.6 Conceptual Framework	33
2.7 Hypothesis Formulation	34
2.8 Summary of Chapter	37
CHAPTER THREE	38
METHODOLOGY AND ORGANISATIONAL PROFILE	38
3.1 Introduction	38
3.2 Research Design	38
3.3 Research Purpose	40
3.4 Population of the Study	40
3.5 Sample Size and Sampling Technique	40
3.6 Data Collection	42

3.7 Data Processing and Analysis	44
3.8 Validity and Reliability	44
3.9 Ethical Issues	45
3.10 Organizational Profile	45
CHAPTER FOUR	47
RESULTS AND DISCUSSIONS	47
4.0 Introduction	47
4.1 Exploratory Data Analysis	47
4.2 Respondents and Firm Profile	50
4.3 Correlation Analysis	53
4.4 Confirmatory Factor Analysis	54
4.5 Hypotheses for Direct Relationship	59
4.6 Discussion of Key Findings	61
CHAPTER FIVE	67
SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS	67
5.0 Introduction	67
5.1 Summary of Findings	67
5.2 Conclusion	69
5.3 Implications of the Study	70
5.4 Limitations and Recommendation for Future Research	71
REFERENCES	73
APPENDIX	87

LIST OF TABLES Table 4.1: Data Response Rate **Error! Bookmark not defined.**

Table 4.2: Test for Common Method Variance (CMV)	48
Table 4.3: Bartlett's Test of Sphericity and KMO Test	49
Table 4.4: Results of Independent-Samples t-Test for Non-Response Bias.....	50
Table 4.5: Respondents and Firm Profile.....	51

Table 4.6: Correlation Analysis.....	54
Table 4.7: Confirmatory Factor Analysis.....	56
Table 4.8: Fornell-Larcker criterion.....	58
Table 4.9: Heterotrait-Monotrait Ratio (HTMT)	58
Table 4.10: Model fitness indices	59
Table 4.11: Predictive Relevance (R^2) and Q^2	59
Table 4.12: Hypotheses for Direct Relationship	61

LIST OF FIGURES

Figure 2.1: Conceptual framework.....	33
Figure 4.1: Measurement Model Assessment	58
Figure 4.2: Structure Model Evaluation	61

LIST OF ABBREVIATIONS

CFA	Confirmatory Factor Analysis
CMB	Common Method Bias
GDP	Gross Domestic Product
PMS	Procurement Measurement System
SC	Supply Chain
SCM	Supply Chain Management
SEM	Structural Equation Modeling
SI	Stakeholder Involvement
WBS	Work Breakdown Structure

KNUST



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In many nations, the service industry contributes significantly to the GDP, making it an important player in the global economy (Abbas et al., 2021; Musarat et al., 2021; van Niekerk, 2020). It includes, among other things, a broad spectrum of industries like banking, travel, telecommunications, and healthcare (Abbas et al., 2021). The service industry has expanded rapidly over the years, especially in Africa including Ghana, offering chances for job growth and economic diversification (Aduhene and Osei-Assibey, 2021; Jayne et al., 2021). However, Aduhene and Osei-Assibey (2021) claimed that there are unique challenges and issues that affect the service sector's contribution to the overall economy. One of the key issues in the sector is the lack of reliable and efficient supply chains (SC) (Dutta et al., 2020; Kouhizadeh et al., 2021). According to Dutta et al. (2020) and Kouhizadeh et al. (2021), poor infrastructure, limited access to transportation networks, and inadequate logistics systems hinder the smooth flow of goods and services across the continent. For organizations within the sector to operate smoothly in SC and remain competitive, there is the need to adopt effective SC mechanisms (Garcia-Buendia et al., 2022; Singh et al., 2022).

Accordingly, supply chain management (SCM) practitioners and scholars argue that stakeholder involvement (SI) is crucial for the success of SCM implementation and the overall performance of the SC (Baah et al., 2022; Khosravi and Izbirak, 2019; Kitchot et al., 2021; Rane et al., 2021). SI therefore, refers to the active participation and engagement

of individuals or groups who have a vested interest in or are affected by the procurement process (Gregory et al., 2020; Loureiro et al., 2020). Extensive research has shown that SI has a significant impact on overall performance including SC (Ahmed et al., 2020; Seems et al., 2023; Siems and Seuring, 2021; Tsai et al., 2022). Involving stakeholders in the procurement process promotes accountability and transparency. Incorporating stakeholders into the decision-making process allows for the inclusion of their viewpoints and skills, resulting in better informed and comprehensive conclusions. Ultimately, this may lead to more efficient and better procurement outcomes. In addition, the engagement of stakeholders cultivates a feeling of responsibility and cooperation, leading to fruitful project results and enduring viability (Arlati et al., 2021). Studies have indicated that companies that place a high priority on stakeholder participation typically see increases in consumer satisfaction (Barrane et al., 2021).

Stakeholder theory defines Stakeholder Engagement (SI) as the active involvement and engagement of persons or groups who are either directly impacted by or have a vested interest in the procurement process. According to this hypothesis, decision-making including stakeholders may result in better SC performance and outcomes (Tseng et al., 2022). According to Voinov et al. (2016), stakeholders can offer insightful information, a range of viewpoints, and knowledge that can be used to identify potential dangers, opportunities, and creative solutions. Their participation might also lessen the possibility of corruption or unethical behavior by improving the procurement process's accountability, transparency, and trustworthiness (Derakhshan et al., 2019; Osei-Tutu et al., 2010). Since SI is essential to improving supply chain performance and sustainability, it is clear that

SCM studies have given it a lot of attention lately. But by creating open lines of communication and giving stakeholders regular updates, the efficacy of SI in SC can be further increased (Mok et al., 2018). This makes sure that everyone is aware of the situation and has a chance to offer comments and recommendations at any point during the process.

Additionally, involving stakeholders in the early stages of procurement allows for their input to be considered during the planning and strategy development, resulting in a more aligned and successful procurement process (Plantinga et al., 2020; van Langen et al., 2021). By actively engaging stakeholders and valuing their perspectives, organizations can maximize the benefits of stakeholder involvement in procurement and ultimately achieve better results. However, the mechanism through which SI affects procurement performance is not fully explored. To precise, there is a paucity of research on how information sharing moderate the SI and procurement performance relationship. Therefore, this research examined the nexus between stakeholder involvement and procurement performance under the condition of information sharing in the service industry in Ghana.

1.2 Problem Statement

In Ghana, the service industry has experienced significant growth in recent years (OwusuManu et al., 2019; Li et al., 2021). This sector includes a wide range of activities such as tourism, hospitality, banking, telecommunications, and retail. The service industry has become a major contributor to Ghana's economy, attracting both domestic and foreign investments (Duodu and Baidoo, 2022). It has also created employment opportunities for many Ghanaians, especially in urban areas. Conversely, the sector is faced with challenges such as stakeholder expectations, infrastructure limitations, and competition (Pucciarelli

and Kaplan, 2016; de Vass et al., 2021). This has affected the overall performance, including the SC and profitability, of businesses in the service industry (Chen, 2018; Reklitis et al., 2021). In order for firms to thrive in this competitive environment, they need to constantly innovate and adapt to changing customer demands, which could be effectively achieved by effectively involving stakeholders' in the decision-making process (de Moura and Saroli, 2021).

Having said that, numerous studies have contended that the level of stakeholder involvement in procurement processes can significantly impact the overall performance and success of procurement projects (Allal-Chérif et al., 2021; Bohari et al., 2020; Hamdan et al., 2021; Jayasuriya et al., 2020; Shaukat et al., 2022). However, these studies indicated that there is a lack of consensus regarding the extent to which stakeholder involvement influences procurement performance. While some studies have found a positive correlation between stakeholder involvement and improved SC performance (Brun et al., 2020; Rane et al., 2021; Wu and Li, 2020; Baah et al., 2022), others have suggested that excessive stakeholder involvement can lead to delays and inefficiencies in the procurement process (Loosemore et al., 2021; Rebs et al., 2019; Wankmüller and Reiner, 2021). This inconsistency in findings highlights the need for further research to understand the nuanced relationship between stakeholder involvement and procurement performance, taking into account various contextual factors such as information sharing (Bugshan and Attar, 2020; Loureiro et al., 2020).

Information sharing is defined as the exchange of relevant and timely information between stakeholders involved in the procurement process (Colicchia et al., 2019). It is crucial for effective decision-making, coordination, and collaboration among stakeholders (Mehrjerdi

and Shafiee, 2021). However, the relationship between SI and procurement performance as a contingent of information sharing is not fully understood in SCM research. Arguably, there is dearth of research on how information sharing plays a contingency role in the SI and procurement performance relationship. In line with the above, this research focused on evaluating the moderating effect of IS on the effect of SI on procurement performance in the context of service organizations in Ghana.

1.3 Research Objective

1.3.1 Main Objective

This research aimed at evaluating the effect of stakeholder involvement on procurement performance under the condition of information sharing within the service industry of Ghana.

1.3.2 Specific Objectives

The objectives of the study include:

1. To examine the nexus between SI and procurement performance.
2. To examine the link between IS and procurement performance.
3. To examine the moderating role of IS in the model of SI and procurement performance.

1.4 Research Questions

1. What is the nexus between SI and procurement performance?
2. What is the link between IS and procurement performance?

3. Can IS moderate the SI and procurement performance relationship?

1.5 Significance of the Study

This study outcomes would be significant to both theory and practice. It is imperative for firms seeking to optimize their procurement processes to comprehend the correlation between stakeholder involvement and procurement performance. Researchers can determine the elements influencing procurement success and create plans to increase stakeholder participation by looking into this relationship. Furthermore, investigating the moderating influence of information sharing in this particular situation will yield significant insights into how efficient communication and cooperation amongst stakeholders might enhance procurement outcomes even more.

In addition to adding to the body of theoretical knowledge, this research will have application for companies looking to improve their overall performance and procurement procedures in the cutthroat business world of today. Organizations may make wellinformed decisions and execute efficient strategies to accomplish their procurement objectives by comprehending the effects of stakeholder involvement and information exchange. Organizations can use this research as a guide to strengthen their connections with stakeholders, which will improve procurement outcomes and boost overall performance.

1.6 Overview of Research Methodology

The study used an explanatory research design and a quantitative/deductive research methodology. They are significant because they enable deductive theory testing by allowing the researcher to hunt for evidence to either confirm or refute the hypothesis. The population, which consists of logistics, supply chain, and operations officers who were

selected through purposive and convenience sampling approaches. A sample size of 390 firms were recruited to participate in the study. Before data collection, firms and respondents were contacted to explain the study purpose and questionnaire to them. Only respondents who voluntarily agreed to participate were questionnaires administered to. After data collection, the primary information gathered from the field were examined for reliability and accuracy through coding using Epidata. Descriptive and inferential data analysis were both employed in this study. Multivariate data analysis tools such as structural equation modeling (SEM) and factor analysis via Smart-PLS were used for this. To check for normalcy, the descriptive analysis included data for means, skewness, kurtosis, frequencies, and percentages. This study set out to confirm that the data collected was suitable for covariance-based SEM analysis. We looked into data distribution, outliers, and missing data. Inferential analysis was used to test the study's hypotheses and assess the importance of the correlations between the variables.

1.7 Scope of the Study

This research focused on service firms in Eastern part of Ghana to examine the nexus between stakeholder involvement and procurement performance under the contingent effect of information sharing. In doing so, the study utilized the stakeholder, consumer involvement and principal-agency theories to explain these relationships among the study variables.

1.8 Limitations of the Study

This study, despite its contributions, also had some drawbacks that affect its generalizations.

The small sample size of the study was one of its limitations, which might have had an impact on how broadly the results might be applied. Furthermore, the study's reliance on stakeholders' self-reported data raises the possibility of bias and mistakes in assessing their level of involvement and how it affects procurement performance.

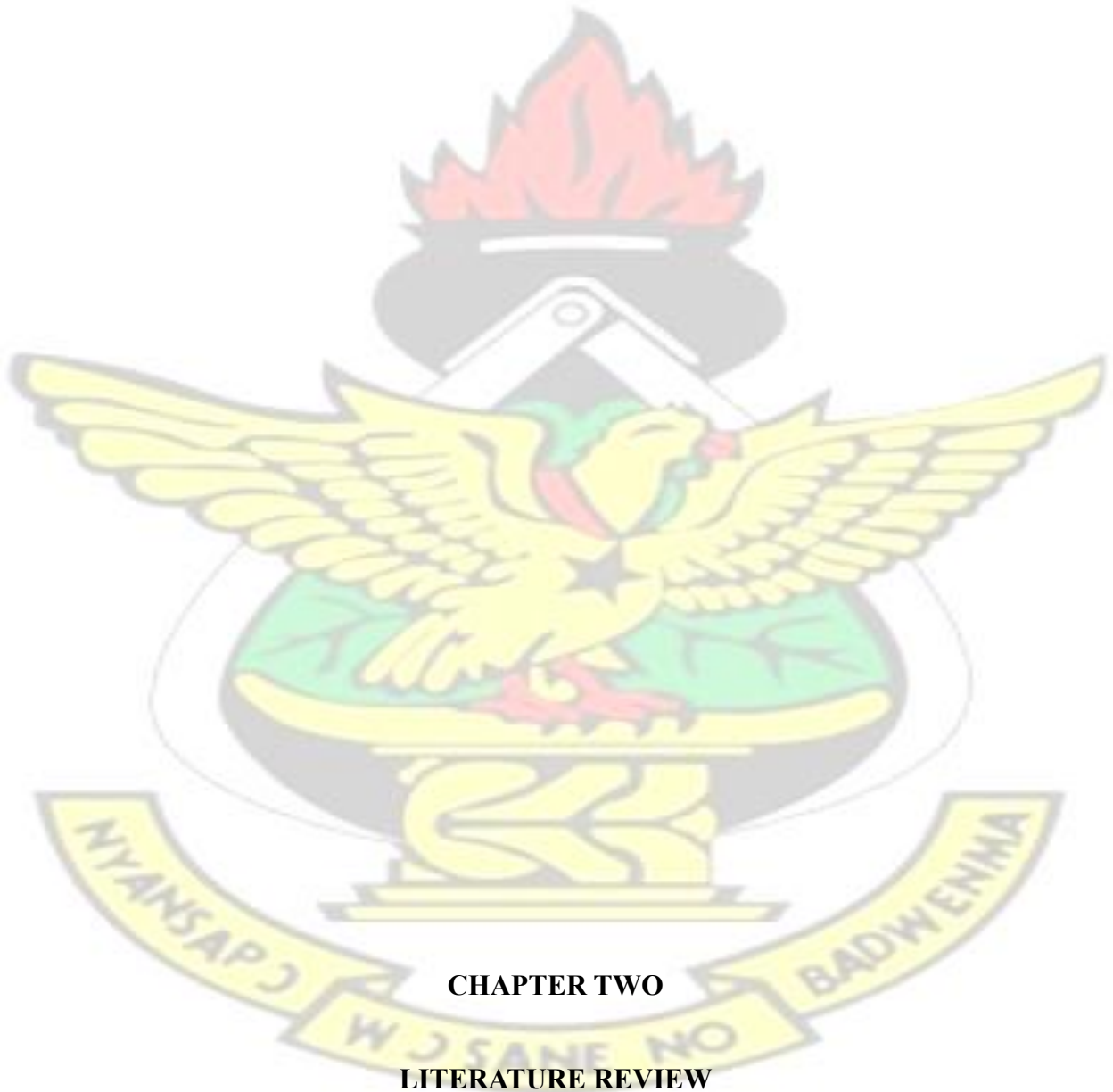
The inability to control outside variables that might have affected the connection between procurement performance and stakeholder involvement was another drawback. For instance, the study did not take into consideration the potential influence of competitive pressures and market conditions on the results. Moreover, the study's exclusive focus on the service sector may have limited the findings' generalizability to other industries. To improve the generalizability of the findings, future research might think about enlarging the sample size and extending the scope to include other industries. A more thorough insight might also be obtained by combining objective measurements and self-reported data.

1.9 Organization of the Study

This study was structured into five sections: The introductory section presents the background, problem statement, study objectives, research questions, and hypotheses, significance of the study, and scope and limitations. Chapter two discussed relevant literature on the topic under study. This was divided into sub-sections comprising the conceptual, theoretical, and empirical reviews as well as the conceptual framework. The section ends with a summary establishing the gap in the literature.

Chapter three addressed the methods and procedures for gathering data and how the data were analyzed. The section also looked at the sample and sampling approach, research design and approach, data collection procedure, data validity and reliability, data collection

tools, study population, and ethical issues. The results and discussion of the findings were presented in the fourth chapter. The final chapter summarized the study findings, draw conclusions, and make recommendations for policy implementation.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter will focus on the literature review of the topic understudy. The broad areas of this chapter will include; the concept of the stakeholders, theoretical review, types of stakeholders, the influence stakeholders have on procurement performance, benefits and challenges of the stakeholders on procurement performance.

2.1 Conceptual Review

2.1.1 The Definition of Stakeholder

A 'stakeholder' is a person who stands to gain or lose because of a project or planning process (Wu et al. 2020). A stakeholder, according to Gregory et al. (2020), is a person who has a strong interest in a process or activity. Furthermore, McCaffrey et al. 2(021) argue that stakeholders are individuals or organisations that profit from a corporation. He goes on to say that an organisation may victimise stakeholders. A company and its operations may, in general, impact stakeholders. Stakeholders may therefore impact how a company runs, its aims, goals, and progress. Stakeholders are important and may help an organisation achieve its aims, but they can also be adversarial if they reject the organization's purpose. As a consequence, stakeholders are powerful and may be either a danger or a benefit to the company (Gupta, 2020).

2.1.2 Stakeholder Involvement and Management

It is the process of successfully engaging stakeholders' perspectives on their current connection with the organisation (Pedrini and Ferri, 2019). Following that, Stakeholder Management is specifically stakeholder relationship management, although entity management is not required (Pedrini and Ferri, 2019). As public participation becomes an

increasingly important part of national and international relations, policymakers and implementers must have a thorough understanding of who will be affected by decisions and also have the authority to influence the outcomes of stakeholders. As a result, the stakeholder concept has gotten a lot of attention from academics, policymakers, and policy development practitioners. The concept of stakeholder has been widely used in strategic management. Stakeholders have therefore become a vital necessity, since it is required that stakeholders be included in the strategy of any public sector organisation.

