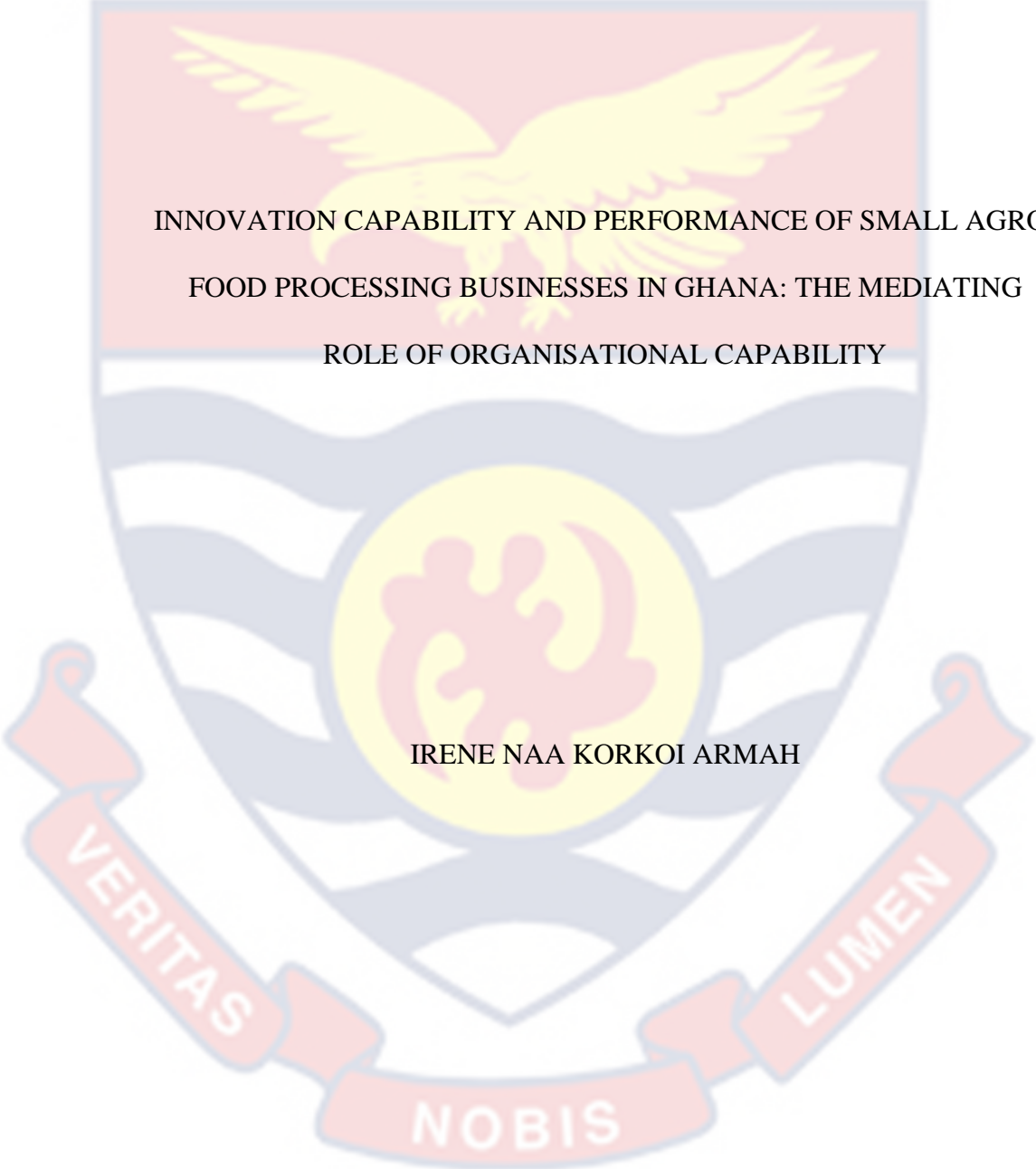


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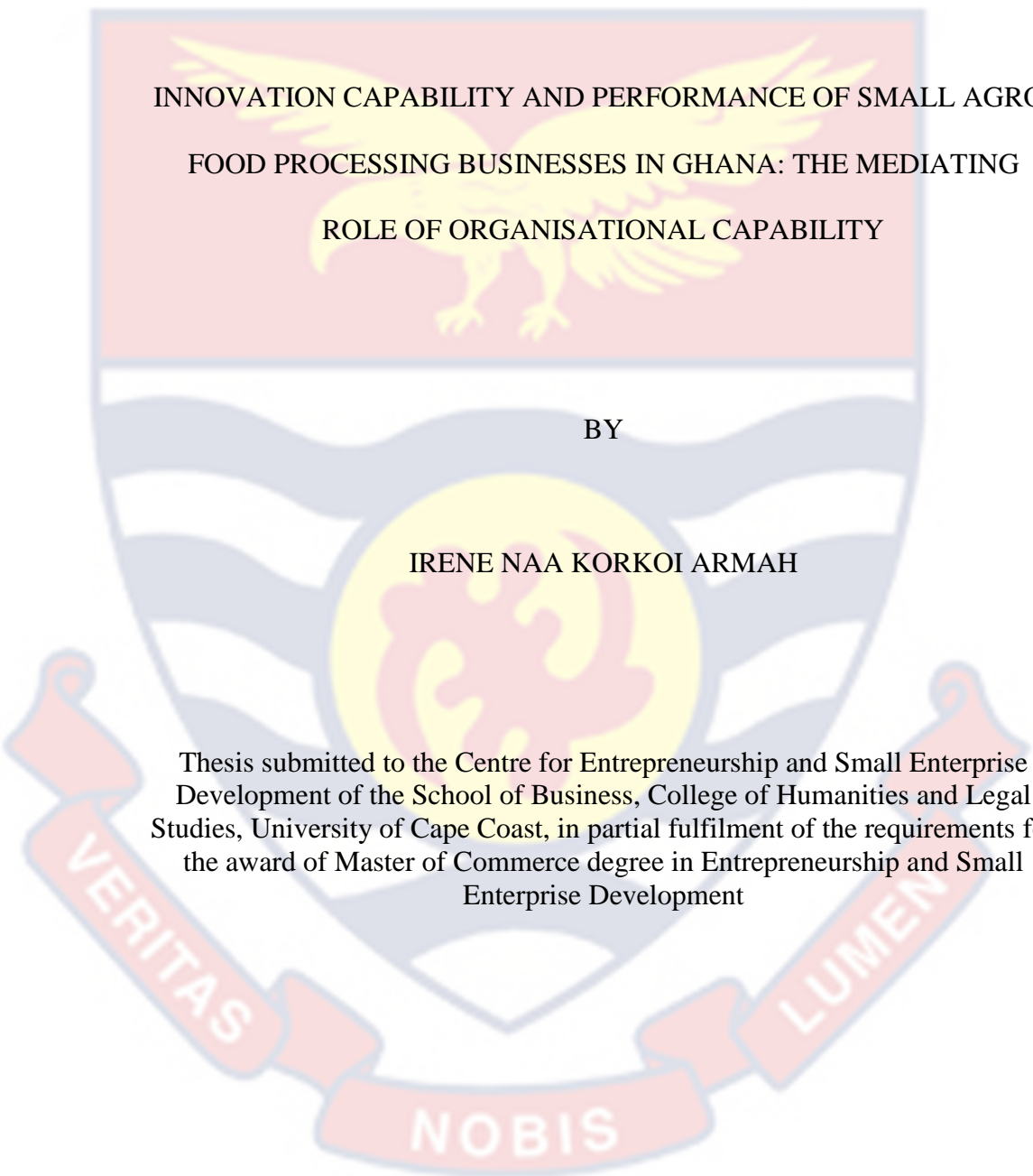


INNOVATION CAPABILITY AND PERFORMANCE OF SMALL AGRO-
FOOD PROCESSING BUSINESSES IN GHANA: THE MEDIATING
ROLE OF ORGANISATIONAL CAPABILITY

IRENE NAA KORKOI ARMAH

2023

UNIVERSITY OF CAPE COAST



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BY

IRENE NAA KORKOI ARMAH

Thesis submitted to the Centre for Entrepreneurship and Small Enterprise
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Studies, University of Cape Coast, in partial fulfilment of the requirements for
the award of Master of Commerce degree in Entrepreneurship and Small
Enterprise Development

SEPTEMBER 2023

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature: Date:

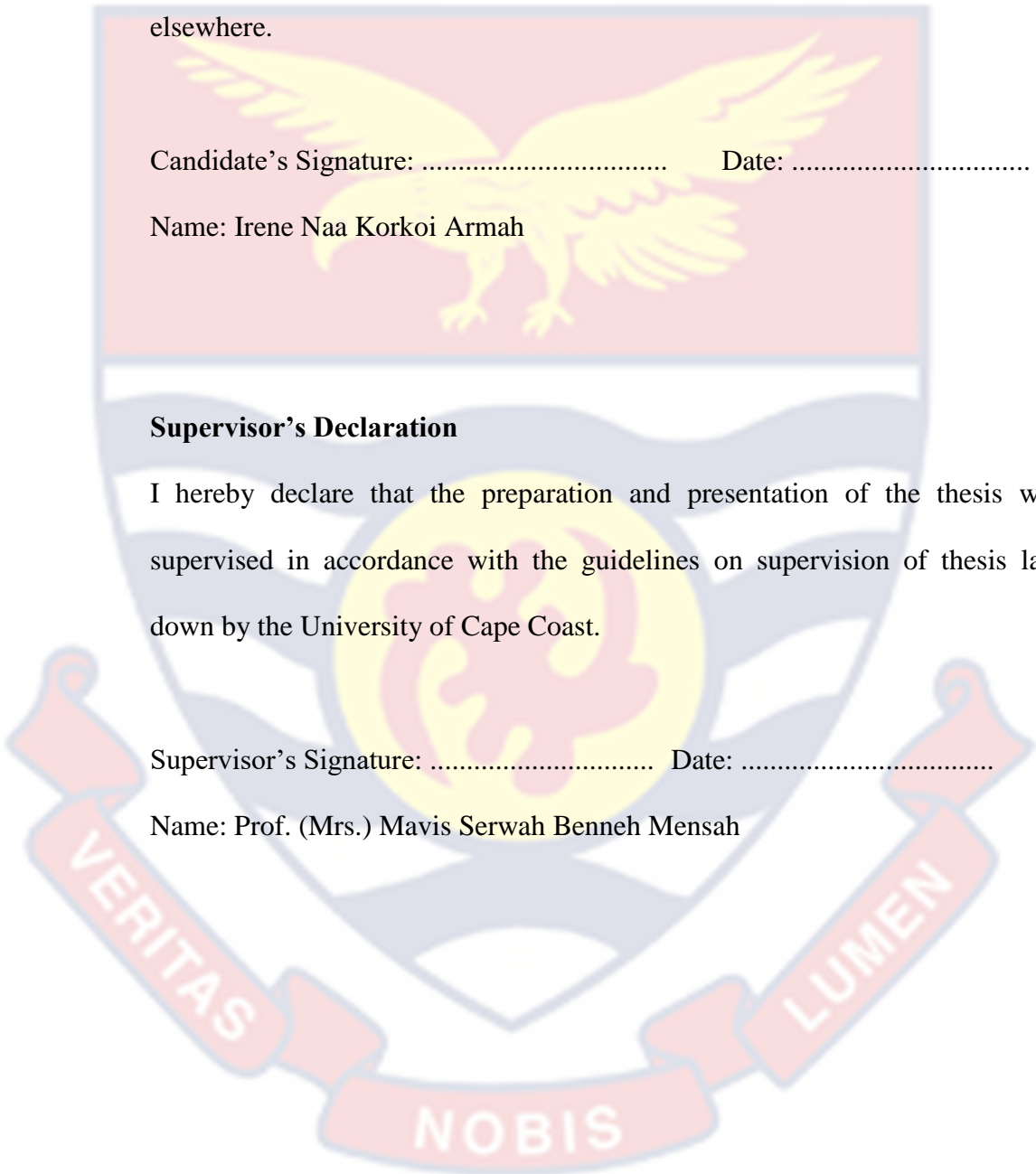
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Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature: Date:

Name: Prof. (Mrs.) Mavis Serwah Benneh Mensah



ABSTRACT

Innovation capability is well established as a key process and the ability to continuously transform resource capabilities in creating value for growth and performance. As part of the quest to resolve the decline in performance of small businesses, the study prioritised the effects of innovation capability and organisational capability for performance of small agro-food processing businesses located in the Greater Accra Metropolitan Area, Ghana. The study also considered the mediating role of organisational capability. It followed the sequential mixed methods research approach and a descriptive-causal research design. It involved a non-probability sampling technique for a population of 800 which resulted in the selection of 260 small agro-food processing businesses with a response rate of 80.8%. Through convenience sampling interviews were conducted with 11 Managers of the small agro-food processing businesses. Inferential analysis through structural equation modeling showed that innovation capability positively and significantly influenced the performance of small agro-food processing businesses in Ghana. The facets of innovation capability made up of knowledge management, organisational learning and organisational culture capabilities were evident in the operations of the businesses. However, there was a minimal level of training and development activities, a systematic means for searching, receiving, and sharing information on new ideas. The mediating role of organisational capability was positive in relation to contribution to performance. A key outcome of this study was that, intentionally building systems to increase innovation capability through operational structures of organisational capability would result in high performance and development of small agro-food processing businesses in Ghana. The study recommended that national growth strategies should be embedded in innovation capability and organisational capability technical support management systems for small businesses in Ghana.

KEY WORDS

Agro-food Processing

Innovation Capability

Organisational Capability

Performance

Resources

Small Business



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I would like to express my heartfelt gratitude to my family who supported me thoroughly with their prayers.



DEDICATION

To my husband Edward and daughter Adidi for your patience and love.



TABLE OF CONTENTS

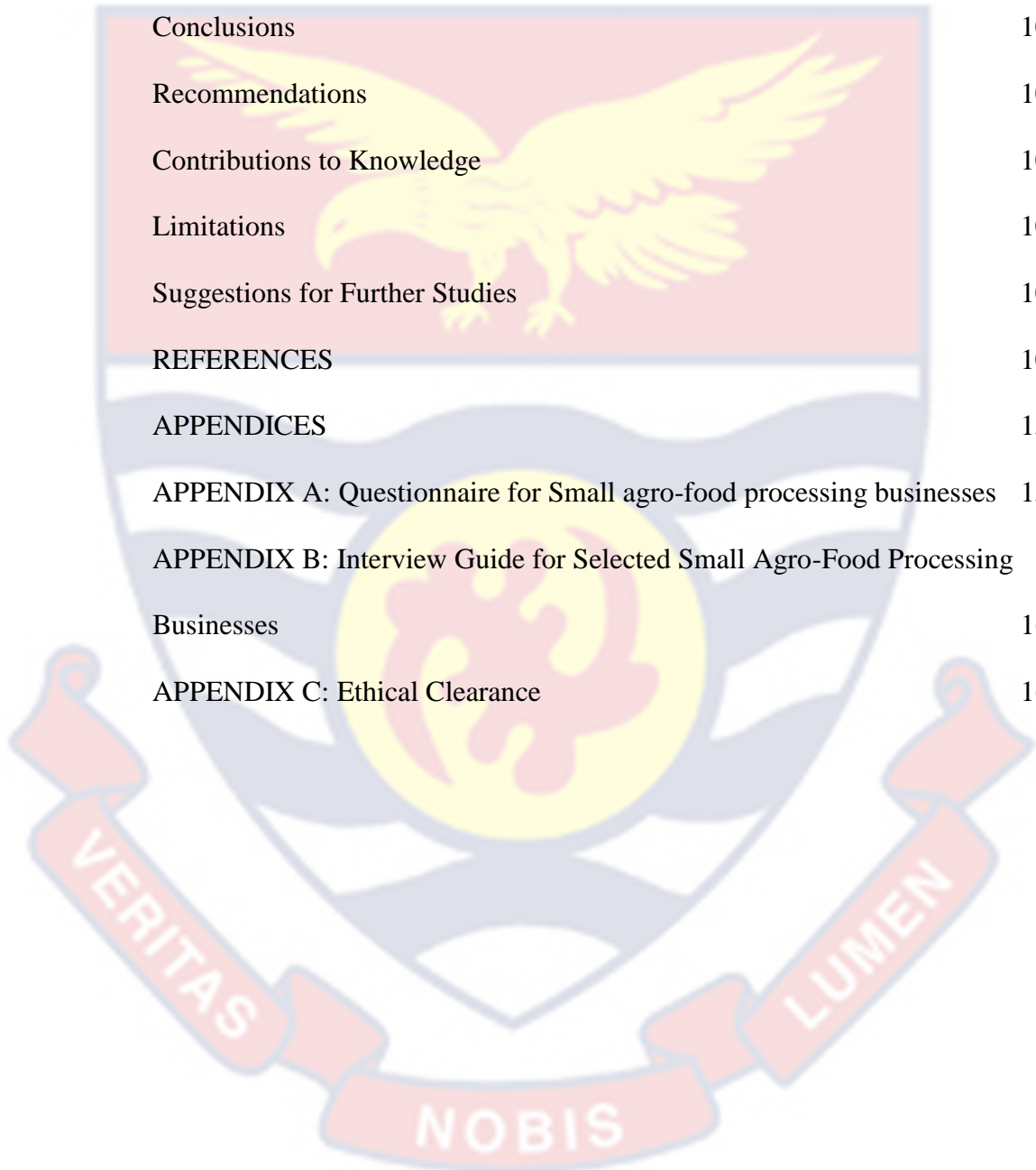
	Page
DECLARATION	ii
ABSTRACT	iii
KEY WORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF ACRONYMS	xiii
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	7
Purpose of the Study	9
Research Objectives	9
Research Questions	10
Hypotheses	10
Significance of the Study	12
Delimitations	13
Definition of Key Terms	13
Organisation of the Study	15
CHAPTER TWO: LITERATURE REVIEW	
Introduction	16
Theoretical Review	16

Resource-Based View Theory	17
Knowledge-Based View Theory	20
Organisational Learning Theory	24
Review of Key Concepts	29
Innovation Capability and Small Business Performance	29
Organisational Capability and Small Business Performance	33
Small Business Performance	35
Empirical Review	38
Empirical Review on Innovation Capability	38
Empirical Review on Knowledge Management Capability	42
Empirical Review on Organisational Learning Capability	46
Empirical Review on Organisational Culture Capability	49
Empirical Review on Organisational Capability	52
Lessons from Empirical Review	55
Conceptual Framework	58
Chapter Summary	60
CHAPTER THREE: RESEARCH METHODS	
Introduction	61
Research Paradigm	61
Research Approach	61
Research Design	62
Study Area	64
Population	66
Sample and Sampling Procedure	67
Data Collection Instruments	69

Ethical Consideration	71
Data Collection Procedures	72
Data Processing and Analysis Procedures	73
Chapter Summary	75
CHAPTER FOUR: RESULTS AND DISCUSSION	
Introduction	76
Background Characteristics of Respondents	76
Innovation Capability of Small Agro-food Processing Businesses	78
Level of Performance of Small Agro-food Processing Businesses	85
Effects of Innovation Capability on Performance of Small Agro-Food Processing Businesses	86
Measurement Model	87
Discriminant Validity	88
Structural Model	89
Objective 4: Mediating Role of Organisational Capability on the Innovation Capability and Small Business Performance Relationship	94
Construct Reliability and Validity	95
Collinearity Statistics	97
Structural Model	97
Outer Loadings	97
Coefficient of Determination	98
Mediating Effect	98
Coefficient of Determination	99
Chapter Summary	100

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND
RECOMMENDATIONS

Introduction	102
Summary	102
Conclusions	104
Recommendations	105
Contributions to Knowledge	106
Limitations	108
Suggestions for Further Studies	108
REFERENCES	109
APPENDICES	159
APPENDIX A: Questionnaire for Small agro-food processing businesses	159
APPENDIX B: Interview Guide for Selected Small Agro-Food Processing Businesses	163
APPENDIX C: Ethical Clearance	165

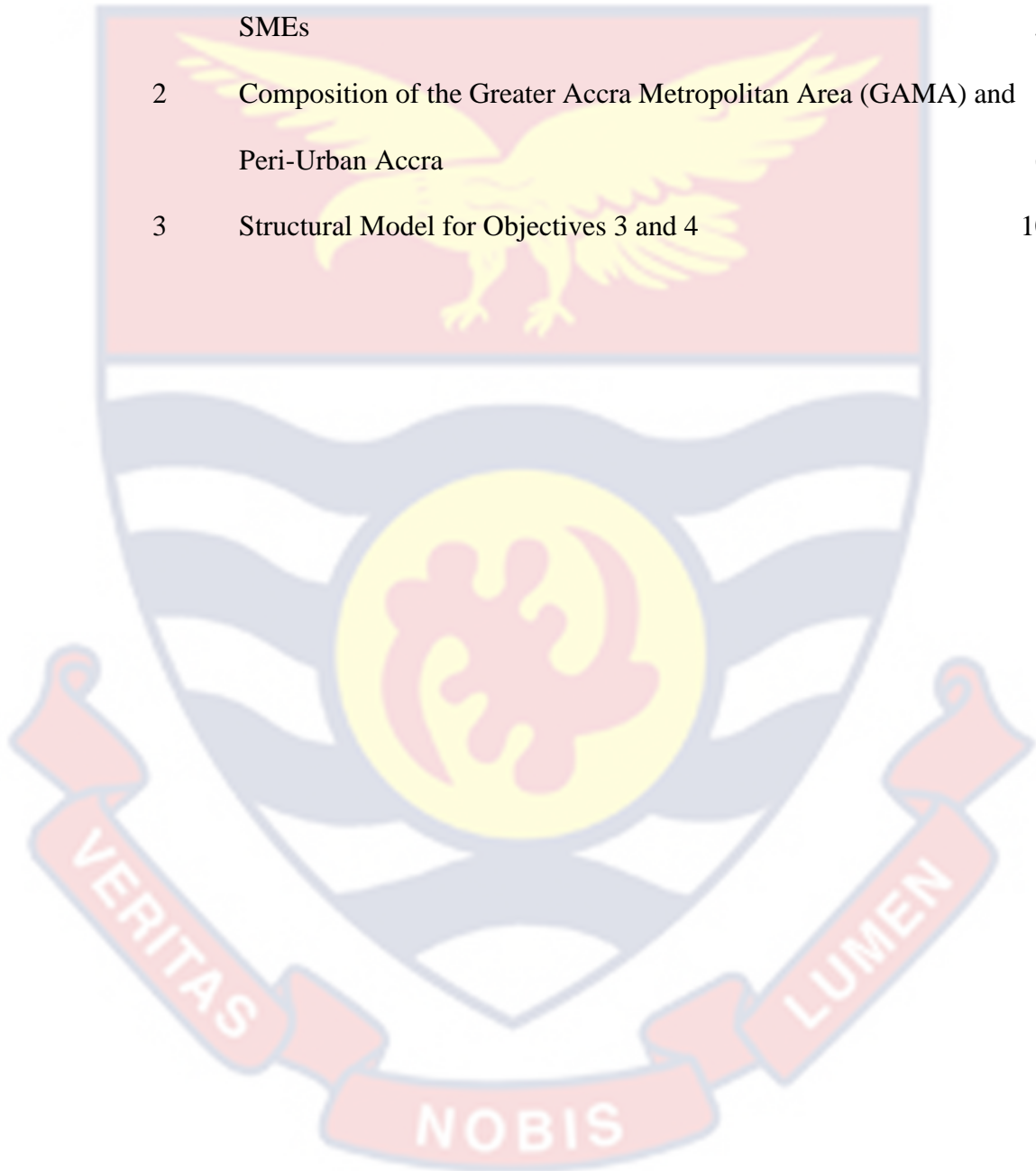


LIST OF TABLES

Table	Page
1 Background Characteristics of Small Businesses	77
2 Knowledge Management Capability	80
3 Organisational Learning Capability	82
4 Organisational Culture Capability	84
5 Small Business Performance	86
6 Construct Reliability and Validity	87
7 Heterotrait-Monotrait Ratio (HTMT)	88
8 Inner VIF	89
9 Path Coefficient, Effect Size and Predictive Relevance	90
10 Path Coefficient, Effect size and Significance	92
11 Co-efficient of Determination	93
12 Construct Reliability and Validity	95
13 Heterotrait-Monotrait Ratio (HTMT)	96
14 Inner VIF	97
15 Coefficient of Determination	98
16 Specific Indirect Effects	98
17 Coefficient of Determination	99

LIST OF FIGURES

Figure		Page
1	Conceptual Framework of effect of innovation capability and the mediating role of organisational capability on the performance of SMEs	58
2	Composition of the Greater Accra Metropolitan Area (GAMA) and Peri-Urban Accra	65
3	Structural Model for Objectives 3 and 4	100



LIST OF ACRONYMS


AGI	Association of Ghana Industries
AMOS	Analysis of a Moment Structures
CFA	Confirmatory Factor Analysis
CLP	Continuous Learning Practices
CSR	Corporate Social Responsibility
EFA	Exploratory Factor Analysis
GAMA	Greater Accra Metropolitan Area
GEA	Ghana Enterprise Agency
GSS	Ghana Statistical Service
GDP	Gross Domestic Product
GHS	Ghanaian Cedi
IC	Innovation Capability
ICM	Individual Competency Management
ICT	Information Communication Technology
ITC	International Trade Centre
KBV	Knowledge-Based View theory of the firm
KFS	Knowledge and Feedback Systems
MBA	Master of Business Administration
MCS	Management Control Systems
MOFA	Ministry of Food and Agriculture
OECD	Organisation for Economic Co-Operation Development
OLT	Organisational Learning Theory
PLS	Partial Least Squares
RBV	Resource-Based View

SEM	Structural Equation Modelling
SMEs	Small and Medium-sized Enterprises
SPSS	Statistical Package for the Social Sciences
UAE	United Arab Emirates

UNIDO United National Industrial Development Organisation

VRIN Valuable, Rare, Inimitable, Non-Substituable



CHAPTER ONE

INTRODUCTION

The need for survival of small businesses in rough ecosystems called for the study of innovation capability and performance. The study analysed organisational capability as a mediator in bringing together high-performance outcomes of small agro-food processing businesses (Abisuga-Oyekunle, Muchie & Patra, 2019). The absence of clear outcomes of innovation capability attributes and learnings of organisational capability has led to the decline and low survival rates and growth constraints of these small businesses (Fu, Mohnen, & Zanello, 2018).

To synthesize the different misconceptions surrounding innovation capability, organisational capability and performance this thesis relied on the resource-based view theory (RBV) by Penrose (1959), knowledge-based view (KBV) of the firm by Grant (1996) and the organisational learning theory (OLT) (Argyris & Schon, 1978). The theories provided the necessary framework for discussions of innovation capability and organisational capability for performance. The main contribution of this study was the expansion of innovation capability, the mediating role of organisational capability and performance in the context of small businesses (Abdukhoshimov & Durmuş-Özdemir, 2017).

Background to the Study

Innovation capability is the capacity to develop new ideas using the company's resources to enhance existing or newly curated products or services (Raghuvanshi, Ghosh & Agrawal, 2019; Saunila & Ukko, 2012). Omar, Aris and Nazri (2016) defined innovation capability as factors that influenced the

ability of a firm to manage innovation. Innovation capability consists of knowledge development, organisational culture and experience by learning which provides a roadmap for performance (Kafetzopoulos & Psomas, 2015; Maldonado-Guzmán, Garza-Reyes, Pinzón-Castro, & Kumar, 2018).

Organisational capability forms a critical success feature for overall performance of small businesses (Amoah, Jibril, Luki, Odei & Yawson, 2021). Organisational capability integrates innovation capability resources and influences performance (Bature, Sallehuddin, Rosli & Saad, 2018).

The integration of knowledge management capability, organisational learning capabilities and organisational culture capability fosters holistic patterns for organisational capability for enhanced performance (Rauffet, Da Cunha & Bernard, 2016). The ability to deploy resources in meeting specific goals proves the strength that organisational capability brings to performance (Sehnm et al., 2022). By combining organisational capability, resource skills and competence, small businesses respond proactively to issues leading to high level performance (Dhir & Dhir, 2018). The OL theory, the KBV theory of the firm, and the RBV theory are linked to innovation capacity with organisational effectiveness (Otto, Szymanski & Varadarajan, 2020).

The RBV theory emphasises that firms with internal innovation capability resources including knowledge can harness organisational abilities for high performance (Grillitsch, Schubert & Srholec, 2019). Therefore, the KBV theory of the firm asserts that internal intangible resource of knowledge capability relates to performance (Gatuyu & Kinyua, 2020; Kengatharan, 2019). As part of the framework to improve results, the OLT argues that the ability to learn and process knowledge within an organisation drives a

successful factor of organisational culture which creates a formula for superior performance (Najafi-Tavani, Najafi-Tavani, Naudé, Oghazi & Zeynaloo, 2018).

Specifically, operational success and financial performance form key components of company performance (Saunila, 2016). Operational performance of firms are measured by market share, productivity, and quality, whereas financial performance is measured by metrics like profit margin, investment yield, and asset turnover (Panwar, Jain, Rathore, Nepal & Lyons, 2018). According to Xu and Li (2020), global performance in the agro-food processing and manufacturing industry are identified as development ability and innovation ability. Additionally, Nyamah, Attatsi, Nyamah, and Opoku (2022), argued that pooling resources like knowledge, operating within a system of set values and beliefs of culture, and sustained performance is highly related to organisational networking abilities.

An in-depth analysis by Iddris (2016), revealed that knowledge management, organisational culture, and organisational learning capabilities are the leading key elements influencing small business performance. Additionally, Saunila, Pekkola, and Ukko (2014) concurred that small business performance was greatly enhanced by exploiting determinants of innovation capability. These determinants included participatory leadership culture, ideation and organisational structures, work climate and wellbeing, know-how development, regeneration, external knowledge, and individual activity.

A study by Kafetzopoulos and Psomas (2015), widened the scope of determinants and found that overall innovation capability, product, process,

marketing, and organisational innovation outcomes enhanced positive performance levels of manufacturing. However, according to Al-kalouti et al. (2020), small businesses are advised to imbibe a holistic organisational capability approach of formidable integral resources to develop and perform effectively. The crux for performance of small manufacturing businesses lies within invaluable attributes (Benos, Kalogeras, Verhees, Sergaki & Pennings, 2016).

Therefore, the thesis argument was that the ability to recognise and exploit knowledge, learning, and systemic cultures formed core innovation capability components of performance in manufacturing firms (Pauw, 2018). This allows small businesses channel their efforts to survival tactics, compete healthily in constantly changing economies, and acknowledge the relevance of leaning on innovation capability processes and organisational capability in determining firm performance (Lo, Wang, Wah & Ramayah, 2016).

The potential benefits of small businesses in developed and developing countries are realised in their contribution as high implementers of sustainable economic climates and economic growth through employment creation (Razak & Abdullah, 2018). A study by Asgary, Ozdermir and Özyürek (2020) established that small businesses make up more than 90% of the business population, 55% of GDP, and 60-70% employment worldwide. Similarly Amoah et al. (2021), reiterated that small businesses provide 70% of job opportunities in developed and developing countries. In this regard, support for small business performance and growth in advanced economies highlights innovations and capabilities for continuous improvement in attaining exceptional performance (Maldonado-Guzman, et al., 2018).

The Organisation for Economic Co-operation and Development (OECD) provides new economic growth policy insights into the relevance of small businesses. These insights include national innovation and organisational capability systems in global economies (OECD, 2018). According to Dutta, Lanvin, León and Wunsch-Vincent (2021), small businesses in European economies like Sweden, the United States of America and the Netherlands have made significant strides in performance because of knowledge development, learning cultures, and innovation capabilities. In a study by Szopik-Depczyńska et al. (2020), the regions in the European Union invested highly in building internal structures of small businesses through resilient internal innovation and capacity structures.

For developing and emerging economies, achieving firm performance is key to developing economic growth strategies (Adeosun & Shittu, 2021). According to the 2020 African Sustainable Development Report, promoting inclusive transformational business climates reinforces learning, knowledge mechanisms, and innovation capability resources (Leal, Azul, Brandli, Lange & Wall, 2021). The intervention of sustainable development goals of industry, innovation, and infrastructure (SDG 9), aims at investing in innovation capacity building of manufacturing businesses to address sustainability for prosperity and economic wellbeing (Franco, Arduz & Buitrago, 2020). Through organisations like the Master Card Foundation, capacity-building programmes have been introduced to small businesses in developing countries (Possumah & Appiah, 2018).

In Ghana, small businesses operate within the various sectors of wholesale and retail trade, manufacturing, and agriculture (Quaye & Mensah,

2019). Ghana's agro-food processing manufacturing sector contributes 20 to 30 percent of processed foods with the potential to increase employment for economic growth (Andam & Silver, 2016). This is indicated by the input of skilled and unskilled labour in the agro-food processing sector across three key sectors, agriculture, industry, and service (World Bank, 2017). In partnership with The International Fund for Agricultural Development (IFAD), the government of Ghana reviewed policies that emphasized increasing innovation capacity building and infrastructure development of agro-processing businesses (IFAD, 2019).

Studies by Onuma, Asante, and Osei (2021) and Andam, Al-Hassan, Asante, and Diao (2015), established that small businesses in the agro-food processing sector performed poorly to the point of decline in terms of market share, customer satisfaction, sales growth, and profit. In their study, Diao, Hazell, Kolavalli and Resnik (2019) also identified several constraints and challenges that hindered performance of agro-food processing businesses in Ghana. Furthermore, some of Ghana's challenges in the agro-food processing sector includes weak innovation capacities, market failure, poor strategies in achieving organisational capability, and low gains that inhibit performance (Affum & Wang, 2019).

As part of efforts to tackle sustainable opportunities for agro-food processing small businesses in Ghana, national and international collaborations are encouraged to drive innovation capability through improving the knowledge and expertise of value chain actors (UNICEF, 2021). Efforts by the government of Ghana to promote sustainable innovation in the agro-food processing sector includes strategic linkages in policy

objectives through capacity building, training in knowledge sharing and management learning support programmes (MOFA, 2021). There are plans to roll out innovation business support programmes that will augment organisational capability and performance of agro-food processing small businesses in Ghana (Ntiamoah, et al, 2022; Quaye, Yamga & Tetteh, 2020).

Furthermore, recent developments in Ghana's agro-food processing manufacturing sector have linked the industry with institutions to foster and train capacity building for innovative outcomes and increase sector performance (CSIR, 2021). Another notable feature to promote innovation in the agro-food processing sector in Ghana is the introduction of Green Innovation Centres that will equip the sector with systems of learning, knowledge sharing, and effective organisational practice. The agro-food processing sector heavily fuels an integral aspect of employment creation (World Bank Group, 2022). This study is essential to the growing concern in a sector with the potential to boost Ghana's economic structural development and transformation.

Statement of the Problem

Small businesses form the backbone of economic advancement worldwide (OECD, 2018). The successful performance of small businesses in developed countries such as Korea is highly supported by the dynamics in the linkage of innovation and organisational capability systems (Bayraktar & Algan, 2019). In most developing countries, small businesses play a critical role in poverty alleviation, provision of employment, and equitable income through wealth creation (Makanyeza & Dzvuke, 2015). The agro-food

processing business in Africa has the potential to grow to a \$1 trillion market by 2030.

However, according to a study by Emezie (2017), trends indicate a downward spiral in performance of small businesses in Sub-Saharan Africa. The share of GDP between 2006 and 2015 of the manufacturing sector in Ghana reached a decline from 10.2% to 4.7% (GSS 2015). Research carried out by Odoom and Mensah (2019) indicated that small businesses in Ghana continue to grapple with myriad challenges in their processes and operations, contributing to stagnation.

Therefore, the blueprint of this thesis was drawn using the RBV theory (Barney, 1991; 2001b), the KBV of the firm (Wernerfelt, 1984; Grant, 1996; 2002b), and OLT (Cyert & March, 1963). The RBV theory (Barney, 1991) states that resources borne by organisations or firms must always maintain four attributes. These attributes must be valuable, rare, inimitable, and non-substitutable (VRIN). Once a firm capitalises on innovation capability resources and strengthens its organisational capability, it becomes difficult for others to copy (Barney, 1986; Cool, Dierickx & Jemison, 1989; Peteraf, 1993). The KBV of the firm and OLT considers knowledge acquisition and how it is used to improve performance (Belinski & Frederico, 2020).

Critical in the scope of findings are suppositions that, studies of innovation capability and performance within the scope of small businesses in the agro-food manufacturing processing sector in Ghana have not been clearly defined (Andam & Silver, 2016). Despite the attention of some studies to unravel the understanding of the innovation capability and performance relationship, there is still a research gap and a need for further understanding.

In addition, very few studies have investigated the mediating role of organisational capability in this relationship considering the sector of small agro-food processing businesses (Belinski, Peixe, Frederico & Garza-Reyes, 2020).

Therefore, the research gap addressed in this study was the lack of empirical evidence on the mediating role of organisational capability in the relationship between innovation capability and performance in agro-food processing enterprises. This study aimed at filling the gap by providing empirical evidence on the mediating effect and influence of organisational capability on the innovation capability and performance relationship.

Purpose of the Study

The study examined the effect of innovation capability and the mediating role of organisational capability on the performance of small businesses in the agro-food processing sector of the Greater Accra Metropolitan Area, Ghana.

Research Objectives

The specific objectives of the study were to:

1. assess the levels of innovation capability of small agro-food processing businesses.
2. assess the level of performance of small agro-food processing businesses.
3. examine the effect of innovation capability on the performance of small agro-food processing businesses.

4. examine the mediating role of organisational capability on the innovation capability – performance relationship of small agro-food processing businesses.
5. provide recommendations for small agro-food processing businesses on how to improve their innovation and organisational capabilities for sustainable performance.

Research Questions

The study sought to address the research objectives by finding answers to the following questions:

1. What are the levels of innovation capability of small agro-food processing businesses?
2. What is the level of performance of small agro-food processing businesses?
3. What is the effect of innovation capability on performance of small agro-food processing businesses?
4. Does organisational capability play a mediating role on the innovation capability – performance relationship of small agro-food processing businesses?

Hypotheses

In relation to the third and fourth objectives, the following hypotheses were tested. The hypothesis for the third objective was composite in nature and with related variables for analysis and results. The first hypothesis, referred to hypothesis 1a, 1b, 1c and 1d were related to the third objective, respectively. The hypothesis 2, related to the fourth objective respectively.

Hypothesis 1(a)

H₀: Innovation capability does not significantly influence the performance of small businesses.

H₁: Innovation capability significantly influences the performance of small businesses.

Hypothesis 1(b)

H₀: There is no significant effect of knowledge management capability on the performance of small businesses.

H₁: There is significant effect of knowledge management capability on the performance of small businesses.

Hypothesis 1(c)

H₀: There is no significant effect of organisational learning capability on the performance of small businesses.

H₁: There is significant effect of organisational learning capability on the performance of small businesses.

Hypothesis 1(d)

H₀: There is no significant effect of organisational culture capability on the performance of small businesses.

H₁: There is significant effect of organisational culture capability on the performance of small businesses.

Hypothesis 2

H₀: Organisational capability does not significantly mediate the relationship between innovation capability and performance of small businesses.

H₁: Organisational capability significantly mediates the relationship between innovation capability and performance small businesses.

Significance of the Study

This study sought to make significant contributions to the research literature by taking an in-depth look at innovation capability and its effect on performance and the mediating influence of organisational capability on the performance of small businesses in the Greater Accra Metropolitan Area. The study contributed immensely to the existing literature on innovation capability and small business performance in three main ways. Firstly, the findings furthered the understanding of innovation capability in the developmental context of small agro-food processing businesses in growing economies. The Greater Accra Metropolitan Area perspective also provided a platform for further studies in other related sectors of the Ghanaian economy.

Secondly, the findings of the study was very useful to small businesses in general, particularly those in manufacturing, in that managers and employees could have first-hand knowledge of innovation capabilities for increase in performance and stabilise businesses. More so, the findings were found to be particularly relevant for promoting innovation domestic-led growth drive for Ghana's economic development. The study findings were also useful in linking innovation and organisational capability measures to small business performance and growth, thus creating a revamp in slow-performing industries. Finally, the study could boost the interest of innovation on a large scale in Ghana and Africa.

Delimitations

The study concentrated on the effects of innovation capability and influence of organisational capability on performance of small agro-food processing businesses in the Greater Accra Metropolitan Area. Innovation capabilities were made up of several dimensions crucial to growth and competitive performance level of firms. However, the study focused on knowledge management, organisational learning, and organisational culture as dimensions of innovation and mediating variable of organisational capability in relation to performance. Small business performance was determined using subjective measures of firm performance. This study highlighted the growing interest of innovation capability undertaken by small agro-food processing businesses.

Definition of Key Terms

The research used a wide range of concepts and terminologies. The study's contextual variables and their definitions are listed below.

Innovation capability was referred to as a set of internalised transformational resources that a firm develops using a combination of internal knowledge and external capacities resulting in products, processes, and new markets beneficial for success and value creation for stakeholders (Saunila, 2020).

Knowledge management capability was defined as an embodiment of knowledge and processes that an organization utilises to enhance its ability for value (Sun, Liu & Ding, 2020).

Organisational learning capability was implemented as a process through which the learning capability of an organisation is characterized through the

creation, transfer, and integration of knowledge and experience, as well as a continuous learning (Basten & Haamann, 2018).

Organisational culture capability was referred to as the structure of the organization is made up of norms and values interpreted into the mode of operation for creating value to enhance and increase growth and all-round performance (Tidd & Bessant, 2020).

Small business was defined as a small business refers to either micro, small or medium business of 1 to 5, between 6 to 30 and 31 to 100 employees. (Amankwah-Amoah, Boso & Antwi-Agyei, 2018).

Organisational capability was referred to as a set of combined unique skills and abilities managed strategically that differentiate small business in the way to accomplish a more capable mode of achieving high results in performance (Sok, O'cass & Miles, 2016).

Small business performance referred to small business performance assesses the financial and non-financial capability needed to enhance high competitiveness and performance rates. Small business performance applies non-financial indicators of growth in sales and market share as important for achieving maximum business efficiency (Abor & Quartey, 2010).

Agro-food processing firms referred to businesses involved in a set of food and beverage manufacturing activities which are applied to raw materials of agricultural produce (Zhao, Wang & Pal 2021).

Resources was defined as items used to create value that comes in various forms of either a supply, support or source (Cao, Lv & Xing, 2020).

Organisation of the Study

The thesis is organised into five Chapters. The first Chapter is an introduction to the thesis, as well as background information, the research problem, research objectives, significance of the study, delimitations and limitations of the study. Chapter two is made up of reviewed related theories, conceptual and empirical literature of the main study variables of innovation capability and small business performance. Based on the literature review a conceptual framework of hypothesized relationships of the variables were developed.

Chapter three comprises the research methodology used in the study. It includes the research design, the target population, the sampling design, the sample size, and the operationalisation of the variables. It also includes data collection methods and instruments of the study. Chapter four presents research findings, results of data analysis, and a detailed discussion of the findings. The Chapter also contains descriptive statistics, diagnostic tests, and inferential statistics. Finally, Chapter five comprises the summary of research findings, contribution of the study to knowledge, conclusions, recommendations, and suggested areas for further research.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Literature review consists of the theories, ideas and evidence of published works related to the topic (Mudavanhu, 2017). The literature review supports the proposed study by establishing a foundation for formulating the research problem and the research process as a whole and by establishing connections to previously conducted research. Reviewed literature provides a logical base on background knowledge needed to expand and synthesize current knowledge to advance research development (Ahmad, Mohammed & Nordin, 2019).

This Chapter reviewed the literature on innovation capability, organisational capability, and performance of small businesses. It captured three theories within the scope of innovation capability, followed by a conceptual review. The empirical review looked at the break down of innovation capability and performance of small businesses and enterprises.

Theoretical Review

Theoretical frameworks for the research are discussed here. The RBV theory focuses on the firm's internal resource capabilities, which explains innovation capability and organisational capability as key drivers that create heterogeneity that is accountable for performance (Barney, 1991). The equilibrium of innovation capability and organisational capability is made possible using the RBV theory in advancing organisational systems towards higher performance (Khosravi, Newton & Rezvani, 2019). The knowledge-based theory of the firm by Sveiby (2001), demonstrates how firms utilise

knowledge resource capability for value creation. In addition, the OLT situates the ability of the firm to continually churn internal learnings into a pattern, culture and system for organisational innovation abilities within the firm to improve and maintain performance.