Stakeholder interaction is defined in this research as a mutual or reciprocal action or impact between individuals of interest (Hollebeek et al. 2023). According to Stocker (2020), engaging stakeholders entails implementing practises that positively incorporate stakeholders in organisational operations. Newsletters, employee work councils, consumer focus groups, neighbourhood town hall meetings, and active public relations officers are among the many strategies for engaging stakeholders, and corporations vary greatly in their efforts to engage stakeholders. Involving stakeholders and creating a consultation strategy takes into account the necessity for consultation as well as the value that consultation may bring to the procurement process.

It focuses on the first job of defining which groups should be contacted, how they should be consulted, and when. Client involvement is described as the creation of required relationships, while engagement with customers to develop goods, services, and offers helps to outperform rivals in the long run (Chen et al. 2020). Because of the many phases and nature of the procurement process, from requirement identification through contract conclusion, stakeholders are impacted in both good and negative ways (Zingraff-Hamed, 2020). Disputes, cost overruns, poor communication, and supply chain failure are just a

few of the usual issues that occur from stakeholder conflict. Conflicting interests develop as a result of parties having different aims and priorities, and such conflicts are often intertwined. Stakeholders are critical to the success of any organisation. An organisation cannot survive without the support of its stakeholders. Many organisations, both public and commercial, are looking for methods and means to include stakeholders in their operations (Wojewnik-Filipkowska, and Wgrzyn, 2019).

2.1.3 Types of Stakeholders

The goal of stakeholder management is to make first contact with, and subsequent interactions with, stakeholders as easy and efficient as possible. Methods for managing stakeholders include selecting different kinds of stakeholders based on their categories, gathering information about them, outlining their role in the programme, identifying their key strengths and weaknesses, and learning about their strategies and forecasting their behaviour patterns. In fact, there are many other approaches to classify stakeholders (Cruz et al., 2020; Tampio et al., 2022):

Stakeholders have been categorised as follows by Cruz et al. (2020) and Tampio et al. (2022):

Internal stakeholders are those who are part of the project coalition and should be consulted at every stage.

- External stakeholders are people who are significantly impacted by the project.

Stakeholders might be internal or external to the project participants (Nguyen, 2021).

Furthermore, categorizations exist inside and outside of stakeholders (Tarode and Shrivastava, 2022), as well as direct and indirect stakeholders (Waris et al., 2022).

2.1.4 Stakeholders Categories Influencing Efficient Procurement Performance

Organizations has different types of stakeholders that influence the procurement decision of firms. Below are the listed categories of stake holders and how they influence the procurement efficiency in most organizations.

Internal stakeholders: People and groups inside an organisation, such as workers, owners, shareholders, and management, might be considered internal stakeholders. They worry a lot about their future with the company, their prospects for promotion, and their pay raises.

Employees. They are entitled to be treated fairly and with respect, and it is the obligation of the organization to see that individual managers do not abuse their power or mistreat their subordinates. In this regards employees (especially those in the procurement department of the organisation) are expected to conduct their activities with honesty, fairness, integrity, and loyalty so as to achieve the best possible outcome during the procurement process. This implies that they should decline from all unethical behaviours such as stealing, absenteeism, as well as mismanagement of institutional resources which can detriment the success of the institution.

- **Owners.** Owners are the cardinal shareholders of the organization where their invested resources are treated superior. They are conscious of the responsibilities and opportunities of their position as owners and seek to be positive ethical role models by their own conduct and by helping to create an environment in which principled

reasoning and ethical decision making are highly prized. Besides, they seek to protect and build the institution good reputation and the morale of its employees by engaging in no bad procurement conduct that might undermine respect and by taking whatever actions are necessary to correct or prevent inappropriate conduct of others.

- **Board of directors/managers.** The Board of Directors are responsible for coordinating the organizational resource for it to provide appropriate services for the client. The Board of directors or managers are also responsible for investing shareholders money in various resources to maximize returns on their investment. Poor procurement ethics can cause bad behaviour within the organization. When poor ethics trickle down to the lower levels of the organization it will compel the good professionals to make poor and selfish decisions. This will harm the good reputation of the organization. As a result, it becomes very necessary for board/managers to draft organizational code of ethics to ensure that organizational values are being upheld right down to the employees and customers.

External stakeholders: External stakeholders may include customers (those who buy the institution's products and services), creditors (those to whom the institution owes money), the government, suppliers (those from whom the institution buys its products), and members of society at large. These parties include;

Local communities. The success or failure of an organization largely depends on the local residents. This is because the local communities provided them the land to establish their firm. So they expect that their procurement activities right from the need identification to the disposal, pollution and many more should benefits them but not contaminate or make the environment unhealthy for them as local dwellers.

- **Suppliers.** They are another group of external stakeholder who can contribute significantly to the efficiency of their procurement performance through the provision of quality materials, and other relevant inputs. Since the suppliers may have direct impact on the organizations' performance or efficiency, the organisation must ensure that it build confidence by maintaining high standards on essentials such as paying suppliers on time and delivering goods on time. It also consider signing up to the prompt payment code to demonstrate your commitment. This will prevent the suppliers from delaying them on certain demands.
- **Customers.** They are the most influential outside group in the company. Customers have the greatest influence because of the value they place on purchasing products and services of excellent quality at reasonable prices. Customers' comments and suggestions may also help the company's standing in the eyes of the public. Again, customers are often the primary reason businesses innovates and develop new products and services.

2.1.5 Procurement Performance

Traditionally, procurement function management has been evaluated against two key profiles (Hallikas et al., 2020; Belvedere et al., 2018). First, consider efficacy, which refers to the capacity to satisfy cost, quality, and logistical targets. Second, efficiency relates to the correct utilisation of the function's resources via suitable practises and processes.

Delivery dependability, delivery lead times, scrap rates, unit cost, and savings against a budget for purchased materials and services are all examples of the former category, which refers to management characteristics unique to the suppliers used by the procurement function and the contractual terms agreed upon with them. For the latter, indicators like the

number of formal procedures and the size of the function's budget are often used as measures of success (Hallikas et al., 2020). Companies must, however, define a restricted number of indicators to control when designing a Procurement Measurement System (PMS) in order to allow management to concentrate on a small set of objectives (Bourne et al., 2018).

The buying management literature suggests that before deciding on indicators and creating a PMS, businesses should have a firm grasp on what the procurement function's ultimate goal is. Efficiency-oriented PMS, effectiveness-oriented PMS, and multi-objective PMS are the three primary options here (Pagell et al., 2022; Belvedere et al., 2018; Liu et al., 2019). Those businesses in which procurement is primarily a back-office support role will benefit from the former, while those in which it plays a more strategic role will benefit from the latter, as the latter will be judged by how well it increases profits, delights internal customers, and fosters lasting bonds with key vendors (Taouab, O., and Issor, 2019; Van Poucke et al., 2019). The third kind of PMS incorporates indications of both efficiency and effectiveness, and is thus seen as a more accurate method of capturing the overall performance of the procurement function (Belvedere et al., 2018; Taouab, O., and Issor, 2019). While the multi-objective PMS is more complete in theory, it lacks the concentration necessary for an effective PMS, which is a key downside (Hallikas et al., 2020).

2.2 Stakeholder Involvement and Procurement Performance

Performance of the procurement process and stakeholder involvement are assessed here. The study's factors will dictate the outcome. To begin, procurement performance stakeholders are any individuals, groups, or organisations who have a direct or indirect

financial, personal, or reputational investment in the success of a procurement process or its consequences. Stakeholders care about the outcome of the procurement processes. It might be anything like a claim to ownership or a legal right. Both legal and moral claims to ownership of anything may exist in any given scenario (Danso et al., 2020; LazoHerencia, 2021). Assuring that stakeholders understand and support the procurement process, and addressing and managing their expectations, are both beneficial to stakeholders.

In addition, the starting processes for procurement determine and detail the procurement performance's scope and kind. Failure to correctly execute this step may seriously compromise the procurement process' ability to meet community needs (Magassouba et al., 2019). Specific essential procurement process identification in this case entails understanding the procurement project environment and making sure the necessary requirements and technical specifications are included into the procurement process. According to Turfboer and Silvius (2021), problems should be identified, recorded, and proposed solutions. Activities that should be planned for during the initiation stage include: deciding on the best given project that corresponds to the need of the community or organisation; appointing a project manager; breaking down the needs and requirements into manageable goals; conducting a financial, social, and economic analysis of the costs and benefits; locating a funding source; and engaging stakeholders.

Recognising genuine and valid stakeholders and understanding their strength, proximity, and influence is necessary for dealing with their potential impact on the procurement process (Njagi, 2020). One of the first things to do when putting up a project is to figure out who will be affected by or benefit from the procurement procedure. Then, appropriate

and suitable strategies to boost stakeholders' positive influence may be developed and put into action. For project managers, this presents a fundamental risk management challenge, since the inability to establish a full connection between project risks and stakeholder engagement would almost surely lead to the project's failure (Hirpa, 2022).

2.2.1 Stakeholder Involvement in Procurement Planning and Performance

Planning for a procurement project requires input from all involved parties, who must agree on the scope, quality, and goals of the work to be done, as well as the resources to be used, the timeline to be followed, the risks to be considered, and the means by which the work will be delivered. Managers of procurement projects may improve the project's execution process and/or outcome by including stakeholders early on.

The impact of stakeholder participation in procurement project planning processes was also investigated by Hirpa (2022) in Japan. They found that include stakeholders in the planning process affected everything from resource allocation to job description to the final outcome of the project. Musyimi (2022) argues that involving stakeholders in the planning process helps to clarify who is responsible for what when it comes to establishing objectives, drafting milestones and scope statements, selecting a planning team, determining deliverables, developing a work breakdown structure (WBS), determining how much time and money will be needed to complete the project's tasks, and so on.

In addition, it is usually suitable for project performance to use procedures like procurement project planning, specifying the roles and duties of all stakeholders, and keeping a constructive working relationship with them. Most often used during the planning phase of

a project are reviews of the project's plan and major milestones. All relevant parties must take part in the technique's planning stages for it to be effective.

Budgets are created, tasks are delegated, and schedules are made by these managers (Chebichii, 2021). This responsibility is guaranteed by the Ghanaian system for the Management and Oversight of Public Procurement and Large-Scale Projects. They aid the government or organisations in creating and managing different procurement projects by providing advice and assistance. The project's budget, schedule, and work plan must also get approval from the relevant functional divisions. Stakeholders' participation in the planning stage is warranted because it improves the quality of the projects that result from the process of identifying, assessing, scheduling, coordinating, and controlling all the aspects that may impact the performance of the project.

2.2.2 Stakeholder Involvement in Procurement Project Implementation and Performance

Integrating project stakeholders is a crucial part of procurement project management. To carry out the designated project plan, project managers facilitate team member collaboration, optimal resource utilisation, and accurate risk assessment throughout the implementation phase. According to Waithaka (2022), for instance, the successful translation of a project's planned plans and objectives into actual, well-structured tasks and activities is dependent on the active participation of the project's stakeholders.

Procurement projects, due to their length, complexity, and number of new and unexpected requirements, may make it hard to maintain stakeholder engagement throughout the execution phase (Magassouba, 2019). Several approaches are given for classifying the

perils and difficulties associated with stakeholder participation in project execution and performance. Business and political atmosphere, government regulations, political influence, financial and social viability, procurement, and acceptance of the project are all examples. (Njagi, 2020)

Hirpa (2022) argues that the perspectives of several stakeholders are crucial to the achievement of any development procurement project's goals. Therefore, the entire performance of the procurement project will suffer if key project stakeholders are not committed to completely carrying out their commitments during implementation. Engaging stakeholders and considering their claims and interests throughout the project's implementation stages is crucial to achieving project objectives, as stated by Magassouba (2019) and Schmidt et al. (2020).

It's important to note that the impact between procurement efforts and stakeholder involvement goes both ways. Thus, it is possible for development activities to affect stakeholders even while they may affect project performance. While better quality project implementation in the construction and mining industries may improve and alter people's living conditions, the negative effects of the project on the environment will become clear to some stakeholders (Chebichii, 2021; Tampio et al., 2022). In addition, Atkin and Lin et al. (2019) found that including the right stakeholders in the decision-making and implementation processes of a project made it much easier to anticipate and prepare for potential risks.

2.2.3 Stakeholder Involvement in Procurement Project Monitoring and Performance

Procurement Project monitoring is the process of closely overseeing and evaluating a project. It evaluates efficiency and effectiveness by contrasting expected and actual results (Magassouba, 2019). To ascertain whether or not a project is being managed effectively, it is necessary to conduct an assessment of the project's current condition. In a major way, the quality of a project is affected by how closely it is monitored. Colleagues Loureiro and in the future). That's why it's crucial to have a reliable control instrument in place, one that provides regular and organised updates on how the procurement project is progressing.

Pre- and post-implementation assessments of the project are recommended. The purpose of monitoring and control, for instance, is to evaluate the effects of each factor and examine how it affects the procurement project as a whole. (Hirpa, 2022). In the words of Magassouba (2019), "control means seeing that everything happens in accordance with established rule and expressed command." The goal is to provide a comprehensive strategy for planning, sustainability, and decision-making in projects so that goals may be met. According to Masinde and Nzuki (2021), the inclusion of affected stakeholders in the monitoring phase enhances the chance of success, which in turn impacts development project performance. Hirpa (2022) echoed this sentiment, noting the significance of organisations in the process of monitoring and supervising projects and reporting his findings of a favourable and robust correlation between stakeholder engagement in the monitoring stage and the influence of those stakeholders on project performance.

By monitoring and reporting on procurement activities, stakeholders may be made aware of potential problems and solutions. Stakeholder involvement in monitoring is one method that upper-level management may use to influence and boost project outcomes (Njagi, 2020). Organisations benefit from increased project success thanks to stakeholder input

that is both positive and well-informed throughout the monitoring phase of a procurement project.

KNUST

2.2.4 Challenges of Stakeholder Involvement

Stakeholder involvement challenges in this study refers to a precise barrier, constraint or issue related to stakeholder management in the procurement process of an organisation. Just as important as stakeholders can be to the success of a business, they can often impact operations for a variety of reasons (Hearn and Meagher, 2022). There are challenges when dealing with stakeholders sometime. Below are some of these challenges;

i. Stakeholders resistance to share information

A Business Analyst's day might be ruined if an uncooperative stakeholder is encountered. Even if the stakeholder shows up to your workshop, getting any useful information out of them will be very laborious, and they may eventually refuse to meet with you altogether, which will just add more time to the project. There might be many reasons why a stakeholder is withholding information:

Resistance to change: They enjoy the way they operate and see little benefit in altering problems in office politics. Business analysts may be uninformed of prior project failures, resulting in stakeholders unwilling to expend further work on another project that may potentially fail, as well as the fear of being made redundant or replaced.

ii. Standing in the way of progress.

In today's fast-paced business world, people understandably feel threatened by the constant upheaval. Recent developments in communication and technology have had far-reaching effects on the ways in which individuals, organisations, and countries engage with one another. Management and workers often disagree on important issues, such as the effect of globalisation on workers' rights and the usefulness of technology in replacing human employment.

iii. Stakeholders mis-define their real needs

One of the most difficult issues a Business Analyst has is stakeholders who fail to describe their true demands. If the BA is unable to correctly interpret and articulate requirements on behalf of stakeholders, any inadequately stated requirements may result in project failure. Some examples of when stakeholders could incorrectly characterise their needs are as follows:

Stakeholders utilise the project to establish their 'wish list'. This may result in needs being overlooked or improperly prioritised; stakeholders with technical backgrounds describe the requirements as a technical specification to address the issue; and stakeholders contribute requirements in areas in which they are not experts.

iv. Accept or ignore requirements when more than one stakeholder is involved with different views

Another problem that Business Analysts confront is when they get contradictory needs from multiple stakeholders. The issue for the Business Analyst is to determine which needs must

be adopted without causing friction among stakeholders. A decision must be made in which both sides agree on what must be supplied.

v. Communication problems

Too much, too little, too commercial, too straightforward. In addition, it is often not communicated in a manner that reaches the targeted audiences. Communication should be smart and handled strategically, and above all, do not begin boasting. (Hearn and Meagher, 2022).

2.2.5 Organisational Performance

Organisational performance (OP) is a core term in strategic management study. The organisational performance concept refers to the phenomena of certain organisations outperforming others. A construct is a conceptual word defined by scholars to describe a genuine occurrence that is unobservable by nature (Zyphur et al., 2023). As a result, "the challenge of the unobservable in strategic management research" (Cheah and Tan, 2020) affects organisational performance. This issue is best articulated using the predictive validity framework (PVF). The PVF is divided into two levels: conceptual and operational (Van der Hauwaert et al., 2022). Theories describe links between constructs at the conceptual level using propositions. Following that, these hypotheses are experimentally examined at the operational level, where researchers use indicators to quantify a construct. Organisational performance therefore refers to the extent to which an organisation, given certain informational, financial, and human resources, successfully places itself on the commercial market. Individual performance may have a favourable or negative impact on the overall success of the organisation in the short, medium, and long term.

2.2.5.1 Dimensions of organisational performance

Zhai and Tian (2020) offer a three-dimensional OP framework: accounting returns, stock market performance, and growth.

Accounting returns

Accounting returns are defined as an organization's historical performance as measured by financial accounting data provided in yearly reports (Hamann and Schiemann, 2021). According to Van der Hauwaert et al. (2022), there is only one accounting returns dimension, although other research discover many dimensions derived from accounting returns indicators. Accounting returns indicators, on the other hand, are expected to represent at least two distinct dimensions. To begin, it is expected that there would be a liquidity component, which is defined as a company's ability to meet its financial obligations using cash flows generated by current operations (Sunardi et al., 2020). Second, it is expected that there would be a profitability component, which is defined as the effectiveness with which a company turns its production inputs into profits. Cash flows that can be traced back to revenue and expense accruals are emphasised in accounting studies as distinct from profits (such as net profit) (e.g., Kadim, 2020). While accruals help reduce the timing and matching problems inherent in assigning cash flows to certain time periods, they may be skewed by subjective accounting choices (such as a depreciation method or asset useful life). Magni (2019) further stresses the difference between the ROI calculated using accounting methods and the ROI calculated using cash flows.

Procurement Performance

The crucial significance of procurement in attaining operational effectiveness, cost reduction, and supply chain optimization has been underlined in numerous studies (Sharma and Modgil, 2020; Hallikas et al., 2021; Sharma et al., 2020; Yang et al., 2021). Sharma et al. (2020) further highlight the impact that procurement performance has on important organizational outcomes such as customer happiness, product quality, and financial performance. Organizations may find best practices, strengthen their procurement strategies, and ultimately improve their performance by having a better understanding of the body of knowledge that already exists in this field. The user's input emphasizes the value of procurement in achieving operational effectiveness, cost cutting, and supply chain optimization in the end (Yang et al., 2021). The research also underlines how important organizational outcomes like customer happiness, product quality, and financial success are impacted by procurement performance (Hallikas et al., 2021). Organizations can identify best practices, enhance their procurement strategies, and improve their overall performance by comprehending the body of knowledge in this field.

Stock market performance

Stock market performance reflects investor expectations for future success of organisations (Morched and Jarboui, 2021). Capital market metrics such as total shareholder return (TSR) are used to measure this dimension. However, the velocity and volatility of capital markets, the economy, and psychological influences all have an impact on capital market indices (Goodell et al., 2022). In contrast to accounting returns, which have a historical viewpoint, stock market success represents future organisational performance. Previous research has shown consistent evidence that stock market success is a separate component of organisational performance.

Organisational growth

Organisational development is described as a change in the size of an organisation over time. Organisational development is a dynamic notion that is generally measured using three dimensions: sales, workers, and assets (Griffith et al., 2020). Previous studies that investigate the organisational performance dimensions focus on sales growth and disregard employment and asset growth.

2.3 Information Sharing

Information sharing has received a lot of attention due to its usefulness in building efficient supply chain responses, particularly in supply chains (Baah et al., 2019; Colicchia et al., 2019). According to Colicchia et al. (2019), firms are making considerable investments in information technology due to the need for flexibility to respond quickly to market changes. Firms must employ ways for making rapid decisions based on new information in order to respond quickly to market changes. They must also be aware of fresh and useful knowledge that emerges from the environment (Baah et al., 2019). Most importantly, information sharing enables businesses and supply chains to adjust to the dynamic and changing character of today's competitive markets (Feizabadi et al., 2019; Pham et al., 2019). Li et al. (2022) went on to explain that the content and quality of information exchange should be taken into consideration. Consequently, the authors concluded that quality and good content are necessary for information to be communicated to be pertinent or essential for supply chain competitiveness, as indicated by Dubey et al (2020).

Investments in information technologies like enterprise resource planning, electronic data exchange, and the Internet are crucial if businesses and their supply chains want to be competitive, according to Baah et al. (2019).

2.4 Theoretical Review

2.4.1 Stakeholder Theory

According to the stakeholder theory, which was first articulated by Freeman et al. (2021) in their book "Stakeholders of the Organisational Mind," it is a primary responsibility of management to influence, regulate, or balance the network of relationships that may have an effect on an organization's or institution's ability to fulfil its goal. Freudenreich et al. (Freudenreich et al., 2020; Hörisch et al., 2020) put out the idea of stakeholder theory as a management approach and an ethical framework for management. The core concept is that an organization's project efforts are measured by the quality of its connections with stakeholders. These stakeholders include customers, workers, suppliers, communities, financiers, and others. Stakeholder engagement isn't necessary for minor choices or emergencies, but it is necessary for complicated circumstances with far-reaching effects, and it helps avert future issues when done proactively rather than reactively (Freudenreich et al., 2020). According to Langrafe (2020), under the stakeholder model, any individuals or organisations with legitimate interests participate in a corporation to reap advantages; there is no established hierarchy of interests or rewards. Managers need to be aware of the potential impact of several stakeholders on the outcome of a project. Instead of being persuaded by lower-level personnel, these stakeholders will become involved because of their ties to upper management. Top-level management's encouragement of stakeholder

participation in product acquisition increases the likelihood that stakeholders will welcome, rather than resist, the final offerings. Therefore, the stakeholder theory aids in clarifying the connection between assistance from upper management and successful procurement.

2.4.2 Consumer Involvement Theory

After noting that two variables influence the vast majority of purchasing choices across all contexts, Wang et al. (2020) presented this idea. The first factor is the amount of work put into selecting a choice by an individual or group. The second factor is how much weight is given to sentiment as opposed to reasoning when making a purchase choice. User involvement theory posits that there are situations when involving consumers actively results in positive outcomes.

Likewise, there are instances when the idea falls flat. There are four possible outcomes, each of which requires large investments in things like IT infrastructure, an office building and lease, a group health insurance policy, and more. In the second group, we find more emotionally charged and user-involved activities like jewellery shopping, wedding planning, and vacation packing. Emotional or sensuous purchases, such a meal out at a nice restaurant for a particular occasion, fall under the third category of strong user involvement/rational scenarios (Prince, 2020). The last kind of scenario classifies low user engagement with emotional or sensual purchases (like a restaurant for a special occasion) or low user involvement with logical purchases (like a car for transportation). According to the study by Calvo-Porrall et al. (2021), "Influence of End Users Engagement in

Procurement Decision Making on Purchasing," this theory is useful for establishing a link between the independent variable (user engagement) and the dependent variable (efficiency in procurement performance).

2.4.3 Principal-Agency Theory

All parties involved in public procurement may benefit from a better understanding of their place in the buying process according to this procurement theory. An agency relationship, as defined by Tekin and Polat (2020), is a contractual arrangement wherein one or more parties (the principals) choose another party (the agent) to act on their behalf and entrust that party with the authority to make decisions on their behalf. The agent's actions within the context of the principal-agent relationship will have repercussions for both parties. The agent's decision impacts both actors, for whom the effects may be beneficial or detrimental.

The principle-agent relationship is established when the agent has more of the necessary skills and resources than the principal (Tipu and Yousaf, 2022). The theory assumes that a principal may influence an agent to act in a way that benefits the principal but not the agent. The principal-agent theory states that an agent may be instructed to carry out specific duties on behalf of the principal. On the other side, the principal is responsible for providing exhaustive information on the service, item, or job at hand. This is because the principal is ultimately responsible for the agent's failure (Nuwagaba, 2019).

When making decisions and carrying out processes in the procurement environment, it is important to keep the interests of the various stakeholders in mind. Measures are taken to ensure that all relevant parties are consulted prior to making procurement decisions in mature systems. Including all relevant parties in procurement decision-making is not

always feasible. AdjeiBamfo and MalorehNyamekye (2019) argue that the procurement function should be seen as an agent for all stakeholders.

Stakeholder involvement is crucial in procurement, as Bohari et al. (2021) show in their research titled "Public Procurement Procedures and Supply Chain Performance in State Corporations in Kenya." They are all aware that they must do their part to guarantee a smooth procurement procedure. This research emphasises stakeholder participation because it shows the need of collaboration to achieve the stated goal. Since the procurement team has access to market information that the institution does not, they might be considered an agent of the institution and must act in the best interests of the institution while avoiding any potential conflicts of interest.

2.5 Empirical Review

As part of their advocacy and empowerment efforts, Dansoh et al. (2021) investigated the impact of stakeholder management concerns on procurement results in Ghana's upper east area. According to the findings, the study's major stakeholders played an essential part in the project's success because of the roles and interests they played. Stakeholder management, however, has been demonstrated to be characterised by sporadic and fleeting actions that are not heavily institutionalised. Unfair competition, conflicts of interest, a lack of dedication, a bad communication line, a lack of experience on the part of managers, and a lack of understanding and awareness on the part of leaders all had significant effects on organisational performance.

According to Aduda et al. (2019), customers (end-users) and suppliers were designated as the two primary stakeholders after extensive research on the nature of the procurement

process and stakeholder interaction was conducted. He used Institutional and Socioeconomic theories to analyse MONUSCO's end-user departments and concluded that they needed to establish priorities for minimum acceptable quality and quantity. In order to enhance both procurement and organisational performance, the procurement department should always consult with all relevant parties before finalising the materials and service requirements for quality assurance throughout service delivery.

Yunusa (2021) identifies a number of obstacles impacting public procurement procedures and supply chain performance, including the difficulty in establishing and maintaining relationships between entities for the purpose of resource pooling, regulatory loopholes that can be exploited to make the procurement process inefficient, and non-compliance with regulations. The research looked at the adherence to public procurement rules, the problems that emerged, and the impact that public procurement practises had on supply chain efficiency. Using the Agency, Dialectical, Innovation, and Stakeholder Management theories, he found evidence that procurement procedures are followed by parastatals, that procurement staff are adequately trained to handle procurement issues, that product quality is rising, that relationships with vendors are strengthening, and that prices for goods and services are falling.

Nana (2022) studied how involving stakeholders influenced the success of water, sanitation, and hygiene (WASH) initiatives in Rwanda. Community members were surveyed mostly using semi-structured questionnaires for this research. The local community, which stands to gain from the project and knows best which aspects of it will serve its interests, should be included in decision making, it has been determined that stakeholder participation has a direct bearing on project success.

2.6 Conceptual Framework

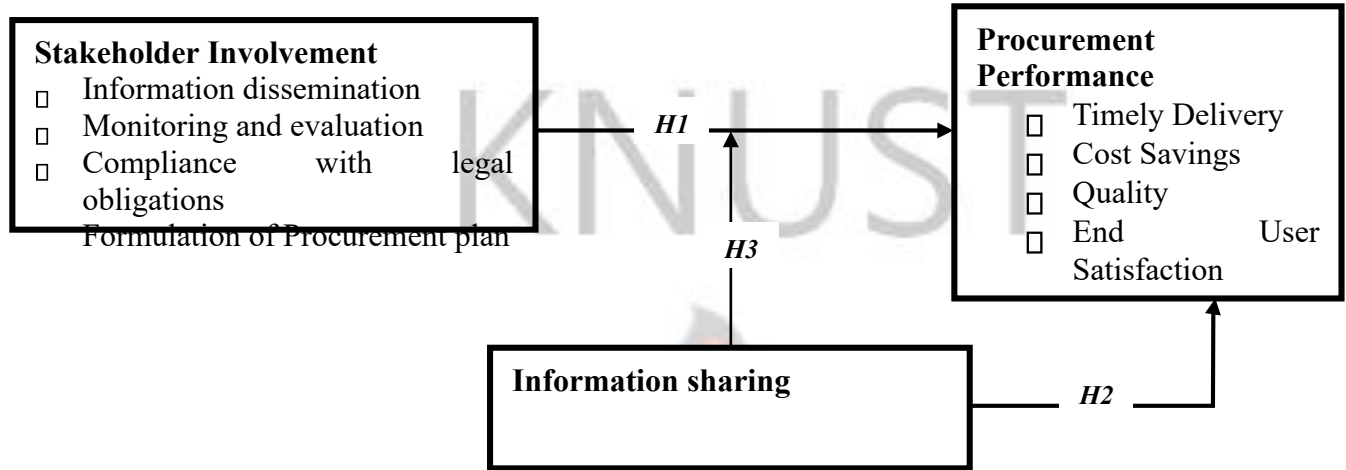


Figure 2.1: Conceptual framework

The framework in Figure 2.1 suggested in this study emphasizes how crucial stakeholder participation is to the effectiveness of procurement. Stakeholder involvement can result in improved outcomes for cost reduction, quality improvement, and innovation. Stakeholders include suppliers, customers, and employees. Yet, the degree of information sharing between the people involved determines how well stakeholder involvement works. Stakeholders are more likely to cooperate to achieve shared objectives when they can communicate information openly and honestly. By enhancing value generation, reducing risk, and increasing efficiency, this can lead to better procurement performance. To fully reap the rewards of stakeholder involvement in procurement processes, companies must understand the moderating function that information sharing plays. Organizations may establish an environment that is more collaborative, facilitates efficient procurement procedures, and ultimately leads to commercial success by fostering an open and transparent culture.

2.7 Hypothesis Formulation

2.7.1 Stakeholder Involvement and Procurement Performance

Stakeholder involvement fosters systemic awareness, shared strategy and knowledge, group learning, and system-wide goals, all of which have a positive effect on performance, according to the body of existing literature (Sayyed et al., 2023). Moreover, stakeholder involvement can result in organizational practices that are in line with sustainability criteria, according to research by (Stocker et al., 2020). According to the underlying stakeholder participation idea, cooperation boosts resource productivity and establishes the framework for community-driven growth (Ghassim and Bogers, 2019). Hence, involving stakeholders can aid firms in identifying potential risks and opportunities that could impact their procurement process, such as suppliers, customers, and employees. Organizations can gain important insights and feedback by including stakeholders in the procurement process, which can aid them in making wise decisions. Also, this cooperation promotes openness and transparency between the organization's stakeholders. Yet, this study fills a vacuum that previously impeded the finding of a strong causal relationship between stakeholder participation and procurement performance by outlining the fundamental ideas behind the concept of stakeholder involvement. Thus, this study proposed that:

H₁: Stakeholder involvement directly and positively influence procurement performance

2.7.2 Information sharing and Procurement Performance

According to the literature review, information sharing is essential for raising performance (Barrat and Oke, 2007; Sezen, 2008; Cao and Zhang, 2011; Blome et al., 2013; Eckstein et al., 2015; Brusset, 2016). According to these earlier research, information sharing enables procurement partners to adapt to customer wants, market changes, and competitive

demands efficiently and effectively as a single unit. It is impossible to overstate the importance of information sharing in today's highly competitive marketplaces since it fosters long-term cooperation and coordination, which improves supply chains and company performance (Lofti et al., 2013; Aslam et al., 2018). Consequently, improving procurement effectiveness in current business situations requires the creation, sharing, and utilization of pertinent information. The authors went on to say that one of the key functions of information sharing in the procurement process is to increase benefits while decreasing expenses, such as the initial investment in information systems (e.g., electronic data interchange, enterprise resource planning, etc.). According to Dubey et al. (2020), as competition intensifies, information systems and processing also advance. As a result, enterprises are under pressure to integrate in order to create competitive advantages while enhancing procurement performance. Furthermore, Aslam et al. (2018) stressed the importance of adopting good information-sharing procedures during the procurement process in order to create dynamic capabilities that improve purchasing procedures and performance.

According to Feizabadi et al. (2019) sharing information also fosters teamwork in the procurement process, which has a substantial impact on competitive advantage. Cao and Zhang (2011) demonstrated how procurement collaborations based on efficient information sharing enhance relational rents in addition to others, resulting in improved firm performance and higher competitive positions acquired through collaborative advantage. Given the foregoing, it is clear that information sharing has a significant positive impact on the procurement process, from visibility to performance. As a result, more research is

necessary to understand the wider implications and effects of information sharing in supply chains. Thus, this study propose the hypothesis that:

H₂: Information sharing is positively related to procurement performance

2.7.3 Moderating Effect of Information Sharing

From a stakeholder theory perspective, it is widely recognized that stakeholder involvement can significantly impact procurement performance (Freudenreich et al., 2020). However, the extent to which information sharing moderates this relationship remains unclear. Recent research suggests that information sharing plays a crucial role in mitigating the potential negative effects of stakeholder involvement on procurement performance (Yang, and Basile, 2021). Specifically, effective communication and collaboration between stakeholders and procurement teams can lead to better alignment of goals and expectations, increased trust, and improved decision-making processes. This, in turn, can enhance overall procurement performance by reducing delays, improving quality control, and increasing cost-effectiveness. Thus, it is essential for organizations to prioritize information sharing as a key factor in their stakeholder involvement strategies to achieve optimal procurement outcomes (Vogelsang et al., 2023). By fostering an environment of transparency and open communication with stakeholders, organizations can ensure that their procurement processes are aligned with stakeholder needs and expectations while maintaining high levels of performance and efficiency. Based on the above, this study fill the gap in literature by providing the basis for understanding how information sharing play a contingency role in the link between stakeholder involvement and procurement performance. Hence, the study hypothesized that:

H₃: Information sharing moderates the relationship between stakeholder involvement and performance of procurement

2.8 Summary of Chapter

Stakeholder participation in procurement activity selection, planning, execution, and monitoring increases the likelihood of procurement success and is an acceptable strategy to meet an organization's objectives. The data gathered on stakeholders' engagement in prior studies suggested a significant link between procurement success and different stakeholders, and many authors agreed and are doing more extensive research to back up those conclusions. As a result, as mentioned in the literature, stakeholder participation in procurement via identification, planning, execution, monitoring, and control contributes significantly to procurement success. The current research does advocate a careful examination of the essential success variables emphasised in this study, as well as the organization's objectives, for more dynamic, innovative, and successful procurement performance.

CHAPTER THREE

METHODOLOGY AND ORGANISATIONAL PROFILE

3.1 Introduction

The research questions were addressed using the methods described in this chapter. The sections list the available approaches and explain why each decision was made. An introduction is given at the beginning of the chapter, which is then followed by sections on the research design and methodology, study population, sample size, sampling strategy, research instrumentation, data collecting process, validity and reliability, and data analysis.

3.2 Research Design

Asenahabi (2019) and Sileyew (2019) define research design as "the overall framework for integrating the many components of the study in a coherent and logical manner, ensuring that the research issue is effectively handled" (emphasis added). There are many different types of research designs, but not every one of them will work for your topic. Al-Ababneh (2020) identifies three distinct research strategies: exploratory, descriptive, and explanatory. Since each design is intended to accomplish something specific, he categorises them according to their study field. Descriptive studies aim to provide a picture of a situation, person, or event; they may also demonstrate connections between elements of the natural world (Siedlecki, 2020). Descriptive research, on the other hand, is best suited to a brand-new or unexplored study subject since it cannot explain why an event happened (Rahman, 2020). When descriptive information is supplied, further research strategies, such as explanatory or exploratory methods, might be recommended.