Resource-Based View Theory

The resource-based view theory (RBV) propounded by Wernerfelt (1984) was advanced to determine the emergence of internal resources and capabilities that firms utilised to provide value for high performance. The theory postulates that the difference in the high performance of firms occur because of the possession and enhancement of resource capabilities that are hard to imitate. The RBV addresses innovation capabilities as the internal components of inputs required to bring about innovations. The theory also indicates that exploiting internal resource capabilities explains differences in firm level performance (Kamasak, 2017).

The theory was developed to explain the gap in non-substitutable internal resource capabilities and long-term firm performance. In line with resources, Penrose (1959) first recognised that internal resources formed a vital component in the performance levels of the firm. Wernerfelt (1984) reiterated that a combination of firm resources could be attributed to long-term performance. However, Barney (1991) clarified that these resources must be valuable, rare, imitable, and non-substitutable to sustain performance. Grant (1991), in contrast, suggested that a clear distinction of resources provides the opportunity to build innovation capabilities through a combination of various internal capabilities.

The RBV hypothesis allows businesses to get a competitive edge and outperform their rivals by focusing on internal factors like the resources and skillsets of the company (Kamasak, 2015). The theory is based on two main assumptions relevant to this study which furthers the understanding of innovation capability and firm performance. The first assumption is that intangible firm resources, including skills and capabilities, must be heterogenous. Firms with different levels and a mix of resources can compete effectively, setting the scene for achieving high performance (Adnan, Abdulhamid & Sohail, 2018).

The second premise of the RBV theory is that immovable intangible resources owned by the company and unable to be copied provide the foundation for higher performance (Almarri & Gardinera, 2014). Resource immobility, according to Madhani (2010), is the cause of higher sustained business performance. The consistency of intangible knowledge and learning innovation skills analysed to forecast business success is Hart and Dowell's (2011) evidence that these assumptions are a key component. In order to achieve high performance, resource capabilities must be successfully utilised and positioned collectively (Aas & Breunig, 2017).

The resource value, which directly distinguishes the competence level in connection to excellent performance, is one of the conditions relevant to the RBV theory (Varadarajan, 2020). Alvarez and Barney (2017), assert that a corporation cannot achieve high performance without the capacity to recognise an intangible resource competence since it must create value for customers. Second, the idea is predicated on the premise that resources must exhibit rare attributes exclusive to the firm, as ordinary resources cannot give

the premium required to achieve any exceptional performance (Barney, Della Corte, Sciarelli & Arikan, 2012).

The unique element of internal capacity resources that the firm holds is another requirement of the RBV theory. If the intangible resources are such that no other corporate entity can obtain them, they can serve as the foundation of performance (Kraaijenbrink, Spender & Groen, 2010). The condition of non-substitutability, which comes after the immutability of resources, argues that an organisation's intangible resources cannot be replaced by another (Poazi, Tamunosiki-Amadi & Fems, 2017). Because of this, a rival company might not be able to maintain the same momentum as one that has stepped on the gas to improve performance. The premises of the RBV theory considers that internal company resources, such as learning and knowledge, along with organisational culture and a number of other characteristics, predicts the impact that innovation capability has on the better long-term performance of the firm (Roxas, Ashill & Chadee, 2017).

Most frequently, comments draw attention to flaws pushing researchers to continually refine their findings and vouch for other publications. Consequently, despite the RBV theory's significant contributions to different study areas, the theory has received harsh criticism (Kraaijenbrink, Spender & Groen, 2010; Priem & Butler, 2001). When comparing the findings of multiple studies, the RBV hypothesis is critiqued as being untestable when considering intangible resources (Barney, 2001; Kraaijenbrink & Spender, 2010; Lowe & Teece, 2001). According to Priem and Butler (2001), comparing and defining different outcomes is challenging due to the lack of uniform nomenclature. They criticised the indiscriminate use of resources,

competencies, and capacities. Barney (1991) clarified that, despite being tautological, the RBV theory is not necessarily so.

Further acknowledgment of other management theories, such as Porter's (1980) arguments that firm ability predicts business performance were viewed as tautological (Barney, 2001). The RBV theory was also criticised by Priem and Butler (2001), who noted a number of issues, including the idea that diverse resources produce the same value of performance and advantages in businesses and that all firms can use capabilities for performance. The RBV theory addressed the internal-outside approach, emphasising resources and capabilities; however, Barney (2001) offered counter arguments that dealt with this. Attaching ambiguity to a framework for different capability resources over time to produce innovations for higher performance is another challenge (De Toni & Tonchia, 2003; Grant, 1991).

Despite the limitations of the resource-based perspective theory, studies like that by Madhani (2010) show that the ownership of a well-defined range of resources and skills is the foundation for business performance. According to the Richardian paradigm, which states that resources like knowledge may be enlarged, increased through time, upgraded, and integrated for firm performance, firm resources and capacities have been strengthened (Peteraf, 1993). For the sustainability and performance of businesses, Ordonez-Ponce, Clarke and Colbert (2021) identified the knowledge-based experience as a priceless, distinctive, and difficult-to-imitate resource.

Knowledge-Based View Theory

It is possible to trace the origins of the KBV of the company (KBV), sometimes referred to as the knowledge-based theory, to the writings of

Socrates, Plato, and Aristotle. Their work served as the theoretical foundation for several academic viewpoints on knowledge (Kirsimarja & Aino, 2015). According to several research, the KBV of the company was developed as an extension of the RBV hypothesis (Barney, 2001; Nickerson & Zenger, 2004).

The KBV of the firm asserts that knowledge is the most strategically allocated resource for growth and performance and that firms are heterogeneous and laden with it (Grant, 1996b). According to the firm's knowledge-based perspective, knowledge is essential to enhancing and utilising knowledge capability and performance (Branzei, Jennings & Vertinsky, 2002).

In order to develop innovations of value and high firm performance, the KBV of the firm connects internal capabilities for timely exchanges of knowledge generation, accumulation, and sharing (Curado & Bontis, 2006; Kaplan, Schenkel, von Krogh, & Weber, 2001). The performance gap between enterprises is addressed by acknowledging that knowledge is a resource capability of the organisation and is a crucial explanatory component (Kirsimarja & Aino, 2015). In contrast to previous theoretical approaches, the enterprise's knowledge-based perspective emphasizes the internal workings of the organisation. In contrast to the RBV theory, which groups all resources in connection to firm performance, the KBV of the firm approach places the function of knowledge as the basis of firm survival directly tied to performance (Hokanson, 2012).

The notion that knowledge is a valuable primary resource that people possess is fundamental to the knowledge-based vision of the enterprise. The second supposition holds that knowledge creation serves a purpose within the company by applying knowledge to creating goods and services that provide

value (Grant, 1996). Companies with a wealth of knowledge are also in a good position to develop high-performance knowledge-based capabilities. According to Nickerson and Zenger's (2004) stated theory of the KBV of the organisation, a manager's goal is to produce value through new knowledge.

The idea that a certain combination of knowledge is required to solve complicated situations is another one of the assumptions. It is well known that knowledge is unique to each business, knowledge-based capabilities are seen to be superior for sustained performance (Curado, 2006). The process of developing, acquiring, storing, sharing, and applying knowledge is recognised as a common approach to the KBV of the organisation (Theriou, Aggelidia & Theriou, 2009). Knowledge is considered a firm's competence when input and output are combined to provide useful solutions in response to the requirement to develop innovations.

Innovative solutions emerge under the combined demonstration of employee activities. Firm roles and types set the boundary as the coordinating body of complex problems (Grant, 1996). Relevant feedback on the increase or decline in firm performance is related to the knowledge base phenomenon of the firm (Curado, 2006). Felin and Hesterly (2007) explained that the KBV of the firm is the antecedent nested in innovation capabilities in relation to the high performance of the firm. Studies from other disciplines criticise the non-existence of a defined model for the KBV of the firm (Kogut & Zander, 2002; Sveiby, 2001). Kirsimarja and Aino (2015) note that the KBV of the firm is still more of a set of ideas than a unified theory, and much vagueness exists in the key concepts.

For instance, diverse literary works treat the ideas of resources, knowledge, and capacities (Curado, 2006). Additionally, the operationalisation of knowledge without a primary emphasis and defined measurements makes it difficult to understand the causal links between knowing capability and performance (Kirsimarja & Aino, 2015). The long-term existence and sustainability of the company depends on more than just knowledge acquisition; it also depends on the function that capabilities play in the relationship between business performance and long-term survival (Kaplan, Krogh, Schenkel & Weber, 2001; Xiao & Cao, 2017).

Despite these shortcomings, the KBV of the company is a crucial asset for a firm's capacity for innovation since it plays a crucial part in the generation of knowledge for innovation, which influences the firm's performance output (Moreno, 2012). The knowledge-based vision of the firm and small business performance, competitive advantage, and growth have a favourable link (Price & Stoica, 2015; Stoian, Dimitratos, & Plakoyiannaki, 2018). Furthermore, prior research identifies the main argument supporting the need for businesses to increase their knowledge-based competence as an innovation input for business survival and performance (Moreino, Pinheiro & Joia, 2012; Nonaka & Tomaya, 2003).

Knowledge-based resources are critical and key to a firm's innovation capability, which emphasizes that knowledge does not depreciate, is mainly intangible and dynamic, and presents an asset to the firm (Price, Stoica & Boncella, 2013). The firm's KBV focuses highly on acquiring and creating knowledge. It includes capturing, sharing, integrating, re-combining, applying, and exploiting, which ingests knowledge and learning resources for the

accumulation of innovation capabilities to explain the effect of knowledge capabilities on performance. In order to address the issue of decline and poor performance, the KBV of the company collaborates with the theory of organisational learning. The OLT significantly influences the relationship between innovation capability and business performance (Argyris & Schön, 1978).

Organisational Learning Theory

Organisational learning theory (OLT) by Argyris & Schön (1978) situated in the scope of behavioural theories holds that to perform successfully in a competitive environment, firms must apply the knowledge acquired and abilities to influence goals to reach their strategic objectives. The key concept of the theory is that for learning to occur, firms must align their actions through capabilities to changes that occur, in relation to the outcome maintained for performance. The OLT is based on the premise that learning occurs at an individual and organisational level and involves the interaction and sharing of experiences and knowledge through knowledge creation (Basten & Haaman, 2018; Leavitt, 2011). The core of organisational learning is the ability of the firm to transform learning into knowledge to accelerate innovation capability for superior performance (Wujiabudula & Zehir, 2018).

Organisational learning assumes that the organisation must be a learning organisation and that learning is valuable, continuous, and effective when shared based on the premise that every experience is an opportunity to learn (Yang, Secchi, & Homberg, 2018). Another assumption is that learning begins at an individual level and transcends into an accumulation of routines available to the organisation despite personnel turnover (Hariharan &

Vivekanand, 2018). Another assumption shared with the learning curve theory, which informed the contribution of the OLT, is that learning results in the improvement of innovations for perceived future performance. This perceived outcome is evident in organisational learning capability, which uses inside and outside knowledge to improve performance over time (Knipfer, Kump, Wessel & Cress, 2013).

The key conditions set to promote organisational learning are within five principles (Senge, 2004). These include: 1) new capabilities that an organisation possesses; 2) the managers/leaders are the pacesetters for organisational learning in a firm; 3) learning occurs as a result of practice and performance; 4) process and content are interlocked; 5) learning is dicey.

Some common themes guiding these principles are establishing an organisational culture, experimentation for learning and feedback, encouraging people to take responsibility for the development, and managerial efficiency of a leader to empower employees to seek continuous learning and development (Argyris, 1991; Senge, 2004b).

Organisational learning is made up of bundles of knowledge acquired from learning which is made up of three levels. The first level is the cognitive level which is the consideration of new ideas and ways of thinking, the second is the behavioural phase where employees consider new approaches as part of their responsibilities and adjust to suit the supposed outcomes. The third level is the improvement in performance which happens when change within the organisation leads to measurable results (Curado, 2006). From this perspective, learning occurs as a result of a process of detecting and correcting errors. Leavitt (2011) summarizes common themes of the organisational

learning process as integrating data acquisition, retention, individuals, culture, transformation, and structure effectively.

The KBV of the firm by Grant (1996) and the OLT by Argyris and Schön, (1996) postulates that enhancing firm innovation capability lies in resource allocation, which is a joint result of the RBV theory proposed by Wernerfelt (1984) in order to achieve high-level performance. The ability of the company to build a cultural dimension is taken into account by organisational learning. Organisational culture, which shows the importance of shared values and behaviour inherent in the organisation, is one of the organisational elements that significantly influences innovation capabilities. Curado (2006) claims that the resource capabilities that contribute most to long-term success and competitive advantage are knowledge, learning capacity, culture, teamwork, and human capital.

Leveraging knowledge and learning innovation capabilities creates a strong organisational culture that impacts firm performance (Škerlavaj et al., 2011). Organisational culture relies heavily on organisational learning and influences innovation capabilities in two ways (Lee, Tan & Chiu, 2008). First, individuals within the organisation learn an acceptable process of how activities should function in line with innovative norms and values to emulate. Secondly, shared values, assumptions, and beliefs become part of the organisational structure to direct their innovations (Kiziloglu, 2015). Werlang and Rossetto (2019) also stress that the organisational culture of a firm also defines the differences in systems, thereby creating the competitive boundary of innovation capabilities. The firm needs to explore the variable of culture which Takeuchi and Nonaka (1986) mention as a high-performance factor.

The OLT has been subject to various criticisms throughout its development. The most notable critique is the one that refers to the consideration of organisational and individual learning (Curado, 2006). While some support that the individual is the actor within the organisation who learns, others believe that the collective learning of members on site should be referred to as organisational learning (Cangelosi & Dill, 1965; Huysman, 2000). Huber (1991), argues that although individual learning is necessary for organisational learning, it is an insufficient condition for organisational learning to occur. A similar position by Wallace (1998), states that although individuals are the key acting agents in learning, the organisation can still learn independently of any particular individual, thereby building the organisational learning capability structure of the firm.

Pawlowsky (2003), attributes the possible divergence in concepts and the inexistence of a unifying paradigm of organisational learning to the lack of research in knowledge management, organisational learning, and organisational memory. Although the concept of organisational learning has been used in various forms, the amount of literature that establishes the renovation of organisational learning, innovation capability, competencies, and firm performance struggle to form a fundamental structure for works between organizational learning and firm performance (Curado, 2006; Hariharan & Vivekanand, 2018; Leavitt, 2011; Sadler, 2003). Senge (2004) suggests that moving the organisation towards a learning mode entails building a systematic institutional capability to enhance innovation synergies over time. Yet, the OLT suffers some shortcomings in theoretical spheres.

Another criticism of the OLT points out that contributions overlook the likelihood of unforeseen events, thus limiting the prospect of purposeful learning (Bell, Whitwell & Lukas, 2002). Kiziloglu (2015) argues that conceptualising the OLT in a limiting way as an emerging process does not capture the fullness of abilities that the firm must possess to tackle the likelihood of unforeseen circumstances and problem-solving. Basten and Haaman (2018), also present that the limits of organisational learning in solving underlying issues are due to its complex and heterogenous nature. They argue that these constraints do not properly address the underlying causes of problems but rather consider symptoms.

Given the variety of phenomena surrounding the relevance of the OLT, the theory is situated in the fundamental leverage it has in expanding the organisational innovation capability factor in response to problems and changes of a firm (Wallace, 1998). It helps firms fully exploit the learning process through acquiring, interpreting, and adapting knowledge resources to form a cultural dimension to transform the organisation into a high-performing one (Salim & Sulaiman, 2011).

The OLT is influential in its capacity to expose resource, knowledge, and cultural innovation capability dimensions as crucial components in solving complex issues and analysing effects and performance-based outcomes (Wujiabudula & Zehir, 2016). Based on the previous discussion of theories, the next sections look at the variables of innovation capability dimensions of knowledge, organisational learning, culture, and organisational capability in mediation and small business performance. The next section

gives a clearer understanding of the variables and contributes further to the relevance of this study.

The study was guided by relevant theories that complemented each other and connected to clearly explain the rationale and data behind the research. The application of the RBV theory reflected the sustainable competitive advantage of a firm captured internally (Afuah, 2020). The resources of small businesses was captured as the capability and strength guiding activities of the organisation's capacity to achieve their goals. Various intangible assets of the RBV theory extended into knowledge, learning, and a cultural perspective in the behaviour of the business. The KBV theory of the firm and OLT considered resources of knowledge creation, and formulating learning mechanisms embedded in systems that led to superior advanced performance (Antunes & Pinheiro, 2020).

Review of Key Concepts

The theoretical review conveyed key concepts relevant to the study of the effects of innovation capability and role of organisational capability on the performance of small businesses. The concepts included innovation capability which comprised of the components of knowledge management, organisational learning, organisational culture and performance, organisational capability and performance.

Innovation Capability and Small Business Performance

Innovation capability has been identified as one of the most crucial multi-dimensional inputs to advance research of innovation and performance. Drucker (1954) suggested that innovation capability was critical for firms to survive in uncertain economic environments. Drucker's innovation capability

highlighted enhancing high organisational learning ability for increased firm performance. To successfully create innovations for improved performance, an organisation's innovation capability aims to use resources that are challenging to replicate. The firm acquires these resources through knowledge and learning. According to Lawson and Samson (2001), innovation capability is the ability to gain knowledge, learn, and generate ideas in order to provide new results that are valuable for performance in the form of goods and services.

Verma, Singh, and Rao (2014) defined innovation capability as a process of exploiting firm capabilities that tackle the phenomena of highly unpredictable competitive business environments. The study of Saunila (2020) identified various aspects that influence an organisations innovation capability to enhance performance. These included the likelihood of innovation, the methods of innovation, and the outcomes of innovation activities. Iddris (2016), states that different knowledge, organizational, and human factor categories can be used to define innovation capability. Business organisational innovation dimensions are the names given to these variables, and using these variables, innovation capability can be measured.

In the same vein innovation adaptation, absorption and innovation have been found to indicate the link to business performance and further indicates innovation capability as most important for small enterprises to overcome fluctuations (Maldonado-Guzmán, et al., 2018). Recent attention in several studies have focused on the influence of innovation capability as a process in relation to transforming ideas. Schumpeter (1934) suggested that innovation

capabilities that link to firm performance lie within the process of change in the stimulation of exploration and exploitation.

A broader perspective of innovation capability as a process is adopted in a cultural structure relating to transforming ideas into knowledge and learning within unpredictable firms such as small enterprises, mostly in the manufacturing sector (Aas & Breunig, 2017). In view of this Iddris (2016) through a content analysis of articles from thirty journals concluded that although there was no clear definition for innovation capability, the terms knowledge management, organisational culture and organisational learning trust ranked highest among process capabilities that demonstrate firm performance.

According to Saunila (2020), firm innovation capability forms the most important path in generating a knowledge management process for survival in achieving successful performance for small enterprises. Following that perspective, their study stressed that knowledge management capability provided the necessary input through acquisition, assimilation, transformation, and exploitation, clearly defining overall small business performance. This view is supported by Al Amiri, Rahim and Ahmed, (2023) who noted that knowledge management capability is a holistic solution that solves the complex declining issues of small businesses by creating rapid innovation results.

The ability of small businesses in the manufacturing industry to improve their knowledge management capabilities mechanism by emphasising organisational learning capability underpins their strong resilience and exceptional performance (Slater, Mohr & Sengupta, 2014). Achieving a high

level of organisational learning capability in tandem with the development and growth of the company's knowledge management capability enhances the improvement in a firm's performance (Salim & Sulaiman, 2011). Due to the lack of agreement on the concept of organisational learning, the term falls into a multidimensional context of learning as both a process and a body of knowledge (Castaneda & Rios, 2007). Organisational learning capability was described by Gomes and Wojahn (2017) as the capacity to process knowledge through knowledge acquisition, transfer, and integration to enhance company performance.

According to Argyris and Schon's (1978) definition of organisational learning, double-loop learning entails developing a transformational system that links a feedback loop to effective performance methods and values that define firm performance (Basten & Haaman, 2018). Similarly, Salim and Sulaiman (2011) investigated the underlying mechanisms that lead to new product and service offers. They found that while generative learning identifies new markets and customers, adaptive learning results in more effective and efficient ways to supply new goods and services. Notably, the informal learning system that prevails in small businesses makes these organisational learning capabilities a crucial part of developing the innovation capability aspects required to increase resilience for survival.

According to the impact of organisational culture and learning, businesses can perform at a high level. According to Hofstede (2001), organisational culture incorporates values and beliefs for the aim of innovation, which leads to long-term success and performance. In a similar vein, Tuan and Venkatesh (2010) agreed that organisational culture took into

account beliefs and values that encompass the organization's mission and vision, external environment, methods for achieving goals, public perception of the organisation, management procedures, employee needs, interpersonal relationships, and leadership that may have an impact on the firm's capacity for innovation and performance. Çakar and Ertürk (2010) showed how organisational culture influenced small business performance through innovations and promotes innovation capability.

A study by Verma, Singh, and Rao (2014), categorised organisational culture as a process of characteristics deeply rooted in learning that organisations access for growth, success, and performance. The organisational culture of a firm is said to support the deep foundations of values, norms, and beliefs for the development of innovation abilities, providing sustained innovativeness and performance (Dombrowski et al., 2013 & Handoyo, 2018). There is some proof that company culture has a beneficial effect on small and medium-sized businesses' productivity. Culture in the workplace was identified as a key factor in the long-term success of an organisation by Dombrowski et al. (2007). Similarly, studies by Zakari, Poku, and Owusu-Ansah (2013) showed that organisational culture leads to positive organisational performance.

Organisational Capability and Small Business Performance

Organisational capability is the collection of unique capacities an organisation possesses, strategically applied to influence their survival and performance (Bakhru & Grant, 2006; Henri, 2006; Penrose, 1959). Based on the RBV theory, Grant (2001) urges that organisational capability is a unique response strategy that plays a major role in developing high firm performance.

These definitions are concurrent with Gomathi and Nayeemunnisa (2020) and Ayoup, Mohamed, and Rehman (2019), who assert that organisational capability boosts innovation capability and performance relationship through inimitable internal strengths.

Gill and Delahaye (2004) defined organisational capability as a combined set of knowledge, learning, and organisational structure that provides a competitive advantage through innovation. Gill and Delahaye emphasised that strategic intent, organisational structure, and individual knowledge of the firm are the three focal areas of organisational capability that form the capacity to generate a consistent source for performance. Similarly, Koufteros, Verghese, and Lucianetti (2014) and Rehman, Mohamed, and Ayoup (2019) encapsulate organisational capability among small businesses as “strategic management capability,” “external stakeholder relation capability,” and “operational capability” issues that determine the overall performance of the organisation.