Exploratory studies are carried out when there is a lack of knowledge about a phenomena or when an issue has not been well described (Ryder et al., 2020). Its purpose is not to solve research issues but to investigate them from different angles. Therefore, the conference was focused on topics that have not been extensively explored before (Thille et al., 2022). Even

under the most severe of circumstances, exploratory research lays the framework for more conclusive study by establishing the first research design, sample strategy, and datagathering technique (Swedberg, 2020).

However, the purpose of a descriptive research is to provide an explanation for, and an account of, the descriptive data collected. While descriptive research may investigate "what" issues, explanatory research aims to address "why" and "how" questions (Mttus et al., 2020). Methods of both exploratory and descriptive research are used to get to the bottom of what keeps something from happening once and for all. The goal of an explanatory investigation is to determine if a theory or prediction has any basis in fact. It's done so that we can identify and document causal relationships between the event's constituent parts. The major purpose of this study is to examine the impact of stakeholder involvement on procurement performance and the moderating role played by face-to-face communication in this relationship. To do this, we generate quantitative and statistical data and use qualitative research to confirm our findings. Therefore, it is best to choose an explanatory research method that can answer both the how and the why of the primary research question.

3.3 Research Purpose

The study aimed to provide light on the phenomenon under investigation. Data for the study came from a selected population, hence the explanatory research design is valid. Data collection from a large sample of the population may be accomplished quickly and easily via the use of surveys (Al-Ababneh, 2020). The respondents felt they had greater say in the research procedure when using a survey. In addition, the survey method is suitable for this study since it will aid the researcher in determining the SI in SC and its impact on

procurement performance and providing statistical explanations for those findings. Therefore, the purpose of this study was to examine the effect of SI on procurement performance within the framework of data exchange.

3.4 Population of the Study

The population of the study refers to all of the components that may be selected to be a part of the research's sample. Bloomfield and Fisher (2019) define a study's population as "all the people, things, and occurrences that meet the requirements for inclusion in the sample." The population, according to Campbell et al. (2021), is the whole collection of cases from which a sample is selected. The study's population comprises of supply chain managers and procurement officers firms.

3.5 Sample Size and Sampling Technique

The problem of sample and sampling method has a long history of dispute in academia, owing to the fact that the selection of sample and process has major implications for the conclusion of any scholarly investigation. Kothari (2004) defines the sample as "the researcher's effort or strategy to determine the number of study participants who should be included in the sample." There are three primary approaches for calculating sample size in a given population that may be identified. To begin, formulae may be used to compute sample size (Israel, 1992). Second, the use of a published statistical table to determine sample size, such as Krejcie and Morgan's (1970) published statistical table. Finally, a researcher might choose to use census procedures, which include gathering data from the whole population. The sample size for this experiment was determined using Singh and Masuku's (2014) sample size determination method. The researcher's ignorance of the true

number of people employed in the Eastern region's service industry justifies the use of the Singh and Masuku (2014) method. 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

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

$$n=384.16$$

$$n \approx 384$$

The calculated sample size for this study is 384. However, to deal with non-response, an additional 6 respondents were considered summing up to 390.

For the recruitment of respondents, convenience and purposive sampling techniques were adopted. At the organization level, the researcher purposefully selected key respondents to participate in the study. Purposive sampling is a sampling strategy that, by definition, relies on the researcher's own judgment when selecting members of the population to take part in the study (Obilor, 2023). The use of this approach is justified by the fact that the researcher is interested in only individuals who have the requisite skill, knowledge and expertise concerning the subject under study. The researcher therefore selected individuals with managerial role in the organization who are knowledgeable in terms of supply chain. However, the researcher included only respondents who are ready, accessible and willing

to partake in the study through convenient sampling technique. Convenience sampling is a qualitative research sample strategy that includes selecting participants depending on how conveniently and quickly the researcher can contact them. Rather of being picked at random from a broader group, participants in this approach are chosen because they are conveniently accessible to the researcher (Simkus, 2022).

3.6 Data Collection

The study used primary data. Primary data are those gathered by a study from the field to help the researcher meet the study's goals and respond to its questions (Bloomfield et al., 2016). Using this primary data source is consistent with earlier studies on knowledge exchange (e.g., Saleem et al., 2021; Fernando et al., 2020; Singh et al., 2021; Chen et al., 2019). Additionally, the research context—service industry in a developing economy—makes it challenging to find secondary data sources for the variables to be calculated. The data collecting strategy employed was quantitative a structured or self-completion questionnaire. For easy validation of the questionnaire, the researcher adopted constructs of previous studies and modify the measurement items to suit the current study. For instance, the measurement item for stakeholder involvement was adapted from CarrilloHermosilla et al. (2009); Heugens and Oosterhout (2002) and Moroni et al. (2022). The questionnaire consisted of 8 items to measure stakeholder involvement. For procurement performance, the researcher adapted measures from Appiah and Lartey (2019). Six items were used to measure the procurement performance of service industry. Further, with 11 items sourced from Baah et al. (2019) and Holcomb et al. (2011), the information sharing was measured. All measurement constructs were measured on a 7-point likert scale.

This research followed a face-to-face data collection approach, specifically delivery-and-collection, consistent with previous survey studies focusing on senior managers as main informants. This approach to data collection is not only acceptable in the Ghanaian context, but also produces high response rates. The weak address system and low internet accessibility or penetration levels make techniques for collecting mail and internet data inefficient and therefore hard to implement in Ghana. Given the time constraint and complexity of managing the questionnaires with a face-to-face approach and reaching out to a wide range of organizations, the researcher included three other individuals to assist in the collection of data. The supervisor of the study performed a background check of the credibility of the field study agents to ensure that quality data is collected and to adhere to ethical issues. In addition, relevant training for the additional data collection agents was provided by the study supervisor. Only from the main informants were completed questionnaires obtained and also strictly set to complete the data collection on 30 days on which questionnaires that were not submitted within 30 days were unapproved. The fieldwork lasted for one month (i.e. July – August, 2023).

3.7 Data Processing and Analysis

To achieve its objectives, this study combined descriptive analysis with multivariate data analytics like factor analysis and structural equation modeling (SEM). As analysis tools, Smart-PLS and the Epidata were the instruments for data analyses. Before the data set is sent to Amos for further analysis, the Epidata application was applied for data coding, input, cleaning, and exploration. The collected data were checked before being transferred to minimize errors, ensure that all scores were within the acceptable range for the scale, and ensure that no entering of incorrectly numbers. The statistical connection between the

variables in this study were examined using the maximum likelihood estimation method, which was applied to all questions in confirmatory factor analysis (CFA), common method analysis (Baumgartner et al., 2021), descriptive statistics, inter-construct correlations, and multiple regression analysis, among other tests (Hair et al., 2021).

3.8 Validity and Reliability

According to Cohen et al. (2017), tests of dependability confirm that a survey instrument produces identical results for all measures, regardless of whether they are administered to the same or a comparable population. The dependability of the instrument can be ascertained or examined by measuring or examining the Cronbach alpha coefficient.

Amirrudin et al. (2021) established that an instrument was deemed reliable if it had a *Cronbach alpha* coefficient of 0.7 or greater, meeting the reliability requirement.

Additionally, validity of research instrument refers to the process of making sure the survey assessed what it was supposed to measure in terms of constructs in the model (Sürücü and Maslakçi, 2020). Appropriate research procedures were used for data collection and analysis to ensure the validity of the findings. The supervising team of experts was supplied with the instrument so they could review it. Once the instrument was approved, it was administered straightforward. Utilizing average variance extracts, convergent validity, and discriminant validity, the validity of the instrument was assessed.

3.9 Ethical Issues

In this study, some significant ethical issues in research were covered. Overviews was given on a mission to individuals who consented to take part in the study once the field officers

had the approval from the administration of the respondents and firms. In order to get their attention and encourage them to participate in the survey, the participants were made aware of the significance and purpose of the study. Additionally, those who were unable to finish the questionnaire were disqualified from the study even though justification appeals were provided to the respondents. The study guaranteed and ensured the respondents' or firms' confidentiality at the same time. Finally, the information gathered were only utilized for its intended purpose.

3.10 Organizational Profile

The engine of economic expansion and progress is the service sector. It contributes considerably to a nation's GDP overall in addition to creating job possibilities. But one of the biggest problems facing the service sector is procurement, including locating trustworthy suppliers or negotiating advantageous contracts. A key component of addressing these issues is stakeholder involvement. Interacting with different stakeholders, including as vendors, clients, and governmental organizations, can assist in recognizing and efficiently addressing procurement-related problems.

Furthermore, fostering a solid rapport with suppliers and putting in place open and honest procurement procedures can also aid in reducing these difficulties. Implementing performance measures, performing supplier assessments, and maintaining regular communication can all help achieve this. Utilizing digital platforms and technology to its full potential can also increase productivity and streamline the procurement process. Through the implementation of efficient procurement strategies and the resolution of these

obstacles, the service sector may sustain its prosperity and make a substantial contribution to the economic advancement of a nation.

KNUST



CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

The following chapter of this academic study examines the information from the previous chapter, which is divided into four major sections. The first segment covers the exploratory data evaluation findings, and the second segment discusses demographics. Information

about CFA and model fit index discoveries is provided in the additional section, which focuses on correlation analysis. In order to analyze the proposed hypotheses and further discuss the major findings, the study's final section employs a structural equation model.

4.1 Exploratory Data Analysis

The first stage of data analysis was exploratory in nature, with a primary goal of evaluating the data's quality using exploratory factor analysis with the aid of SPSS. The response rate, non-response bias, and common method bias (CMB) were some of the subsections of this evaluation that were looked at. In the sections that follow, the data quality assessment tests are thoroughly explained along with their corresponding interpretations.

4.1.1 Response Rate

Information on survey response rates is provided in table 4.1. The questionnaire was distributed to a total of 390 people. Out of these, 384 responded, which corresponds to a response rate of 98.5%. On the other hand, 6 individuals did not respond to the survey, representing a non-response rate of 1.5%.

Table 4.1: Data Response Rate

Distributed	Collected	Percentage of Usable
Response	384	98.5
Non-Response	6	1.5
Total	390	100.0

4.1.2 Test for Common Method Bias and Sampling Adequacy

In order to maintain the relationship between the dependent variable and the predictors, testing for common method bias (CMB) is an essential component of survey research (Podsakoff and Organ, 1986; Bahrami et al., 2022). One type of CMB that can be found

using techniques that lessen the amount of data produced by CMB is social desirability or consistency. A single factor may only account for less than 50% of the variation, according to the results of exploratory factor analysis, which supports Harman's single component approach. This strategy was found to be responsible for 46.497% of the overall variance by the main component analysis.

Table 4.2: Test for Common Method Variance (CMV)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.624	46.497	46.497	11.624	46.497	46.497
2	2.692	10.767	57.264	2.692	10.767	57.264
3	1.703	6.811	64.075	1.703	6.811	64.075
4	1.400	5.602	69.677	1.400	5.602	69.677
5	1.080	4.321	73.998	1.080	4.321	73.998
6	.961	3.846	77.844			
7	.925	3.699	81.543			
8	.667	2.669	84.211			
9	.592	2.367	86.578			
10	.553	2.213	88.791			
11	.509	2.034	90.826			
12	.398	1.594	92.419			
13	.340	1.360	93.779			
14	.297	1.188	94.967			
15	.230	.921	95.887			
16	.187	.749	96.637			
17	.167	.668	97.305			
18	.153	.614	97.919			
19	.126	.506	98.425			

20	.111	.444	98.869			
21	.073	.294	99.163			
22	.070	.280	99.443			
23	.056	.223	99.666			
24	.047	.188	99.854	25	.036	.146
		100.000				

Extraction Method: Principal Component Analysis.

Source: Field Survey (2023)

4.1.3 Bartlett's Test of Sphericity and KMO Test

Both the Bartlett's Test of Sphericity and the KMO Measure of Sampling Adequacy, as shown in Table 4.3, give strong indication that the data is suited for factor analysis. The substantial result of Bartlett's Test indicates that there are substantial associations connecting the variables, justifying the usage of component analysis. Furthermore, the high KMO value (0.819) suggests that the dataset contains a high degree of shared variance, validating the data's eligibility for factor analysis.

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

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.					.819
Bartlett's Test of Sphericity	Approx. Chi-Square	9647.372	df	300	
	Sig.				.000

Source: Field Survey (2023)

4.1.3 Non-Response Bias

In this investigation, it was determined that examining non-respondent bias was crucial. There is a propensity for non-response when a study has a low response rate. Low survey response rates can cause non-response bias, which reduces the reliability of the sample and the research's ability to be generalized. This study looked at early and late respondents in

an effort to lessen the potential effects of non-response bias. Oppenheim (2001) ruled that the model input variables for "early responders" and "late responders" must be the same. The lack of non-response bias is demonstrated by the fact that the samples accurately reflect the population. 192 responses arrived on time, while 192 others were tardy. T-tests were used to investigate non-response bias. (See Table 4 Point 4). The research's conclusions show that the construct's data in the first and last months are identical.

Table 4.4: Results of Independent-Samples t-Test for Non-Response Bias

				Levene's Test for Equality of Variances		
	Group	Mean	Std. Deviation	F	Sig.	t
Stakeholder Involvement	1	22.99	5.066	0.683	0.41	-1.379
	2	24.12	5.03			-1.379
Information Sharing	1	30.93	6.2	0.336	0.563	-1.611
	2	32.55	6.099			-1.611
Procurement Performance	1	31.3	6.151	0.964	0.328	-0.705
	2	32	6			-0.705

Source: Field Survey (2023)

4.2 Respondents and Firm Profile

Table 4.5 presents the distribution of responses related to respondents' demographic characteristics and firm profiles. The table consists of various variables such as Gender, Age, Education, Current Position, State run Enterprise, Number of Employees, Industry, Revenue of the Company, Ownership of Company, Legal Form of Entity, Type of Customers Served, Number of Estimated Customers, and Position in the Supply Chain. The respondents' gender distribution shows that 47.7% of the respondents are male, while 52.3% are female. The age distribution reveals that the largest group of respondents falls

within the age range of 20 to 30 years (47.4%), followed by the age range of 30 to 40 years (25.0%). The majority of respondents have an undergraduate education (74.2%), followed by those with a master's degree (22.7%), and a smaller proportion with SHS education (3.1%). Among the respondents, the largest group holds the position of Fleet Manager (31.5%), followed by Logistics Manager (16.9%) and General Manager (15.4%). Almost an equal number of respondents' firms are classified as both "Yes" (47.4%) and "No" (52.6%) in terms of being state-run enterprises. The distribution of firms by the number of employees shows that the majority have over 100 employees (38.3%), while the smallest group consists of firms with fewer than 6 employees (7.0%). The respondents' firms are engaged in various industries, with Health (39.1%) and Retail (21.9%) being the most common industries represented. The majority of firms fall within the revenue range of 40,000 to 80,000 New Ghana Cedis (24.0%), followed by those with revenue over 1,000,000 New Ghana Cedis (22.1%). Most of the firms are solely Ghanaian-owned (71.4%), followed by Joint Ventureships (18.2%) and Foreign-Owned (10.4%) companies. The distribution by legal form of entity shows that Sole Proprietorship (31.0%) and Public Limited Liability (29.9%) are the most common legal forms. The majority of firms serve Consumers (58.6%), followed by Retailers (19.0%) and Wholesalers (15.4%). The distribution of firms by the estimated number of customers indicates that the largest group serves more than 200 customers (37.0%). The main roles reported are Service Provider (41.7%) and Main Supplier to the Service (22.4%).

Table 4.5: Respondents and Firm Profile

Variables	Classifications	Frequency	Percent
Gender	Male	183	47.7
	Female	201	52.3
Age	Below 20 years	80	20.8

	20-30years	182	47.4
	30-40 years	96	25.0
<hr/>			
Highest education	40-50years	26	6.8
	SHS	12	3.1
	Undergraduate	285	74.2
	Masters	87	22.7
Current position	Logistics manager	65	16.9
	Fleet manager	121	31.5
	General manager	59	15.4
	Operations manager	58	15.1
	Warehouse manager	47	12.2
	Supply chain manager	34	8.9
State run Enterprise	Yes	182	47.4
	No	202	52.6
Number of Employees	<6 employees	27	7.0
	6-29 employees	86	22.4
	30-59 employees	80	20.8
	60-99 employees	44	11.5
	100+ employees	147	38.3
Corresponding industry	Financial Services (banking & investments)	59	15.4
	Health	150	39.1
	Retail	84	21.9
	Transportation	52	13.5
	Telecommunication	32	8.3
	Pharmaceuticals	7	1.8
Revenue of Company (GH¢)	<40,000	66	17.2
	40,000-80,000	92	24.0
	80,000-120,000	31	8.1
	120,000-160,000	38	9.9
	160,000-200,000	6	1.6

	200,000-500,000	32	8.3
	500,000-1,000,000	34	8.9
	>1,000,000	85	22.1
Ownership of company	Solely Ghanaian Owned	274	71.4
	Foreign Owned	40	10.4
	Joint Ventureship	70	18.2
Legal form of Entity	Sole Proprietorship	119	31.0
	Limited Liability	79	20.6
	Partnership	71	18.5
<hr/>			
	Public Limited Liability	115	29.9
Type of Customers served	Distributors	27	7.0
	Wholesalers	59	15.4
	Retailers	73	19.0
	Consumers	225	58.6
Estimated Customers	1 – 20	13	3.4
	21-50	45	11.7
	50-100	132	34.4
	101- 200	52	13.5
	>200	142	37.0
Position in the Supply Chain	Main Service	32	8.3
	Main Supplier to the service	86	22.4
	Secondary Supplier of the main Supplier/service	59	15.4
	Distributor/Dealer	47	12.2
	Service provider	160	41.7
	Total	384	100.0

Source: Field Survey (2023)

4.3 Correlation Analysis

Table 4.6 displays the correlation coefficients among three constructs: Information Sharing, Procurement Performance, and Stakeholder Involvement. The correlation coefficient between Information Sharing and Procurement Performance is 0.739. This value indicates a strong positive linear relationship between these two constructs. The correlation coefficient between Information Sharing and Stakeholder Involvement is 0.744.