Abass and Asghar (2010) are of the opinion that effective leadership could be the key determinant for the change in organisational capability that is necessary for superior performance. This was in contrast to the literature’s consensus regarding the influence of the various organisational capability components, which revolves around strategy, organisational, and operational issues. However, a study by Akaegbu and Usoro (2017) on the input of organisational capabilities in strategy formulation reiterates that organisational factors of leadership alone are insufficient to yield the superior performance a firm requires.

As a result, Akaegbu and Usoro (2017) resolved that firms centre their organisational capability to include five major capabilities: leadership, adaptability, creativity, innovation, and collaboration, which form the integrated basis for organisational capability and create the balance needed to fuel superior performance. In addition, Hindasah and Nuryakin (2020), López-Cabarcos, Göttling-Oliveira-Monteiro and Vázquez-Rodríguez (2015) categorised organisational capability in the context of the creation, and development as well as the implementation of knowledge and learning connectors which are made up of the internal and external resource dynamics of the firm which remain core in enhancing performance.

Small Business Performance

Enterprises continue to drive employment creation and economic development worldwide (Masroor & Asim, 2019). However, there is no agreed universal definition for small businesses (Al Suwaidi, Alshurideh, Al Kurdi, & Salloum, 2020). The World Bank's definition of small and medium-sized enterprises (SMEs) are businesses that have no more than 300 employees, \$15 million in total assets, or \$15 million in total sales per year (Berisha & Pula, 2015). To qualify as a small business, a company can have no more than 50 workers and no more than \$3 million in total assets and total yearly sales.

The European Union's definition of a small and medium-sized enterprise (SME) is a business that employs fewer than 250 people with a yearly revenue of no more than €50 million and/or a yearly balance sheet of no more than €43 million (Roffia, Moracchiato, Liguori, & Kraus, 2021). Bouri,

Breij, Diop, Kempner, Klinger, and Stevenson (2011) examined an all-encompassing approach to providing support to SMEs in developing countries.

In Ghana, the term "SME" has also been defined in various ways. The Ghana Statistical Service (GSS) classifies small businesses as having fewer than 10 employees, while the Ghana Enterprise Agency (GEA) defines SMEs as having between six and twenty-nine employees and an investment in plant and machinery (excluding land, buildings, and vehicles) of no more than ten million Ghanaian cedis (Agyapong, Essuman, & Yeboah, 2021). Various factors of capability contribute greatly to small business performance.

Performance, in a business sense, is the ongoing application of resources to achieve results for set goals (Pinho, Rodrigues & Dibb, 2014). Performance occurs across various institutions in terms of dynamic, entrepreneurship, cooperative, organisational, among many others (Alam, Arumugam, Nor, Arumugam & Fang 2013). Pinho et al. (2014) refer to small business performance in broad terms of financial, objective, and non-financial or subjective determinants. From a broad spectrum of literature, financial performance relates to factors of sales value, sales growth, and profitability, whilst non-financial performance relates to factors of "product quality," "customer satisfaction," "market expansion," "increasing of human resources," "reputation," and "social contribution" (Utami & Lantu, 2014).

Collectively, these studies explain why small business performance is so important in fostering widespread employee economic engagement over the world (ILO, 2015). Similar to how the success of small manufacturers has been shown to have a major bearing on the expansion of local enterprises, global economic activity and recovery are dependent on the success of small

manufacturers around the world (Emezie, 2017). For small manufacturing enterprises, the use of non-financial performance indicators is recommended by Primadonna and Emrizal (2018). In addition, most small businesses lack the resources to generate reliable financial accounts, contributing to the disparities of an enabling business environment for healthy competition (Yoo, Choo & Lee, 2018).

Small businesses performance influences firm survival and sustainability, which is fundamental for developing countries' economic and social advancement (Turyakira, Kasimu, Turyatunga & Kimuli, 2019). Studies by Sulistyono and Ayuni (2019) showed that small businesses that focused on actively enhancing capabilities drive innovations for superior performance and contribute strategically to economic development. In view of this, Singh, Ologu, and Musa (2016) suggested that small businesses consider all aspects of performance factors, considering, in particular, non-financial and subjective performance for manufacturing businesses and incorporating firm age and characteristics of size as factors that may influence variables.

As a result, most small businesses are reticent to share their objective financial performance data with outside parties. As a result, the study will measure firm performance based on how customers perceive those businesses, which have been identified as crucial for success. This analysis will include metrics such as sales growth and market share growth relative to the competition (Turyakira, et al., 2019). Many of the study's factors were already discussed above. In the next paragraph, the study addresses the variables of empirical review. In this section, a systematic review of the literature

concerning the consequences of innovation capacity on the efficiency of small businesses is presented.

Empirical Review

An empirical review is a systematic review written on the phenomena under study drawn from a collection of previous works (Thompson, Verduijn & Gartner, 2020). This section reviews empirical studies in relation to the theories underpinning the study on innovation capability and small business performance. The section begins with empirical studies on innovation capability, knowledge-management, organisational learning, organisational culture capabilities and small business performance. In addition, organisational capability is also reviewed. The conceptual framework, maps out the relationship of the study variables, also included in the Chapter.

Empirical Review on Innovation Capability

The RBV theory argues that firms that possess bundles of innate resource capabilities, termed valuable, rare, imitable, and non-substitutable, form the basis for performance and competitive advantage (Wernerfelt, 1984 & Barney, 1991). As a result, studies by Al-kalouti et al. (2020), Andjarwati (2020), Le, Nguyen, and Hoang (2020), Arshad and Arshad (2019), and Saunila (2017) which established the RBV theory for innovation capability as a vital input for firm performance were reviewed. In contrast, YuSheng and Ibrahim (2020) found that innovation capability had a positive but insignificant effect on firm performance.

In their research, Al-kalouti et al. (2020) used the RBV theory to examine how innovative capacity relates to business results for Jordanian financial institutions. Organisational culture, knowledge exchange, effective

resource management, and customer engagement were the operationalisations of the independent variable innovation capability. Organisational performance, measured in monetary and qualitative metrics, served as the dependent variable. The questionnaires for the study were uploaded to and distributed by the participants with the help of the internet platform Qualtrics.

The study by Al-kalouti et al. (2020) used a quantitative approach to gather responses from 300 middle-level and senior-level managers of Jordanian banks. The objective of the study was to investigate the determinants of innovation capability and their link with organizational performance. A total of 160 valid responses were collected, giving a satisfactory response rate of 53%. The data were collected over a period of 3 months with a purposive sampling technique. The study's survey data was analysed with the Statistical Package for Social Sciences (SPSS). Responses were analysed using descriptive statistics, correlations, and regressions using a scale of agree to strongly agree.

Statistically significant positive associations were found between the markers of innovation capacity, as determined by the study's correlation analysis. Regression analysis firmed up the percentage of variables that affected both performance metrics positively. The study revealed that corporate culture was crucial in producing knowledge for innovation which would boost performance. The study demonstrated that both indicators of organisational performance were found to improve when the organisation's innovation capabilities were increased.

Further research by Bahta, Yun, Islam and Ashfaq (2020) looked into the connections between corporate social responsibility (CSR) and financial

performance for small and medium-sized enterprises (SMEs) in Eritrea, with a focus on the mediating influence of innovation capabilities on this relationship. The study used stakeholder and RBV theories to understand resources and performance. Innovation capability construct consisted of four items and firm performance with four indicators of perceptual measurements were adapted and adopted from previous studies using a 5-point Likert scale. The actual number of responders was 402, with a response rate of 77% out of a potential population of 600.

Bahta et al. (2020) distributed self-administered structured questionnaires to SME owner-managers in Asmara, Eritrea. The survey data was analysed using SPSS and PLS which was the best fit for the study in line with the formulated hypothesis. Measurement and structural models were assessed for data quality and consistency. The study found that CSR significantly improved innovation capability, which in turn advances the competitiveness of small businesses. The findings also indicated a significant positive effect of innovation capability on small business performance. As part of the findings, innovation capability as a mediator also partially affected the CSR-SME performance relationship.

Vietnamese SMEs were analysed by Le, Nguyen, and Hoang (2020), who looked at how company culture, management accounting data, innovation prowess, and financial success were all interconnected (SMEs). A six-item scale, converted to a 5-point Likert scale, was used to measure innovative capacity, which included process, product, and idea. Le et al. (2020) 's research followed in the footsteps of Al-kalouti et al. (2020) in that it assessed SMEs' financial and non-financial success across 10 established variables.

The sample size of 200 was determined from 350 questionnaire replies received via email. The information was obtained independently by the participants through email.

The responses were derived from the top or middle managers of SMEs in South Vietnam with more than three years of experience. The study by Le et al. (2020) used a simple random technique that differed from the purposive sampling technique employed by Al-kalouti et al. (2020). Management accounting information positively affected management's value orientation toward innovation for high performance in a study by Le et al. (2020). The research also highlighted the positive and significant link between innovation capacity and business outcomes. Management accounting also entirely mediated the connection between management's value orientation and innovation, which was found in the study.

Ashad and Ashad (2019) conducted a study on textile enterprises in Pakistan to investigate the impact of innovative capability and absorptive capacity on small business performance. The study used innovativeness in product, market, process, behaviour, and strategy to quantify innovation capability. Sixteen assessments of the ability for acquisition, assimilation, transformation, and exploitation were also adopted from earlier studies. The success of firms in Pakistan's textile sector was considered while evaluating small business performance. A 7-point Likert scale was used to measure the study's primary factors. The study population was made up of 379 people, of which 350 were ultimately determined. The study used a simple random approach. The study's data was analysed with PLS-SEM. The study concluded

that small business performance was significantly impacted by their ability to innovate.

In order to examine the impact of innovation aptitude on the performance of Finnish SMEs, Saunila (2014) performed a study. The seven categories of participatory leadership culture, ideation, and organisational structures, work climate and well-being, know-how development, regeneration, external knowledge, and individual activity were used to classify innovation capability. The financial and operational performance of the company was assessed using the respondents' perceptual level. Out of an overall population of 8214, 2400 Finnish SMEs were chosen by random sampling through the mail system.

The final response was 311 at a rate of 7.68%. The questionnaire was developed, reviewed, revised, and distributed through a mailing system. The study of Saunila (2014) differed from the studies of Al-kalouti et al. (2020), Andjarwati (2020), Le, Nguyen, and Hoang (2020), Arshada and Arshada (2019), in that the respondents consisted of both management and employees since the study sought to deliberate on the input of both viewpoints of respondents. The study employed factor analysis to assess the construct validity of the measurement scales and Cronbach alpha-checked reliability. Industry and firm size were used as control variables. The study found the relationship between innovation capability to be significant.

Empirical Review on Knowledge Management Capability

Knowledge management capability has gained recognition as an integral resource asset that influences innovation capability for the achievement of organisational performance. As the KBV theory implies,

access to knowledge, creation and exploitation creates opportunities and newness factors for innovation capability to exist which positively affects and increases organisational performance (Kiseli, Senaji & Eng 2016; Nickerson & Zenger, 2006). Consequently, various studies that relied on the KBV theory were reviewed to help comprehend the knowledge management capability and performance relationship.

The performance of organisations and sustainable entrepreneurship was examined in a study by Qader et al. (2022) to determine the impact of knowledge management techniques on inventive potential. The study also examined how male managers of textile small enterprises in various Chinese cities saw opportunities and their own dynamic capacities. Knowledge management techniques were regarded as a creative and knowledge-sharing behaviour. A 5-point Likert scale was used to rate items in the study by Qadar et al. (2022). 480 male textile managers out of a population of 750 were chosen by convenience sampling. Respondents were emailed a structured questionnaire to complete on their own.

Data were collected from January 2021 to August 2021, and PLS-SEM was used to analyse the data. According to the study, knowledge management techniques significantly impacted the entrepreneurial success of small businesses. In considering the mediating and moderating roles of dynamic capability and opportunity recognition for small businesses entrepreneurial and organisational success, the study showed that further support from the government was required to complement performance. According to a major study conclusion, knowledge management methods aid in the development of strong performance structures for small businesses.

To ascertain how knowledge management practices in Abu Dhabi emirate hospitals relate to hospital performance, Alolayyan et al. (2020) undertook a study. The study used a quantitative methodology, and the major factors of knowledge management practices included storage, creation, implementation, and generation on hospital performance, which was composed of client happiness, financial performance, and working relationship. The study by Alolayyan et al. (2020) made use of SPSS analytical software version 16.0 in a manner akin to that of Qader et al. (2020).

Confirmatory factor analysis (CFA) was carried out before conducting a full-fledged structural equation modeling for additional study. Two hundred hospital medical staff members were chosen as the sample size for the study using a stratified random sampling procedure and a 7-point Likert scale. The surveys were completed by self-reporting. A positive and statistically significant association between knowledge management practice and hospital performance was found, according to the study. As a result, the performance of hospitals was directly impacted by knowledge management practices.

In a follow-up study, Henao-Garcia et al. (2020) examined how knowledge management techniques affected Colombian tech-driven enterprises' financial and non-financial performance. The classifications of knowledge management practices were similar to those made by Qader et al. (2022) and Alolayyan et al. (2020), and they included knowledge creation practices, continuous learning practices (CLP), knowledge and feedback systems (KFS), and management of individual competencies of employees. A 5-point Likert scale was used for comparing financial and non-financial

performance to other organisations in the industry, while a 7-point Likert scale was used for knowledge management techniques.

The survey method and self-administered questionnaires were used to get a respondent size of 160. The stratified approach was employed as the sampling technique. Henao-Garcia et al. (2020), in contrast to Qader et al. (2022) and Alolayyan et al. (2020), added control variables of size, sector, geographic location, age, technical intensity, and knowledge intensity to their analysis. Data analysis was done using Smart PLS 3 software. Henao-Garcia et al. (2020) found something different regarding knowledge management practices and performance. The study discovered that item knowledge creation has no bearing on financial results. Additionally, individual competency management and continuous learning policies did not impact performance or financial results.

The study instead found that knowledge generation strategies had an impact on non-financial performance. Additionally, there was a positive correlation between performance indicators and knowledge and feedback systems. Additionally, there was a favourable correlation between employees' unique competencies and non-financial performance. The study concluded that the construct of knowledge management practice did not generally have an impact on company performance. According to Henao-Garcia et al. (2020), improving KCP, KFS, and ICM in technologically advanced businesses could enhance non-financial performance.

Al Zoubi et al. (2020) conducted a study in Jordan to examine knowledge management, organisational culture, and organisational performance in the transportation sector. This study's knowledge management

construct included knowledge identification, acquisition, storage, sharing, and application. Organisational culture acted as a mediator. The survey was conducted with 196 top managers and a final sample of 179; a response rate of 91.0% formed the study. The data for the study was collected from Dec 2019 to Jan 2020. The study applied Smart PLS for analysis. The study found that knowledge management positively affected organizational performance in technologically driven companies. Secondly, knowledge management had a positive effect on organizational culture. However, the mediating variable of organisational culture was not significant in the relationship between knowledge management and organisational performance.

Empirical Review on Organisational Learning Capability

According to Argirys and Schon (1978) constant learning occurs with the developing, retaining, and transferring of knowledge in a changing environment. From this perspective it is inferred that learning from experience informs the performance pattern of organisations (Gomes & Wojahn, 2017). In this regard studies by Shodiya and Ojenike (2021) were reviewed. Studies by Tambosi and Gomes (2020), Werlang and Rossetto (2019) as well as Pham and Hoang (2019) provided further insight to the significant influence of organisational learning in the enhancement of organisational performance.

Shodiya and Ojenike (2021) conducted a study in Ogun State, Nigeria, to ascertain the effect of organisational learning on SMEs' performance among five major economic sectors, including transport, information, education, and communication. The key variables of the study comprised organisational learning, which included information acquisition, information interpretation, and organisational memory. The non-financial performance

looked at sales growth and market share. Data collected was executed using a structured questionnaire on a 7-point Likert scale.

Out of a population of 384, a sample size of 337 was validated for analysis giving a response rate of 92%. Data were analysed with PLS-SEM. In their study, Shodiya and Ojenike (2021) found that organisational learning had a significant and positive effect on organisational performance. They affirmed that SMEs wishing to improve performance would have to increase information acquisition, interpretation, and organisational memory in their business.

In a further study, Tambosi and Gomes (2020) investigated the influence of organisational learning capability on innovation performance among Spanish SMEs in the textile industry. From a learning capability theory perspective, Tambosi and Gomes (2020) considered the dimensions of experimentation, a propensity to risk, interaction with the external environment, dialogue, and participatory decision-making. The dependent variable of innovation performance comprised effectiveness and efficiency with a mediator as the cooperation. Similarly to Shodiya and Ojenike (2021), the study of Tambosi and Gomes (2020) used a 7-point Likert scale.

Tambosi and Gomes (2020) conducted their study with a population of 160, and finally, 93 valid responses were used for the study giving a response rate of 58.12%. Data collection was self-administered, and emails were also sent to respondents. A partial least squares path modelling algorithm (PLS-PM) was used for data analysis. In their findings, Tambosi and Gomes (2020) concluded a positive effect of organisational learning capability on innovative performance. The dimension of cooperation had a relation in the construct.

Werlang and Rossetto (2019) studied the relationships between learning orientation, organisational innovativeness, and organisational performance of hotels and lodgings in Brazil. The scale measurements of the study by Werlang and Rossetto (2019) was a 5-point Likert scale, which differed from the 7-point Likert scale of Shodiya and Ojenike (2021) and Tambosi and Gomes (2020). The key variables of the study included learning orientation, organisational innovativeness, and performance. Out of a population of 166, Werlang and Rossetto (2019) conducted the study with a sample size of 162 were realised through the non-probability convenience method.

Questionnaires for the study were distributed and collected using an online method. Werlang and Rossetto (2019) analysed the study first with the calculation of descriptive statistics, Exploratory Factor Analysis (EFA), SPSS 21.0, and Confirmatory Factor Analysis (CFA) using Structural Equations Modelling (SEM) and AMOS 21.0. The key finding of the study by Werlang and Rossetto (2019) differed from the previous findings of Shodiya and Ojenike (2021) and that of Tambosi and Gomes (2020). The study found that learning orientation did not positively affect organisational performance. However, learning orientation had a direct and positive influence on organisational innovativeness whereas organisational innovativeness did not positively influence organisational performance.

Phan and Hoang (2019) conducted a study among MBA students working in Vietnamese firms. The study aimed to assess the impact of organizational learning capability on business performance. The study was measured on a 7-point Likert scale. Out of a population of 163, the final

sample size of 160 formed the study giving a response rate of 80%. SPSS and AMOS software was used for data analysis. The study's key finding was that there was a direct positive relationship between organizational learning and business performance. Phan and Hoang (2019) also found that the items of organisational learning that contributed immensely to business performance were management commitment to learning and knowledge transfer and integration.

Empirical Review on Organisational Culture Capability

Organisational values and beliefs make up the culture that moulds institutional behaviour and philosophy (Hamed & Shafiq, 2014; Hofstede, 1991). Relying on the OLT, organisational culture refers to the mode of learning that builds the behaviour shared within the structure of the company (Tan, Lee & Chiu, 2008). Therefore, organisational culture is key to integrating innovation capabilities for firm performance (Wahjudi, Singgih, Suwignjo & Baihaqi, 2013).

A statistically beneficial association between organisational culture and business performance was shown in an empirical study by Tulcanaza-Prieto, Aguilar-Rodriguez, and Artieda (2021) in the Ecuadorian service sector. Twelve components of involvement, flexibility, consistency, mission, and performance made up the study's dimensions for organisational culture. The study measured respondents using a seven-point scale and a five-point Likert scale.

Google forms-based questionnaires was used to collect the data over the course of nine months. Of 240 respondents, 154 responded, constituting a final analysis percentage of 64%. The statistical programme SPSS was used to

analyse the data. The study found that, in addition to the beneficial influence of organisational culture on performance in the Ecuadorian service sector, the dimension of involvement was a crucial aspect of organisational culture that affected corporate performance.

In a separate investigation, AlShehhi, AlZaabi, Alnahhal, Tabash, and Sakhrieh (2021) looked into the connection between organisational culture and the effectiveness of UAE organisations. In identifying the organisational culture dimensions that most significantly affected organisational performance, AlShehhi et al. (2021) study were similar to that of Tulcanaza-Prieto et al.'s. According to AlShehhi et al. (2021), among the seven components of organisational culture, employee dedication and engagement, as well as competence and innovation-supporting orientation, are the most crucial and have a stronger correlation with organisational performance.

The respondents of the study by AlShehhi et al. (2021) comprised 131 employees of public and private sectors of UAE organisations. Data for the study was collected using a questionnaire in November 2020. Analysis of the study was conducted using correlation analysis, Cronbach's alpha reliability, and two-sample t-test analysis. The study's key finding was a positive relationship between organizational culture and performance.

Aboramadan, Albashiti, Alharazin, and Zaidoune (2019) conducted a study to examine the links between organisational culture, innovation, and banks' performance in Palestine. The key variables of the study were organisational culture measured by 22 items, while innovation performed a mediating role using marketing and technological innovation, and performance comprised four items. The study comprised a final sample size of

186 employees in the banking sector of the Gaza strip resulting in a response rate of 58%. A self-administered structured questionnaire with a 5-point Likert scale was used for data collection.

The analysis of the study was conducted using the PLS-SEM approach. Similar to the findings of the studies of Tulcanaza-Prieto et al. (2021) and AlShehhi *et al.* (2021). The study by Aboramadan et al. (2019) also reiterated a positive relationship between organizational culture and performance. In the findings of the study organisational culture promotes marketing and technological innovation; however, technological innovation did not indicate any significant effect on banks performance. In addition, marketing innovation partially mediated organisational culture and bank performance.

Asif and Sajjad (2018) conducted a study in Pakistan to investigate the influence of organisational culture on organisational performance. The key variables of the study were organisational culture and organisational performance. The survey was conducted using a structured questionnaire with a different approach to the measurement scale. The study was contrarily measured from previous studies by Tulcanaza-Prieto et al. (2021), AlShehhi et al. (2021), and Aboramadan et al. (2019) by using a 3-point scale of increasing, stable, or decreasing in performance”.