This value also indicates a strong positive linear relationship between these two constructs. The correlation coefficient between Procurement Performance and Stakeholder Involvement is 0.590. This coefficient indicates a moderate positive linear relationship between these constructs.

Table 4.6: Correlation Analysis

Constructs	1	2	3
Information Sharing	1.000		
Procurement Performance	0.739	1.000	
Stakeholder Involvement	0.744	0.590	1.000

Source: Field Data, 2023

4.4 Confirmatory Factor Analysis

Table 4.7 show the finding of a Confirmatory Factor Analysis (CFA) evaluates the outer loadings, CA, CR, AVE, and T statistics of the constructs. The outer loadings show how each latent variable (factor) correlates with its observable variables (indicators). The outer loadings vary from 0.702 to 0.918, demonstrating a significant link between variables. CR, CA, and AVE assess internal consistency and convergent validity, respectively (Hair et al., 2016). All factors show strong CR (0.933 to 0.951), CA (0.918 to 0.938), and AVE (0.636 to 0.764) values, suggesting good internal consistency and convergent validity (see Table 4.7). T-statistics and p-values indicate outer loading statistical significance. All loadings

exhibits high t-statistics (from 22.013 to 135.107) and low p-values (less than 0.05), suggesting statistically significant between variables.

KNUST



<u>Variables</u>	<u>Codes</u>	<u>Outer Loadings</u>	<u>CA</u>	<u>CR</u>	<u>AVE</u>	<u>T statistics (O/STDEV)</u>	<u>P values</u>
Procurement Performance	PP1	0.908	0.938	0.951	0.764	123.005	0.000
	PP2	0.851				35.352	0.000
	PP3	0.883				50.698	0.000
	PP4	0.897				42.625	0.000
	PP5	0.876				54.758	0.000
	PP6	0.828				33.474	0.000
Stakeholder Involvement	SE1	0.702	0.923	0.937	0.653	16.596	0.000
	SE2	0.918				135.107	0.000
	SE3	0.829				34.073	0.000
	SE4	0.717				18.969	0.000
	SE5	0.788				29.693	0.000
	SE6	0.852				45.012	0.000
	SE7	0.824				23.679	0.000
	SE8	0.811				36.057	0.000
Information Sharing	SI10	0.774	0.918	0.933	0.636	31.153	0.000
	SI11	0.790				31.724	0.000
	SI2	0.835				43.801	0.000
	SI3	0.735				22.013	0.000
	SI5	0.808				36.307	0.000
	SI6	0.865				55.811	0.000
	SI8	0.754				26.177	0.000
	SI9	0.813				33.468	0.000

Table 4.7: Confirmatory Factor Analysis

Source: Field Data, 2023

KNUST

55



4.4.1 Discriminant Validity

The Fornell-Larcker criteria assessed the study's constructs discriminant validity (Hair et al., 2010; Henseler et al., 2016b). As indicated in Table 4.8, the diagonal values are the square roots of each construct's AVE, which indicated the construct's variance relative to measurement error. Off-diagonal values show construct correlations. Discriminant validity requires AVE values larger than inter-construct correlations. In Table 4.8, all constructs have AVE values larger than their inter-construct correlations, suggesting discriminant validity.

Table 4.8: Fornell-Larcker criterion

Constructs	1	2	3
Information Sharing	0.798		
Procurement Performance	0.739	0.874	
Stakeholder Involvement	0.744	0.590	0.808

Source: Field Data, 2023

The Heterotrait-Monotrait Ratio (HTMT) also assessed discriminant validity. All constructs' HTMT values are below 0.85, showing adequate discriminant validity (see Table 4.9).

Table 4.9: Heterotrait-Monotrait Ratio (HTMT)

Constructs	Heterotrait-monotrait ratio (HTMT)
Procurement Performance <-> Information Sharing	0.775
Stakeholder Involvement <-> Information Sharing	0.792
Stakeholder Involvement <-> Procurement Performance	0.599

Source: Field Data, 2023

4.4.2 Model fitness indices

Table 4.10 displays the calculated model's fitness indices. As the standardized root mean square residual (SRMR) value of 0.072 is below the suggested threshold of 0.08, this indicates a good model fit. The model fit is also good base on its d_ULS (unweighted least squares) value of 2.128 and d_G (geodesic) value of 1.888. Model fits improves with lower d_ULS and d_G values. The observed data deviates from the predicted model because the chi-square value is 3091.345 ($p < 0.05$). The NFI value of 0.666 suggests a moderate level of model fit improvement compared to a baseline model.

Table 4.10: Model fitness indices

Model fitness indices	Estimated model
SRMR	0.072
d_ULS	2.128
d_G	1.888
Chi-square	3091.345
NFI	0.666

Source: Field Data, 2023

4.4.3 Predictive Relevance (R^2 and Q^2)

R-squared measures the proportion of variance in the dependent variable that is explained by the independent variables in a regression model (Chin et al., 2020; Hair et al., 2018). The R-squared value for the "Procurement Performance" construct is 0.556. This suggests that the independent variables collectively explain about 55.6% of the variability in procurement performance (see Table 4.11 and Figure 4.1).

Table 4.11: Predictive Relevance (R^2) and Q^2

Construct	R-square	Q^2 predict
Procurement Performance	0.556	0.542

Source: Field Data, 2023

Q^2_{predict} assesses the predictive relevance of a model by comparing the cross-validated predicted values to the actual values (Geisser, 1974; Stone, 1974). The Q^2_{predict} value for the “Procurement Performance” construct is 0.542. This suggests that the model's predictions, when cross-validated, explain approximately 54.2% of the variance in procurement performance (see Table 4.11 and Figure 4.1).

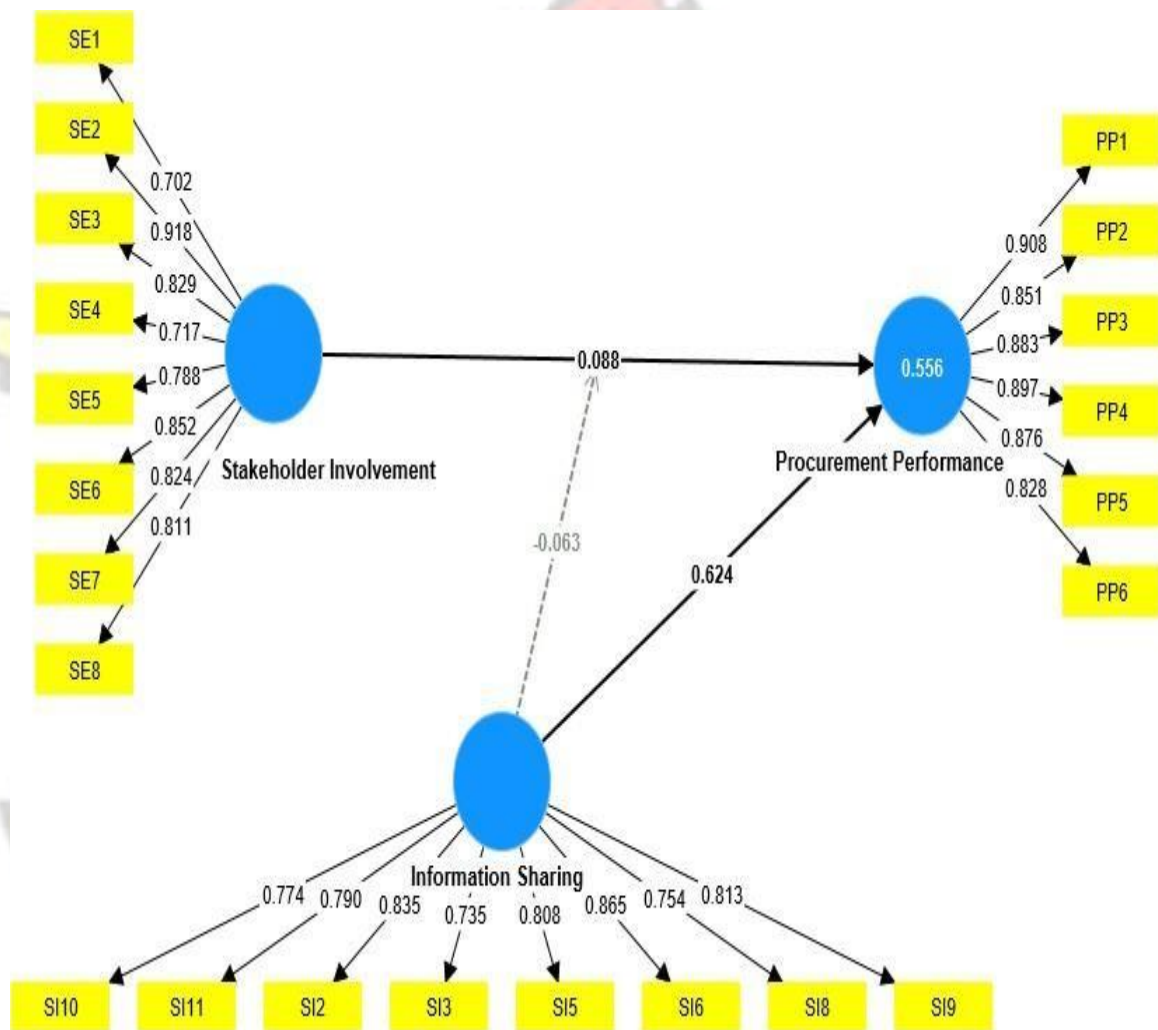


Figure 4.1: Measurement Model Assessment

4.5 Hypotheses for Direct Relationship

Figure 4.2 and Table 4.12 depicts the structural model assessment, which in its entirety evaluates the connections between the constructs. Figure 4.2 and Table 4.12 show the results of this analysis. The relevance of the model's three pathways was examined using PLS bootstrapping with 5000 samples. The results on the direct correlations among these constructs provided in Table 4.12 and Figure 4.2 are discussed further.

Table 4.12: Hypotheses for Direct Relationship

Path	Path Coefficient	T statistics	P values	Hypothesis Validation	VIF
Information Sharing -> Procurement Performance	0.624	10.468	0.000	Accepted	2.631
Stakeholder Involvement -> Procurement Performance	0.088	1.556	0.120	Rejected	2.244
Information Sharing x Stakeholder Involvement -> Procurement Performance	-0.063	2.171	0.030	Rejected	1.403

Source: Field Data, 2023

The positive path coefficient (0.624) with a high t statistic (10.468) and a very low p-value (0.000) suggests a strong and statistically significant relationship between information sharing and procurement performance. This relationship is accepted. The statement indicates that information sharing contributes significantly to the attainment of procurement performance. This implies that as organizations engage in more effective information sharing, their procurement performance tends to improve in a consistent and meaningful way, and this relationship is supported by statistical evidence.

The path coefficient (0.088) is insignificant, as is the t statistic (1.556). The p-value (0.120) is more than the commonly used threshold of 0.05, suggesting that there is insufficient evidence to demonstrate a link between stakeholder involvement and procurement performance. The connection is rejected. This term suggests that the data and statistical

analysis conducted in the study do not provide enough support to confidently claim that a substantial or meaningful connection exists between stakeholder involvement and procurement performance. In other words, the evidence available is not strong enough to support the idea that changes in stakeholder involvement consistently lead to changes in procurement performance.

The presence of a negative coefficient (-0.063), a high t statistic (2.171), and a very low pvalue (0.030) suggests that information sharing significantly and negatively moderates the association between stakeholder involvement and procurement performance. This link is approved. This implies that as information sharing increases, the effect of stakeholder involvement on procurement performance diminishes. In other words, higher levels of information sharing are associated with a reduction in the positive impact of stakeholder involvement on procurement performance.

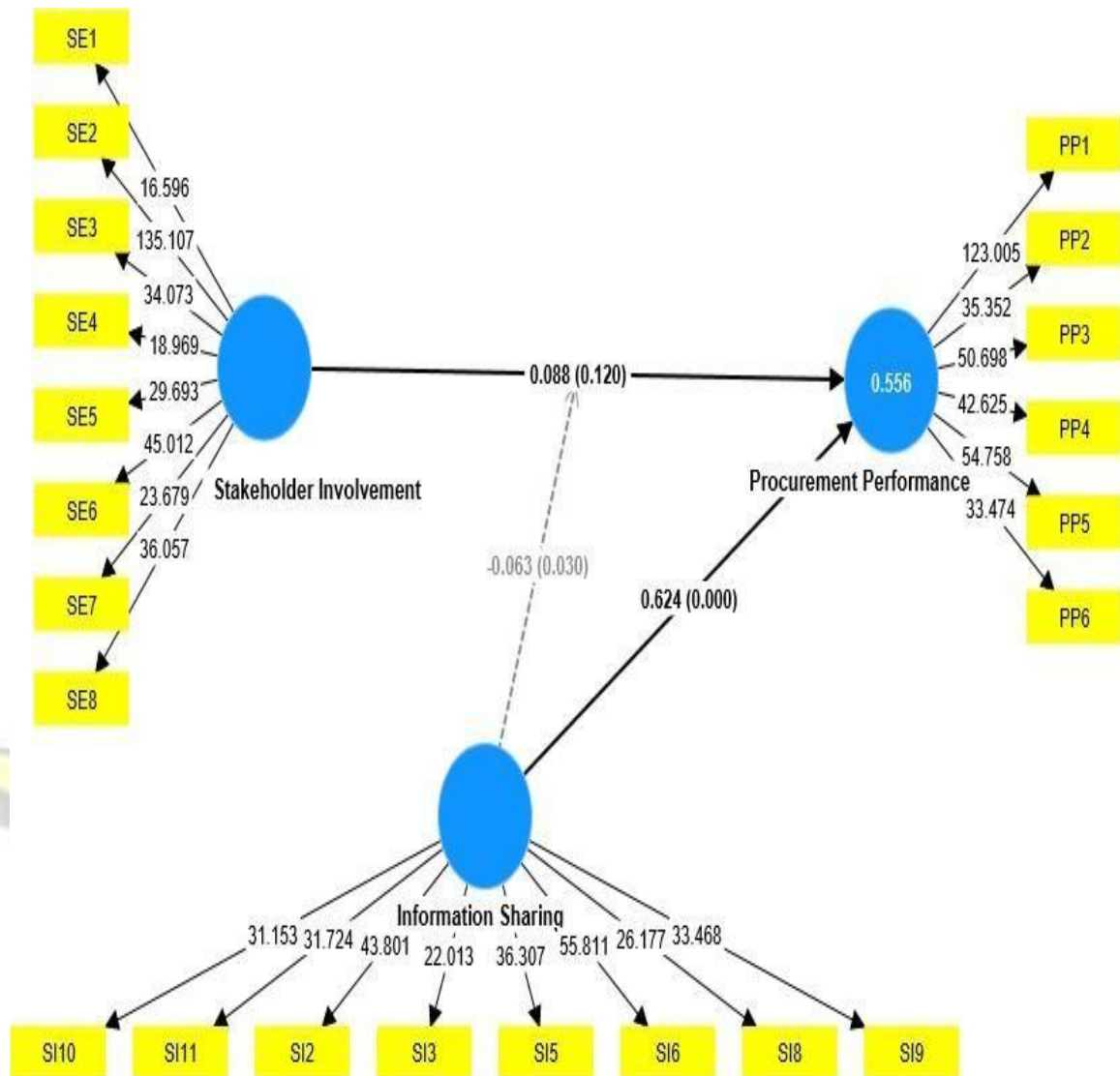


Figure 4.2: Structure Model Evaluation

4.6 Discussion of Key Findings

The present study aims to investigate the moderating role of information sharing in the relationship between stakeholder involvement and procurement performance. This section present a discussion of the key findings in line with stated objectives.

4.6.1 Stakeholder Involvement and Procurement Performance

The initial objective of this study that examine the effect of stakeholder involvement on procurement performance indicates that there is insufficient evidence to demonstrate a link between stakeholder involvement and procurement performance. The connection is rejected. This term suggests that the data and statistical analysis conducted in the study do not provide enough support to confidently claim that a substantial or meaningful connection exists between stakeholder involvement and procurement performance. In other words, the evidence available is not strong enough to support the idea that changes in stakeholder involvement consistently lead to changes in procurement performance.

The results showing no significant relationship between stakeholder involvement and procurement performance run counter to several previous studies. For example, Ufua et al. (2022) found a positive influence of community and firm stakeholder engagement on construction project performance in Nigeria. The inconsistency suggests potential country- or industry-specific factors at play. Mann et al. (2021) also established a positive connection between staff involvement and UK transportation agency cost savings, contrasting with our public sector context. According to the available research (Sayyed et al., 2023), the inclusion of stakeholders contributes to the development of systemic awareness, shared strategy and knowledge, group learning, and system-wide objectives, all of which positively impact performance. Furthermore, the inclusion of stakeholders has been shown to lead to the adoption of organisational practises that align with sustainability criteria, as evidenced by the study conducted by Stocker et al. (2020). Ghassim and Bogers (2019) argue that the concept of stakeholder engagement is fundamental in promoting collaboration, enhancing resource productivity, and facilitating community-driven progress. Therefore, the inclusion

of stakeholders may assist organisations in spotting prospective hazards and prospects that may influence their procurement procedures, including suppliers, consumers, and staff. The inclusion of stakeholders in the procurement process may provide organisations with valuable insights and feedback, hence facilitating informed decision-making. Furthermore, this collaboration facilitates the cultivation of an environment characterised by openness and transparency among the many stakeholders of the organisation. The lack of relationship requires more nuanced theory to define conditions and indirect effects. It calls for integration of stakeholder and capability-based views to better specify the mechanisms of stakeholder influence (Cabral et al., 2019). Moderators like engagement type, contract characteristics, and internal processes likely shape outcomes. The findings mean procurement managers should not assume stakeholder participation will directly improve efficiency or savings without further analysis. Still, inclusive processes can provide ethical, development and transparency benefits on a case-by-case basis. Assessing how varying forms of involvement affect short-term performance indicators and long-term relational goals is recommended.

However, the missing link aligns with Flynn and Davis (2017) who were unable to confirm correlations between varied stakeholder engagement and key public procurement results. Similarly, Glock and Broens (2017) revealed mixed to negative performance outcomes from user and community participation across European public food contracts. The study bolsters this emergent body of research questioning the procurement stakeholder theory in practice. In summary, comparing supportive and contradictory studies contextualizes findings in academic debates. Exploring theoretical refinements and practical takeaways then gives meaningful implications for scholars and managers.

4.6.2 Information Sharing and Procurement Performance

The objective assessing the effect of information sharing on procurement performance found a significant positive relationship between the two, indicating that greater information sharing improves procurement performance. Past research highlights how information sharing enables better adaptation to customer needs, market changes, and competitive demands (Baah et al., 2022; Can Saglam et al., 2021). It promotes cooperation and coordination, improving supply chains and performance (Lofti et al., 2021; Aslam et al., 2018). As competition has intensified, integration through information systems has become key for creating competitive advantage and enhancing procurement (Dubey et al., 2020). Information sharing also develops dynamic capabilities (Aslam et al., 2018) and teamwork (Feizabadi et al., 2019) that substantially impact competitive advantage. Additionally, information sharing enhances relational rents and collaborative advantage, further improving performance (Cao et al., 2021).

The positive effect of information sharing provides empirical support for information processing theory (Yu et al., 2021) and knowledge-based procurement (Schütz et al., 2020). It highlights information management capability as a competitive advantage source (Zu & Kaynak, 2012). Practically, managers should develop procedures and channels to enable transparency, flow and analysis of high quality data between stakeholders. Recommendations include forming cross-functional teams, creating centralized databases, and employing information technologies for insights. Prioritizing information sharing can drive measurable improvements in efficiency, savings, and stakeholder satisfaction. In summary, the objective confirms the vital role information sharing plays in boosting procurement performance through cooperation, capabilities, and competitive advantage.

Both theory and practice stand to benefit from further inquiry.

4.6.3 Moderating Role of Information Sharing

The last objective, which evaluate the moderating effect of information sharing in the relationship between stakeholder engagement and procurement performance, suggests that information sharing significantly and negatively moderates the association between stakeholder involvement and procurement performance. This link is therefore rejected as the study hypothesised a positive moderation role of information sharing. This implies that as information sharing increases, the effect of stakeholder involvement on procurement performance diminishes. In other words, higher levels of information sharing are associated with a reduction in the positive impact of stakeholder involvement on procurement performance. The finding that information sharing negatively moderates the relationship between stakeholder engagement and procurement performance contradicts some previous studies. For example, Hajmohammad et al. (2023) found that greater information sharing between supply chain partners strengthened the positive impact of environmental collaboration on manufacturing performance. There could be several reasons for these contradictory results. Firstly, previous supportive studies were in contexts outside of public sector procurement which differs in its complexity of stakeholder relationships (Wu et al., 2022). Secondly, excessive information sharing can lead to coordination issues from information overload (Cao et al., 2021). Finally, the type of information shared may not have been relevant or high quality enough to aid procurement decisions (Zsidisin, 2022). However, this results align with studies by Lee et al. (2000) and Carr and Kaynak (2007) who did not find a significant positive moderating effect of information sharing. From a stakeholder theory perspective, it is widely recognized that stakeholder involvement can

significantly impact procurement performance (Freudenreich et al., 2020). However, the extent to which information sharing moderates this relationship remains unclear. Recent research suggests that information sharing plays a crucial role in mitigating the potential negative effects of stakeholder involvement on procurement performance (Yang, and Basile, 2021). On the other hand, the negative moderating effect reported in the study could be that increased information sharing among stakeholders may lead to conflicting interests and goals, making it difficult to align procurement performance objectives. Additionally, the influx of information from various stakeholders might create information overload, resulting in decreased efficiency and effectiveness in decision-making processes. Thus, it is essential for organizations to prioritize information sharing as a key factor in their stakeholder involvement strategies to achieve optimal procurement outcomes (Vogelsang et al., 2023). By fostering an environment of transparency and open communication with stakeholders, organizations can ensure that their procurement processes are aligned with stakeholder needs and expectations while maintaining high levels of performance and efficiency. Overall, the study contributes to a mixed body of literature on the impact of information sharing. The study provide novel empirical evidence that information sharing may negatively moderate stakeholder involvement benefits depending on the procurement context. More targeted research is needed to determine boundary conditions like procurement category, stage of the process and information relevance.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.0 Introduction

The present investigation offers a thorough synopsis of the outcomes, conclusions, and suggestions obtained from the carried out research. The findings of the research demonstrate significant links among the variables examined. Several conclusions were derive from the aforementioned findings. Additionally, the study offers practical and theoretical implications, and suggests future research directions to augment the applicability and broaden the influence of its findings.

5.1 Summary of Findings

The main purpose of the study is to investigate the moderating role of information sharing in the relationship between stakeholder involvement and procurement performance. This quantitative survey used an explanatory research design. Purposive sampling selected 384 individuals. A pre-designed structured questionnaire was used to gather data. SPSS version 26 and Smart-PLS version 4 were used for the statistical analysis. Data was analysed using descriptive and inferential statistics. The findings that are shown below are completely in line with the study's objectives.

5.1.1 Stakeholder Involvement and Procurement Performance

The initial objective of this study that examine the effect of stakeholder involvement on procurement performance indicates that there is insufficient evidence to demonstrate a link between stakeholder involvement and procurement performance. The connection is rejected. This term suggests that the data and statistical analysis conducted in the study do not provide enough support to confidently claim that a substantial or meaningful connection

exists between stakeholder involvement and procurement performance. In other words, the evidence available is not strong enough to support the idea that changes in stakeholder involvement consistently lead to changes in procurement performance.

5.1.2 Information Sharing and Procurement Performance

The following objective that assess the effect of information sharing on procurement performance suggests a strong and statistically significant relationship between information sharing and procurement performance. This relationship is accepted. The statement indicates that information sharing contributes significantly to the attainment of procurement performance. This implies that as organizations engage in more effective information sharing, their procurement performance tends to improve in a consistent and meaningful way, and this relationship is supported by statistical evidence.

5.1.3 Moderating Role of Information Sharing

The last objective, which evaluate the moderating effect of information sharing in the relationship between stakeholder engagement and procurement performance, suggests that information sharing significantly and negatively moderates the association between stakeholder involvement and procurement performance. This link was therefore unacceptable as the study expected that information sharing could positively moderate the stakeholder involvement and procurement performance relationship. This implies that when stakeholders are more involved in the procurement process, the performance of procurement decreases when there is a higher level of information sharing. Additionally, it is possible that increased information sharing may also result in conflicts and disagreements among stakeholders, further impacting the overall performance.

5.2 Conclusion

The main purpose of the study is to investigate the moderating role of information sharing in the relationship between stakeholder involvement and procurement performance. This quantitative survey used an explanatory research design. Purposive sampling selected 384 individuals. A pre-designed structured questionnaire was used to gather data. SPSS version 26 and Smart-PLS version 4 were used for the statistical analysis. Data was analysed using descriptive and inferential statistics. The finding indicates that stakeholder involvement has an insignificant effect on procurement performance. The result suggests a strong and statistically significant relationship between information sharing and procurement performance. Finally, the result suggests that information sharing significantly and negatively moderates the association between stakeholder involvement and procurement performance. This study provides valuable insights into the multifaceted interactions between stakeholder involvement, information sharing, and procurement performance. These findings contribute to a deeper understanding of how organizations can strategically manage these aspects to optimize their procurement processes. Future research endeavors could further explore the mechanisms that drive the observed relationships and delve into potential strategies for effectively leveraging stakeholder involvement and information sharing to enhance procurement performance within various organizational contexts.

5.3 Implications of the Study

Theoretical and practical implications of the study are presented in this section in light of the findings.

5.3.1 Practical Implications of the Study

While stakeholder involvement might not independently impact procurement performance significantly, organizations should recognize the broader ecosystem. Consider integrating stakeholder involvement with effective information sharing practices. This could mean involving stakeholders in decision-making processes while ensuring that they are wellinformed through transparent communication channels. The identified strong and positive relationship between information sharing and procurement performance underscores the importance of creating a culture of open communication. Encourage teams and departments to share relevant information, insights, and data across the organization. This can lead to better-informed decisions, enhanced collaboration, and ultimately improved procurement outcomes. The discovery of information sharing's negative moderating effect on the relationship between stakeholder involvement and procurement performance emphasizes the need for a more nuanced approach. Organizations should be cautious not to assume that stakeholder involvement alone will always lead to positive outcomes. Instead, consider how information dissemination might alter this relationship and strategize accordingly. Understanding that stakeholder involvement might not be a direct driver of procurement performance, tailor engagement strategies based on specific organizational needs and industry contexts. Organizations can focus on targeted stakeholder collaborations that align with the organization's objectives while also emphasizing robust information-sharing mechanisms. Develop training programs that educate employees on the value of information sharing and effective stakeholder engagement. Encourage a culture of continuous learning and improvement in these areas. Simultaneously, design communication plans that ensure stakeholders receive timely and accurate information, fostering greater transparency and collaboration.

5.3.2 Theoretical Implications of the Study

The study's findings contribute to the theoretical landscape by complicating conventional assumptions within these theories (Stakeholder Theory, Consumer Involvement Theory, and Principal-Agency Theory). They encourage researchers to explore the multifaceted interplay of stakeholder involvement, information sharing, and performance outcomes, acknowledging that the relationships might not be as straightforward as initially assumed. This study calls for a more holistic understanding of these theories by considering additional contextual factors and intermediary variables that may shape the observed relationships. Such extensions can enhance the theoretical robustness and practical applicability of these frameworks in complex organizational scenarios.

5.4 Limitations and Recommendation for Future Research

The study's findings are contingent upon the specific sample used. The industries, organizational sizes, and geographical locations represented in the sample might limit the generalizability of the results. Future research could broaden the sample to include diverse industries and contexts for a more comprehensive understanding. The study's crosssectional design captures relationships at a single point in time, preventing the establishment of causality. Longitudinal or experimental designs could provide insights into the dynamic nature of the moderating effect over time or under controlled conditions. The accuracy of the measurements used in the study could impact the results. Constructs such as stakeholder involvement, information sharing, and procurement performance might be subject to measurement errors or biases. Improving the measurement instruments or employing multiple methods could enhance the reliability of the findings. The study focused on

stakeholder involvement, information sharing, and procurement performance. Other variables, such as organizational culture, leadership styles, or external market factors, might also influence the relationships. Incorporating these variables into the analysis could offer a more comprehensive understanding. Examine whether information sharing mediates the relationship between stakeholder involvement and procurement performance. This could help explain the process through which information sharing influences the link between stakeholder involvement and outcomes.

REFERENCES

- Abbas, J., Mubeen, R., Iorember, P.T., Raza, S. and Mamirkulova, G., 2021. Exploring the impact of COVID-19 on tourism: transformational potential and implications for a sustainable recovery of the travel and leisure industry. *Current Research in Behavioral Sciences*, 2, p.100033.
- Adjei. Bamfo, P. and Maloreh. Nyamekye, T., 2019. The “baby steps” in mainstreaming sustainable public procurement in Ghana: A “double. agency” perspective. *Journal of Public Affairs*, 19(1), p.e1902.
- Aduda, Ojunga Susan, Abuya Isaac Odhiambo, and Odundo Paul Amollo. "Influence of

Stakeholder Participation on Procurement Effectiveness of Preschools' Teaching and Learning Resources in Nyando Sub-County, Kisumu County, Kenya."

- Aduhene, D.T. and Osei-Assibey, E., 2021. Socio-economic impact of COVID-19 on Ghana's economy: challenges and prospects. *International Journal of Social Economics*, 48(4), pp.543-556.
- Ahmed, W., Ashraf, M.S., Khan, S.A., Kusi-Sarpong, S., Arhin, F.K., Kusi-Sarpong, H. and Najmi, A., 2020. Analyzing the impact of environmental collaboration among supply chain stakeholders on a firm's sustainable performance. *Operations Management Research*, 13, pp.4-21.
- Aksoy, L., Banda, S., Harmeling, C., Keiningham, T.L. and Pansari, A., 2022. Marketing's role in multi-stakeholder engagement. *International Journal of Research in Marketing*, 39(2), pp.445-461.
- Al-Ababneh, M.M., 2020. Linking ontology, epistemology and research methodology. *Science & Philosophy*, 8(1), pp.75-91.
- Allal-Chérif, O., Simón-Moya, V. and Ballester, A.C.C., 2021. Intelligent purchasing: How artificial intelligence can redefine the purchasing function. *Journal of Business Research*, 124, pp.69-76.
- Amora, J. T. (2021). Convergent validity assessment in PLS-SEM: A loadings-driven approach. *Data Analysis Perspectives Journal*, 2(3), 1-6.
- Appiah, L.O. and Lartey, F.A., 2019. Examining the Impact Records Keeping, Information Sharing and Partner Relations on Procurement Performance in Firms. *International Journal of Business Strategy and Social Sciences*, 2(1), pp.10-23.
- Arlati, A., Rödl, A., Kanjaria-Christian, S. and Knieling, J., 2021. Stakeholder participation in the planning and design of nature-based solutions. Insights from CLEVER cities project in Hamburg. *Sustainability*, 13(5), p.2572.
- Asenahabi, B.M., 2019. Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, 6(5), pp.76-89.
- Baah, C., Acquah, I.S.K. and Ofori, D., 2022. Exploring the influence of supply chain collaboration on supply chain visibility, stakeholder trust, environmental and financial performances: a partial least square approach. *Benchmarking: An International Journal*, 29(1), pp.172-193.
- Baah, C., Opoku Agyeman, D., Acquah, I.S.K., Agyabeng-Mensah, Y., Afum, E., Issau, K., Ofori, D. and Faibil, D., 2022. Effect of information sharing in supply chains: understanding the roles of supply chain visibility, agility, collaboration on supply chain performance. *Benchmarking: An International Journal*, 29(2), pp.434-455.
- Barrane, F.Z., Ndubisi, N.O., Kamble, S., Karuranga, G.E. and Poulin, D., 2021. Building trust in multi-stakeholder collaborations for new product development in the digital transformation era. *Benchmarking: An International Journal*, 28(1), pp.205-228.

- Belvedere, V., Grando, A. and Legenvre, H., 2018. Testing the EFQM model as a framework to measure a company's procurement performance. *Total Quality Management & Business Excellence*, 29(5-6), pp.633-651.
- Bloomfield, J. and Fisher, M.J., 2019. Quantitative research design. *Journal of the Australasian Rehabilitation Nurses Association*, 22(2), pp.27-30.
- Bloomfield, R., Nelson, M.W. and Soltes, E., 2016. Gathering data for archival, field, survey, and experimental accounting research. *Journal of Accounting Research*, 54(2), pp.341-395.
- Bohari, A.A.M., Skitmore, M., Xia, B., Teo, M. and Khalil, N., 2020. Key stakeholder values in encouraging green orientation of construction procurement. *Journal of Cleaner Production*, 270, p.122246.
- Bojovic, D., Clair, A.L.S., Christel, I., Terrado, M., Stanzel, P., Gonzalez, P. and Palin, E.J., 2021. Engagement, involvement and empowerment: Three realms of a coproduction framework for climate services. *Global Environmental Change*, 68, p.102271.
- Bourne, M., Melnyk, S. and Bititci, U.S., 2018. Performance measurement and management: theory and practice. *International journal of operations & production management*.
- Brun, A., Karaosman, H. and Barresi, T., 2020. Supply chain collaboration for transparency. *Sustainability*, 12(11), p.4429.
- Bugshan, H. and Attar, R.W., 2020. Social commerce information sharing and their impact on consumers. *Technological forecasting and social change*, 153, p.119875.
- Calvo-Porrá, C., Ruiz-Vega, A. and Lévy-Mangin, J.P., 2021. How consumer involvement influences consumption-elicited emotions and satisfaction. *International Journal of Market Research*, 63(2), pp.251-267.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D. and Walker, K., 2020. Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, 25(8), pp.652-661.
- Can Saglam, Y., Yildiz Çankaya, S. and Sezen, B., 2021. Proactive risk mitigation strategies and supply chain risk management performance: an empirical analysis for manufacturing firms in Turkey. *Journal of Manufacturing Technology Management*, 32(6), pp.1224-1244.
- Cao, S., Nie, L., Sun, H., Sun, W. and Taghizadeh-Hesary, F., 2021. Digital finance, green technological innovation and energy-environmental performance: Evidence from China's regional economies. *Journal of Cleaner Production*, 327, p.129458.
- Cheah, S.C. and Tan, C.L., 2020. Knowledge Management, Organizational Ambidexterity, and Manufacturing Performance in the Era of Industry 4.0: A Proposed Model. *International Journal of Industrial Management*, 5, pp.10-19.
- Chebichii, M., 2021. *Stakeholder involvement and Performance of Aerospace Safety Automation Projects: a Case of Kenya Civil Aviation Authority* (Doctoral dissertation, University of Nairobi).