A sample size of 350 people completed the self-administered surveys, and 185 of those completed valid responses, yielding a response rate of 53% for analysis. The convenience non-probability method was used to sample the data between three and four months in 2017. A descriptive methodology was employed to analyse the data. An organisational culture and performance association that was statistically significant was the study’s main finding. The

hierarchy-oriented culture was in first place among organisational culture items in the breakdown of findings, followed by market, clan, and adhocracy cultures, in that order. The study discovered that, on the other hand, there was no significant relationship between profitability, customer happiness, and business growth rate and performance. Market share, personnel count, and new product development performance indicators were, however, strongly correlated with organisational culture.

Empirical Review on Organisational Capability

Organisational capability holds a strategic place in the combination of factors for organisational performance. According to Grant (1991) developing a collection of resources will help businesses avoid imminent decline and build tools needed to sustain and attain higher performance. Through the RBV theory, various studies indicate the importance of organisational capability as the medium through which the firm deploys tangible and intangible resources for superior performance.

In a study relating to the mediating role of organisational capabilities, Magsi, (2021) examined the interactive use of Management Control Systems (MCS) and the mediating role of organisational capabilities that affect organisational performance. The key variables of the study were management control systems, organisational capabilities, and organisational performance. The study used a list of companies enlisted on the Bursa Malaysia (Malaysian Stock Exchange). Data was gathered using a structured questionnaire. The population of the study was 858, out of which only 70 responded. Respondent opinions were assessed on a 5-point Likert scale. Questionnaires sent was filled via email over 3 weeks, giving a response rate of 23.33%. The study was

analysed with factor analysis. Also, the internal reliability for each variable was assessed with descriptive and multiple regression tests.

Magsi (2021) discovered that organisational capabilities are positively and significantly associated with organisational performance. However, the study found that organisational capabilities were not significantly associated with the non-financial dimension of organisational performance. In another related study, Her, Ahmad, and Hee (2020) sought to analyse and identify the significant relationship between Information and Communication Technology (ICT) support and organisational capability as the mediator that influences small business performance. Her et al. (2020), conducted their study in the agriculture and manufacturing sector in Malaysia. The scale of measurement in the study of Her et al. (2020) differed from that of Magsi (2021) in that in the study by Her et al. (2020), a 6-point Likert scale was used to measure the opinions of the respondents.

A sample size of 296 was achieved for data analysis using the basic random strategy, with a population size of 384 small businesses, yielding a response rate of 77.08%. Descriptive analysis, Pearson correlation, multiple regression, and hierarchical regression analysis were all used in the study's analysis, assessing the mediation. The study's main conclusions focused on the strong link between ICT support and company performance via the mediating function of organisational competence. The study also recognised how organisational competency fully mediates the relationship between ICT support and the performance of small businesses. A descriptive and quantitative study was carried out by Rehman, Mohamed, and Ayoup (2019) to ascertain the impact of the Management Control System (MCS) on

organisational performance and the mediating function of organisational capacities. The study was carried out in Pakistan's textile sector.

Similar to Magsi (2021), management control systems, organisational skills, and organisational performance made up the study's primary variables conducted by Rehman et al. (2019). Similar to Magsi (2021), Rehman et al. (2019) used a 5-point Likert scale to gauge respondents' opinions. The scale ranged from strongly agree to strongly disagree. The basic random sampling procedure was used to generate a sample size of 160 from a population of 201 for the investigation. The study's major findings revealed that organisational skills strongly moderated the relationship between MCS and organisational performance and had a considerable impact on the entire organization's performance. Magsi (2021) and Rehman (2019) had similar findings. Full mediation of organisational performance was found, according to the results. In a different study, ceramic tile experts' organisational skills, knowledge management, and manufacturing innovation all played a mediating role in Akbariyeh and Seddigh's (2017) investigation of the impact of strategic orientation on new product creation.

A self-administered structured questionnaire was used to rate items using a 5-point Likert scale. The total number of responders to the survey was 138. With the software SPSS and LISREL, the descriptive study used correlation and causation analysis to establish the causal linkages between the variables. The findings of the study concluded that organisational capability was a critical success factor in the complex nature of new product development. In addition, the findings in the path analysis showed that

organisational capability had a significantly positive effect on product innovation and new product development.

Lessons from Empirical Review

The review of empirical studies provided significant lessons on methodological aspects in relation to the study. Some of the issues considered were the operationalisation of innovation capability, the purpose of the study, the context of small businesses, study design, sampling procedure, and data analysis. The outcome of the empirical literature suggested that the term and definition of innovation capability represents a multidimensional nature of processes that results in improved performance. However, it was still unclear what specific dimensions made up the nature of innovation capability for a deeper understanding of the phenomena. For example, studies by Al-kalouti (2020) and Saunila (2017) considered an overall outlook of innovation capability, including facets of organisational culture, knowledge sharing, efficient resource management, customer engagement, regeneration, and know-how development.

In the studies of Le et al. (2020) and Bahta et al. (2020), other dimensions of innovation capability considered included the external environment like the outcome of product and internal processes. However, the unclear definition of external or internal dimensions of innovation capability overlaps with other factors and will need further studies for clarification (Aas & Breunig, 2017; Iddris, 2017). With this understanding a synthesized and comprehensive outlook of innovation capability as the capacity to continuously generate innovation is needed to advance a deeper understanding on performance outcomes.

Again, the novel aspect of this study was the direct and composite nature of innovation capability components on subjective performance measurements considered which included knowledge management capability, organisational learning and organisational culture capability, whilst other studies focused only on direct measurements alone linked to both financial and non-financial performance (Le et al. 2020; Saunila, 2016). In line with the newness of the study, the mediating role of organisational capability added a theoretical contribution allowing an empirical perspective of small businesses in the agro-food processing industry of Ghana.

A number of studies were conducted in the service sector areas of banking, hospitality, technology, and medical institutions (Alolayyan, 2020; Tulcanaza-Prieto et al., 2021; Werlang & Rossetto, 2019). Although research on small businesses in Eritrea, Vietnam, Pakistan, and Finland were undertaken by Bahta (2020), Le et al. (2020), Rheman (2019), and Saunila (2017), it is debatable whether or not comparable studies can be carried out in the context of small businesses in Ghana's agro-food processing sector. Additionally, the definition of small businesses varied from nation to nation and included varying details across industries (Njanike, 2019). Consequently, small businesses are defined in this study in terms of size by number of employees.

The study design is predictive and allows results that indicate the changes of the dependent variable based on the values of the independent variable. Again, most of the study designs were quantitative (Aboramadan et al., 2019; Her et al., 2020; Qader et al., 2022; Shodiya, 2021). Therefore, this study used a mixed-methods approach and added a qualitative aspect in

throwing more insight into the triad of innovation capability, organisational capability, and small business performance in the agro-food processing industry Ghana.

Again, several of the studies employed various data analytical approaches, which included descriptives (Al-kalouti, 2020; Magsi, 2021) regression method (Pham & Hoang, 2019; Saunila, 2017), correlation analysis (AlShehhi et al., 2021; Her, 2020) structural equation modelling (Alolayyan, 2020; Henao-García, 2020; Le et al., 2020; Qader et al., 2022). In view of empirical literature by Bhatt, (2020), Le et al. (2020), and Rehman (2019), the robustness of Partial Least Squares Structural Equation Modeling (PLS-SEM) using the Smart-PLS 3.0 software was considered for data analysis of this study. According to Panhwar, Ansari, and Shah (2018) PLS-SEM can achieve high levels of statistical power and is ideal for testing the indirect effects of various sample sizes.

The non-probability convenience sampling procedure was used as the sampling method to improve the return rate as per the cluster method, which can yield very few numbers (Hameed 2020). In addition, the mode of data collection was facilitated by a self-administrated drop and pick method which yielded satisfactory primary results. Using the Smart-PLS application satisfied the reliability and validity of all constructs in the study. Again, the measurement of a 7-point Likert scale which is the most accurate and with a better reflection of the respondent's true opinion was used as per the 5-point Likert scale (Bhatt, 2020; Le et al., 2020; Saunila, 2017) which sometimes can be less accurate.

Conceptual Framework

Based on empirical research by Al-Kalouti (2022) and Saunila (2019), innovation capability was operationalised as the ability of the firm to exploit and deploy resource abilities of knowledge management capability, organisational learning capability, and organisational culture capability, which positively enhances performance. The importance of innovation capability and the mediating role of organisational capability in the performance of small businesses was reflected in the RBV theory by Barney (1986).

The KBV theory by Wernerfelt (1985) and the OLT by Agyris and Schon (1978) established the facets of knowledge management, organisational learning, and organisational culture of innovation for improved performance of small businesses in the agro-food processing of GAMA. The conceptual framework (Figure 1) of the study sought to provide insight into the nature of the study's interactions and relationships.

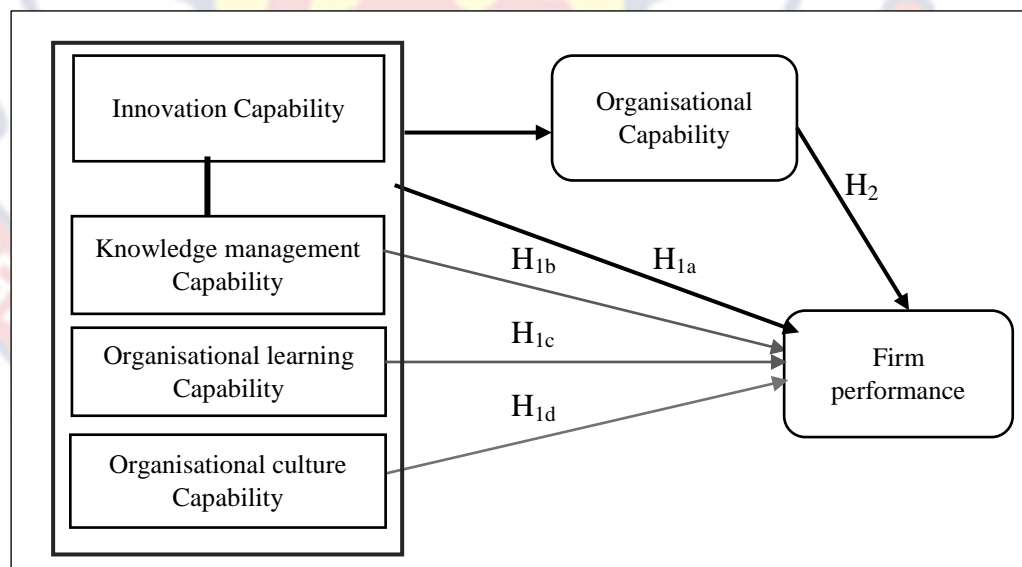


Figure 1: Conceptual Framework of effect of innovation capability and the mediating role of organisational capability on the performance of SMEs
Source: Author's Construct, (2022).

Firstly, the RBV theory (Barney, 1986) argued that firms with the capability to deploy resources that are valuable, rare, inimitable, and non-substitutable are poised for innovations and tend to be high performers. According to Barney (1986) and Penrose (1995), the collection of knowledge and learning of an organisation enables the firm to behave and exhibit unique attributes that seep into the firm's organisational culture.

Therefore, it is important to study the firm's core competencies that lead to and explain superior performance (Lockett, Thompson & Morgenstern, 2009). The conceptual framework (Figure 1) also proposed that the mediating influence of organisational capability is a channel for firm competencies that lead to high performance. Organisational capability includes enablers of innovation capability bringing together values, culture, learning, knowledge, processes, and development activities that activate reliable performance. Empirical works by Rehman, Mohammed, and Ayoup (2019) demonstrated that organisational capability as a mediator had the power to influence positive and high-performance outcomes.

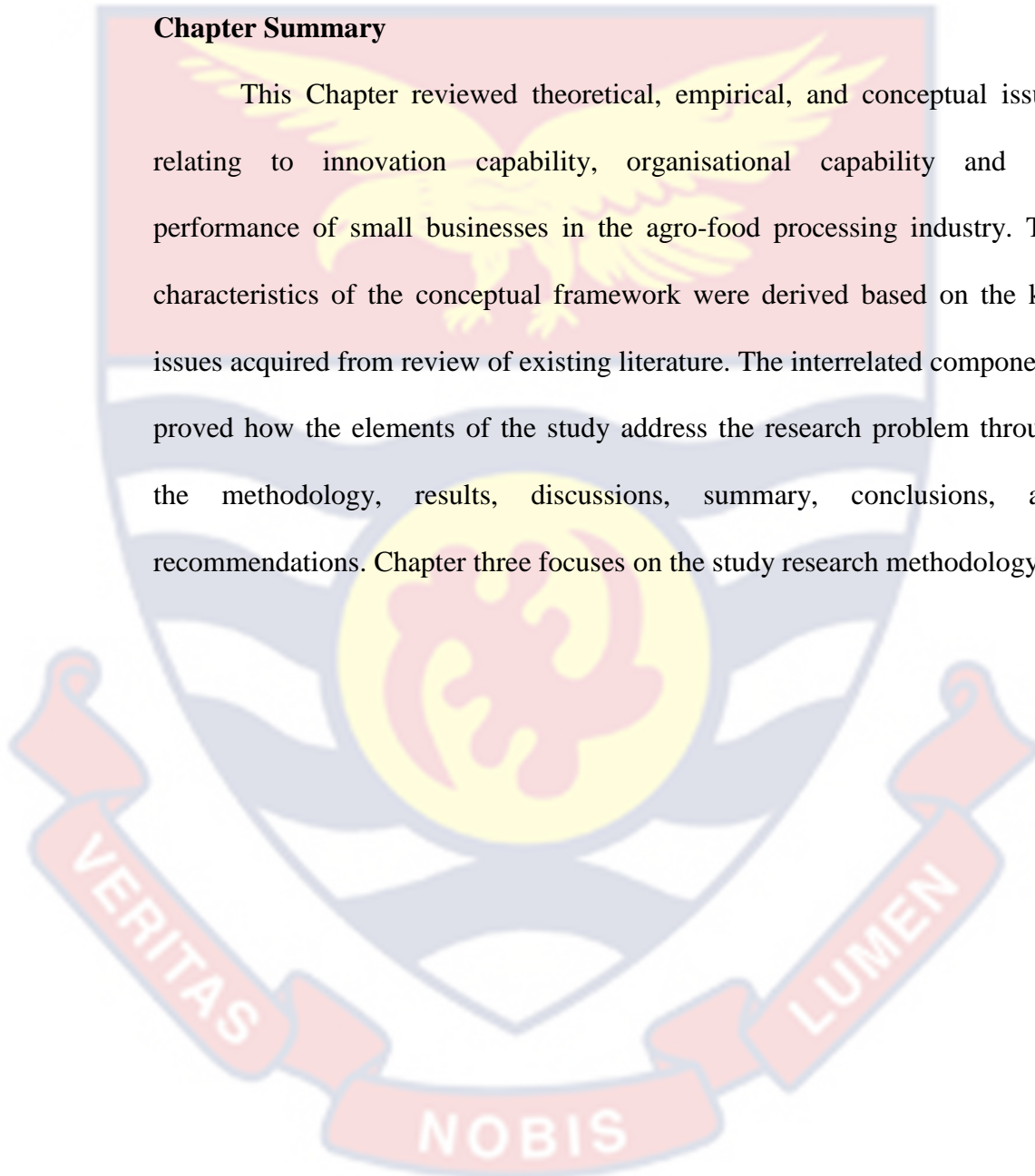
Secondly, knowledge management capability resource indicates knowledge as the engine of growth and strategic innovation. The KBV theory of the firm (Grant, 1996) posits that knowledge is the firm's most strategic resource, which, when acquired, learned, stored and disseminated, gives the elevation for competitive advantage.

The scope of innovation capability considers that organisational learning and organisational culture ability spur creativity and innovation, having a long-term effect on value and increase in performance (Hasan & Nikmah, 2019). In line with the OLT Argyris and Schon (1978) and Senge

(1990) concur that tapping into knowledge that culminates in learning beyond the individual is salient for continuous performance. In line with organisational learning, modelling an organisational culture enables the learning process to achieve performance (Ngugi, Komen & Korir, 2021).

Chapter Summary

This Chapter reviewed theoretical, empirical, and conceptual issues relating to innovation capability, organisational capability and the performance of small businesses in the agro-food processing industry. The characteristics of the conceptual framework were derived based on the key issues acquired from review of existing literature. The interrelated components proved how the elements of the study address the research problem through the methodology, results, discussions, summary, conclusions, and recommendations. Chapter three focuses on the study research methodology.



CHAPTER THREE

RESEARCH METHODS

Introduction

This Chapter discusses the methodological approaches, techniques, assumptions, and procedures used in this study. Research methods are used to analyse the objectives and research questions in the study (Rahi, 2017). In view of this, the Chapter explains the research philosophy and design underpinning the study. The study area, population, sampling procedure, data collection instruments, data collection procedures and data processing and analysis follow this. Finally, the Chapter concludes with a summary.

Research Paradigm

The research paradigm refers to belief systems that describe the mental view and thoughts for knowledge, sense-making, and an understanding of the world (Rehman & Alharthi, 2016). According to Kivunja and Kuyini (2017), to fully understand the complex nature of a research phenomenon, it is recommended that one follows a research paradigm. Some research paradigms widely acknowledged in research circles include positivist, post-positivist, pragmatist, postmodernist, critical realist, social constructionist, interpretivist, and advocacy (Greener, 2008; Rahi, 2017). Positivism recognises that knowledge is gradually accumulated through developing verifiable scientific facts independent of persons (Rehman & Alharthi, 2016).

Research Approach

Critics of the positivist approach argue that scientific methods face limitations in the studies of social phenomena in which human relationships and thoughts cannot be observed and measured (Mittwede, 2012). The

hindrances of the positivist approach led to the introduction of post-positivism, a combination of positivist and interpretivist approaches. The interpretive approach investigates and gathers rich insight into behavioural elements (Alharahsheh & Pius, 2019). Post-positivism seeks a deeper understanding of science and reality by combining empirical observations with logical reasoning (Darwardi, Shrestha & Giri, 2021).

Pragmatist research paradigm supports mixed methods (Kaushik & Walsh, 2019). Post positivism which can be pragmatism, uncovers deeper meanings of complex phenomena being studied (Henderson, 2011). This study adopted a post-positivist research paradigm. This paradigm supports data expansion in accurately presenting scientific yet complex notions in knowledge development (Ansari, Panhwar, & Shah, 2017). The paradigm stresses the importance of scientific rigour that uses a highly structured methodology to facilitate replication (Saunders, Lewis & Thornhill, 2012).

Research Design

Research design constitutes the structure, collection, and analysis of data based on the research questions and hypotheses (Sileyew, 2019). According to Mishra and Alok (2022), research design spells out the blueprint that outlines the conduct of the researcher from hypothesis to the writing of analysis. As such, the time and costs for research design must be considered well in advance to ensure efficiency with the best use of limited resources and time (Synder, 2019). The research design was cross-sectional, which was beneficial in taking a snapshot of the observation at a single moment (Thomas, 2020).

Although there are various types of research designs, the common ones frequently used include descriptive design, explanatory design, and causal design (Rahman, 2016). The descriptive design aims to describe the characteristics of the current situation of study, whereas the explanatory design explains the cause of a phenomenon (Pavlova & Sagov, 2020). The study adopted an explanatory design, considering the fact that an explanatory design increases the understanding of the phenomena under study and is useful in explaining problems in the form of causal relationships (Bhattacharjee, 2012). The explanatory design determines the effects between the independent and dependent variables and makes the study predictive (Thomas, 2020).

The scope of the study offered the opportunity to combine qualitative and quantitative methods, resolving in a mixed methods approach (Flick, 2009). Creswell (2016) advances four major mixed methods designs: triangulation, embedded, explanatory, and exploratory. The triangulation design allows the researcher to compare and combine various quantitative and qualitative methods (Creswell, 2016). Common strategies for data collection for triangulation design are concurrently conducting qualitative and quantitative studies, qualitative before quantitative, quantitative preceding qualitative and ongoing qualitative studies, and conducting several quantitative measures over time (Gibson, 2017).

In the embedded design, the researcher collects and analyses the study's quantitative and qualitative data within the quantitative or qualitative study (Khazanchi & Yu, 2017). The embedded design improves and explains research questions that call for different methods. It is very useful in

unravelling complex research issues (Gibson, 2017). Based on the strength that mixed methods bring to research, the triangulation mixed study approach was used to satisfy the purpose of the research objectives.

A survey approach and interview guide were used for data collection.

The follow-up explanation model of the explanatory design was used to explain and expand quantitative factors. This was done by collecting qualitative data using an interview guide for interviews from respondents who were deemed most suitable for further explanation. For integration purposes, the various forms of data and results were merged and the quantitative and qualitative results were reported together with supporting themes (Louw & Wium, 2018).

Study Area

The study was conducted in the Greater Accra Metropolitan Area (GAMA) (Figure 2). This is the regional capital of the Greater Accra Region, which also serves as the national capital of Ghana (World Bank, 2017). The GAMA has been earmarked as one of the fastest-growing cities in the West African region and the gateway to the country. The region generates a quarter of the country's Gross Domestic Product and attracts over 80% of all foreign direct investment in Ghana (World Bank Group, 2017). The region also accounts for about 25% of the nation's GDP dominating over 50% of formal and informal urban employment (Ocloo, Malcalm, & Kumar, 2021). The scope of GAMA includes 17 Districts comprising 2 Metropolitan, 10 Municipal and 5 Districts (Adamtey, Ocloo, & Oduro, 2015).