- Chen, C., Gu, T., Cai, Y. and Yang, Y., 2019. Impact of supply chain information sharing on performance of fashion enterprises: An empirical study using SEM. *Journal of Enterprise Information Management*, 32(6), pp.913-935.
- Chen, H.L., 2018. Supply chain risk's impact on corporate financial performance. *International Journal of Operations & Production Management*, 38(3), pp.713-731.
- Chen, S.C.I., Liu, C., Wang, Z., McAdam, R., Brennan, M., Davey, S. and Cheng, T.Y., 2020. How geographical isolation and aging in place can be accommodated through connected health stakeholder management: qualitative study with focus groups. *Journal of Medical Internet Research*, 22(5), p.e15976.
- Coleman, P., 2022. Validity and reliability within qualitative research for the caring sciences. *International Journal of Caring Sciences*, 14(3), pp.2041-2045.
- Colicchia, C., Creazza, A., Noè, C. and Strozzi, F., 2019. Information sharing in supply chains: a review of risks and opportunities using the systematic literature network analysis (SLNA). *Supply chain management: an international journal*, 24(1), pp.521.
- Cosmus, K.M., 2021. Stakeholder Involvement and Infrastructure Projects Implementation in Kenya Ports Authority.
- Cruz Rivera, S., McMullan, C., Jones, L., Kyte, D., Slade, A. and Calvert, M., 2020. The impact of patient-reported outcome data from clinical trials: perspectives from international stakeholders. *Journal of patient-reported outcomes*, 4(1), pp.1-14.
- Danso, A., Adomako, S., Lartey, T., Amankwah-Amoah, J. and Owusu-Yirenkyi, D., 2020. Stakeholder integration, environmental sustainability orientation and financial performance. *Journal of business research*, 119, pp.652-662.
- Dansoh, A., Frimpong, S., Ampratwum, G., Dennis Oppong, G. and Osei-Kyei, R., 2020. Exploring the role of traditional authorities in managing the public as stakeholders on PPP projects: a case study. *International Journal of Construction Management*, 20(6), pp.628-641.
- de Moura, G.B. and Saroli, L.G., 2021. Sustainable value chain management based on dynamic capabilities in small and medium-sized enterprises (SMEs). *The International Journal of Logistics Management*, 32(1), pp.168-189.
- de Vass, T., Shee, H. and Miah, S.J., 2021. IoT in supply chain management: Opportunities and challenges for businesses in early industry 4.0 context. *Operations and Supply Chain Management: An International Journal*, 14(2), pp.148-161.
- Derakhshan, R., Turner, R. and Mancini, M., 2019. Project governance and stakeholders: a literature review. *International Journal of Project Management*, 37(1), pp.98116.
- Dubey, R., Bryde, D.J., Foropon, C., Graham, G., Giannakis, M. and Mishra, D.B., 2020. Agility in humanitarian supply chain: An organizational information processing perspective and relational view. *Annals of Operations Research*, pp.1-21.

- Duodu, E. and Baidoo, S.T., 2022. The impact of capital inflows on economic growth of Ghana: Does quality of institutions matter?. *Journal of Public Affairs*, 22(1), p.e2384.
- Dutta, P., Choi, T.M., Somani, S. and Butala, R., 2020. Blockchain technology in supply chain operations: Applications, challenges and research opportunities. *Transportation research part e: Logistics and transportation review*, 142, p.102067.
- Feizabadi, J., Gligor, D. and Motlagh, S.A., 2019. The triple-As supply chain competitive advantage. *Benchmarking: An International Journal*.
- Fernando, Y., Zainul Abideen, A. and Shaharudin, M.S., 2020. The nexus of information sharing, technology capability and inventory efficiency. *Journal of Global Operations and Strategic Sourcing*, 33(4), pp.327-351.
- Fiore, M., Galati, A., Gołębiewski, J. and Drejerska, N., 2020. Stakeholders' involvement in establishing sustainable business models: The case of Polish dairy cooperatives. *British Food Journal*.
- Flake, J.K., Davidson, I.J., Wong, O. and Pek, J., 2022. Construct validity and the validity of replication studies: A systematic review. *American Psychologist*, 77(4), p.576.
- Freeman, R.E., Dmytriiev, S.D. and Phillips, R.A., 2021. Stakeholder theory and the resource-based view of the firm. *Journal of Management*, 47(7), pp.1757-1770.
- Freudenreich, B., Lüdeke-Freund, F. and Schaltegger, S., 2020. A stakeholder theory perspective on business models: Value creation for sustainability. *Journal of Business Ethics*, 166, pp.3-18.
- Garcia-Buendia, N., Moyano-Fuentes, J., Maqueira, J.M. and Avella, L., 2022. The lean supply chain management response to technology uncertainty: consequences for operational performance and competitiveness. *Journal of Manufacturing Technology Management*, 34(1), pp.67-86.
- Ghassim, B. and Bogers, M., 2019. Linking stakeholder involvement to profitability through sustainability-oriented innovation: A quantitative study of the minerals industry. *Journal of Cleaner Production*, 224, pp.905-919.
- Goodell, J.W., Kumar, S., Rao, P. and Verma, S., 2022. Emotions and stock market anomalies: a systematic review. *Journal of Behavioral and Experimental Finance*, p.100722.
- Gregory, A.J., Atkins, J.P., Midgley, G. and Hodgson, A.M., 2020. Stakeholder identification and engagement in problem structuring interventions. *European Journal of Operational Research*, 283(1), pp.321-340.
- Gregory, A.J., Atkins, J.P., Midgley, G. and Hodgson, A.M., 2020. Stakeholder identification and engagement in problem structuring interventions. *European Journal of Operational Research*, 283(1), pp.321-340.
- Griffith, J., Najand, M. and Shen, J., 2020. Emotions in the stock market. *Journal of Behavioral Finance*, 21(1), pp.42-56.

- Gupta, K., Crilly, D. and Greckhamer, T., 2020. Stakeholder involvement strategies, national institutions, and firm performance: A configurational perspective. *Strategic Management Journal*, 41(10), pp.1869-1900.
- Hajmohammad, S., Klassen, R.D. and Vachon, S., 2023. Managing supplier sustainability risk: an experimental study. *Supply Chain Management: An International Journal*.
- Hallikas, J., Immonen, M. and Brax, S., 2021. Digitalizing procurement: the impact of data analytics on supply chain performance. *Supply Chain Management: An International Journal*, 26(5), pp.629-646.
- Hamann, P.M. and Schiemann, F., 2021. Organizational performance as a set of four dimensions: An empirical analysis. *Journal of Business Research*, 127, pp.45-65.
- Hamdan, H.A., Andersen, P.H. and De Boer, L., 2021. Stakeholder collaboration in sustainable neighborhood projects—A review and research agenda. *Sustainable Cities and Society*, 68, p.102776.
- Hancock, J.T., Naaman, M. and Levy, K., 2020. AI-mediated communication: Definition, research agenda, and ethical considerations. *Journal of Computer-Mediated Communication*, 25(1), pp.89-100.
- Hearn, D. and Meagher, M., 2022. Stakeholder Capitalism's Next Frontier: Pro-or Antimonopoly?.
- Heugens, P.P. and Oosterhout, H.J.V., 2002. The confines of stakeholder management: Evidence from the Dutch manufacturing sector. *Journal of Business Ethics*, 40(4), pp.387-403.
- Hirpa, T., 2022. *Assessment On The Relationships Between Stakeholders Management And Project Performance: In Case of Ethio Telecom-Tep Project* (Doctoral Dissertation, St. Mary's University).
- Holcomb, M.C., Ponomarov, S.Y. and Manrodt, K.B., 2011, January. The relationship of supply chain visibility to firm performance. In *Supply Chain Forum: An International Journal* (Vol. 12, No. 2, pp. 32-45). Taylor & Francis.
- Hollebeek, L.D., Kumar, V., Srivastava, R.K. and Clark, M.K., 2023. Moving the stakeholder journey forward. *Journal of the Academy of Marketing Science*, 51(1), pp.23-49.
- Hörisch, J., Schaltegger, S. and Freeman, R.E., 2020. Integrating stakeholder theory and sustainability accounting: A conceptual synthesis. *Journal of Cleaner Production*, 275, p.124097.
- Israel, G.D., 1992. Determining sample size.
- Jayasuriya, S., Zhang, G. and Yang, R.J., 2020. Exploring the impact of stakeholder management strategies on managing issues in PPP projects. *International Journal of Construction Management*, 20(6), pp.666-678.

- Jayne, T.S., Fox, L., Fuglie, K. and Adelaja, A., 2021. Agricultural productivity growth, resilience, and economic transformation in sub-Saharan Africa. *Association of Public and Land-grant Universities (APLU)*.
- Kadim, A., 2020. Turnitin Determinants of Debt Policy and Company's Performance.
- Khosravi, F. and Izbirak, G., 2019. A stakeholder perspective of social sustainability measurement in healthcare supply chain management. *Sustainable Cities and Society*, 50, p.101681.
- Kipkoech, A., 2022. Stakeholder Participation and Performance of Ngara Park Road Housing Project in Nairobi City County, Kenya.
- Kitchot, S., Siengthai, S. and Sukhotu, V., 2021. The mediating effects of HRM practices on the relationship between SCM and SMEs firm performance in Thailand. *Supply Chain Management: An International Journal*, 26(1), pp.87-101.
- Kothari, C.R., 2004. Sample size determination. *Research Methodology. New Age International Publications*, 1, pp.74-1.
- Kouhizadeh, M., Saberi, S. and Sarkis, J., 2021. Blockchain technology and the sustainable supply chain: Theoretically exploring adoption barriers. *International journal of production economics*, 231, p.107831.
- Krejcie, R.V. and Morgan, D.W., 1970. Sample size determination table. *Retrieved July, 19(2018)*, p.38.
- Krupa, M.B., McCarthy Cunfer, M. and Clark, S.J., 2020. Who's winning the public process? How to use public documents to assess the equity, efficiency, and effectiveness of stakeholder engagement. *Society & Natural Resources*, 33(5), pp.612-633.
- Langrafe, T.D.F., Barakat, S.R., Stocker, F. and Boaventura, J.M.G., 2020. A stakeholder theory approach to creating value in higher education institutions. *The Bottom Line*, 33(4), pp.297-313.
- Lazo-Herencia, S.E., 2021. Business Sustainability Practices through Media Based Stakeholder Engagement: Maximizing Positive Social Impacts Via Locally Produced Educational Media for Young Citizens. *Human Dimensions of Organizations (HDO)*.
- Li, S., Zhou, Q., Huo, B. and Zhao, X., 2022. Environmental uncertainty, relationship commitment, and information sharing: the social exchange theory and transaction cost economics perspectives. *International Journal of Logistics Research and Applications*, pp.1-25.
- Li, Z., Anaba, O.A., Ma, Z. and Li, M., 2021. Ghanaian SMEs amidst the COVID-19 pandemic: evaluating the influence of entrepreneurial orientation. *Sustainability*, 13(3), p.1131.

- Lin, X., McKenna, B., Ho, C.M. and Shen, G.Q., 2019. Stakeholders' influence strategies on social responsibility implementation in construction projects. *Journal of Cleaner Production*, 235, pp.348-358.
- Liu, J., Shi, B., Xue, J. and Wang, Q., 2019. Improving the green public procurement performance of Chinese local governments: From the perspective of officials' knowledge. *Journal of Purchasing and Supply Management*, 25(3), p.100501.
- Loosemore, M., Denny-Smith, G., Barraket, J., Keast, R., Chamberlain, D., Muir, K., Powell, A., Higgon, D. and Osborne, J., 2021. Optimising social procurement policy outcomes through cross-sector collaboration in the Australian construction industry. *Engineering, Construction and Architectural Management*, 28(7), pp.1908-1928.
- Lotfi, R., Safavi, S., Gharehbaghi, A., Ghaboulia Zare, S., Hazrati, R. and Weber, G.W., 2021. Viable supply chain network design by considering blockchain technology and cryptocurrency. *Mathematical problems in engineering*, 2021, pp.1-18.
- Loureiro, S.M.C., Romero, J. and Bilro, R.G., 2020. Stakeholder engagement in cocreation processes for innovation: A systematic literature review and case study. *Journal of Business Research*, 119, pp.388-409.
- Loureiro, S.M.C., Romero, J. and Bilro, R.G., 2020. Stakeholder involvement in cocreation processes for innovation: A systematic literature review and case study. *Journal of Business Research*, 119, pp.388-409.
- Maclaren, A.S., Cleland, J., Locock, L., Skea, Z., Denison, A., Hollick, R., Murchie, P. and Wilson, P., 2022. Understanding recruitment and retention of doctors in rural Scotland: Stakeholder perspectives. *The Geographical Journal*, 188(2), pp.261-276.
- Magassouba, S.M., Tambi, A.M.B.A., Alkhlaifat, B. and Abdullah, A.A., 2019. Influence of stakeholders involvement on development project performance in Guinea. *International journal of academic research in business and Social Sciences*, 9(1), pp.1111-1120.
- Magni, C.A., 2019. Accounting Measures and Economic Measures: An Integrated Theory of Capital Budgeting. *Journal of Accounting and Finance*, 19(9), pp.166-208.
- Mann, R., Adebajo, D., Abbas, A., El Kahlout, Z.M., Al Nuseirat, A.A. and Al Neaimi, H.K., 2021. An analysis of a benchmarking initiative to help government entities to learn from best practices—the “Dubai We Learn” initiative. *International Journal of Excellence in Government*, 2(1), pp.2-23.
- Masinde, V.M. and Nzuki, D., 2021. Stakeholder Involvement and Performance of Projects at the Kenya Revenue Authority. *The International Journal of Business & Management*, 9(6).
- McCaffrey, T., Higgins, P., Monahan, C., Moloney, S., Nelligan, S., Clancy, A. and Cheung, P.S., 2021. Exploring the role and impact of group songwriting with multiple stakeholders in recovery-oriented mental health services. *Nordic Journal of Music Therapy*, 30(1), pp.41-60.

- Mehrjerdi, Y.Z. and Shafiee, M., 2021. A resilient and sustainable closed-loop supply chain using multiple sourcing and information sharing strategies. *Journal of Cleaner Production*, 289, p.125141.
- Mok, K.Y., Shen, G.Q. and Yang, R., 2018. Stakeholder complexity in large scale green building projects: A holistic analysis towards a better understanding. *Engineering, Construction and Architectural Management*, 25(11), pp.1454-1474.
- Morched, S. and Jarboui, A., 2021. Is business performance linked to organizational culture? A study from Tunisian SMEs through subjective measures. *Qualitative Research in Financial Markets*, 13(1), pp.59-81.
- Moroni, I.T., Seles, B.M.R.P., Lizarelli, F.L., Guzzo, D. and da Costa, J.M.H., 2022. Remanufacturing and its impact on dynamic capabilities, stakeholder engagement, eco-innovation and business performance. *Journal of Cleaner Production*, 371, p.133274.
- Möttus, R., Wood, D., Condon, D.M., Back, M.D., Baumert, A., Costantini, G., Epskamp, S., Greiff, S., Johnson, W., Lukaszewski, A. and Murray, A., 2020. Descriptive, predictive and explanatory personality research: Different goals, different approaches, but a shared need to move beyond the Big Few traits. *European Journal of Personality*, 34(6), pp.1175-1201.
- Musarat, M.A., Alaloul, W.S. and Liew, M.S., 2021. Impact of inflation rate on construction projects budget: A review. *Ain Shams Engineering Journal*, 12(1), pp.407-414.
- Musyimi, A., 2022. *Influence of Stakeholders Participation on the Performance of Health Projects: a Case of Kitui County, Kenya* (Doctoral dissertation, University of Nairobi).
- Nana, K., 2022. *Stakeholder Involvement in Project Management Cycle on the Performance of the Free Human Papillomavirus Program in Kenya: a Case of Bungoma County, Kenya* (Doctoral dissertation, University of Nairobi).
- Nguyen, T.S. and Mohamed, S., 2021. Mediation Effect of Stakeholder Management between Stakeholder Characteristics and Project Performance. *Journal of Engineering, Project & Production Management*, 11(2).
- Njagi, C.N., 2020. *Influence of Stakeholder's Involvement in the Performance of Public Projects: A Case Study of Moi Stadium in Embu County Kenya* (Doctoral dissertation, University of Nairobi).
- Nuwagaba, I., 2019. Principal-Agency Relationship in the Road Transport Sector. *Ugandan Journal of Management and Public Policy Studies*, 17(1), pp.50-65.
- Obilor, E.I., 2023. Convenience and purposive sampling techniques: Are they the same. *International Journal of Innovative Social & Science Education Research*, 11(1), pp.1-7.
- Omar, I.A., Jayaraman, R., Debe, M.S., Salah, K., Yaqoob, I. and Omar, M., 2021. Automating procurement contracts in the healthcare supply chain using blockchain smart contracts. *IEEE Access*, 9, pp.37397-37409.

- Osei-Tutu, E., Badu, E. and Owusu-Manu, D., 2010. Exploring corruption practices in public procurement of infrastructural projects in Ghana. *International Journal of Managing Projects in Business*, 3(2), pp.236-256.
- Owusu-Manu, D.G., Jehuri, A.B., Edwards, D.J., Boateng, F. and Asumadu, G., 2019. The impact of infrastructure development on economic growth in sub-Saharan Africa with special focus on Ghana. *Journal of Financial Management of Property and Construction*, 24(3), pp.253-273.
- Pagell, M., Flynn, B.B., Fugate, B. and Cantor, D.E., 2022. Developing purchasing and supply management theory. In *Handbook of Theories for Purchasing, Supply Chain and Management Research* (pp. 29-47). Edward Elgar Publishing.
- Pedrini, M. and Ferri, L.M., 2019. Stakeholder management: a systematic literature review. *Corporate Governance: The International Journal of Business in Society*, 19(1), pp.44-59.
- Pham, H.C., Nguyen, T.T., McDonald, S. and Tran-Kieu, N.Q., 2019. Information sharing in logistics firms: An exploratory study of the vietnamese logistics sector. *The Asian Journal of Shipping and Logistics*, 35(2), pp.87-95.
- Plantinga, H., Voordijk, H. and Dorée, A., 2020. Clarifying strategic alignment in the public procurement process. *International Journal of Public Sector Management*, 33(6/7), pp.791-807.
- Prince, M., 2020. Domestic product involvement and consumer willingness to buy domestic products: Empirical testing of a cognitive consistency theory framework. *Journal of International Consumer Marketing*, 32(5), pp.453-461.
- Pucciarelli, F. and Kaplan, A., 2016. Competition and strategy in higher education: Managing complexity and uncertainty. *Business horizons*, 59(3), pp.311-320.
- Quintão, C., Andrade, P. and Almeida, F., 2020. How to Improve the Validity and Reliability of a Case Study Approach?. *Journal of Interdisciplinary Studies in Education*, 9(2), pp.264-275.
- Rahi, S., Alnaser, F.M. and Abd Ghani, M., 2019. Designing survey research: recommendation for questionnaire development, calculating sample size and selecting research paradigms. *Economic and Social Development: Book of Proceedings*, pp.1157-1169.
- Rahman, M.S., 2020. The advantages and disadvantages of using qualitative and quantitative approaches and methods in language “testing and assessment” research: A literature review.
- Rane, S.B., Thakker, S.V. and Kant, R., 2021. Stakeholders' involvement in green supply chain: a perspective of blockchain IoT-integrated architecture. *Management of Environmental Quality: An International Journal*, 32(6), pp.1166-1191.
- Rebs, T., Thiel, D., Brandenburg, M. and Seuring, S., 2019. Impacts of stakeholder influences and dynamic capabilities on the sustainability performance of supply chains: A system dynamics model. *Journal of Business Economics*, 89, pp.893-926.

- Reklitis, P., Sakas, D.P., Trivellas, P. and Tsoulfas, G.T., 2021. Performance implications of aligning supply chain practices with competitive advantage: Empirical evidence from the agri-food sector. *Sustainability*, 13(16), p.8734.
- Ryder, C., Mackean, T., Coombs, J., Williams, H., Hunter, K., Holland, A.J. and Ivers, R.Q., 2020. Indigenous research methodology—weaving a research interface. *International Journal of Social Research Methodology*, 23(3), pp.255-267.
- Saleem, H., Li, Y., Ali, Z., Ayyoub, M., Wang, Y. and Mehreen, A., 2021. Big data use and its outcomes in supply chain context: the roles of information sharing and technological innovation. *Journal of Enterprise Information Management*, 34(4), pp.1121-1143.
- Sayyed, Y., Hatamleh, M.T. and Alaya, A., 2023. Investigating the influence of procurement management in construction projects on the innovation level and the overall project performance in developing countries. *International Journal of Construction Management*, 23(3), pp.462-471.
- Schmidt, L., Falk, T., Siegmund-Schultze, M. and Spangenberg, J.H., 2020. The objectives of stakeholder involvement in transdisciplinary research. A conceptual framework for a reflective and reflexive practise. *Ecological Economics*, 176, p.106751.
- Schütz, K., Kässer, M., Blome, C. and Foerstl, K., 2020. How to achieve cost savings and strategic performance in purchasing simultaneously: A knowledge-based view. *Journal of Purchasing and Supply Management*, 26(2), p.100534.
- Sharma, R., Kamble, S.S., Gunasekaran, A., Kumar, V. and Kumar, A., 2020. A systematic literature review on machine learning applications for sustainable agriculture supply chain performance. *Computers & Operations Research*, 119, p.104926.
- Sharma, S. and Modgil, S., 2020. TQM, SCM and operational performance: an empirical study of Indian pharmaceutical industry. *Business Process Management Journal*, 26(1), pp.331-370.
- Shaukat, M.B., Latif, K.F., Sajjad, A. and Eweje, G., 2022. Revisiting the relationship between sustainable project management and project success: The moderating role of stakeholder involvement and team building. *Sustainable Development*, 30(1), pp.58-75.
- Siedlecki, S.L., 2020. Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), pp.8-12.
- Siems, E. and Seuring, S., 2021. Stakeholder management in sustainable supply chains: A case study of the bioenergy industry. *Business Strategy and the Environment*, 30(7), pp.3105-3119.
- Siems, E., Seuring, S. and Schilling, L., 2023. Stakeholder roles in sustainable supply chain management: a literature review. *Journal of Business Economics*, 93(4), pp.747-775.
- Sileyew, K.J., 2019. *Research design and methodology* (pp. 1-12). Rijeka: IntechOpen.

- Simkus, J., 2022. Convenience sampling: Definition, method and examples. *Retrieved Oktober, 6, p.2022.*
- Singh, S., Agrawal, V. and Mohanty, R.P., 2022. Multi-criteria decision analysis of significant enablers for a competitive supply chain. *Journal of Advances in Management Research*, 19(3), pp.414-442.
- Singh, S.K., Gupta, S., Busso, D. and Kamboj, S., 2021. Top management knowledge value, knowledge sharing practices, open innovation and organizational performance. *Journal of Business Research*, 128, pp.788-798.
- Stocker, F., de Arruda, M.P., de Mascena, K.M. and Boaventura, J.M., 2020. Stakeholder involvement in sustainability reporting: a classification model. *Corporate Social Responsibility and Environmental Management*, 27(5), pp.2071-2080.
- Sunardi, N., Husain, T. and Kadim, A., 2020. Determinants of Debt Policy and Company's Performance. *International Journal of Economics and Business Administration*, 8(4), pp.204-213.
- Suri, H., 2020. Ethical considerations of conducting systematic reviews in educational research. *Systematic reviews in educational research: Methodology, perspectives and application*, pp.41-54.
- Sürücü, L. and MASLAKÇI, A., 2020. Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 8(3), pp.2694-2726.
- Swedberg, R., 2020. Exploratory research. *The production of knowledge: Enhancing progress in social science*, pp.17-41.
- Tampio, K.P., Haapasalo, H. and Ali, F., 2022. Stakeholder analysis and landscape in a hospital project—elements and implications for value creation. *International Journal of Managing Projects in Business*, 15(8), pp.48-76.
- Taouab, O. and Issor, Z., 2019. Firm performance: Definition and measurement models. *European Scientific Journal*, 15(1), pp.93-106.
- Tarode, S. and Shrivastava, S., 2022. A framework for stakeholder management ecosystem. *American Journal of Business*, 37(2), pp.76-88.
- Tavakol, M. and Wetzel, A., 2020. Factor Analysis: a means for theory and instrument development in support of construct validity. *International journal of medical education*, 11, p.245.
- Tekin, H. And Polat, A.Y., 2020. Agency theory: A review in finance. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 8(4), pp.1323-1329.
- Thille, P., Chartrand, L. and Brown, C., 2022. Diary-interview studies: longitudinal, flexible qualitative research design. *Family Practice*, 39(5), pp.996-999.
- Tipu, W.A. and Yousaf, T., 2022. Agency theory in public-private partnership projects. *Administrative and Management Sciences Journal*, 1(1), pp.71-78.

- Tsai, F.S., Cabrilo, S., Chou, H.H., Hu, F. and Tang, A.D., 2022. Open innovation and SME performance: The roles of reverse knowledge sharing and stakeholder relationships. *Journal of Business Research*, 148, pp.433-443.
- Tseng, M.L., Ha, H.M., Lim, M.K., Wu, K.J. and Iranmanesh, M., 2022. Sustainable supply chain management in stakeholders: supporting from sustainable supply and process management in the healthcare industry in Vietnam. *International Journal of Logistics Research and Applications*, 25(4-5), pp.364-383.
- Turfboer, J. and Silvius, G., 2021. Start marketing your project; The relationships of Marketing BY the project with stakeholder involvement and project success. *The Journal of Modern Project Management*, 9(2).
- Ufua, D.E., Olujobi, O.J., Tahir, H., Okafor, V., Imhonopi, D. and Osabuohien, E., 2022. Social services provision and stakeholder engagement in the Nigerian informal sector: A systemic concept for transformation and business sustainability. *Business and Society Review*, 127(2), pp.403-421.
- Van der Hauwaert, E., Hoozée, S., Maussen, S. and Bruggeman, W., 2022. The impact of enabling performance measurement on managers' autonomous work motivation and performance. *Management Accounting Research*, 55, p.100780.
- van Langen, S.K., Vassillo, C., Ghisellini, P., Restaino, D., Passaro, R. and Ulgiati, S., 2021. Promoting circular economy transition: A study about perceptions and awareness by different stakeholders groups. *Journal of Cleaner Production*, 316, p.128166.
- van Niekerk, A.J., 2020. Inclusive economic sustainability: SDGs and global inequality. *Sustainability*, 12(13), p.5427.
- Van Poucke, E., Matthyssens, P., Van Weele, A. and Van Bockhaven, W., 2019. The effects of purchasing proactivity on value creation and supply risk reduction in sourcing projects: Implications for marketers' capabilities. *Industrial Marketing Management*, 83, pp.104-114.
- Vogelsang, L. G., Weikard, H. P., van Loon-Steensma, J. M., & Bednar-Friedl, B. (2023). Assessing the cost-effectiveness of Nature-based Solutions under climate change uncertainty and learning. *Water Resources and Economics*, 100224.
- Voinov, A., Kolagani, N., McCall, M.K., Glynn, P.D., Kragt, M.E., Ostermann, F.O., Pierce, S.A. and Ramu, P., 2016. Modelling with stakeholders–next generation. *Environmental Modelling & Software*, 77, pp.196-220.
- Waithaka, W.K., 2022. *Stakeholders' Involvement and Implementation of Child Protection Programs by Charitable Organizations in Kenya: a Case of Five Compassion International's Projects in Marsabit County* (Doctoral dissertation, University of Nairobi).
- Wang, Y., Wang, J., Yao, T., Li, M. and Wang, X., 2020. How does social support promote consumers' engagement in the social commerce community? The mediating effect of consumer involvement. *Information Processing & Management*, 57(5), p.102272.

- Wankmüller, C. and Reiner, G., 2021. Identifying challenges and improvement approaches for more efficient procurement coordination in relief supply chains. *Sustainability*, 13(4), p.2204.
- Waris, M., Khan, A., Abideen, A.Z., Sorooshian, S. and Ullah, M., 2022. Stakeholder Management in Public Sector Infrastructure Projects. *Journal of Engineering, Project & Production Management*, 12(3).
- Wojewnik-Filipkowska, A. and Węgrzyn, J., 2019. Understanding of public–private partnership stakeholders as a condition of sustainable development. *Sustainability*, 11(4), p.1194.
- Wu, A. and Li, T., 2020. Gaining sustainable development by green supply chain innovation: Perspectives of specific investments and stakeholder engagement. *Business Strategy and the Environment*, 29(3), pp.962-975.
- Wu, G., Liu, C., Zhao, X., Zuo, J. and Zheng, J., 2022. Effects of fairness perceptions on conflicts and project performance in Chinese megaprojects. *International journal of construction management*, 22(5), pp.832-848.
- Wu, H. and Hou, C., 2020. Utilizing co-design approach to identify various stakeholders' roles in the protection of intangible place-making heritage: The case of Guchengping Village. *Disaster Prevention and Management: An International Journal*, 29(1), pp.22-35.
- Yang, J. and Basile, K., 2021. Communicating corporate social responsibility: External stakeholder involvement, productivity and firm performance. *Journal of Business Ethics*, pp.1-17.
- Yang, J., Xie, H., Yu, G. and Liu, M., 2021. Achieving a just-in-time supply chain: The role of supply chain intelligence. *International journal of production economics*, 231, p.107878.
- Yu, W., Zhao, G., Liu, Q. and Song, Y., 2021. Role of big data analytics capability in developing integrated hospital supply chains and operational flexibility: An organizational information processing theory perspective. *Technological Forecasting and Social Change*, 163, p.120417.
- Yunusa, A., 2021. Inventory management practices and performance of manufacturing firms in Kogi State. *Journal of Good Governance and Sustainable Development in Africa*, 6(3), pp.54-63.
- Zhai, X. and Tian, X., 2020. Do performance measures matter in the relationship between high-performance work system and organizational performance?. *International Journal of Manpower*, 41(3), pp.241-257.
- Zingraff-Hamed, A., Hüesker, F., Lupp, G., Begg, C., Huang, J., Oen, A., Vojinovic, Z., Kuhlicke, C. and Pauleit, S., 2020. Stakeholder mapping to co-create nature-based solutions: who is on board?. *Sustainability*, 12(20), p.8625.
- Zsidisin, G.A., 2022. 13. Agency theory in purchasing and supply management. *Handbook of Theories for Purchasing, Supply Chain and Management Research*, p.186.

Zyphur, M.J., Bonner, C.V. and Tay, L., 2023. Structural equation modeling in organizational research: The state of our science and some proposals for its future. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, pp.495-517.

KNUST



KNUST

APPENDIX SURVEY QUESTIONNAIRE

My name is Selina Apotey. I am a student at Kwame Nkrumah University of Science and Technology School of Business, Department of Information Systems and Decision Sciences. This survey instrument has been designed to enable me carry out a research on ***“The Effect of Stakeholder Involvement on Procurement Performance in the Service Industry”***. The purpose of the research is to provide an understanding of how stakeholder involvement influence procurement performance, under the condition of information sharing in developing nations south of the Sahara using data from Ghana. Any information provided will ONLY be used for general information, and it will be treated as ***HIGHLY CONFIDENTIAL***.

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: <input type="checkbox"/> Male <input type="checkbox"/> Female	Age: <input type="checkbox"/> Below 20 years <input type="checkbox"/> 20-30years <input type="checkbox"/> 30-40 years <input type="checkbox"/> 40-50years <input type="checkbox"/> Above 50years <input type="checkbox"/>	
What is your highest of education? <input type="checkbox"/> JHS <input type="checkbox"/> SHS <input type="checkbox"/> Undergraduate <input type="checkbox"/> Masters <input type="checkbox"/> PHD	What is your current position? Logistics manager <input type="checkbox"/> Fleet manager <input type="checkbox"/> General manager <input type="checkbox"/> Operations manager <input type="checkbox"/> Warehouse manager <input type="checkbox"/> Supply chain manager <input type="checkbox"/> Other (Specify) _____	
Nationality: <input type="checkbox"/> Ghanaian <input type="checkbox"/> Foreigner	State run Enterprise: <input type="checkbox"/> Yes <input type="checkbox"/> No	How long have you worked in this company _____
Number of Employees <input type="checkbox"/> <6; <input type="checkbox"/> 6-29; <input type="checkbox"/> 30-59; <input type="checkbox"/> 60-99; <input type="checkbox"/> 100+	When was the company incorporated in Ghana? _____	
Please place a check in your company's corresponding industry	<input type="checkbox"/> Financial Services (banking & investments); <input type="checkbox"/> Health; <input type="checkbox"/> Retail; <input type="checkbox"/> Transportation; <input type="checkbox"/> Telecommunication; <input type="checkbox"/> Pharmaceuticals; Other (specify) _____	
Please indicate the Revenue of the Company in New Ghana Cedis	<input type="checkbox"/> <40,000; <input type="checkbox"/> 40,000-80,000; <input type="checkbox"/> 80,000-120,000; <input type="checkbox"/> 120,000-160,000; <input type="checkbox"/> 160,000-200,000; <input type="checkbox"/> 200,000-500,000; <input type="checkbox"/> 500,000-1,000,000; <input type="checkbox"/> >1,000,000	
Ownership of company <input type="checkbox"/> Solely Ghanaian Owned; <input type="checkbox"/> Foreign Owned; <input type="checkbox"/> Joint Ventureship; <input type="checkbox"/> Other (specify) _____		
Legal form of Entity <input type="checkbox"/> Sole Proprietorship; <input type="checkbox"/> Limited Liability; <input type="checkbox"/> Partnership; <input type="checkbox"/> Public Limited Liability; <input type="checkbox"/> Other (specify) _____		
Type of Customers served: Distributors <input type="checkbox"/> Wholesalers <input type="checkbox"/> Retailers <input type="checkbox"/> Consumers <input type="checkbox"/>		
Number of Estimated Customers: 1 – 20 <input type="checkbox"/> 21-50 <input type="checkbox"/> 50-100 <input type="checkbox"/> 101- 200 <input type="checkbox"/> >200 <input type="checkbox"/>		
Position in the Supply Chain: Main Service <input type="checkbox"/> Main Supplier to the service <input type="checkbox"/> Secondary Supplier of the main Supplier/service <input type="checkbox"/> Distributor/Dealer <input type="checkbox"/> Service provider <input type="checkbox"/>		

Instructions: Indicate your opinion for the following statement by placing a checkmark (✓) in the right column under the 7-point Likert Scale.

	7-point Likert Scale						
	Strongly Disagree	Moderately Disagree	Disagree	Neither Agree nor Disagree	Agree	Moderately Agree	Strongly Agree
Stakeholder Involvement (Source: Carrillo-Hermosilla et al., 2009; Heugens et al., 2002; Moroni et al., 2022)							

SE1: Our firm has a website to communicate with stakeholders.							
SE2: Our firm regularly conducts, as a communication strategy, conferences and lectures with stakeholders.							
SE3: Our firm adopts the practice of corporate education as a communication strategy with stakeholders.							
SE4: Our firm discloses its performance reports (operational, financial, social, and environmental, among others) to its main stakeholders.							
SE5: Our firm uses co-option to engage stakeholders. (This happens when the company practices identified initiatives that take the form of consultation forums and strategic alliances and partnerships established with stakeholders. For example, develop a microcredit program).							
SE6: Our firm uses protection to engage stakeholders. (This happens when companies create a multidirectional information flow, between the company and several stakeholders, it receives and passes on information related to its sustainability practices. For example, promoting business arising from climate change).							
SE7: Our firm adopts organizational learning to engage stakeholders.							
SE8: Our firm seeks, when possible, to solve problems together with its stakeholders.							
	Strongly Disagree	Moderately Disagree	Disagree	Neither Agree nor Disagree	Agree	Moderately Agree	Strongly Agree
<i>Information Sharing (Source: Baah et al., 2019; Holcomb et al., 2011)</i>							
SI1: Our firm shares relevant information with supply chain partners.							
SI2: Our firm exchanges timely information with supply chain partners.							
SI3: Our firm shares accurate information with supply chain partners.							
SI4: Our firm and supply chain partners share confidential information.							
SI5: Our firm and supply chain partners share complete information.							
SI6: Senior managers have regular meetings with shareholders.							
SI7: We regularly compare our share value to that of our competitors.							
SI8: We regularly carry out public relations aimed at shareholders.							

SI9: We have regular staff appraisals in which we discuss employees' needs.							
SI10: We have regular staff meetings with employees.							
SI11: We survey staff at least once each year to assess their attitudes to their work							
	Strongly Disagree	Moderately Disagree	Disagree	Neither Agree nor Disagree	Agree	Moderately Agree	Strongly Agree
<i>Procurement Performance (Source: Appiah and Lartey, 2019)</i>							
PP1: Our suppliers deliver on time.							
PP2: All materials and services received are of the right quality.							
PP3: Materials and services are obtained in the most cost effective manner							
PP4: Our suppliers fulfil our requirements at all times when we request.							
PP5: End user departments are satisfied with procured items.							
PP6: Materials and services are always available when needed for internal use.							

Thank you. Your participation is greatly appreciated. If you are interested in a personalized copy of the analyzed results, please attach a business card or provide your contact information.