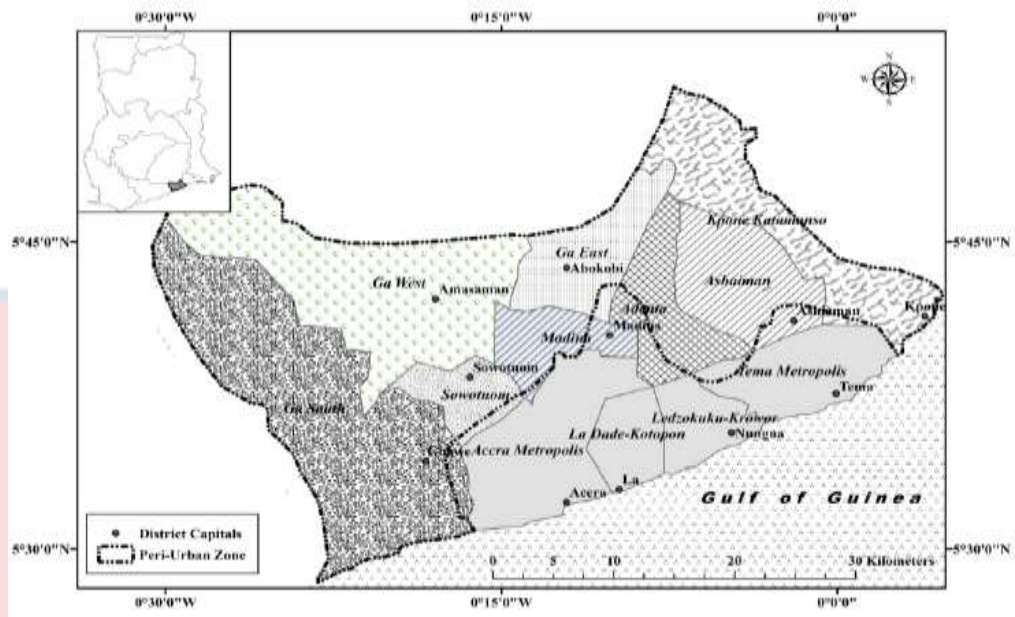


Figure 2: Composition of the Greater Accra Metropolitan Area (GAMA) and Peri-Urban Accra

Source: Adamtey, Ocloo & Oduro (2015)

The agro-food processing sector is directly linked to the agricultural sector and plays a crucial role in the survival and growth of the Ghanaian economy. The agro-food processing sector, a subset of the agricultural sector, indicates more than 50% of manufacturing activities in Ghana (UNIDO, 2015). Majority of small agro-food processing businesses in Ghana can be found in GAMA, which represents the largest section of processed commodities (Quartey & Darkwah 2015). Most of these businesses find themselves in resilient locations within GAMA, indicating rapid potential within a broad range of food processing activities in Ghana (Omari, 2020).

According to the Ministry of Food and Agriculture (MOFA), the development of the agro-food processing industry is the most important sub-sector of small businesses in the manufacturing industry in GAMA and contributes substantially to 51% of manufacturing activity in Ghana (Boakye, Eghoff, Farvacque-Vitkovic, & Raghunath, 2008).

The need for this study was also founded on the basis that a vibrant agro-processing sector in GAMA formed the core of an agriculture-based economy contributing immensely to economic growth and employment (Andam & Silver, 2016). Despite the contribution of small agro-food processing businesses in GAMA indicating a quarter of total employment in the manufacturing sector, very few works have so far been conducted on innovation capability on agro-food processing among small businesses in the GAMA (Omari, 2020). Therefore, the findings of this study were highly beneficial to the study area. Figure 2 shows the map of the study area.

Population

The population of a study defines the collection or group of persons or objects with common characteristics from which a sample is chosen for the generalisation of the study (Mbokane, 2009). In statistics, the study population is also classified as the entire pool from which the selection of units forms the data set for investigation and examination (Allwood, 2012). Based on the study objectives, the target population was small agro-food processing businesses registered with GEA and AGI in the GAMA.

The study population comprised small agro-processing businesses located in the GAMA. The elements of the study population included representatives of the small businesses as participants for the interview. The 11 participants were the owner managers, directors and founders of the businesses who were highly involved in the day-to-day running of the business as well as very key in decision making. The expertise of participants in the activities of the business made them the most suitable representatives of the small businesses needed for the interactions.

Sample and Sampling Procedure

Sampling is the technique used to select the subset of the entire population of interest in the study (Bhardwaj, 2019). This study's sampling frame was drawn from small agro-food processing businesses in GAMA registered with GEA, AGI, and MOFA. The population of recognised small businesses at the time of the study was 800 comprising food and beverage processing businesses. The sample size determination tables by Krejcie and Morgan (1970) and Singh and Masuku (2014) were used to determine a minimum sample size of 260 suitable for the study (Taherdoost, 2016; Bala & Etikan, 2017).

There are two major sampling techniques: probability and non-probability (Singh & Singh, 2018). Probability sampling is a sampling method that gives every member the opportunity to be selected (Campbell et al., 2020). Examples of probability sampling include simple random sampling, stratified random sampling, systematic sampling, cluster sampling, and multistage sampling (Patten & Newhart, 2017).

Non-probability or non-random sampling provides the technique that samples can be conducted on a judgemental basis, focusing on selecting a smaller number of samples specific to the chosen purpose (Creswell, 2011). The non-probability study provides an in-depth and rich exploration of research questions (Coe, Waring, Hedges & Ashley, 2021). The sampling procedure for the study constituted both quantitative and qualitative sampling. The goal of using both sampling methods arose from the need to investigate the various dimensions of innovation capability and the interaction of

organisational capability and performance of small agro-processing businesses in the GAMA.

The study used a sample size of 260 small agro-food processing businesses and 11 owner-managers were determined through convenience and judgemental sampling. Ideally, 11 to 50 participants for a qualitative study is sufficient for the design of study (Baškarada, & Koronios, 2018). According to Lê and Schmid (2022), convenience random sampling is cost effective and efficient for research. Furthermore, purposive or judgemental sampling proves to be effective for discovering the how and why of a study in exploring research questions (Saunders, Lewis & Thornhill, 2012).

The sample size determination tables, by Singh and Masuku (2014) and Lakens (2022) were used to determine the sample size for the quantitative study. The formula in reference to the table is the assumption of a degree of confidence level of 95% and a margin of error of 5%.

The formula is indicated as follows:

$$n = \frac{X^2 * N * P * (1-P)}{(ME^2 * (N-1)) + (X^2 * P * (1-P))}$$

Where

n = required sample size

x^2 = Chi-square for desired confidence level at 1 degree of freedom

N = population size

P = population proportion (0.50 for table)

ME = desired margin of error (expressed as a proportion)

The sample size determination table was used to determine the appropriate sample size of the study in order to avoid any issues in correspondence with the population size (Kaur, 2021). Using the

determination table, the population size of 800 resulted in the sample size of 260 for the quantitative aspect of the study. With reference to the qualitative aspect of the study, 11 participants were selected through convenience sampling. These persons were made up of owners and directors of the businesses.

Data Collection Instruments

The key instruments for data collection was a questionnaire and an interview guide. Structured questionnaires are vital tools structured for accurate responses with no personal influence on the collection of data on participants' characteristics, beliefs, and behaviour for statistical analysis (Gill, Stewart, Treasure & Chadwick, 2008). Questionnaires were used to collect primary quantitative data for the quantitative aspect of the study. Questionnaires for data collection tend to be cost saving and scalable for further research (Nayak & Narayan, 2019). An interview guide was used for qualitative data collection. Interviews are noted to provide in-depth information and reliable data on complex reality (Bandiera, Martimianakis, Nimmon, O'Brien & Paradis, 2016).

The study questionnaire consisted of seven sections. Section A (Appendix A) sought to find out about small businesses, including questions on ownership, number of years in business, and number of employees. Sections B, C, D, E, and F gathered information on knowledge management capability, organisational learning capability, organisational culture capability, organisational capability, and performance of small businesses. Each variable was measured using a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Dawes (2007) suggests that reliability and

validity are improved with a seven-point scale in comparison to the lower scale points. These findings informed the study's decision to employ a 1 to 7 scale point.

Sections B, C, and D (Appendix A) measured innovation capability using a three-dimensional construct of knowledge management capability, organisational learning capability, and organisational culture capability. The constructs were derived from empirical studies (Iddris, 2016; Saunila, 2014). Measurement indicators for innovation capability were adapted from these sources (Aggeri, Elmquist & Pohl, 2009; Ahmed & Shafiq, 2014; Gold, Malhotra & Segars, 2001; Lawson & Samson, 2001; Martins & Terblanche, 2003; Saunila & Ukko, 2014; Shu-Mei Tseng, 2016; Suryaningrum, 2012).

Section E (Appendix A) measured organisational capability using fourteen items. In this section organisational capability acted as the mediating variable. The items for organisational capability were adapted (Gill & Delahaye, 2004; Hase, 2000). The measurement of organisational capability elements was based on the study of Hase (2000). Ratings of organisational capability fell under a seven-point Likert scale of '1' to '7' with '1' indicating strongly disagree and '7' strongly agree.

Section F (Appendix A) was made up of items on small business performance which, according to Saunila (2017) can be categorised under either financial or non-financial dimensions. The measures for small business performance were adapted from these sources (Dobrovic, Gallo, Lambovska & Timkova, 2018; Gomes & Wojahn, 2017; Saunila, 2017).

Self-administered questionnaires and an interview guide were developed for data collection. The interview guide refers to the list of topics

discussed during the interview (Dawson, 2002). An interview schedule was included in the collection of primary data as part of the processes of the mixed methods approach to research. The interview is a strategic verbal interaction between the researcher and the participant aiding data collection (Coughlan, Cronin & Ryan, 2009). An interview aids in bringing out meanings of in-depth views and beliefs of the participant pertaining to the phenomena under study (Flanagan & Hancock, 2010). The interview guide (Appendix B) consisted of a brief introduction and a list of integrated items on management, organisational systems and processes, knowledge and insights, people skills and talents and integration (Akaegbu & Usoro, 2017).

Ethical Consideration

It is imperative for the researcher to consider that research intrudes into people's lives hence the need to seek permission and assure the respondent of the nature of the research and what it involves (Dawson, 2002). Strict adherence and guarantee to all respondents with an introductory letter from the Centre of Entrepreneurship and Small Enterprise Development was made available, which explained the intent of the study as purposely for academic purposes only.

The introductory letter was forwarded to the GEA and AGI organisations. There was a non-disclosure agreement established to assure confidentiality of all participants in the study. Anonymity was guaranteed, and participants were assured that information gathered would be used for academic and research purposes only (Early, Seliskar, White, Mead & Campbell, 2021). This requirement was clearly stated as part of the questionnaire to adhere strictly to ethical considerations.

In addition, permission was sought and all participation was voluntary. Therefore, at any given time participants had the option of not answering any question they deemed uncomfortable with. These measures were taken to ensure the veracity of the study. Referencing was with the recommended referencing style required by the University of Cape Coast. In the empirical study, a plagiarism check was done to prevent the threat of stolen ownership (Sun, Sun, Lu & Mislove, 2021). Furthermore, an ethical clearance process was issued by the Institutional Review Board Secretariat of the University of Cape Coast (IRB-UCC) (Appendix C). Privacy, rights, and unanimity of the participants were strongly respected, given the nature of the formulation of the items in the scales (Zhou & McLellan, 2021).

Data Collection Procedures

The study utilised a multi-approach to the data collection in this empirical study. Through the self-administration method, the questionnaires were distributed to the qualified participants to foster primary data collection for the quantitative dimension of the study. The data collection took place between November 2021 and March, 2022. Structured questionnaires numbering 260 were issued to the qualified participants, however 210 questionnaires were retrieved successfully. The average time to complete a questionnaire was 15 minutes. This, therefore, led to the recording of an 80.8% response rate.

The rapport built between the researcher and participants through field visits and phone calls that served as reminders enabled frequent interactions which resulted in a high response rate of the study. Ethical clearance paved way for participants to formally grant permission for the primary data

collection exercise to be conducted by the small businesses targeted for the study. The participants freely and willingly agreed to participate in the study.

With respect to the qualitative data collection, interviews were conducted. Eleven participants were asked the same kind of questions. Participants consented to the interviews which were recorded using a recording device to accurately capture data. On average, each interview took 35 minutes to complete. In all, 11 interviews were conducted. The recorded textual data were later transcribed for further processing through thematic analysis (Nowell, Norris, White & Moules, 2017; Tuckett, 2005).

Data Processing and Analysis Procedures

As part of data processing and analysis, data collected from questionnaires were cleaned to avoid incomplete outliers and missing values from the data file marked for entry. Interviews were transcribed, and common themes were identified for analysis. Quantitative data was collected from the questionnaires, and qualitative data from the interviews. For quantitative data, a coding book was generated as a guide for coding the structured questionnaire in respect of the items contained. The numeric coding option was selected in the Statistical Package for Social Sciences (SPSS version 25.0). Once coding was completed, data input was done accordingly using the SPSS application.

A complete data file was saved in sav format. The file was converted into a csv file and then imported into the SMART pls software to test the formulated research objectives. The nature of the formulated research objectives influenced the choice of the analytical technique for the data analysis. Objective one was measured descriptively through mean and

standard deviation via the SPSS application. The mean was adjudged the appropriate measure of central tendency whilst standard deviation was considered the appropriate measure of dispersion. Objectives two and three were measured using structural model configuration in a reflective model specification in the SMART pls software.

These specifications were considered to be direct models. Objective four was configured with a mediation effect. The model setup was based on a consistent bootstrapping algorithm with a minimum of 5000 bootstrapping with a 2-tailed selection. The configured models were evaluated based on the two-stage model evaluation approach (Hair et al., 2019). This approach follows the sequence of evaluation of the measurement model before evaluating the structured model (Benitez et al., 2020).

The evaluation criteria in the measurement model evaluation phase included construct reliability and validity. Internal consistency was measured with Cronbach's Alpha ($CA > 0.7$) and the rho_A ($\rho_A > 0.7$), although rho_A was strongly favoured in this context. Composite reliability ($CR > 0.7$) was also measured. Convergent validity was measured with the average variance extracted ($AVE > 0.5$). Discriminant validity was measured with the heterotrait-monotrait ratio (HTMT ratio < 1).

Multicollinearity was measured with the outer VIF (Outer VIF < 5). Common method bias was measured with the inner VIF (Inner VIF < 5). These parameters for the measurement model evaluation model are well recognized for reflective model configuration and evaluation (Benitez et al., 2020; Henseler, 2017). The evaluation of the structural model saw the assessment of the following criteria. Indicator reliability (Indicator reliability > 0.7 ; $p \leq 0.05$),

path co-efficient with effect sizes [f^2 : Effect size values above 0.35, 0.15, and 0.02 were interpreted as strong, moderate, and weak respectively [(Benitez et al., 2020)] and coefficient of determination [R^2 : Results above 0.67 (Substantial), 0.33 (Moderate) and 0.19 (Weak) (Benitez et al., 2020)].

The analysis of qualitative data gathered via interviews conducted was done through thematic analysis. Themes were obtained from the excerpts from the recorded qualitative data generated from the interviews. Transcribing was subsequently done and this eventually aided the coding of the responses. The findings were presented through captions and descriptive statistics. This supported the researcher in ensuring the triangulation of the study (Noble & Heale, 2019; Dzwigol, 2020; Turner, Cardinal & Burton, 2017).

Chapter Summary

This Chapter explained the research methods and how the study was conducted. The suitability of the research design and approach matched the research questions, and hypotheses within the study area were incorporated efficiently. The questionnaire and interview guide were the instruments employed for data collection. The Chapter included the appropriate quantitative and qualitative data analysis tools and the data which was processed and analysed to fully realise the research objectives.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This Chapter comprises the presentation and discussion of results and objectives studied. It begins with a discussion on the background characteristics of respondents. Then further proceeds with the objectives of innovation capability and performance levels, effects of innovation capability on performance and the mediating role of organisational capability in the innovation capability and performance relationship. The objectives and matching hypotheses are discussed based on the conceptual framework, theories, and previous empirical works reviewed.

Background Characteristics of Respondents

This section considers the background characteristics of small agro-food processing businesses in the GAMA. As Loeb et al. (2017) recommended, a descriptive analysis provides relevant information that forms an integral part of every research study, which was used to analyse the data of respondents. A total of 260 small businesses filled out the questionnaires, of which 210 were valid for analysis. The four background characteristics analysed included the position or rank of the respondents, firm age, number of workers, and legal status of businesses (Table 1).

Table 1: Background Characteristics of Small Businesses

Variable	Options	N 210	Frequency	Percentage (%)
Position	Owners		137	65.24
	Managers		40	19.05
	Directors		33	15.71
Total			210	100
Firm age	Less than 5 years		83	39.52
	Above 5 years		127	60.48
Total			210	100
Number of workers	6-29 workers		153	72.86
	30-99 workers		57	27.14
Total			210	100
Business registration	Sole proprietorship		141	67.14
	Partnership		25	11.90
	Private limited liability company		42	20
	Other		2	0.96
Total			210	100

Source: Field survey (2022)

As shown in Table 1, respondents (65.24%) representing the small businesses were owners, followed by managers (19.05%), while directors (15.71%) formed the minority of respondents. Regarding the years the business has existed, the findings indicated that 39.52% were 5 years and under, while those above 5 years formed a majority of respondents, 60.48%. The range of 6-29 employees indicated 72.86%, and the range of 30-99 employees indicated a smaller number making up 27.14%. The indication of staff strength was necessary to satisfy the description of small businesses used in the study. The International Trade Centre (2016) notes that small businesses

that survive beyond 5 years are more likely to improve their abilities for performance and contribute economically to national development.

Regarding the legal form of ownership, 67.14% were sole proprietorship enterprises, followed by private enterprises making up 20%. A partnership was next with 11.90% and the least indicated as others showed 0.96% of enterprises in transition and not fully legalised under any form of ownership during the time data was collected. Most small agro-food processing businesses surveyed in the GAMA were privately owned as sole proprietorship enterprises. This was in line with the fact that small businesses constitute 92% of businesses in Ghana (Zonwire, 2021).

The high number registered as sole proprietorships was found to be in line with the findings of Shodiya and Ojenike (2021), which showed that sole proprietorship was less capital intensive and did not require a rigorous process of business registration. Participant 3 stated in an interview.

“It was much easier to begin the business whilst I was still a student. Registering as a sole proprietor was the most affordable and convenient to start with.”

Innovation Capability of Small Agro-food Processing Businesses

As indicated in the conceptual framework (Figure 1), innovation capability was captured and defined as the internal transformational resource of a firm, developed using a combination of internal knowledge and external capacities resulting in products, processes, and new markets which brings value to the firm and all stakeholders (Saunila, 2020). With the support of the RBV theory, the first objective assessed the level of innovation capability of small agro-food processing businesses in the GAMA. The research question

framed for the objective was “What is the level of innovation capability of small agro-food processing businesses?” The need to determine the levels of innovation capability was required to enrich the analysis and significance of recommendations arising from the study.

The variable of innovation capability was categorised and measured as indicated in the conceptual framework (Figure 1) by the dimensions of knowledge management capability, organisational learning capability, and organisational culture capability. As part of the dimensions of innovation capability, knowledge management capability considered knowledge resources an organization acquires, uses, and stores to enhance value (Sun, Liu & Ding, 2020). Organisational learning capability, as defined by Basten and Haamann (2018), is an organisation’s process and learning ability, characterized by the creation, transfer, and integration of knowledge and experiences. The third dimension of organisational culture capability was defined as the norms and values an organisation interpretes into operations to create value for increased growth and all-around performance (Bessant & Tidd, 2007).

The level of innovation capability was captured in the conceptual framework of the study (Figure 1). The variables were measured on a 7-point Likert scale of 1 (low) to 7 (high) (Taherdoost, 2019). Table 2 consists of 7 items of knowledge management capability which were captured in responses of all 210 respondents indicating an overall mean score of 5.54. The use of information technology to create, share and store knowledge recorded the highest whilst the use of customer feedback to improve production was ranked the lowest.

Table 2: Knowledge Management Capability

	Mean	Std. Deviation
The organisation uses information technology to create, share, store and use knowledge	6.34	0.755
The organisation exchanges knowledge with business partners	5.81	0.865
The organisation processes knowledge for distribution and use in the organisation	5.52	0.727
The organisation generates new knowledge from existing knowledge	5.49	0.714
The organisation acquires knowledge about suppliers	5.37	0.708
Organisational knowledge is protected through security processes	5.20	0.795
The organisation uses customers feedback to improve production	5.06	0.908
Knowledge Management Capability Man	5.54	

Source: Field survey, (2022)

Respondents expressed a high level of exchange of knowledge with business partners. This outcome was also exhibited in the processing of knowledge for distribution and use in the enterprise. Furthermore, respondents expressed a high level of generating new knowledge from existing knowledge and acquiring knowledge about their suppliers. The respondents indicated a slightly high level in the protection of organisational knowledge through a security process, and the same was reflected in the use of customer feedback for improved production, which ranked lowest. Generally, respondents expressed a mean score of 5.54, indicating a high level of knowledge management capability as part of their practices in enhancing performance.

In support of the findings, all eleven participants interviewed concurred that knowledge was cyclical and a formidable means of acquiring

and analysing regular customer feedback would highly improve product development and brand building for performance. Participants 3 and 8 also noted:

“Learning and allowing clients to share their experiences gives us the knowledge needed to boost our capacity and improve on products to increase our performance.”

The above response indicated that the application and development of capabilities in finding, acquiring, sharing, and storing knowledge were crucial to the running of the enterprise at all times.

In previous studies by Henao-García, Lozada, and Arias Pérez (2020) and Jordan Al Zoubi, Tasmin, and Abu rumman (2020), it was found that the practice of knowledge management capability of soft skills improves performance indicators such as customer satisfaction, profit, branding, and market share. Similarly, studies by Alolayyan, Alalawin, Alyahya, and Qamar (2020) proved that knowledge management capability plays a vital role in exhibiting quality and excellence for high performance. Furthermore, Qader et al. (2022) conceded that developing knowledge management capability was crucial to the survival of small business performance.

As used in this study, organisational learning capability refers to a process through which learning capability is characterized by the creation, transfer, and integration of knowledge, experience, and continuous learning (Basten & Haamann, 2018). Table 3 summarizes results of respondents on organisational learning capability in the GAMA.

Table 3: Organisational Learning Capability

	Mean	Std. Deviation
There are systems for receiving and sharing information from within and outside the company	6.10	0.692
The organisation keeps records of experiences, data, and sample products for future reference	5.60	0.778
There are frequent organisational wide training and development activities	5.17	0.839
There are systems for searching, receiving, and sharing information from outside the organisation	4.87	0.870
The organisation experiments on new ideas	4.84	0.860
The organisation involves employees in participatory decision making	4.82	0.808
The organisation involves customer user experience	4.80	0.798
The organisation creates opportunities for risk taking	4.55	0.917
Organisational Learning Capability Mean	5.09	

Source: Field survey, (2022)

Respondents expressed a high level of ability to receive and share information from within and outside the company. Record keeping of data and product sample procedures indicated high levels. Respondents indicated a fair level of agreement in the frequency of training and development activities, a systematic means for searching, receiving, and sharing information experimentation on new ideas, employee involvement in decision making and involvement of customer user experience. Creating opportunities for risk-taking ranked lowest. In line with this perspective, participant 5 shared that

“In as much as we wish to test the feasibility of the business, we cannot afford to take certain risks. It is costly and also we need to really understand what will happen when we take such risks.”

The overall mean of 5.09 showed that respondents fairly operationalised organisational learning capability. Five respondents reiterated that learning and sharing experiences with external stakeholders were

encouraged by leadership. Participant 2,9,10 indicated that although there was a system in check to ensure that trade secrets were kept within the company for exploring innovations, record keeping of data and notes of experiences gathered were only accessible to the leadership of the enterprises for product development of already existing products. Studies by Shodiya and Ojenike (2021) found that it was important to transfer learning to others for a collaborative knowledge base critical for enhancing performance.

In a study by Tambosi and Gomes (2020), they argued that free flow and open communication had an impact on the level of improvement of performance gained. In that regard, previous studies by Werlang and Rossetto (2019) echoed that learning orientation depends on sharing knowledge and experiences. In line with this perspective participant 7 indicated that

“We allow free expressions of communication in our operations. Especially when we have customer feedback. This has allowed us to incorporate the findings which include likes and dislikes of the business.”

In this section of the study organisational culture capability was analysed and defined as organisational structures that make up norms and values interpreted into operations for creating value to enhance and increase growth and all-around performance (Bessant & Tidd, 2007). Table 4 summarizes respondents' results on the level of organisational culture of small businesses in the GAMA.

Table 4: Organisational Culture Capability

	Mean	Std. Deviation
Innovation proposals by employees are welcome in the organisation	6.10	0.692
The organisation creates time to seek innovative ideas	5.70	0.758
The organisation possesses a good channel of communication	5.63	0.785
The organisation supports change	5.58	0.780
There is some form of autonomy for employees and middle-level management	5.50	0.796
Support for risk-taking and experimentation	5.20	0.957
Tolerance for employee's mistakes	5.14	1.002
Organisational Culture Capability Mean	5.09	

Source: Field survey, (2022)

The respondents expressed a high level of welcoming proposals by employees for innovative ideas. Meanwhile, the tolerance for employee mistakes indicated was the lowest. Respondents also expressed high levels of creating time to seek innovative ideas. Enterprises equally possessed high channels of communication support for change and a form of autonomy for employees and middle-level management. However, a fair level was reached in providing the needed support for risk-taking and experimentation.

The overall mean for organisational culture capability indicated that respondents had a high commitment to the unique values and beliefs acquired over time, thereby increasing their capacity to excel in their ability to consistently reproduce results. Similarly, from the interviews, eight participants mentioned that close relationships with suppliers and staff enabled the creation of a close communication culture which positively impacted

organisational creativity for innovation. In another instance, participant 3 stated:

“Frequent interactions with long-standing employees, new staff, and suppliers have shaped the way we work in our organisation by providing a framework of a cultural system which works for us and helps in our innovations and performance.”

The level of organisational culture capability accounted for, supported the findings of Albashiti, Alharazin, and Zaidoune (2019), who argued that organisational culture was an important factor that positively influenced business performance. Tulcanaza-Prieto, Aguilar-Rodríguez, and Artieda (2021) in their study established that promoting a strong organisational culture formed a helpful bond for achieving high performance.

An overall mean of 5.39 for innovation capability realised translated into a high level of innovation capability from respondents. All eleven participants interviewed indicated a varied level of high rates of the positive output of innovation capability on performance. These findings agreed with previous studies by Bahta, Yun, Islam, and Ashfaq (2020) and Al-kouti et al. (2022) that innovation capability positively influences small business performance.

Level of Performance of Small Agro-food Processing Businesses

This part employed a 7-point Likert scale to evaluate the performance of various small agro-food processing businesses in response to the second aim and accordance with the theoretical and conceptual framework of the study. The study carefully selected six performance indicators, as shown in

table 5 below. Assessment of non-financial levels of performance was conducted for the entire sample of 210 respondents.

Table 5 Small Business Performance

Performance Indicators	Mean	Std. Deviation
Order fulfilment	3.3266	0.81619
Customer satisfaction	3.3589	0.84667
Gaining more customers	3.3871	0.94983
Profit	3.4032	0.80905
Sales growth	3.9879	0.63934
Market share	4.0242	0.76316
Overall Performance Mean	3.4333	

Source: Field survey, (2022)

The respondents expressed an average level in response to their market share (M=4.0242, SD=0.76316) and sales growth (M=3.9879, SD=0.63934). However, respondents expressed low levels of profit (M=3.4032, SD=0.80905), gaining more customers (M=3.3871, SD=0.94983), customer satisfaction (M=3.3589, SD=0.84667), and order fulfilment (M=3.3266, SD=0.81619). Generally, respondents displayed a low level of performance, as indicated by an overall mean score (M=3.4333) among small agro-food processing businesses in the GAMA of Ghana. In comparison with the above findings, interview participants 1, 9 and 11 were of the view that managers must put in place appropriate innovation solutions to improve performance particularly in the areas of customer platform interactions that would increase their customer base, sales growth and profits.

Effects of Innovation Capability on Performance of Small Agro-Food Processing Businesses

This section focuses on the third and fourth objectives which examined the effect of innovation capability on performance and analysed the mediating

role of organisational capability on the innovation capability – performance relationship of small agro-food processing businesses in the GAMA of Ghana.

Measurement Model

As recommended by Hair (2021) the measurement model of the PLS-SEM used was the reflective model. The PLS path model made sure that the model was satisfactory and met all requirements for the structural model and testing of hypothesis. This was done by assessing the quality of the measurement model through the convergent validity which indicated the closeness of association of items in a construct thereby verifying the construct validity and high correlation (Basbeth, Ibrahim & Razik, 2018). The other aspect in assessing the measurement model was the discriminant validity which captured the uniqueness of the construct making sure that the phenomenon was clearly shown as indicated in table 6 below.

Table 6: Construct Reliability and Validity

	Cronbach's Alpha (AVE)	rho_A	Composite Reliability	Variance Extracted
Innovation Capability	0.954	0.956	0.958	0.561
Knowledge	0.838	0.844	0.885	0.608
Management Capability				
Organisational Culture	0.897	0.899	0.919	0.619
Organisational Learning Capability	0.895	0.896	0.920	0.657
Organisational Capability	0.912	0.917	0.926	0.535
Small Business Performance	0.885	0.890	0.916	0.686

Source: Field Survey, (2022)

Composite reliability of constructs was used to ensure overall reliability [CR>0.7]. The constructs indicated high reliability based on the rho_A scores [rho_A>0.7] used instead of Cronbach's alpha which is based on the assumption of one-dimensionality and the likelihood to underestimate

measures and also for more reliable data consistency (Pick, 2020). The internal consistency reliability test was accurately measured [$CA > 0.7$] (Amirrudin, Nasution & Supahar, 2021). Again convergent validity was assessed with the measurement of AVE values, and the results proved that convergent validity was adequately measured for all the constructs ($AVE > 0.5$).

Constructs accurately measured discriminant validity through the heterotrait-monotrait ratio (HTMT ratios < 1). Analysis of discriminant validity tested the degree to which concepts that were not theoretically connected indicated no relationship. According to Cheah, Sarstedt, Ringle, Ramayah, and Ting (2018) and Hamid, Sami, and Sidek (2017), discriminant validity of less than one can be accepted for a measurement model. Findings in Table 7 indicated that constructs accurately measured by discriminant validity through the heterotrait-monotrait ratio (HTMT ratios < 1) were deemed acceptable (Roemer, Schuberth and Henseler, 2021).

Discriminant Validity

Table 7: Heterotrait-Monotrait Ratio (HTMT)

	Knowledge Management Capability	Organisational Culture Capability	Organisational Learning Capability
Organisational Culture Capability	0.909		
Organisational Learning Capability	0.991	0.953	
Small Business Performance	0.839	0.912	0.909

Source: Field survey, (2022)

Collinearity Statistics VIF

Inner VIF scores in Table 8 were measured to check the threat of common method bias.

Table 8: Inner VIF

	Innovation capability	Small Business Performance
Innovation capability		1.000
Knowledge Management Capability	4.037	
Organisational Culture Capability	3.984	
Organisational Learning Capability	5.638	

Source: Field survey, (2022)

The values satisfied the criteria (VIF values < 5) for most of the constructs except organisational learning capability which had a little above the 5 threshold.

Structural Model

Results in regard to the predictive model are presented in this section. The structural model provides information on the effect of innovation capabilities on the performance of small agro-food processing businesses in the GAMA. The analysis used a multivariate approach to explore theories regarding the influences of many interacting variables (Albuquerque & Bronnenberg, 2017). Information about the influence of innovation capabilities on the performance of small agro-food processing businesses in Ghana's GAMA is provided in Table 10. The presented results complied with the loadings, path coefficient, effect magnitude, predictive relevance, and coefficient determination requirements of a reflective measurement model.

Outer loadings above 0.7 were statistically significant. Indicators below 0.7 that were not significant were deleted to improve the measurement model. The figures in Table 10 showed indicator reliabilities that were measured for the constructs given the loading scores (Between the range of 0.651 to 0.872) and significance level of the indicators (p -values ≤ 0.05 ; $t > 1.96$). Results are shown in Table 9 (See Appendix B).

Table 9: Path Coefficient, Effect Size and Predictive Relevance

	Beta	f ²	q ²	P Values
Knowledge Management Capability -> Small Business Performance	0.007	0.000	-0.0001	0.918
Organisational Learning Capability -> Performance	0.410	0.109	0.0350	0.000
Organisational Culture Capability - > Performance	0.468	0.201	0.0680	0.000

Source: Field survey, (2022)

Co-efficient results in Table 9 indicated the relative contributions of the predictors to causing the 72.6% variation in the dependent construct of innovation capability. The results proved that knowledge management capability was positive (Beta=0.007) but an insignificant predictor ($p=0.918$; >0.05). However, knowledge management capability had no effect size score ($f^2=0.000$) and possessed a negative predictive relevance ($q^2=-0.0001$). Additionally, relying on knowledge management capability to improve performance of small businesses may not produce the desired results because the study proved that the contribution of inputs of knowledge management capability was attributable to unpremeditated and not scientific interactions among the factors in the estimated model.

Organisational learning capability made a statistically significant positive contribution to predicting the substantial change in the performance of the small businesses that were at the time of the study operating in the GAMA (Beta=0.410; $p=0.000$; $p<0.05$). Effect size showed that organisational learning capability caused a moderately significant change in the performance of small businesses surveyed in this empirical study ($f^2=0.109$). However, an observation of the predictive relevance showed that organisational learning capability had a weak predictive relevance in the context of the study after the

blindfolding procedure was activated and specified on the reflectively configured path model ($q^2=0.0350$).

Changes in performance of small businesses as accounted for by changes in organisational learning capability was casually attributed to the scientific interaction among the indicators in the estimated reflective path model because the p-value was not above 0.05". Therefore, it could be inferred from the finding that a unit increase in favourable scores for organisational learning caused a significant 0.410 rise in performance of small businesses. On the other hand, it could be inferred from the finding that a unit decrease in scores for organisational learning capability caused a significant 0.410 fall in the' performance of small businesses.

Organisational culture capability made a statistically significant positive contribution to predicting the substantial change in performance of small agro-food processing businesses at the time of study operating in the GAMA (Beta=0.468; $p=0.000$: $p<0.05$). Examination of the effect size showed that organisational culture capability caused a moderately significant change in the performance of small businesses surveyed in this empirical study ($f^2=0.201$). Observation of the predictive relevance showed that organisational culture capability had a weak predictive relevance in the context of the study after the blindfolding procedure was activated and specified on the reflectively configured path model ($q^2=0.0680$).

These findings indicated that changes in small business performance, as accounted for by changes in organisational culture capability, were not attributed to chance but to scientific interactions among the indicators in the estimated reflective path model because the p-value was not above 0.05.

Therefore, it could be inferred from the finding that a unit increase in favourable scores for organisational culture capability caused a significant 0.468 rise in performance. On the other hand, it could be inferred from the finding that a unit decrease in scores for organisational culture capability caused a significant 0.468 fall in small business performance.

The study proved that innovation capability made a statistically significant positive contribution (Table 10) to predicting the substantial change in the performance of small businesses at the time of the study operating in the GAMA (Beta=0.843; $p=0.000$; $p<0.05$).

Table 10: Path Coefficient, Effect size and Significance

	Beta	f ²	T Statistics	P Values
Innovation capability -> Small Business Performance	0.843	2.449	41.946	0.000

Source: Field survey (2022)

Examination of the effect size showed that innovation capability caused a strong significant change in performance of small businesses surveyed in this empirical study ($f^2=2.449$). Therefore, the findings indicated that changes in performance could be accounted for by scientific interactions when the p-value is not above 0.05. This showed that a unit increase in favourable scores for innovation capability caused a significant 0.843 rise in performance. Consequently, the findings supported the view that innovation capability significantly contributes positively, as per empirical studies (Verma, Singh & Rao, 2014), to the degree of improvement in small business performance in the GAMA.

Organisationally, relying on innovation capability as conceptualised and operationalised in this context is laudable. In line with the RBV theory (Barney, 1991) that takes an “inside-out” approach to inclusive resources that

contribute to competitive and superior organisational performance, the study confirmed that innovation capability could become a strategic resource for the performance of small agro-processing businesses in the GAMA.

Table 11: Co-efficient of Determination

	R Square	R Square Adjusted
Innovation capability	1.000	1.000
Small Business Performance	0.710	0.709

Source: Field survey, (2022)

The coefficient of determination indicated that innovation capability exhibited by the small businesses accounted for a substantial positive variation (71.0%) in performance ($r^2=0.710$) when the effects of other variables in the context that were not included in the model were held constant. Such factors had the potential to account for a 29.0% change in small business performance. This confirmed that improved performance of small agro-food processing businesses was strongly anchored on the degree of effectiveness of innovative processes, ideas, technologies, resources and structures embedded in systems (Kolbe, Calderon & Frasset, 2021; Cheah, Ho & Li, 2021).

The RBV theory points out that growth, development and performance are enhanced through strategic interactions of available tangible and intangible resources. (Adnan, Abdulhamid, Sohail & Barney, 2001; Wernerfelt 1984) Key dimensions of innovation capability justified the analogy that small businesses are better positioned to improve their performance through competency in innovation capability (Ashad & Ashad, 2019; Bahta et al., 2020; Le, Nguyen & Hoang, 2020; Saunila, 2017).

The study proved that the efficiency of innovation capability among small businesses in the agro-food processing industry of GAMA has economically justifiable grounds for investment in the various processes,

activities and resources that collectively reflect the innovation capability of small businesses. The study proved that innovation capability, measured, caused substantial significant improvement of small businesses operating in the agro-food processing industry at GAMA.

From the RBV theory perspective, one can infer from this finding that collectively, a holistic approach to implementation and practice of innovation capability by small businesses in the agro-food processing industry supported other functional strategies. This proved to be organisational competence that significantly caused substantial improvement in the level of small agro-food processing business performance in the GAMA. Innovation-oriented investments by the small businesses were thus managerially justified as prudent investments because such innovative drives collectively had a significant positive bearing on small business performance.

Innovation capability was thus seen as a useful bundle of resources that had a bearing on the performance of small businesses in the agro-food processing industry (Al-kalouti et al., 2020; Andjarwati, 2020; Le, Nguyen & Hoang, 2020). This finding was also in line with other empirical studies that collectively held the view that to improve firm performance, organisations must adopt and implement astute organisational innovations (Arshad & Arshad, 2019; Bahta et al., 2020; Saunila, 2017; Le, Nguyen & Hoang, 2020).

Objective 4: Mediating Role of Organisational Capability on the Innovation Capability and Small Business Performance Relationship

The study proceeded to analyse the mediating role of organisational capability on the innovation capability – performance relationship of small agro-food businesses in the GAMA. The results are indicated in table 12

below followed by a reflective higher-order model construct depicting the aim of the study.

Measurement Model

Construct Reliability and Validity

Table 12: Construct Reliability and Validity

	Cronbach's		Composite Reliability	Variance Extracted
	Alpha (AVE)	rho_A		
Innovation Capability	0.954	0.956	0.958	0.561
Knowledge	0.838	0.844	0.855	0.608
Management Capability				
Organisational Culture	0.897	0.899	0.919	0.619
Capability				
Organisational	0.895	0.896	0.920	0.657
Learning Capability				
Organisational	0.912	0.917	0.926	0.535
Capability				
Small Business				
Performance	0.885	0.890	0.916	0.686

Source: Field Survey, (2022)

The internal consistency for adequate reliability and construct validity were measured [$CA > 0.7$] (Dash & Paul, 2021). Composite reliability was relied on as a good measure to indicate that all the items measured the construct. This was achieved with a measurement of [$CR > 0.7$] (Sarstedt, Hair, Cheah, Becker, & Ringle 2019; Chang & Lay, 2018). The constructs proved to be highly reliable with higher scores of rho_A scores ($\rho_A > 0.7$). The average variance extracted (AVE) was used to assess the convergent validity of the scale ($AVE > 0.5$).

Table 13 indicated constructs that measured discriminant validity through the HTMT ratio. The constructs measured were acceptable. The pair of constructs with values below 1 were accepted and satisfactory (Cheah et al. 2018; Henseler, 2018).

Table 13: Heterotrait-Monotrait Ratio (HTMT)

	Innovation capability	Knowledge Management Capability	Organisational Culture Capability	Organisational Learning Capability	Organisational capability
Knowledge Management Capability	1.031				
Organisational Culture Capability	1.023	0.909			
Organisational Learning Capability	1.038	0.991	0.953		
Organisational capability	0.839	0.833	0.792	0.854	
Small Business Performance	0.908	0.839	0.912	0.909	0.770

Source: Field survey, (2022)

Collinearity Statistics

The estimated relationship between one construct and the other was detected in order not to lead to common method bias (Table 14). The values determined by the inner VIF were satisfactory and free from the threat of common method bias (Atmaningrum, Kanto, & Kisman, 2021).

Table 14: Inner VIF

	Innovation Capability	Organisational Capability	Small Business Performance
Innovation capability		1.000	2.641
Knowledge Management Capability	4.034		
Organisational Culture Capability	3.985		
Organisational Learning Capability	5.637		
Organisational capability			2.641

Source: Field survey, (2022)

Structural Model

Outer Loadings

The outer loading indicators depicted were reliable and significant for all the constructs understudied (See Appendix B). The outer loadings were all statistically significant ($p < 0.05$; $t > 1.96$). Outer loadings above 0.7 were statistically significant. Indicators below 0.7 that were not significant were deleted to improve the measurement model.

The study further assessed the variance in small agro-food processing business performance that was accounted for by the change in innovation capability and organisational capability in the estimated model as indicated in Table 15.

Coefficient of Determination

Table 15: Coefficient of Determination

	R Square	R Square Adjusted
Innovation Capability	1.000	1.000
Organisational Capability	0.621	0.620
Small Business Performance	0.712	0.710

Source: Field survey, (2022)

Innovation and organisational capability accounted for a substantial variance in the performance of small agro-food processing businesses in the GAMA ($r^2=0.712$). This showed that 71.2% positive variation in performance was attributed to changes in innovation capability and organisational capability. In addition, innovation capability accounted for a moderate positive variance in organisational capability ($r^2=0.621$). This also proved that innovation capability was a good indicator. This also proved that enhancing innovation capability had an input in organisational capability which improved the performance of small agro-food processing businesses in the GAMA.

Mediating Effect

Table 16: Specific Indirect Effects

	Beta	T Statistics	P Values
Innovation Capability -> Organisational Capability-> Small Business Performance	0.079	1.186	0.236

Source: Field Survey (2022)

The specific indirect effects shown in Table 16 measured the mediation effect (Beta=0.079; $p=0.236>0.05$). The study showed that organisational capability mediated positively in the innovation capability and small business performance relationship. However, the value outcomes were not statistically significant to the output in performance among small agro-food processing businesses in the GAMA.

Prior studies showed that organisational capability had a significant impact on other organisational outcomes and processes. However, in the case

of this study, organisational capability was not statistically significance in the transmission of the influence of innovation capability on performance of small agro-food processing businesses in the GAMA. Therefore, organisational capabilities among the small agro-food businesses in the GAMA occurred as a matter of chance and not because of a pre-determined approach of innovation capability systems and structures of the organisation.

This finding supported earlier positions of previous empirical studies that held that organisational capability had the power to transfer the effect of innovation capability on small business performance (Bhatti, Rehman & Rumman, 2020; Bature, Sallehuddin, Rosli & Saad, 2018). The position of the RBV theory indicates that firms with astute organisational capabilities are better positioned to achieve competitive advantage over those that lack or are deficient in the competence exhibited for improved organisational performance (Kim, Kumar & Kumar, 2012; Nwachukwu, & Chladkova 2019; Sousa-Zomer, Neely & Martinez 2020).

Coefficient of Determination

Table 17: Coefficient of Determination

	R Square	R Square Adjusted
Innovation Capability	1.000	1.000
Organisational Capability	0.621	0.620
Small Business Performance	0.712	0.710

Source Field survey, (2022)

The study further assessed the variance in small business performance that was accounted for by the change in innovation capability and organisational capability in the estimated model. Table 17 showed that innovation and organisational capability accounted for a substantial variance in performance of small agro-food processing businesses in the GAMA ($r^2=0.712$). This showed that a 71.2% positive variation in small business performance was

attributed to changes in innovation and organisational capability. In addition, a moderate positive variance was accounted for by innovation capability in organisational capability of small businesses in the agro-food processing industry ($r^2=0.621$). This also proved that innovation capability was a good indicator. This also further proved that enhancing innovation capability had an input in organisational capability, which improved performance of small agro-food businesses in the GAMA.

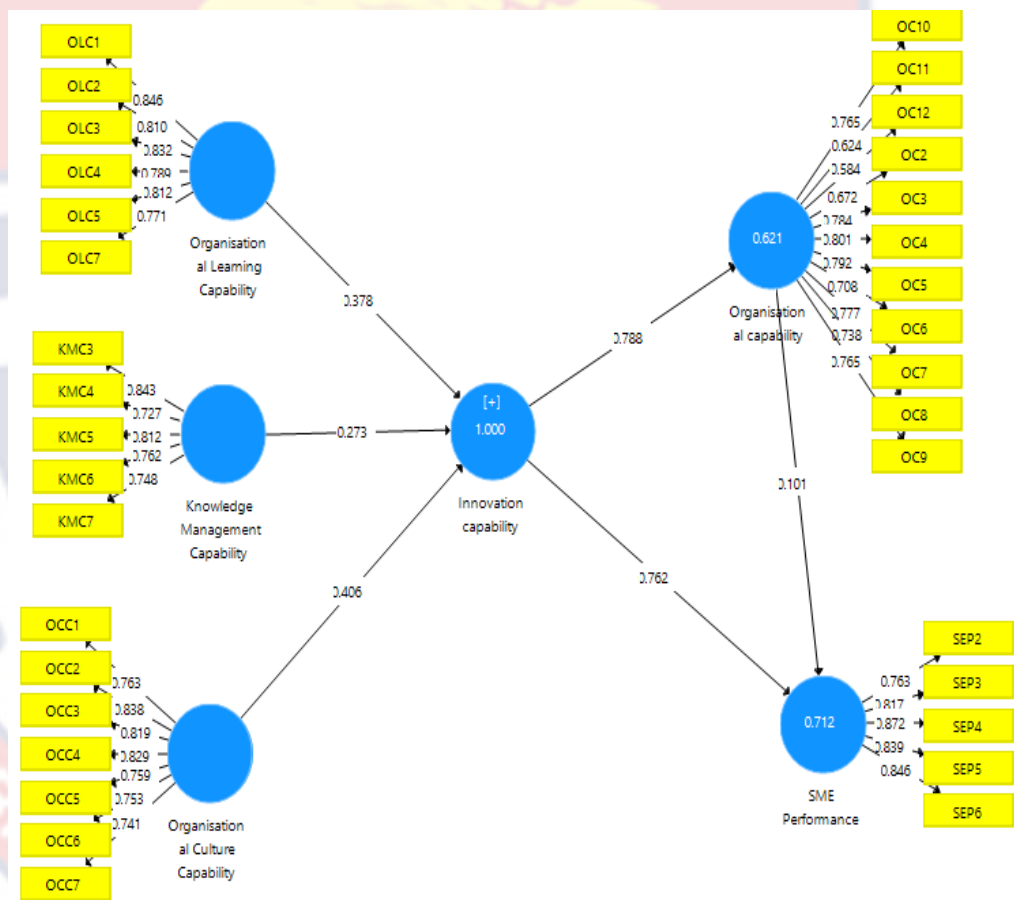


Figure 3: Structural Model for Objectives 3 and 4
Source: Field survey, (2022)

Chapter Summary

The Chapter analysed and discussed the backgrounds of respondents of the study. It also assessed the levels of innovation capability and performance of small agro-food processing businesses in the GAMA. The effect of

innovation capability on performance and the mediating role of organisational capability were also examined. For research question one, the level of innovation capability was analysed with the components of knowledge management capability, organisational learning capability and organisational culture capability. Respondents expressed a high level of innovation capability (M=3.4333). Knowledge management capability was (M=5.54), followed by organisational learning capability (M=5.09) and organisational culture capability (M=5.55). Research question two assessed the level of performance and was also captured (M=3.43).

Research objective three was duly captured under the hypothesis that innovation capability significantly influenced small business performance, followed by the sub-hypotheses of a significant effect of knowledge management capability, organisational learning capability and organisational culture capability on small business performance. Small business performance was attributed to changes in innovation capability which accounted for a statistically significant improvement in the performance of small agro-food processing businesses that were at the moment operating in the GAMA.

Research objective four was aligned with the research question of whether organisational capability mediated the innovation capability – performance relationship of small agro-food processing businesses in the GAMA. The outcome indicated that organisational capability contributed positively to innovation capability of small businesses and performance relationship but was not statistically significant in value.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The study analysed the levels of innovation capability and performance of small agro-food processing businesses in the GAMA. In addition, the study also examined the influence of innovation capability on performance of small agro-food processing businesses in the GAMA. The study further assessed the mediating effect of organisational capability in the context of study. This Chapter summarizes key findings in respect of the specific research objectives formulated. It also provides conclusions on the specific objectives and finally provides recommendations based on the findings of the study.

Summary

The aim of the study was to examine the effects of innovation capability and mediating role of organisational capacity on the performance of small agro-food businesses in the GAMA of Ghana. The blueprint of the study tapped into empirical studies and employed the RBV theory, KBV theory of the firm and OL theory. A conceptual framework to display the relationships was developed for the study. A mixed-methods approach and cross-sectional design were employed for descriptive and inferential analysis of a convenience sampling of 260 respondents with 210 as valid responses and purposive sampling of 11 participants of interviews conducted. The respondents sampled were small agro-food processing businesses located in the GAMA of Ghana. Both forms of data collection took place from November 2021 and March, 2022.

The responses of 210 small agro-food processing businesses were analysed using PLS-SEM and interview responses of participants were transcribed and themes were derived for interpretation. A Likert scale of 1 to 7 was used in measuring the variables. Data analysis revealed the study's key findings in relation to the objectives, research questions and formulated hypotheses. The first research question focused on the level of innovation capability of small agro-food processing businesses in the GAMA of Ghana.

The following were the key findings of the study:

The first objective sought to assess the levels of innovation capability of small agro-food processing businesses in the GAMA.

1. Firstly, the study proved that there was generally a high level of innovation capability with a mean score of 5.39. The analysis of the components that constituted innovation capability was shown as knowledge management capability of 5.54, indicating a high level, organisational learning capability of 5.09 fair level and organisational culture capability indicating 5.55 showing a high level.

The second objective focused on the level of performance. The outcome of the study for the second objective found the following:

1. An average level of performance among the small businesses using the six performance indicators made up of market share, customer satisfaction, sales growth, order fulfilling rate, profit and gaining more customers.

Objective three, in line with hypothesis one, assessed the effect of innovation capability on the performance of small agro-processing businesses in the GAMA. The study found the following:

1. Innovation capability positively and effectively caused a significant change by causing a positive variation of 71.0% in the performance of small agro-food processing businesses in the GAMA, as indicated by the results (Beta=0.843; $p=0.000$; $p<0.05$).
2. The study showed that the sub-components of knowledge management capability, organisational learning capability and organisational culture capability contributed positively by 29.0% to performance of the small agro-food processing businesses. The improved areas of performance comprised market share, customer satisfaction, profit, sales growth and order filling rate.

The mediating role of organisational capability in the innovation capability and performance relationship was analysed as the fourth objective. The findings were as follows.

1. The specific indirect effect measuring the mediating effect proved that organisational capability positively mediated the innovation capability and performance relationship as indicated by (Beta=0.079; $p=0.236$; >0.05). In essence, although organisational capability mediated positively, it did not show a statistically significant account for the change in relationship between innovation capability and performance of small agro-food processing businesses in the GAMA.

Conclusions

Conclusively, the study showed that innovation capability caused significant improvement in the performance of small agro-food processing businesses in the GAMA. In addition, innovation capability as a bundle of resources was useful when actively invested in and practiced in the forms of

knowledge management, organisational learning and organisational culture capabilities among small agro-food processing businesses in the GAMA.

The aspects of innovation capability that contributed significantly to operations of small agro-food processing businesses in the GAMA for an increase in performance included organisational learning capability and organisational culture capability. However, the findings concluded that the level of performance among the agro-food processing businesses was average. This connotes the need for an increase in the components of innovation capability to generate the needed rise in small business performance particularly for gaining more customers.

Organisational capability was positive but not statistically significant as a mediator in the innovation capability and performance relationship of small agro-processing businesses in the GAMA. Organisational capability can be considered and be highly improved in the transmission of innovation capability for high performance outcomes which can be statistically proved.

Recommendations

Based on the findings and the outcome of the study, the following recommendations were made:

1. The study recommends that managerial attention be focused on how to devise strategies and implement same to improve the levels of knowledge management capability, organisational learning capability and organisational culture capability dimensions.
2. It is necessary to increase the aspects of training and development, experimentation, information sharing and, in particular, record keeping

of the organisational learning capability component of innovation capability, which will enhance performance.

3. Managers of small businesses in the agro-food processing industry should focus on placing a premium on sustaining and equally increasing the implementation of organisational learning and organisational culture capability.
4. Since the study proves that innovation capability is exhibited among small agro-food processing businesses, it is advisable for managers and owners to rely on the conceptualized model for innovation capability in their operations to improve the firm performance.
5. Corporate policies for small businesses can be instituted to encourage a sustained practice of innovation capability.
6. It is advisable for small agro-food processing businesses to pursue a business process of making synergistic gains through integration of innovation capability and organisational capability to improve small business performance since the findings proved a positive mediation of organisational capability.
7. Investment in the innovation capability, organisational capability and performance relationship among small businesses in the agro-food processing industry of GAMA is highly recommended due to the high beneficial impact on performance outcomes when internally incorporated in the activities organisations.

Contributions to Knowledge

Firstly, the study contributes to the gaps identified in the literature, including the limited studies in the area of innovation that do not delve

into the effects of innovation capability factors. Other issues raised were the focus of research in more advanced countries. Other methodological shortfalls included adding mediating variables and varying research techniques that could influence the outcome of small business performance in the agro-food sector. A deeper understanding of varying and merging methodologies was important to support and inform policymakers and private economic investment entities in effectively aligning capacity and resource-building ventures towards performance-enhancing dimensions.

This study also added to the pool of knowledge regarding the channels of innovation in the business sector for economic advancement. Furthermore, the study demonstrates that harnessing interactions of capability resources within the theoretical framework adds firm dimensions to the research protocol. For example, the RBV theory proves to be a sturdy theory in analysing the capitalisation of internal innovation and organisational resources for competitive advantage in various climates. Similarly, the KBV theory is influential in contributing to firm performance. In addition, OLT is useful in rejuvenating and reinventing learning and cultural capability systems in enhancing organizational performance.

Finally, the study showed the relevance of descriptive and inferential statistics, which provides deeper insight into the dynamics of innovation capability and performance in the agro-food processing sector. The study also indicated that as part of the internal resources small businesses can develop, organisational capability did not necessarily capture the fluidity of

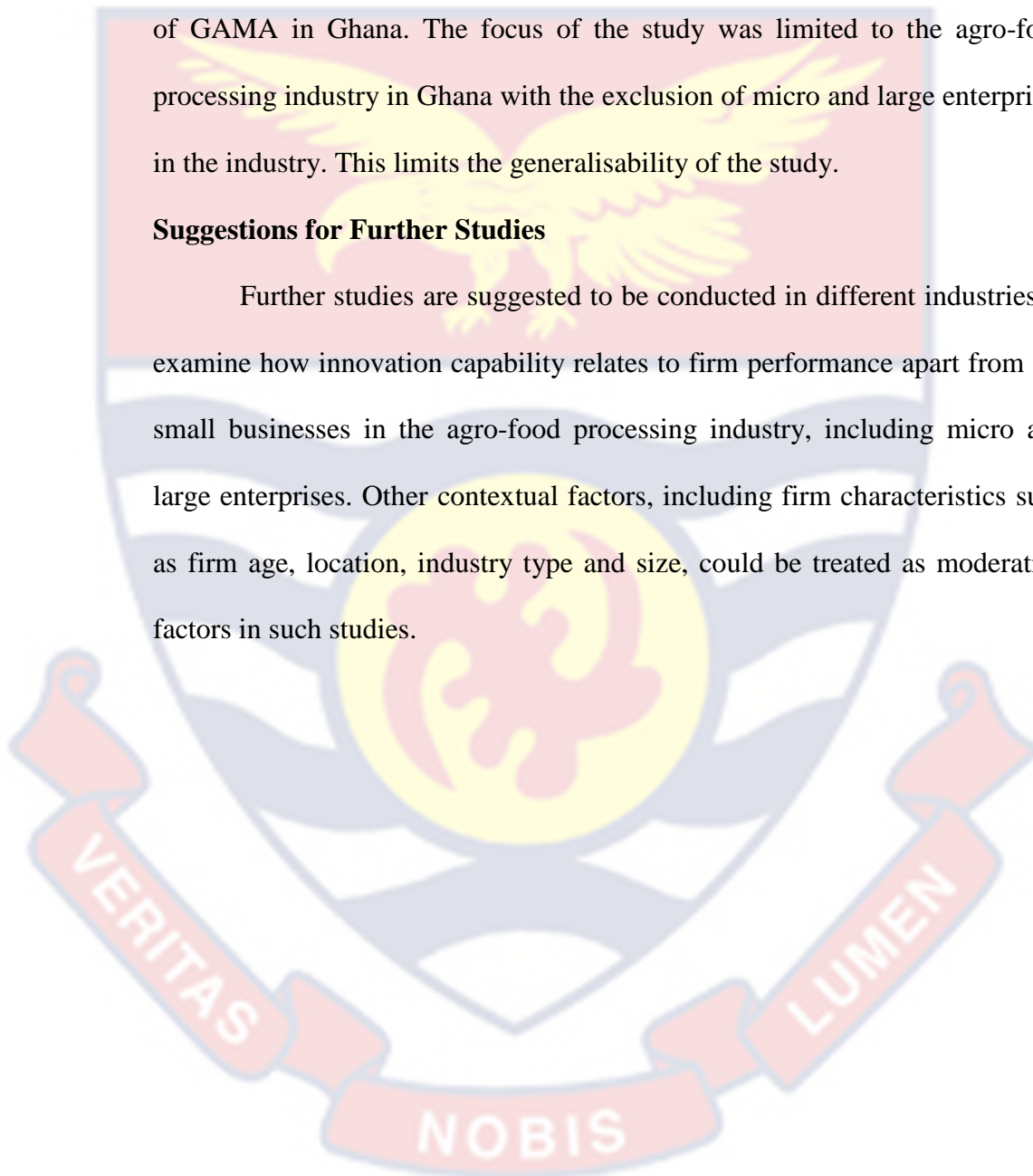
transference of innovation capabilities into performance outcomes. This finding suggests the need to assess organisational capability as a moderator.

Limitations

The study targeted small businesses in the agro-food processing sector of GAMA in Ghana. The focus of the study was limited to the agro-food processing industry in Ghana with the exclusion of micro and large enterprises in the industry. This limits the generalisability of the study.

Suggestions for Further Studies

Further studies are suggested to be conducted in different industries to examine how innovation capability relates to firm performance apart from the small businesses in the agro-food processing industry, including micro and large enterprises. Other contextual factors, including firm characteristics such as firm age, location, industry type and size, could be treated as moderating factors in such studies.



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APPENDICES

APPENDIX A

University of Cape Coast

Centre for Entrepreneurship and Small Entrepreneurship Development

Questionnaire for Small agro-food processing businesses

Dear Respondent,

This questionnaire intends to collect data on the firm's background, innovation capability, organisational capability and small business performance in the Greater Accra Metropolitan Area. The purpose is to determine the effect of innovation capability factors and the mediation of organisational capability on the performance of these firms. The answers provided shall be treated with extreme confidentiality and not intended for any other purpose than the one stated. Anonymity is very well assured. We will entreat you to kindly provide your candid response in relation to the enterprise. Thank you for taking part in the survey.

Section A: Business Background

Please indicate your response by **ticking** (✓) the appropriate response.

1. Kindly state your position in the firm

Owner

Manager

Director

2. How long has the business been in operation

Under 5 years

5 years or more

3. Number of employees

6 – 29

30 – 99

4. What is the legal form of your business?

i. Sole proprietorship

ii. Partnership

iii. Private Limited Liability Company

iv. Other

Section B: Knowledge Management Capability

This section of the questionnaire assesses the firm's ability to acquire, circulate and use the knowledge available for the overall functioning of the firm's production process. Regarding your firm, to what extent do you agree with the following statements?

"Please answer all questions in this section by ticking (√) your level of agreement from 1 = *strongly disagree* to 7 *strongly agree* with each of the statements".

Sn	Statement	1	2	3	4	5	6	7
1	The organisation uses information technology to create, share, store and use knowledge							
2	The organisation generates new knowledge from existing knowledge							
3	The organisation acquires knowledge about suppliers							
4	The organisation uses customer feedback to improve production							
5	The organisation processes knowledge for distribution and use in the organisation							
6	The organisation exchanges knowledge with business partners							
7	Organisational knowledge is protected through security processes							

Section C: Organisational Learning Capability

This section of the questionnaire will help assess the extent of the firm's learning ability that enhances performance. Regarding your firm, to what extent do you agree with the following statements?

"Please answer all questions in this section by ticking (√) your level of agreement from 1 = *strongly disagree* to 7 *strongly agree* with each of the statements".

Sn	Statement	1	2	3	4	5	6	7
1.	There are frequent organisational wide training and development activities							
2.	There are systems for searching, receiving and sharing information from outside the organisation							
3.	The organisation experiments on new ideas							
4.	The organisation involves customer user experience							
5.	There are systems for receiving and sharing information from within and outside the company							
6.	The organisation keeps records of experiences, data and sample products for future reference							
7.	The organisation involves employees in participatory decision making							
8.	The organisation creates opportunities for risk taking							

Section D: Organisational Culture Capability

This section of the questionnaire will help assess the extent of the firm's culture and values as part of the capability to enhance the firm's performance. Regarding your firm, to what extent do you agree with the following statements?

"Please answer all questions in this section by ticking (√) your level of agreement from 1 = *strongly disagree* to 7 *strongly agree* with each of the statements".

Sn	Statement	1	2	3	4	5	6	7
1	Innovation proposals by employees are welcome in the organisation							
2	The organisation creates time to seek innovative ideas							
3.	The organisation possesses a good channel of communication							
4.	The organisation supports change							
5.	There is some form of autonomy for employees and middle level management							
6.	Support for risk taking and experimentation							
7.	Tolerance for employee mistakes							

Section E: Organisational Capability

This section assesses the extent of the firm's organisational capability considering the available resource capabilities to perform competitively. Regarding your firm, to what extent do you agree with the following statements?

"Please answer all questions in this section by ticking (√) your level of agreement from 1 = *strongly disagree* to 7 *strongly agree* with each of the statements".

Sn	Statement	1	2	3	4	5	6	7
1.	The organisation commits adequate time and resources to prepare for and manage change.							
2.	Organisational vision and values are consistent with a preparedness for change.							
3.	The organisation provides highly visible support for change that prepares the organisation for the future.							

4.	Leadership is seen as a low-level management skill in the organisation								
5.	Managers in the organisation are involved in human resource development								
6.	Team based organisational structures are an essential feature of our organisation								
7.	People are allowed to accept responsibility for their own work								
8.	People in the organisation feel that their skills are valued and used.								
9.	The development of employee's competencies is an important organisational goal.								
10.	Learning as part of work is valued more than training in our organisation.								
11.	Employee needs are recognised as much as their skills in our organisation.								
12.	Managing the complexity of change is a critical management function in our organisation								
13.	Our managers are helped to develop their leadership skills.								
14.	Our organisation's capability is increased by the use of self-managing teams								

Section F: Small Business Performance

This section assesses the performance of the firm over the past five years. Please assess the competitive performance of your firm from 2015 to 2020. Regarding your firm, to what extent do you agree with the following statements?

“Please answer all questions in this section by ticking (√) your level of agreement from 1 = *strongly disagree* to 7 *strongly agree* with each of the statements”.

Sn	Statement	1	2	3	4	5	6	7
1.	Increase in market share.							
2.	Increase in customer satisfaction.							
3.	Increase in sales growth.							
4.	Increase in order fulfilling rate							
5.	Increase in profit							
6.	Increase in gaining more customers							

End of Survey

Thank you for your time

APPENDIX B**INTERVIEW GUIDE FOR SELECTED SMALL AGRO-FOOD****PROCESSING BUSINESSES**

Semi-structured interview guide

Item	Response
Introduction and interviewee's consent	
Purpose of research	
Date and time	
Position	
Gender	

SECTION A: BACKGROUND /GENERAL INFORMATION

1. How long have you been in business?
2. What are the products you produce and which one is most popular among your clients?
3. Who are the organisation's competitors and are they a threat?

SECTION B: INNOVATION CAPABILITY

1. What does your production process involve?
2. How do you classify your knowledge, learning and cultural innovation capabilities?
 - i) Are you able to identify, access and manage knowledge from various sources?
 - ii) How do you apply the knowledge acquired to an advantage in the activities of the business?
 - iii) How does learning occur, and in what way is it implemented in the organisational structure?
 - iv) Is there a collective structure or culture that the business adheres to in developing and improving itself?
 - v) What are the other means used to achieve the desired results/targets/goals and vision of the business?
3. How does your company manage and interact with external factors that influence your knowledge, learning and cultural innovation?
4. How do you encourage learning and knowledge sharing?
5. What mechanisms have you put in place to manage risks and challenges when implementing innovations?

SECTION C: ORGANISATIONAL CAPABILITY

1. How does the organisation use tangible and intangible resources to harness effective outputs?
2. In what ways are interactions with stakeholders beneficial to the organisation?
3. How do you ensure open communication with customers and other stakeholders for inputs in improving and developing new products?
4. How does the organisation protect itself against imitation of products?
5. What structures are there to stabilise and protect the inimitable/unique resources the organisation possesses?
6. How poised is the organisation to embrace technological changes on an ongoing basis?

SECTION D: SMALL BUSINESS PERFORMANCE

1. What are some of the setbacks you face in the implementation of knowledge gained, learning and cultural innovation capability needed to enhance the performance of the business?
2. How can you describe your organisation's performance?
3. How satisfied are your customers and how does that reflect in sales growth?
4. How do you think to improve your business performance?
5. What makes your business different from other competitors and does it reflect in your market share?

APPENDIX C

ETHICAL CLEARANCE

UNIVERSITY OF CAPE COAST

INSTITUTIONAL REVIEW BOARD SECRETARIAT

TEL: 0558093143 / 0508878309
E-MAIL: irb@ucc.edu.gh
OUR REF: UCC/IRB/A/2016/1053
YOUR REF:
OMB NO: 0990-0279
IORG #: IORG0009096

12TH AUGUST, 2021

Ms. Irene Naa Korkoi Armah
Centre for Entrepreneurship and Small Enterprise Development
University of Cape Coast

Dear Ms. Armah,

ETHICAL CLEARANCE – ID (UCCIRB/CHLS/2021/25)

The University of Cape Coast Institutional Review Board (UCCIRB) has granted Provisional Approval for the implementation of your research titled **“Effects of Innovation Capability on Performance of Agro Processing Enterprises in the Greater Accra Metropolitan Area, Ghana.”** This approval is valid from 12th August, 2021 to 11th August, 2022. You may apply for a renewal subject to submission of all the required documents that will be prescribed by the UCCIRB.

Please note that any modification to the project must be submitted to the UCCIRB for review and approval before its implementation. You are required to submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'ASIEDU OWUSU'.

Samuel Asiedu Owusu, PhD
UCCIRB Administrator

ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST