Master's degree thesis

LOG950 Logistics

Title:Novelty, Complexity, Importance, Products and Industry groups as Causal Determinants of the Buying Center Involvement (A multiple case study of Private Organizations in Ghana)

Author(s) SOPHIA YAWSON

Number of pages including this page: 85

Molde, May, 2019



Mandatory statement

Each student is responsible for complying with rules and regulations that relate to examinations and to academic work in general. The purpose of the mandatory statement is to make students aware of their responsibility and the consequences of cheating. Failure to complete the statement does not excuse students from their responsibility.

Plea	Please complete the mandatory statement by placing a mark <u>in each box</u> for statements 1-6					
belo	below.					
1.	I/we hereby declare that my/our paper/assignment is my/our own					
	work, and that I/we have not used other sources or received					
	other help than mentioned in the paper/assignment.					
2.	I/we hereby declare that this paper	Mark each				
	1. Has not been used in any other exam at another	box:				
	department/university/university college	1. 🖂				
	2. Is not referring to the work of others without					
	acknowledgement	2. 🖂				
	3. Is not referring to my/our previous work without					
	acknowledgement	3. 🖂				
	4. Has acknowledged all sources of literature in the text and in					
	the list of references	4. 🖂				
	5. Is not a copy, duplicate or transcript of other work					
		5. X				
	I am/we are aware that any breach of the above will be					
3.	considered as cheating, and may result in annulment of the					
	examination and exclusion from all universities and university					
	colleges in Norway for up to one year, according to the Act					
	relating to Norwegian Universities and University Colleges,					
	section 4-7 and 4-8 and Examination regulations section 14 and					
	15.	\boxtimes				
4.	I am/we are aware that all papers/assignments may be checked					
	for plagiarism by a software assisted plagiarism check $oxed{oxed}$					
5.	I am/we are aware that Molde University College will handle all					
	cases of suspected cheating according to prevailing guidelines. $\ oxinesize$					
6.	I/we are aware of the University College's <u>rules and regulation</u>					
	for using sources					

Personal protection

Personal Data Act					
Research projects that processes personal data according to Personal Data Act, should be					
notified to Data Protection Services (NSD) for consideration.					
Have the research project been considered by NSD? \square yes \square no					
- If yes:					
Reference number:					
- If no:					
I/we hereby declare that the thesis does not contain personal data according to Personal					
Data Act.: 🖂					
Act on Medical and Health Research					
If the research project is effected by the regulations decided in Act on Medical and Health					
Research (the Health Research Act), it must be approved in advance by the Regional					
Committee for Medical and Health Research Ethic (REK) in your region.					
Has the research project been considered by REK? \Box yes \Box no					
- If yes:					
Reference number:					

Publication agreement

ECTS credits: 30

Supervisor: PROFESSOR ARNT BUVIK

Agreement on electronic publication of master thesis				
Author(s) have copyright to the thesis, including the exclusive right to publish the document				
(The Copyright Act §2).				
All theses fulfilling the requirements will be registered and published in	Brage HiM, with the			
approval of the author(s).				
Theses with a confidentiality agreement will not be published.				
I/we hereby give Molde University College the right to, free of charge, make the thesis available for electronic publication:	⊠yes □no			
Is there an agreement of confidentiality?	□yes ⊠no			
(A supplementary confidentiality agreement must be filled in) - If yes:				
Can the thesis be online published when the				
period of confidentiality is expired?	⊠yes □no			
Date: May,2019				

Dedication

I dedicate this work to the honor of my dearest Parents, Mr. & Mrs. Yawson, and the ever-supportive Rev. Maxwell Kwesi Incoom, Head Pastor of Word Alive Assembly, Ghana Flag – Kasoa, Ghana (West Africa). You all have invested greatly in me and I am most grateful.

Preface

To start with, I wish to thank The All-Sovereign God for His great grace and mercies that has seen me safely throughout my period of studies.

In addition, I extend my gratitude to my dedicated Supervisor. Professor Arnt Buvik, for his timeless efforts to keep my interest keenly in pursuing Purchasing and Supply. His quality guidance and direction helped me build a strong foundation geared towards an excellent delivery of my Thesis.

My hearty appreciations to my family members and my Church for their unflinching support and prayers that fortified me throughout these few years away from home. You all contributed massively to the success of my studies and the good Lord replenish every effort for my sake. I am humbled, *Thank you all.*

CONTENTS

DEDICA	ATION	5
PREFAC	CE	6
ABSTRA	ACT	3
CHAPTI	ER 1	1
1.1	Introduction	1
1.2	Background of study	1
1.3	Research Problem	4
1.4	Justification of study	5
1.5	Scope of the study	5
1.6	Organization of the study	6
1.7	Summary	6
CHAPTI	ER 2	7
THEC	PRETICAL PERSPECTIVE	7
2.1 Int	troduction	7
2.2 B	Buying Center	7
2.3 D	imensions of the Buying Center	9
2.3.	1 Lateral and Vertical involvement	9
2.3.	2 Extensivity	11
2.3.	3 Connectedness	12
2.3.	4 Centrality	13
2.4 Ot	her key variables of the Buying Center	16
2.4.	1 Complexity of purchase	16
2.4.	2 Novelty of purchase	16
2.4.	The importance of purchase	17
2.4.	4 Product groups	17
2.4.	5 Industry groups	18
2.5 Su	ımmary	19
CHAPTI	ER 3	20
RESEAF	RCH MODEL AND PROPOSITIONS	20
3.1 Intro	duction	20
3.2 Over	view of research model	20
3 3 Defin	nition of constructs	21

3.3.1 Independent variables	21
3.3.2 Dependent variables	22
3.4 Presentation of Propositions	23
3.4.1 Proposition 1	23
3.4.2 Proposition 2	24
3.43 Proposition 3	25
3.4.4 Proposition 4	26
3.5 Summary	26
CHAPTER 4	27
RESEARCH METHODOLOGY	27
4.1 Introduction	27
4.2 Research design	27
4.2.1 Data Collection (Primary and secondary)	27
4.2.2 The Qualitative method approach	28
4.2.3 Measurement process	28
4.2.4 Operationalization of Variables in the Research Model	28
4.2.5 Multiple Case Studies	30
4.2.6 Background of Selected Multiple case studies	31
Blue Skies Company Limited	31
First Sky Limited	32
Zoomlion Ghana Limited	33
Renny Foods Limited	34
Bediako Memorial Institute Limited	34
St. Joseph Hospital	35
4.3 Summary	35
CHAPTER 5	36
EMPIRICAL FINDINGS AND TEST OF PROPOSITIONS	36
5.1 Introduction	36
5.2 Empirical Findings	36
5.3 Test Of Propositions	37
5.3.1 Proposition 1	37
5.3.2 Proposition 2	
5.3.3 Proposition 3	47
5.3.4 Proposition 4	50

5.4 Summary	52
CHAPTER 6	53
DISCUSSIONS, IMPLICATIONS, LIMITATIONS AND CONCLUSION	53
6.1 Introduction	53
6.2 Discussions	53
6.2.1 Summary of findings and discussions	53
6.3 Managerial Implications of study	57
6.4 Limitations of the study	57
6.4.1 Proposals for Further research	58
6.5 Conclusion	58
7.0 REFERENCES	59
7.1 Appendices	69

LIST OF TABLES

TABLE 1: EMPIRICAL STUDIES ANALYZING THE STRUCTURE OF BUYING CENTERS (HERBS)	ТЕТ
Al. 2008)	10
TABLE 2: DIMENSIONS OF THE BUYING CENTER (JOHNSTON AND BONOMA, 1981)	13
TABLE 3: SUMMARY OF THE VARIABLES IN THE BUYING CENTER CONCEPT (ADAPTED FRO	OM
Wallström, 2002)	15
TABLE 4: DEFINITION OF INDEPENDENT VARIABLES IN THE BUYING CENTER	21
TABLE 5: DEFINITION OF DEPENDENT VARIABLES IN THE BUYING CENTER	22
TABLE 6: MEASUREMENT CRITERIA OF VARIABLES IN THE RESEARCH MODEL BASED ON	
INTERVIEW GUIDE	29
TABLE 7: EMPIRICAL FINDINGS OF THE BUYING CENTER VARIABLES FROM VARIOUS	
PRIVATE ORGANIZATIONS	36
TABLE 8: A DEMONSTRATION OF THE THE ASSOCIATION BETWEEN COMPLEXITY AND	
NOVELTY OF PURCHASE	38
TABLE 9: A DEMONSTRATION OF THE ASSOCIATION BETWEEN THE IMPORTANCE OF	
PURCHASE AND VERTICAL INVOLVEMENT	44
TABLE 10: A DEMONSTRATION OF THE DIFFERENCES IN COMPLEXITY OF PURCHASE	
BETWEEN PRODUCT GROUPS OF SERVICE-PRODUCERS AND SERVICE-PROVIDERS	48
TABLE 11: A DEMONSTRATION OF THE EFFECT OF NOVELTY OF PURCHASE ON VERTICAL	
Involvement.	51

LIST OF FIGURES

FIGURE 1: MAP OF GHANA	2
FIGURE 2: A DIAGRAM SHOWING THE ASSOCIATION BETWEEN THE BUYING CENTER	
VARIABLES	20
FIGURE 3: SUMMARY DISCUSSIONS ON THE VARIABLES OF THE BUYING CENTER	54
FIGURE 4:MAP OF WEST AFRICA SHOWING THE LOCATION OF GHANA	73

ABSTRACT

Purpose - The purpose of this study is to add up to available literature, a contribution on Buying Center - This concept brings together persons who are key to the success of purchase decisions on a product or service in organizations. It is also called 'The Decision Making Unit'.

Design/method/approach - Literature on Buying Center is reviewed. Propositions are also stated and tested to fish out the association between the various variables in the Buying Center which are causal determinants of the Lateral and Vertical Involvement in the Buying Center. A Multiple Case Study approach is adopted in this area of study. This is specific to six (6) private Organizations in Ghana: 3 Service-Providers and 3 Service-Producers. Data is collated by way of an interview guide in addition to a face to face conversation with Procurement Managers of the respective Organizations.

Findings: Empirical assessment and evaluation of the output from various Private Organizations reveal that not all Service-Producers mostly adopt Lateral involvement whereas Service-Providers adopted Vertical involvement majority of times. Hence, a multivariate assessment of the individual variables in the Buying Center was adopted. This helped to trace the unique associations between the Buying Center variables, test and also confirm the propositions in the study.

Limitations of study: A major limitation in this multiple case studies approach is the sample size and the limited number of dependent and independent variables being compared. A survey of six (6) companies is not representative enough for a whole country like Ghana, looking at the commercial nature of the country. As a result of this limitations, we cannot use the findings to make generalizations and conclusions on the performance of Private Organizations worldwide. The effectiveness and efficiency of a Buying Center can also not easily be weighted.

Managerial implications: Management is implored to give much attention to these key areas including product groups and industry groups (Service-Producers and Service-Providers), complexity, novelty and importance of the purchase in order to continually have well-functioning Buying Centers. In conclusion, the type of involvement in a Buying Center can be traced to the associations between the Buying Center variables. However, choosing a type involvement in the Buying Center is crucial because, it has influence on the effectiveness of the Decision-Making Unit and ultimately improves Organization's performance.

Keywords: Buying Center, Organizational Behavior, Vertical Involvement, Lateral Involvement, Novelty, Complexity, Importance, Products, Industry Groups, Purchase Decisions.

CHAPTER 1

1.1 Introduction

Purchasing decisions, though complex by nature, yields greater rewards to companies and facilitate the ease with which business goals are achieved. Profit maximization and cost minimization have been key components of the goals of businesses. As a result, they have been given greater consideration across the globe. However, it is essential that reference is made to the root cause of this goal realization which is attributed to the critical point where businesses make strategic purchase decisions. This is the sole responsibility of the business Buying Center. The buying center analysis has received much attention in Industrial Marketing and Organizational Buying research.

"The growing appreciation of this analysis in practice mainly results from Sales people recognizing the importance of understanding Buying Center structures in order to optimize their selling efforts" (Klähn, 2013). "The idea about Decision Making Unit (DMU) was developed in 1967 by Robinson, Farris and Wind (1967), to involve people of an Organization who are involved in the buying decision". According to McDonald et al (2000), "the purchase decision therefore involves those with purchasing, department managerial skiils, in-depth financial knowledge and expertise, and most importantly, Top Management".

This area of study focuses on, 'Novelty, Complexity, Importance, Products and Industry groups as Causal Determinants of the Buying Center Involvement (A multiple case study of Private Organizations in Ghana)'. The research limitations are outlined, conclusion drawn and recommendations forwarded for future researches.

1.2 Background of study

Ghana is a multicultural, commercial, diversified and democratic country located in West Africa. Due to its active involvement in commercialization, the industry set up in Ghana is categorized under Public, Private or Non- Governmental Organizations - These could either be Service-Producing or Service-Providing.

Figure 1: Map Of Ghana



(Source: ghanadistricts.com)

With these preliminary issues understood and for the benefit of this area of study, much emphasis will be placed on Private Organizations in Ghana. These are further categorised into Service-Producers or Service-Providers, relating to areas such as Health, Education, Construction, Manufacturing and Sanitation. In this regard, six Private were considered. Looking at the map above (that is Figure 1), Blue Skies Company Limited is located in the Eastern Region, Bediako Memorial Institute Limited and St. Joseph Hospital are found in the Central Region. The remaining three organizations: Zoomlion Ghana Limited, First Sky Limited and Renny Foods Limited are located in the Greater Accra Region of Ghana, West Africa.

Service-Producers consist of Organizations that indulge in labour intensive operations and follow an "Input – Process – Output" system of operations to produce physical goods either by standardization or customization. Their outputs are mostly tangible (such as are seen in areas of construction, manufacturing and mining, just to mention a few). Service-Providers on the other hand, follow automated systems of operations and their outputs are mainly non-

tangible (such as are seen in areas of education, health care, hospitality, and many more). Though there exist some differences between these two set ups, there are still some similarities. Both types of Organizations have vision, mission and goals which serve as drive for their ultimate achievements at the least minimum cost. Quality, cost effectiveness, flexibility, delivery reliability and most importantly customer satisfaction also serve as some forms of incentives for their operations. It is important to state with regards to the above-mentioned that, procurement is a key activity that amount greatly to the success of both industry groups. To this end, there exist Buying Centers in the respective Organizations.

"The Buying Center, also called the Decision-Making Unit (DMU), brings together all the members of an Organization who become involved in the buying process for a particular product or service" (Robinson, Farris &Wind, 1967). Identifying the key persons to be engaged in the Purchase procedures is prerequisite in advancing Purchases, sales and a core fundamental in creating customer value which eventually influences Organizational effectiveness and efficiency.

Additionally, this helps to formulate the understanding of purchasing Decision-Making in complex environment. Buying Centers differ between Service-Producing and Service-Providing Organizations in Private Organizations especially in Ghana. Key factors for creating Buying Centers include making decisions and assessment on product groups and industry groups (Service-Producers and Service-Providers), complexity of purchase, novelty of purchase and importance of purchase (these variables make up the independent variables) as against the type of involvement needed in the Buying Centers (that is either Lateral or Vertical involvement which make up the dependent variables).

In view of this, this paper seeks to implore qualitative measures and multiple case studies of Private Organizations in Ghana to carry out research on 'Novelty, Complexity, Importance, Products and Industry groups as Causal Determinants of the Buying Center Involvement (A multiple case study of Private Organizations in Ghana)'. The limitations of the study are spelt out, findings discussed, and necessary recommendations and conclusion forwarded for future research work.

1.3 Research Problem

There have been several researches on the concept of the Buying Center. To make mention of a few for the benefit of this area of study, "McWilliams et al. (1992) investigated into "Determining Buying Center size". McQuiston (1989) researched on "Novelty, Complexity and Importance as causal determinants of industrial buyer behavior". Johnston & Bonoma (1981) also worked on "The Buying Center, structure and interaction patterns". More so, Lilien & Wong (1984) conducted "an exploratory investigation of the structure of the Buying Center in the metal working industry". Also, McCabe (1987) examined "The buying group structure: Constriction at the top". Finally, Järvi and Munnukka (2009) explored the "Dynamics and characteristics of Buying Center networks".

A critical observation of the various research works above-mentioned reveal that there probably lacks research works that advances the scope of drawing an association between five Buying Center variables which are causal determinants for a conclusion on either Lateral or Vertical involvement. This research work however, implores qualitative measures and multiple case studies of Private Organizations in Ghana to measure the association between Buying Center variables. In view of the above, this research work seeks to address the following underlisted problems:

- Examine how complexity of purchase is related to the novelty of purchase.
- Assess the relationship between importance of purchase and vertical involvement in the Buying Center.
- Compare the complexity of purchase across Service-Providers and Service-Producers
- Examine the effect of Novelty of purchase on Vertical involvement in the Buying Center.

1.4 Justification of study

This study seeks to examine the association between Lateral and Vertical involvement of Buying Centers using independent variables including product groups and industry groups, complexity, novelty and importance of the purchase. As a result, we rely on the Buying Center concept as the principal theoretical framework to help provide answers to the research problems relating to this phenomenon.

Johnston and Bonoma (1981) noted that, "there are five measurable dimensions of the Buying Center". This research work will therefore discuss all the "five dimensions - vertical, lateral, extensivity, connectedness and centrality" (Johnston and Bonoma, 1981). However, the focus of this work will be centered on solely on making a choice of any of these dimensions – "Vertical and Lateral involvement" (Zolkiewski, 2015), based on the independent variables.

Another justification for conducting this investigation is based on Propositions made from the observations of the data collated. The figures were collated as outcomes for justification of the propositions that there exist some forms of association between the elements of the independent variables in the Buying Center. This is same for the dependent variables.

It is also important to state clearly that, this field of study is an arm's length of previous studies in Organizational behaviour and Business-to-Business purchase decisions. Nevertheless, the focal point for the discussions in the research paper is 'Novelty, Complexity, Importance, Products and Industry groups as Causal Determinants of the Buying Center Involvement (A multiple case study of Private Organizations in Ghana)'.

1.5 Scope of the study

The focus of the multiple case research paper is to compare the Lateral and Vertical involvement in the Buying Center of Service-Providers and Service-Producers using key independent variables (product groups and industry groups, complexity, novelty and importance of the purchase). The areas under consideration for the selection of these Private Organization included education, health, manufacturing, construction and sanitation. It is limited only to the concept of Buying Centre with specific focus on Lateral and Vertical involvement in Private Organizations in Ghana as above-mentioned.

1.6 Organization of the study

The study is organized into Six (6) Chapters. It is opened with a Confidential Agreement, Dedication, Preface, Contents and List of Figures. Chapter One envelopes the Introduction, background of the study, the research problem, justification of the study, scope of study, Organization of the study and a Chapter summary. Chapter Two discloses the Theoretical Perspective of the research work and the Buying Center Concept is examined. Chapter Three delves into the Research Model and Proposition. The constructs with regards to Buying Center variables are defined and four propositions are emphasized. Chapter Four is about Research Methodology. The Research Design, operationalization of the variables in the research model and background of selected multiple case studies are examined. The measurement process is also clearly stated.

Chapter Five is about Empirical Findings and test of propositions. Findings from the various univariate variables are analyzed and propositions are justified with regards to the interview results from the multiple case studies. Chapter Six is the final chapter and it delves into Summary Findings, Discussions, Managerial Implications, Limitation of Study, Proposal for Future Research and a Conclusion. References, Appendices and a list of Abbreviations are also provided for future research purposes.

1.7 Summary

In this Chapter, the introduction, background of study, research problem, justification, scope and Organization of study, and Chapter summary are analyzed. The next Chapter delves into the theoretical perspective of this research work and the Buying Center concept (also called the Decision Making Unit) as developed by Robinson, Farris and Wind (1967) will be emphasized.

CHAPTER 2

THEORETICAL PERSPECTIVE

This Chapter delves into the theories and literature review which constitute the major aspect of this study. The Chapter therefore connects this field of study to previous researches in this regard. It also engages subsections, each describing a variable relating to the Buying Center Concept.

2.1 Introduction

"Industrial purchasing is a growing discipline with a broad scope of research issues. Research contributions vary with respect to problem issues, the level of analysis, research methods and the application of theoretical framework" (Buvik, 2001). "It is a complex process involving many persons, multiple goals and potentially conflicting decision criteria. Organizational buying was originally defined as a decision making process carried out by individuals, in interaction with other people, in the context of formal Organization" (Webster&Wind 1972).

2.2 Buying Center

According to Dowling(1995), "the role of the Buying Center in business marketing and purchasing has been the focus of much theoretical and empirical research. Most studies implicitly assume that, Buying Centers are static in nature, that is, the same group of Managers participate in all stages of the decision-making process". "The Buying Center is defined as the decision-making unit of a buying organization. It is composed of individuals and groups who participate in the purchasing decision-making" (Krapfel, 1985; Venkatesh, Kohli & Zaltman, 1995; Hult et al, 2007).

Organizations have put in place formal and informal buying structures. The formal structures depict the hierarchical structure of the Organization and this differs from the informal structures. Kotteaku et. al. (1995) and Laois and Xideas (1994) used "four parameters to describe the purchasing function. They included: articulation, formalization, centralization and depth of analysis". Businesses must understand all these structures as they impact the Buying Center. The degree of centralization or decentralization is key to the decisions on Organizational purchases. This is because, it shows where the decisions made on behalf of the Organization are concluded.

An essential point to emphasize is that, ultimate purchase decisions are made by the Decision-Making Unit (DMU) of various Organizations. Fisher (1969) outlined that, "the purchase processes include: need or problem recognition, determination of characteristics, specification and quantity of needed item or search for, qualification of potential sources, acquisition and analysis of proposals, evaluation of proposals and selection of suppliers, selection of an order routine and performance feedback and evaluation. Content is a supplier selection criteria used by the members of the DMU to evaluate supplier proposals on the basis of quality, price, life cycle costs, continuity of supply, perceived risks, Organizational policies, selective exposure and perception and selective retention".

Cardozo and Cagley (1971) identified "three decision factors for which Buying Center is formed: the buyclass, product type and the importance of purchase to the buying Organization. The buyclass deals with 'straight re-buy' (when a purchaser reorders the same products without looking for information or considering other suppliers), 'modified re-buy' (a situation where a purchaser makes some changes in the order requiring some additional analysis or product and suppliers research) and 'new task' (a situation requiring the purchase of a product for the very first time)". The product type is about how products are classified into four types namely: "materials, components, plant and equipment and products and services for maintenance, repair, and operation" (Robinson, Faris and Wind,1967). Organizations also consider the sum of money involved, considerable uncertainty about the outcome, Management participation and alternative offers to assess the importance of purchase decision.

"American research undertaken by McWilliams et. al (1992) found out that, the mean size of these Buying Centers mainly consist of four people". The range in this research was between three to five people. "The type of purchase that has to be done and the stage of the buying process influence the size" (McWilliams et. al, 1992). Johnston and Bonoma (1981) defined "five measurable dimensions of the Buying Center and found that, Novelty, Complexity and especially Importance of the purchase were very helpful in explaining the level of managerial involvement as they are likely to be present in and have an effect on both the purchase situation and the interaction afterwards". This paper however incorporates product groups as part of the key variables influencing choices in the Buying Center.

2.3 Dimensions of the Buying Center

2.3.1 Lateral and Vertical involvement

Lateral involvement thus "refers to the number of departments or other work-related groups that are represented in the Buying Center" (Lewin and Donthu, 2005); whereas Vertical involvement "refers to the levels of Top Management involved and exerting authority in the Buying Center" (Dawes et al, 1999). All types of involvements are geared towards channeling efforts to respective participants towards goal attainment. "Logically, the degree of Lateral and Vertical involvement determines the size of the Buying Center" (Dawes et al., 1996).

"Prior research has shown that the level of Vertical involvement will determine the size and also partly dependent on the degree of Lateral involvement" (Dawes, Dowling & Patterson, 1992; Dawes et al, 1996). "As such, as the number of departments increases, more Senior Managers tend to be included and the buying process becomes complex. Differences in opinions and interests are likely to occur and the Senior Managers often become involved to resolve the conflicts and differences" (Dawes, Dowling & Patterson, 1992).

Despite the type of involvement being observed, "business services can have significant impact on the functioning of Organizations, since poor purchase decisions can lead to poor performance and vice versa" (Mitchell, 1994; Soriano, 2001; West, 1997).

"Where there is centralization, the possibility of formalization is also highly expected. Formalization in Organizations, defined as the degree to which rules define roles, authority relations, communications, norms, sanctions and procedures" (Jaworski & Kohli, 1993). Van Weele (2000) also added that, "formalization initiatives can take the form of the establishment of policies, including standards and written guidelines for when and how to make certain purchases, as well as the implementation of formal contracts with for example preferred suppliers".

Lateral involvement, according to Johnston and Bonoma (1981), "measured the number of separate divisions or functional areas participating in the purchase decisions. They add that, as the number of departments involved in the process increases, more information becomes available which helps to reduce uncertainties". Thus, Dawes et al. (1992) are of the Proposition that, "the degree of lateral involvement in purchasing increases as the purchase

decisions becomes more uncertain and riskier". The table below depicts empirical studies analyzing the structure of the international Buying Centers:

Table 1: Empirical studies analyzing the structure of Buying Centers (Herbst et al. 2008)

Author(s)	Analyzed countries	Investigation object	Empirical findings	
Buckner (1967)	GB	vertical i	high centrality of purchase decision	
Buckner (1967)	GB	lateral i	facilities: executive board, management, production engineers; materials and components: purchasing, development and construction engineers, management	
Azumi and McMillan (1975)	J, GB	vertical i	J+GB: important decisons are made by highest hierarchial level; J: more centralized and steeper hierarchy than GB	
Doyle, Woodside and Michell (1979)	GB	size	straight rebuy situations: 2-3 persons; new-task and modified rebuy situations: 3-6 persons	
Grönroos (1980)	S, Europe	vertical i	highest participation of employees in Europe (participation of employees is regulated by law)	
Lilien and Wong (1984)	US	lateral i	early phases of purchase: user (engineers and production), late phases of purchase: chief purchaser and management	
Vyas and Woodside (1984)	US	lateral i	commercial evaluation: purchasing; technical evaluation: engineers, quality controllers, maintenance, user	
Banting et al. (1985)	GB, US, AUS	lateral i	strong similarity between the countries; facilities: early participation of the top management, purchasing at the end; materials and components: purchasing at the beginning and end, support by F&E department; financial and sales department take only rarely part	
Johnston (1987)	US, J	vertical i	US: senior executives play major role in new task purchase decision; J: senior executives play major role in promoting cohesiveness within the organization	
Dawes, Dowling and Patterson (1992)	US	size	majority of BC's (85%): between 2 and 4 persons	
Marsh (1992a)	J	vertical i	participation in decision ≠ decision power; participation of employees without decision authority; important decisions: highest hierarchical levels; routine decisions: delegation	
Marsh (1992b)	J	vertical i	high dependence on head office and 'keiretsus' (industrial group); high decision centrality	
Garrido-Samaniego and Gutierrez-Cillan (2004)	ES	lateral i	routine purchase: purchasing; high investments: production, engineers and management	
Theile (2004)	US, F, D	vertical i	highest decision centrality in D; percentage of highest level of hierarchy in BC: $D = 41.4\%$; $F = 37.1\%$; $US = 32.1\%$	
Theile (2004)	US, F, D	size	size of BC: D = 4.03; US = 2.76; F = 2.91	

Table 1 offers an inclusive overview of the existing empirical studies that deals with International Buying Center Analysis. The various investigation objects help serve as a source of reference for identifying what other future researchers need to consider reviewing. It is seen that, all the various researchers agree on the definition and explanations granted to Vertical and Lateral involvement as well as the size (extensivity) of the Buying Center using diverse approaches. This helps to appreciate how these Buying Concept variables are widely recognized and accepted.

The size of international Buying Centers, according to the table above, has a minimum number of two persons and a maximum of six persons. Doyle et al. (1979) however, "is more specific in the breakdown of the Buying Center size. For 'Straight rebuy' situations, two to three members are suggested. Also, for 'new task' and 'modified rebuy' situations, a membership size of three to six members are suggested". This therefore agrees

with the sizes of Buying Center being practiced in the Private Organizations (Service-Providers and Service-Producers) in Ghana as above-mentioned.

The lowest membership were four persons and the highest were five members. It therefore becomes important to factor the Size of Buying Center when deciding on its structure. This is because, the fewer the Buying Center membership, the more efficient and effective the performance of the Decision Making Unit of Organizations. Thus, the Buying Center is a concept that is widely accepted and has the capability of exponentially multiplying the effectiveness, performance and profitability of organizations globally.

2.3.2 Extensivity

Ghingold and Wilson (1998) noted that, "previous studies have found that Buying Centre networks tend to differ in particular in three specific characteristics: Lateral involvement, Vertical involvement and Extensivity, which is naturally called the size of the Buying Center". "This extensivity is used to describe the structure and the level of participation in the Buying Center" (Ghingold and Wilson, 1998). Extensivity refers to, "the number of persons involved in the buying decision making process" (Kohli, 1989). Johnston and Bonoma (1981) also added that, "extensivity is the degree to which individuals involve and communicate within the Buying Center". "This dimension of the Buying Center has direct effect on the participation of members, their interactions and the amount and accuracy of the purchase-specific knowledge gathered for the buying task" (Shaw, 1981; Kohli 1989).

"Extensivity has been found to have a positive correlation with the degree of formalization in Organization" (Dawes et al., 1998) and "complexity of the purchasing process" (Johnston and Bonoma,1981). However, "an increase in the size of the Buying Center does not necessarily lead to diffusion of authority since decision may still be exercised by a small group of individuals" (McCabe,1987; Glock & Hochrein, 2011). Berkowitz (1986) analyzed, "how the organization size impact the Buying Center size" while Robey and Johnston (1977), Bellizzi (1981) and Lynn (1987) examined "the impact of an organization size on the participation and the influence of different Buying Center members in the buying decision process".

"Popular studies on the Buying Center structure mainly analyze how certain determinants impact the structure of the Buying Center, that is, the Buying Center size" (Laczniak, 1979;

Crow & Lindquist,1985; Naumann & Lincoln, 1989; Backhaus & Voeth, 2015). Crow and Lindquist (1985), examined "how the Buying Center size is influenced by decision-making complexity", whereas Naumann and Lincoln (1989) analysed "whether Buying Center size is dependent on the degree of the organization's formalization and centralization". "Some studies have probably not yet supported the relationship between organizational size and the participant in a Buying Center. When the organizations are segmented by their degrees of formalization and centralization, then a consistent relationship between organizational size and the Buying Center extensivity is indicated" (Andy Wood, 2005).

2.3.3 Connectedness

Johnston and Bonoma (1981) defined connectedness as, "the degree to which the members of Buying Center are connected to each other". To Morris (1992), "Connectedness is also of importance as it depends on the fact that, the marketing message has to be communicated separately to some of the members of the Buying Center and also suggest that connectedness help to identify the central players in the purchase". Schroder et al. (1967) examined the Buying Center "as an information processing system of the organization. They feel that information processing systems could be described in terms of the amount of interconnection among the members of the system. The amount of interconnection among the Buying Center members is termed integrative complexity by Schroder et al (1967)." They also believe that, "connectedness is the degree to which members of the Buying Center are linked with each other by communication flows. They add that, the degree of connectedness of group members has been associated with the quality of decisions".

This form of connectedness may be through written or spoken forms. Johnston (1979) noted that, "the measure of the written or spoken forms of connectedness is inversely correlated with connectedness. This means that, minor purchases are characterized by simple requisition flowing through channels for coordination whereas major purchases require much formal paperwork, large problem solving efforts and personal coordination through meetings. Thus, the concept of Buying Center information processing is described by the Buying Center's degree of formality and connectedness". To Knoke and Kuklinski (1982), connectedness is "the average number of relationships that an individual forms with others within the network". "The integration of a work unit within organization-wide communication networks was the basis of individual power" (Blau & Alba, 1982; Hutt & Reingen, 1987). Similarly, Bacharach and Aiken (1976) "found support for their hypothesis

that, greater participation in the communication network provides an individual with greater influence during decision-making". However, the research work of Berlo et al. (1972) and Shaw (1964) showed that, "the larger a group, the more difficult it is for all members of the group to remain in contact with each other".

2.3.4 Centrality

"This measures the percentage of communication frequency of the Purchasing Manager compared to the total individuals in the Buying Center" (Johnston and Bonoma, 1981). This therefore analyses the influence of the Purchase Manager on the purchase decision. Morris(1992) "evaluated this dimension of the Buying Center as relevant in the buying process". Centrality is therefore dependent on the volume of information the Purchasing Manager sends out and receives which influence the purchase decisions of the Organization. Van De Valk et al (2005) defined centrality as, "the sum of purchase communications of the Purchasing Manager in the buying communication network weighted by the total number of individuals in the Buying Center". Moreover, Grando et al. (2018) notes that, "the use of centrality measures is pertinent as heuristics to improve the solution of security problems, control issues, communication flow and resource optimization".

The Buying Center dimensions include "Vertical and Lateral Involvement, Extensivity, Connectedness and Centrality" (Johnston and Bonoma, 1981), as shown in the table below. For the benefit of this paper our focus shall be on the Lateral and Vertical involvement only. According to Morris (1992), "all these dimensions have important implications for marketers. He adds that, the more vertical levels involved, the more influence those at high levels have in the buying decisions and the greater lateral involvement shows less formality and involves more conflicts". Johnston and Bonoma (1981) summed up these elaborations on the Buying Center dimensions as follows:

Table 2: Dimensions of the Buying Center (Johnston and Bonoma, 1981)

Dimensions	ons Description	
	The degree to which Organization's hierarchical levels exert authority influence and communicate within the Buying Center.	
Lateral Involvement	The degree to which separate departments in addition to divisions and functional areas involve in the purchasing decision.	

Extensivity	The degree to which individuals involve and communicate within the Buying Center.
Connectedness	The degree to which the members of Buying Center are connected to each other.
Centrality	The percentage of communication frequency of the purchasing manager comparing to the total individuals in the Buying Center.

It is also important to understand that, "the Buying Center is made up of influencers, initiators, gatekeeper advisers, deciders, users, buyers and payers" (Kotler, 2009). "The initiator makes request to purchase a product or services or recognizes a problem and that starts the Decision-Making process. The decider makes the actual purchase decision. The buyer selects the qualified suppliers and manages the buying process. The influencer also contributes to the formulation and determination of the specifications of the product or service. The users are the persons who actually use the products or services; and are not always involved in the buying process but extend critical feedback and evaluation on the product or service. Gatekeepers control the flow of information into and out of the company and Buying Center" (Kotler, 2009).

Managing a typical Buying Center therefore requires identifying the make-up of the Buying Center, mapping a strategy for the effectiveness and efficiency of the Buying Center, executing and improvising to get the Buying Center working up to optimum, and planning follow up meetings for performance reviews, prospective purchase references and future buying opportunities. Scholars have argued that, "the value that the Buying Center offers to the organization, including Leadership has been argued to have considerable effects on outcomes. Well operating Buying Centers with appropriate Leadership can be great strategic resource for organizations while dysfuncitonal Buying Centers and leaders hinder the effectiveness and efficiency that can be gained from Supply Chain practices" (Hult, Ferrell & Schul, 1998; Hult et al, 2007; Krapfel, 1985; Wilson, Lilien & Wilson, 1991; Venkatesh etal., 1995). These Buying Center variables are summarised in the table below as adapted from Wallström (2002):

Table 3: Summary of the variables in the Buying Center Concept (Adapted from Wallström, 2002)

Conceptual area	Concept	Conceptualization	Measure used
	Buying center	The individuals who are directly related to the purchasing process	Identifying the individuals who are commonly involved in the purchasing of MRO services
	Dimensions of the buying center	Extensivity	An estimation of the number of people from the buying center involved in the buying communication
		Lateral involvement	An estimation of the number of departments involved in the buying center
		Vertical involvement	An estimation of the number of authority levels that influence the communication within the buying center
		Connectedness	An estimation of the degree to which buying center members are linked to one another by direct communications regarding the purchase
		Centrality	An estimation of the degree to which the purchasing manger acts as a center of communication within the buying center
Buying center	Roles in the buying center	Initiator	Identify those who recognize that some company problem can be solved or avoided by acquiring a product, and initiates the process
		Users	Identify those who actually use the purchased products and services
		Deciders	Identify those who have the authority to choose among alternative buying actions
		Influencer	Identify those who influence the buying process directly or indirectly by adding information or decision criteria for the evaluation of alternative buying actions
		Buyer	Identify those with formal responsibility and authority to actually perform the contractual agreements
		Gatekeeper	Identify those who control the flow of information (and materials) into the buying center
	Influence in the buying center	The formal or informal power of a person to affect others or outcomes in buying situations whether or not exerted consciously	Identification of the most influential member in the buying center (based on the respondents perceptions)

Table 3 conceptualizes the buying process in Scandinavian Pulp and Paper Companies. The characteristics and concepts in the Buying Center are summed up in table format above. It is observed that, the various definitions and expalnations of Buying Center, dimensions, Buying Center roles and its influence agrees with what is said about the nature of Buying Centers in the selected Ghanaian Private Organizations. Great knowledge and insight can therefore be retrieved from a thorough study of the Buying Center of the Scandinavian Pulp and Paper Companies to influence that which is practiced in Ghana-West Africa and vice versa. This is as a result of the idea that, they all follow similar practices and concepts.

2.4 Other key variables of the Buying Center

2.4.1 Complexity of purchase

This Buying Center variable is defined as "technical complexity or the complexity of the buying decision or task under consideration" (McCabe 1987; Lewin and Donthu, 2005; Glock & Hochrein, 2011). McQuiston (1989) stated that, "complexity is assumed to induce uncertainty at the decision makers level and to increase the need for using external sources of information".

McCabe (1987) emphasized that, "the degree of complexity leads to a higher degree of centralization which may be interpreted as an effort to ensure long term availability of resources and to increase the role of technical specialists and Management in the purchase decision". Nevertheless, Lau, Goh & Phua (1999) "does not confirm that there is a significant relationship between complexity of purchase, structure of the Buying Center, formalization and centralization of purchasing". Zaltman and Bonoma (1977) therefore concluded that, "as products become more technologically innovative, the purchasing agent's central position declines"

2.4.2 Novelty of purchase

Novelty of purchase is also rated as high or low based on investment requirement (limited or unlimited), order size (small or large), the experience requirements and impact on the Organization (short or long term). "In a repeated purchase, the buying problem will be more versed, structured and easier to handle as compared to a new buying situation which results in a situation of unfamiliarity and insecurity" (Robinson, Faris &Wind,1967; Glock & Hochrein, 2011).

They therefore proposed that, "the amount of information required and the degree of experience in similar purchase situations are the most significant factors in explaining the behaviour of industrial purchasers" (Robinson, Faris and Wind, 1967; McQuiston, 1989).

"The novelty variable is found to affect participation and influence in the decision process" (McQuiston, 1989; Reve and Johansen,1982; Dawes et. al, 1992; José Garrido-Samaniego&Gutiérrez-Cillán, 2004). This novelty of purchase introduces a lot of uncertainties in the purchase decisions.

"According to Industrial Buying Theory, when faced with uncertainty in a purchase decision, Decision making unit individuals seek more information to reduce that uncertainty,

thereby increasing their participation and influence" (Anderson,1983; Sheth, 1973). Due to the uncertainties and unfamiliarity with the 'straight rebuy', Cardozo and Cagley (1971) showed that, "purchasing personnel tends to assume major responsibilities while line Managers and technical specialists are brought into the buying process and they assume greater roles in the case of novelty of purchase".

2.4.3 The importance of purchase

Purchasing in every Organization is a strategic role for most industry groups and for this paper's sake we cover the Service-Providers and producers. "Several authors have studied the relationship between purchase importance and the Buying Center size and showed, importance of purchase has a positive relationship with the size of the Buying Center" (Johnston and Bonoma, 1981; McQuiston, 1989; Dawes et. al, 1992).

The importance of purchase can also be measured taking into consideration, the volume of trade, the importance of the products to productivity, profitability and the opportunity cost of the product. Dawes, Dowling, and Patterson (1992) "defined importance of purchase as, the impact of the purchase on different functional areas or individuals in the organization, on other purchases, or on the probability and productivity of the company". Also, Patchen (1974) found that, "importance of a purchase affected the degree of participation of the Buying Center in the buying decision"

2.4.4 Product groups

"Product groups are categorized into raw materials, supplementary materials, semi-manufactured products, components, finished products, investment goods, capital equipment, maintenance, repair and operations (MRO) and services" (Van Weele, 2000). Using the Kraljic Portfolio matrix, "these can further be categorized into leverage items, strategic, items, non-critical and bottleneck items" (Nijhoff, 2013).

Grønhaug (1975); Johnston and Bonoma (1981); and Mattson (1988), "categorized products by their influence on the organization's end product and showed that, a high influence on the final product usually leads to a large Buying Center and a high-Top Management involvement in the purchase decision". Due to product specifications and the varied descriptions of product groups, we can propose that there is a n association between complexity of purchase and product groups.

According to Boier (2010), "the marketing perspective of the concept of product encompasses everything that may be offered in order to meet a particular need". They add that, "the review of the information required by product management reveal a set of interrelated aspects among which the most important refer to: product category; the needs that the product addresses; usage situations and fields; the product life cycle; seasonality of manufacturing, purchasing or usage; the path from technical features such as attributes and functions; benefits for the client; total product; the set of associated (complementary) products; the tangible and intangible relationship; consumption visibility and/or as the case may be; the visibility of the consequence of using the product; the relationship reason or emotion in the purchase decision process; customer loyalty; perceived purchase risk; consumer involvement; direct competition; indirect competition by substitutes; product segmentation in agreement with market segmentation; product structure market; the product's typical buying and consumption behaviors; market gaps and product value for the consumer and strategic positioning" (Boier, 2010; Boier& Timiras, 2006).

It is important emphasize that, this area of study covers six private organizations in the areas of construction, sanitation, manufaturing eductaion and health. All these have their unique organizational products which they finalize purchase decisions on.

2.4.5 Industry groups

Industry groups also relate to Service-Producers and Service-Providers for the benefit of this area of study. Service-Producers include construction and manufacturing private companies. Service-Providers include private hospitals, hospitality industries and private educational facilities.

Service-Producers consist of organizations that indulge in labour intensive operations and follow an 'Input-Process Output' system of operations to produce physical goods either by standardization or customization. Their outputs are mostly tangible (such as are seen in areas of construction, manufacturing and mining, just to mention a few). Technical specialties and product specification is key to Service-Producers. This makes their processes more complex than that of Service-Providers. Service-Providers on the other hand, follow automated systems of operations and their outputs are mainly non-tangible (such as are seen in areas of education, health care and hospitality and many others).

"When the purchase of services is compared to the purchase of goods, the process for services is more complex. They claim that, in the elements of the buying organization, service is directed at people, things and processes in combination with the criticality or importance of the service, and eventually provides the purchaser useful information for making purchasing decisions" (Fitzsimmons, Noh and Thies,1998; Van De Valk et al, 2005).

Though there exist some differences between these two set ups, there are still some similarities. Both types of Organizations have vision, mission and goals which serve as drive for their ultimate achievements at the least minimum cost. Quality, cost effectiveness, flexibility, delivery reliability and most importantly customer satisfaction as also serve as some forms of incentives for their operations. Additionally, "some services cannot be classified clearly as being either an MRO or a production service" (Jackson et al.,1995; Van De Valk et al, 2005).

2.5 Summary

This Chapter covered the Theoretical perspective and it subsections elaborated on the dimensions and other variables of the Buying Center. They included "Vertical and Lateral involvement, Extensivity, Connectedness, Centrality, Importance of purchase, Complexity, Novelty, Product Groups and Industry Groups" (Johnston & Bonoma, 1981). The next Chapter takes a cursory look into the Research Model and Propositions.

CHAPTER 3

RESEARCH MODEL AND PROPOSITIONS

3.1 Introduction

This Chapter presents an overview of the Research Model. The propositions which are very vital to the research work, are also highlighted in no particular order of preference or importance.

3.2 Overview of research model

It is important to make mention here that, the sample size of six (6) does not suffice statistically for analytical tools to be used for the evaluation of data collated. This is because we may not realize an output that may be statistically realistic. The sample size is an integral part of the studies. According to Daly et al, (1991) and Karlsson et. al (2003), "too small a sample size will have insufficient power to statistically detect a true difference, so important differences between study groups may be declared statistically insignificant".

It is however important to understand that, "a sample is a sub-set of the target population" (Mugenda and Mugenda, 1999). As a result of this limitation, data will be critically assessed by observation, and the possible associations drawn between the Buying Center variables - which are either Dependent or Independent. This will therefore be the model with which this research work will follow as shown below:

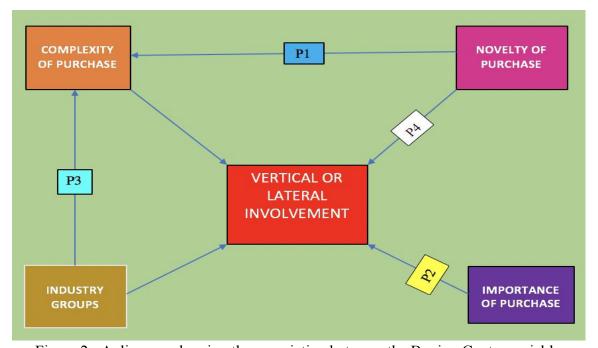


Figure 2: A diagram showing the association between the Buying Center variables

The figure above summarizes what this paper seeks to find out. That is, an association between the Lateral and Vertical Involvement (dependent variables) using independent variables including: Novelty, Complexity, Importance, Industry and Product Groups. It also shows the association between the Buying Center variables as proposed. The arrows used in Figure 2, helps to understand and appreciate the propositions outlined in this research paper and to unearth the association between the Buying Center variables - dependent and independent. It is observed how interrelated and interdependent the various variables in the Buying Center are and the consequential effect is seen by way of efficient and effective performance of Buying Centers.

3.3 Definition of constructs

The variables of constructs in this paper are categorized into dependent and independent variables as examined below. Their respective measures are clearly spelt out in subsequent paragraphs so as to appreciate the relevance of each variable in the Buying Center Concept.

3.3.1 Independent variables

"An independent variable is a variable that is changed or controlled in a scientific experiment to test the effects on dependent variables" (McLeod, 2008). The independent variables for the benefit of this paper include: Novelty, Complexity, Importance, Industry and Product Groups. In this section, the scales of measurements for the individual independent variables are emphasized.

Table 4: Definition of independent variables in the Buying Center

INDEPENDENT VARIABLES	MEASURES
	Novelty is measured by considering the experience and
	information the Organization has with the new product, the uniqueness of the purchase, familiarity with the product, investment requirement, order size (and impact on the Organization either short
NOVELTY	or long term).
	This is measured by assessing the alternative substitutes available, technical specification of product, expertise and specialized skill requirements, type of product (standard or customized), advanced technology involved, level of bureaucratic procedures involved,
COMPLEXITY	initial or a repeat purchase, ease of installation, after sales requirement and dynamic nature of product.
	This constitutes the proportion or the volume of purchases, the productivity effect of the purchase, the opportunity cost for the

IMPORTANCE	product, Management involvement, formalities involved, capital turnover and other investments needed, impact on profitability, Organizational policies and culture and effect on firm's competitiveness.
	This is determinants on whether the Organization is Service-
INDUSTRY	Producing or Service–Providing. However, it is specific to private
GROUPS	Organizations only in Ghana.
PRODUCT GROUPS	These are categorized into raw materials, supplementary materials, semi manufactured products, components, finished products, investment goods, capital equipment, maintenance, repair and Operations (MRO) and services (Van Weele, 2000). Using the Kraljic Portfolio matrix, these can further be categorized into leverage items, strategic, items, non-critical and bottleneck items (Nijhoff, 2013).

3.3.2 Dependent variables

"Dependent variable is the variable being tested and measured in a scientific experiment. It is dependent on the independent variables" (McLeod, 2008). Thus, the dependent variables in this research include Vertical and Lateral Involvement as summarized in the table below with their respective objects of measure for a proper understanding of the variables of construct.

Table 5: Definition of dependent variables in the Buying Center

DEPENDENT VARIABLE	MEASURES
Vertical Involvement	This is measured by examining 'the level of Top Management involvement' (Glock & Hochrein, 2011) in the purchase decisions. That is CEO, General Manager and the Board of directors. The level of formalization of purchase processes and centralization of procedures are also important considerations.
Lateral Involvement	This is measured by examining the level of Departmental Management involvement in the Buying Center. For example, is a Functional Manager such as, Accounts, Administration, Stores, Security, and many others. Also, is to consider the decentralization of purchase procedures.

3.4 Presentation of Propositions

Avan and White (2001) clearly stated that, "propositions form the basis for scientific research. The validity of the research study is to a large extent, evaluated o the criteria of its propositions since propositions provide information regarding the precision of definitions, measurements, associations and confounding factors". The next paragraphs therefore analyze the associations between the Buying Center variables and concludes on four propositions which will guide the flow of the research work.

3.4.1 Proposition 1

The relationship between Complexity and Novelty of purchase.

Hill (1972, 1973) proposed that, "complexity of products is an important dimension and he stresses the effect on the composition of the Buying Center". Lehmann and O'Shaughnessy (1982); Xideas & Moschuris (1998), "developed four basic product-attribute categories in order to examine differences among supplier selection criteria and found that product complexity in combination with novelty of Purchase in application generated uncertainty about product suitability".

This makes the purchase decision complex. Complexity of purchase is valued as high or low based on measures such as: type of product (standard or customized), advanced technology involved, expertise knowledge, the level of bureaucratic procedures involved, initial or a repeat purchase, ease of installation and after-sales requirements. This is because, in this globalization and market dynamic era, industrial products are also rapidly becoming complex. These complexities eventually make the purchase decision cumbersome since expertise and specialized knowledge need to be consulted to finalize on purchase decisions. Woodward (1965); Kotteaku et. al. (1995); Laois and Xideas (1994) noted that, "the type of manufacturing technology played an important role in the way firms had structured their activities and classified the technology according to a scale she called technical complexity.

Grashof (1979) also observed that, "decision complexity as determined by firm size and technical aspects of products, would likely result in a shared verses individual selection decision". Campbell (1985) "built a buyer-seller interaction model incorporating as a key dimension product complexity and assumed that, the higher the product complexity, the higher the degree of interdependence between buyer and seller".

This also shows a line of association between the novelty and complexity of Purchases. Under conditions of new purchases, the purchase decisions are not also easy to conclude since the level of certainty cannot be ascertained. This also shows a line of association between the novelty and complexity of Purchases. As such, we may conclude with a proposition that: "Complexity of purchase is positively related to the novelty of purchase."

3.4.2 Proposition 2

The association between the importance of purchase and vertical involvement

The importance of purchase is assessed based on total cost to the Organization, Management involvement, capital turnover and other investments needed, impact on productivity and profitability, Organizational policies, Culture and effect on firm's competitiveness. Reve and Johansen (1982) established that, "the importance of the purchase affect both the number of participants and their behaviour throughout the purchasing process. Hence, there is mostly greater Top Management involvement, centralization and formalization when the purchase decision is of high importance to the Organization".

Anderson and Chambers (1985) noted that, "varying levels of Lateral and Vertical involvement occur because, buyers are motivated by potential professional gains and losses as a result of the buying task". This also emphasizes the importance of the purchase decision to the various selected private organization as a whole..

In a classic study by Nilsson and Høst (1987), it was revealed that, "if buying is conducted centrally within a strong vetically integrated chain, the buying process will vary considerably, the number of decision makers dramatically reduces, potentially to one, and the degree of central control, range consistency and cost efficiency is increased".

Porter (1980) also argued that, "vertical integration is a valuable instrument for the firm in creating competitive advantage by taking advantage of imperfect markets and for reducing external uncertainty (Pfeffer and Salancik, 1978)". With these understood, we conclude with a second proposition that: "The importance of purchase has a positive link with vertical involvement in the Buying Center".

3.43 Proposition 3

Comparison of the complexity of purchase across Service-Providers and Service-

Producers

Grønhaug (1975), Johnston and Bonoma (1981) and Mattson (1988), "categorized products by their influence on the Organization's end product and showed that a high influence on the final product usually leads to a large Buying Center and a High-Top Management involvement in the purchase decision". Due to product specifications and the varied descriptions of product groups, we can propose that complexity and product groups has a link between them.

Service-Producers consist of Organizations that indulges in labour intensive operations and follows an 'Input-Process +Output' system of operations to produce physical goods either by standardization or customization. Their outputs are mostly tangible (such as are seen in areas of construction, manufacturing and mining, just to mention a few). According to Axelsson and Wynstra (2002), "Services are intangible, inseparable, perishable and heterogeneous: these characteristics affect the purchasing process in the sense that some elements become more important, more difficult or just different in comparison to goods". Webster (1979); Kotteaku et. al. (1995); Laois and Xideas (1994) noted that, "both product and buying decision complexity are dimensions of the industrial marketing uniqueness. He defined product as, an array of financial, technical and personal relationships between buyer and seller".

Technical specialties and product specification is key to Service-Producers. This makes their processes more complex than that of Service-Providers. Service-Providers on the other hand follows automated systems of operations and their outputs are mainly non-tangible (such as are seen in areas of education, health care and hospitality and many others). It is important to state with regards to the above-mentioned is that, procurement is a key activity that amount greatly to the success of both industry groups. Thus, we may propose that: "Service-Producers have higher complexity of purchase than those of Service-Providers".

3.4.4 Proposition 4

The effect of Novelty of purchase on Vertical involvement

Lau, Goh & Phua (1999); Juha & Pentti (2008); Glock & Hochrein (2011) examined "the relationship between the novelty of a purchase and several structural variables of purchasing and both found a positive relationship between the degree of novelty, complexity and centralization". This affirms the fourth proposition that Novelty of purchase helps to make a choice between Lateral and Vertical involvement. For the benefit of the fourth proposition, the association between Novelty of Purchase and Vertical involvement is going to be emphasized. New purchase decisions come with its own technicalities and challenges. As a result, Management is much involved in such "decisions on 'modified rebuy' or a 'straight-rebuy' of a new product" (Malaval, 2001). The impact of a wrong purchase decision negatively affects the productivity and profitability of the firm. New purchase decisions therefore engages Vertical involvement as a result of the varying degrees of experience and knowledge base, with regards to the specific product being decided on and the purchasing situation as a whole. However, routine purchase decisions, which are the usual practices of the firm attracts Lateral involvement. This is also as a result of the work forces' familiarity with the product or service in question and their respective Buying Center procedures.

Mcquiston (1989) referred to "the lack of experience with similar situations as novelty". Robinson, Faris and Wind (1968) added that, "greater novelty suggests a higher likelihood of a more broad, more timely and extended information gathering process". "Novelty of Purchase can therefore affect industrial buying behavior as there is greater insecurity and requires relevant experience and knowledge" (Hanssens & Weitz, 1980; Garrido & Gutierrez, 2004; Mcquiston,1989). We can observe a relation between Novelty of purchase and vertical involvement as compared to Novelty of purchase and Lateral involvement from the scholarly views above and this confirms the fourth proposition that, "there is a positive association between novelty of Purchase and Vertical Involvement".

3.5 Summary

This Chapter focused on Research model and four Propositions have been elaborated covered, an overview of the research model was emphasized, definition of constructs examined and closes with a Chapter Summary. The next Chapter takes a look into the Research Methodology.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 Introduction

The previous Chapter was about Research Model and Propositions. This Chapter however, emphasizes on the various means for which data was collated. Issues to be considered include: Research Design, Measurement Process, operationalization of variables in the research model, background of the multiple case studies and a Chapter summary.

4.2 Research design

Kothari (2004) noted that, "Research Design is making research as efficient as possible hence yielding maximum information with minimal expenditure of effort, time and money". Creswell (2009) adds that, "Data Collection Methods for primary data include: structured, semi-structured questionaires, mailed questionaires, structured and semi-structured interviews (personal and telephone interviews), observation and focus group discussions". In line with this, data was collated from both primary and secondary sources for the benefit of this paper.

4.2.1 Data Collection (Primary and secondary)

The structured primary source was from face-to-face interview, using an interview guide, with Procurement Managers of the respective Organizations. The secondary sources however, were from journals, textbooks, online articles and other internet sources, Websites, published and unpublished data sources. A multiple case studies approach is adopted in this area of study and this specified to six (6) private Organizations in Ghana: 3 Service-Providers and 3 Service-Producers.

Data was therefore collated by way of interviews and face-to-face conversation with Procurement Managers from all the respective Organizations. "Due to the small size of the sample being used for the paper" (Benton et al., 2008), the content of the information retrieved from the organizations is what is assessed to generate the necessary outcomes. Julien (2008) defines content analysis as, "the intellectual process of categorizing qualitative textual data into clusters of similar entities, or concentual categories, to identify consistent patterns and relationships between the variables or themes". In our case the clusters include:

product groups and industry groups (Service-Producers and Service-Providers), complexity, novelty and importance of the purchase.

4.2.2 The Qualitative method approach

The qualitative method is adopted since it is appropriate for multiple case study research papers. According to Cibangu (2012), "qualitative research comprises of the following methods: logic, ethnography, discourse analysis, case study, open-ended interview, participant observation, counselling, therapy, grounded theory, biography, comparative method, introspection, casuistry, focus group, literary criticism, meditation practice, historical research, etc"

To Polkinghorne (2005), "the qualitative method seeks to explain 'how' and 'why' a particular social phenomenon, or program, operates as it does in a particular context. Thus, it tries to understand the social world in which we live and why things are the way they are". In the same vein, this area of study focuses on why an Organization make a choice of either Lateral or Vertical Involvement in a Buying Center and the association between the two based on independent variables.

4.2.3 Measurement process

An interview guide was used for the data collation. It was in two forms: The first part was a scale rating. It had number ratings and percentages which were used for the Organizational decisions and choices. The other section was open for views and opinions to be stated and these had no numerical measurements. They were perceptions, opinions, experiences and observations. We may not be able to apply descriptive statistics on the outcome of the interviews because the sample size is small. Content analysis after critical observation is what we will adopt in this regard for an effective and reliable conclusion.

4.2.4 Operationalization of Variables in the Research Model

McLeod (2008) explained operationalization as, "how you define and measure a specific variable as it is used in a study". This is excatly what this Chapter is about. The research model in Chapter three, showed a pictoral representation of the propositions stated in the paper. According to Michael (2002), "variables are defined by conceptual definitions

(constructs) that explain the concept the variable is attempting to capture; and by operational definitions of how variables will be measured".

The table below shows how the various variables, both dependent and independent were measured with respect to the interview guide, such that the results obtained from them helps to confirm the propositions discussed in Chapter 3 of this paper.

Table 6: Measurement criteria of variables in the research model based on interview guide

VARIABLE	MEASUREMENT		
(DEPENDENT)			
Vertical Involvement	• Scale rating (0% to 100%) where the highest rate was 100% and the lowest was 0% to make a choice of the type of involvement being used in their respective organizations		
Lateral Involvement	Scale rating (0% to 100%) where the highest rate was 100% and the lowest was 0% to make a choice of the type of involvement being used in their respective organizations		
VARIABLE (INDEPENDENT)	MEASUREMENT		
Importance Of Purchase	 Scale rating (0% to 100%) where the highest rate was 100% and the lowest was 0% to ascertain the importance of purchase to the organization. Assessment of importance of purchase with regards to the vision, mission, cost of purchase, volume of trade, Management involvement. Examination of the importance of the recent purchase to the organization 		
Novelty Of Purchase	 Definition of novelty of purchase How often the organizations encounters novelty of purchase (yearly, bianually, others) Who is involved in making new purchase decisions Organizational policy concerning novelty of purchase A scale ratings (1-6, where 6 is the highest) for management and departments involvement in taking new purchase decision. 		
Complexity Of Purchase	 Scale rating (0% to 100%) where the highest rate was 100% and the lowest was 0% to measure the level of complexity of purchase. A time duration was also set to measure the frequency of the complexities of purchase. This was a range of years from 1- 4years, 5-10 years and 11years and above. A definition of complexity by the respective company 		

	 Management of complexites by the organizations 		
	 Type or category of products being used by the 		
Product Groups	organization		
	 How often purchase decisions are taken 		
	 Management and departments involvement in taking 		
	taking decisions using a scale rating of 1to 6, where 6 is		
	the highest and 1 is the lowest.		
	• The size of the Buying Center and how often changes are		
	made to the size		
	• The purpose of establishing the organization (that is		
Industry Groups	Service-Producing or Service-Providing)		
	• How centralized the organization is on a scale of 1 to 6,		
	where 6 is the highest and 1 is the lowest		
	 Department involvement in taking decisions in the 		
	organization, measured using a sclae of rating from 1 to		
	6, where 6 is the highest and 1 is the lowest.		
	• Examination of the line of communication and command		
	in the organization.		

4.2.5 Multiple Case Studies

Yamashita and Moonen (2014) defined case studies as, "a method aimed at holistically analyzing a phenomenon in its context". "A case study focuses on specific unit" (Jacobsen, 2002) and "they provide much richer and more vivid picture of the phenomenon under study than other analytical methods" (Marshall & Rossman). They are therefore used "primarily when researchers wish to obtain an in-depth understanding of a relatively small number of individuals, problems or situation" (Patton, 1990).

To Yin (2003), "a case study can contain a single or multiple study". This study, however, focuses on multiple case studies which is, "a group of similar single cases incorporated form multiple case studies" (Heale et al, 2016). "Multiple Case Studies allow wider exploring of research questions and theoretical evolution" (Eisenhardt & Graebner, 2007) and "evidence that is generated from multiple case studies is strong and reliable" (Baxter & Jack, 2008).

4.2.6 Background of Selected Multiple case studies

Blue Skies Company Limited

"Blue Skies Company Limited was founded in 1997 by British Entrepreneur, Anthony Pile. He had the idea of producing fresh-cut fruits and freshly squeezed juices in Africa whilst he was Managing Director of another company. His vision was to put the factory where the fruits grew and deliver 'ready to eat' fruits which were 'fresh from harvest', from farm to store within just 36 hours. His board however, did not share this vision and so asked him to go away and do some "blue skies thinking". Anthony therefore, decided to do it all by himself. He landed in Ghana in December, 1997, just three months after leaving his previous role with a determination to pursue his dream. Once in Ghana, he had to find the land, bring the water, source the electricity, find the people, provide the training, build a factory, install machinery, work out the logistics and organize the farmers to supply the fruit. Most importantly, he had to find the retailers who would buy his products over those produced by more established manufacturers.

On 26th February, 1998, with just 35 employees, Blue Skies dispatched its first consignment of fresh-from-harvest pineapple bound for the UK retailer Sainsbury. In doing so, Anthony had proven that it could be done despite people around him telling him the contrary. Blue Skies now employs over 4000 people across Africa, South America and Europe. It is also a leader in its field with celebrations of success stories". Blue Skies operates a Buying Center consisting of a four – member team that is strictly limited to the Procurement office. Every purchase decision is taken by these four members and the final approval is received from the Chief Executive Officer. The key membership of its Buying Center, for major purchase decisions that include machinery and other working equipment, include Procurement Manager, Accountant, Designated Office Manager and Chief Executive Officer. Due to the perishability nature of the company's products, Blue Skies face complexities and emergencies which are inevitable in their procurement processes. They undertake new purchases as and when demand triggers and are mainly Service-Producers". (Source: www.blueskies.com).

First Sky Limited

"First Sky Limited is a Ghanaian limited liability construction incorporated in 2002. The vision of the company is to be "a leading and model International Civil Engineering Construction Firm running a world class business of quality, reliability and client focused services". Its mission is to be a leading player in the engineering construction set up through the provision of efficient and cost effective quality constructional services with the state of the art technology; and by very friendly and highly motivated staff through aggressive performance to maintain a leading and good corporate image as well as maximizing shareholders' net worth at all times.

The company has by this also incorporated these objectives: General construction, Management, consultancy, and Foreign trade. the company was started out of a desire to improve upon operational and project delivery standards which were lacking in the civil and Management construction industry at the time of its inception in Ghana. It has since grown significantly over the last decade. It is managed by highly multi-skilled professional team, aiding timely projects delivery and also within budget. Starting with a workforce of 5 persons, the company now employs over 200 permanent managerial, administrative and technical staff and about 1500 casual staff. It owns a fleet of significant construction equipment in addition. It is classified into financial Class A1 B1 with Ministry of Roads and Highways of the Republic of Ghana.

The company's endeavor towards excellence in construction, quality, safety, performance, employee satisfaction and social responsibility has enabled it to be the most trusted and sought-after Engineering Construction Operations and Maintenance firm in the region. It has a track record of consistently delivering projects, providing value-added construction and service skills to customers for whom quality of execution, efficiency and reliability are critical. As a result, the company has principally acquired knowledge, equipment and work force to plan and execute works in General Civil Construction ranging from small private developments to large Government and international projects, with specialization in Roads, Bridges and Dam Construction.

This expertise has grealy boosted Shareholder confidence in their activities. As a construction firm, the Buying Center of First Sky Limited consists of the Procurement Manager, Accountant, Zonal Manager and the Chief Executive Officer (CEO) who influence

decisions and gives approval of all purchase transactions. Due to the varied nature of their purchases, First Sky regularly encounters novelty of purchase especially when new projects are awarded. This comes with its own challenges that are handled by the Buying Center members". (Source: www.firstskyghana.com).

Zoomlion Ghana Limited

Zoomlion Ghana Limited is "the leading waste Management company in Ghana. The company is committed to the provision of services which prevent environmental pollution and safeguards public health, such as solid waste pre-collection, street sweeping, drain cleaning, liquid waste collection and haulage to disposal sites. Their mission is to offer environmental sanitation services by the introduction and utilization of simple but modern technologies and methods of waste management at affordable and competitive rates.

The company founded by Dr. Joseph Siaw Agyepong, began its operations in 2006. It currently handles 70 percent of the solid waste generated in the towns and cities of Ghana. The company currently operates in all Metropolitan, Municipal, District Assemblies in Ghana. The range of services among others include: Solid Waste Collection, Landfill Management, Landscaping and Beautification services, Janitorial and indoor cleaning services, Vector control services and sale of refuse containers. The company runs over thirty other businesses in Africa and in the Middle East. His innovative methods of waste Management have attracted several awards and also helped keep Ghana Clean. Currently, it holds a core staff strength of over 3000 and 65100 field staff under the National Youth Employment Programme (NYEP) initiative by the Government of Ghana.

Zoomlion Ghana Limited is a Service-Providing Company that have well established and implemented procurement structures that guides their purchases. Every purchase begins with a requisition to stores, and then to the Procurement Manager and finally to Top Management for approval before purchase decisions are taken. This is an automatic system being run in a Private Organization. Though they sometimes face some emergencies, they have adhoc measures to curb it impact on the purchase decisions of the Organization". (Source: ir.knust.edu.gh).

Renny Foods Limited

Renny Foods Limited, "founded by Mrs. Irene Ghartey, was started in 2008 as a home-made delicacy which caught the sight of external people. She therefore decided to prepare this cereal on a small scale level for her customers at a fee but later went into large scale production due to high patronage from around the countryside. The company received certification from Ghana Standards Board in 2009 and this spurred her on to produce on a larger scale and also relocate the company to a much bigger area of operation.

As the demand for the cereal products increased, the packaging of the content was improved as part of branding the Organization. Over the years, these cereals (Renny Tom and Renny Gari) containing five or more ingredients (rice, wheat, soya beans, beans and groundnut), have gained wide recognition due to the distribution channels adopted: fuel shops, pharmacies, retail shops, mother care shops, hospitals and shopping malls. Customer satisfaction is the utmost priority of all efforts and operations.

The Buying Center of Renny foods limited absorbs four key persons who are crucial to the success stories of the company. These are three field experts and the CEO. They are responsible and accountable for all monthly purchase decisions with strict adherence to the dictates by Ghana Standards Board". (Source: http://javidac2.blogspot.com/2012/07/renny-foods-now-on-menu.html).

Bediako Memorial Institute Limited

"Bediako Memorial Institute Limited was incorporated in Ghana in 2001, as a Private Limited Liability Basic School. On Tuesdays, September 10, 2002, the school commenced operations, and thus began the long, arduous journey to achieving excellence in basic education. The school opened with a small number of pupils who enrolled from nursery 1 to Primary 6. Numbering close to 50 pupils at that time, the school today has a total enrolment of over 2000 students, from Nursery1 to JHS 3. Of all the factors that have contributed to the growth of the school, one is distinctly significant.

This is the collective vision of the school. The school is committed to a clear vision which governs the decisions and actions of Management and staff-committed to the pursuit of excellence in basic education aimed at becoming a World Class Basic School providing

teaching and learning environments of the highest quality. Spurred by this vison, the school has established a strong corporate culture and achieved significant growth in all aspects of business. The Buying Center of the school is a four member committee consisting of the CEO, accountant, CEO, Accountant, Stores Manager and Designated Tutor. They engage in both major and minor straight and modified rebuy. Novelty of purchase comes in, when the school takes a look at making purchase decisions outside the core mandate of the school".

(Source: www.bediakomemorial.com)

St. Joseph Hospital

"According to the Procurement Manager of this facility, "the Hospital, Service Providing Industry, is a modern facility that adopts advanced technology with extensive range of medical services geared towards delivering quality health care to its clients under safe conditions and environment. As such, it is the pride of the Hospital to be identified with the provision of high standard patient care to its internal and external community.

It is one of the 'Best' Private Medical Hospitals in the Central Region of Ghana with professionally trained work force, enviable and competitive records. The Buying Center of this facility consists of the CEO and Management members. The size is about a maximum of 5 people and approval of purchase decisions is always finalized by the CEO". (Source: Procurement Manager, St Joseph Hospital).

4.3 Summary

This Chapter considered the Research Methodology, where the research design, data collection methods, measurement process, operationalization of the variables in the research model and background of multiple case studies were discussed. A Chapter summary is also given as part of the Chapter. The next Chapter focuses on the empirical findings and test of propositions.

CHAPTER 5

EMPIRICAL FINDINGS AND TEST OF PROPOSITIONS

5.1 Introduction

The previous Chapter dealt with the operationalization of the variables in the Research Model. This Chapter goes into the empirical findings and test of propositions. We have four propositions and evidence from the interview results, from the selected Private organizations in Ghana above-mentioned, will be used to test and confirm the propositions.

5.2 Empirical Findings

Shank (2002) "defined qualitative research as a form of systematic empirical inquiry into meaning". Empirical findings is therefore not based on theory or a belief, rather, it is based on an actual experience – In this case, the findings are retrieved from the results of the interview sessions held with the Procurement Managers of various selected private organizations. The table below therefore analyzes the empirical findings on the Buying Center variables relevant to this field of study and based on the interview results from various private organizations.

Table 7: Empirical findings of the Buying Center Variables from various private organizations

Companies	Novelty Of Purchase	Complexity Of Purchase	Importance Of Purchase	Product Groups	Industry Groups	Lateral involvement	Vertical involvement
	Assessment (High/Medium/Low)						
First Sky Limited	HIGH	HIGH	HIGH	Construction materials	Service- Producer	LOW	HIGH
Blue Skies Company Limited	HIGH	HIGH	HIGH	Fresh-cut fruits	Service- Producer	HIGH	LOW
Renny Foods Limited	HIGH	HIGH	HIGH	Cereal mix	Service- Producer	HIGH	LOW
Bediako Memorial Institute Limited	LOW	LOW	LOW	Education materials	Service- Provider	LOW	HIGH
St. Joseph Hospital	LOW	LOW	LOW	Health services	Service- Provider	LOW	HIGH
Zoomlion Ghana Limited	MEDIUM	LOW	HIGH	Cleaning materials	Service- Provider	MEDIUM	MEDIUM

Table 7 presents a univariate overview of empirical findings in a tabulated format. It is observed that, there are high scores for Novelty of purchase amongst Service-Producers and low scores for Service-Providers. This is based on what is recognized as a new purchase. The interview results revealed that, newness of a purchase decision usually occurs when the firms operates outside their core mandate. It is also observed that, there is high complexity of purchase amongst Service-Producers than Service-Providers. Importance of Purchase however, attracts a high score for all the Industry Groups. This is because purchase is key to the operations of all the firms and calls for Management and Department involvement for it to take place effectively.

Product groups cannot be rated because of the nature of the products for the respective organizations. The tangibility, technicalities and specifications of the products are relevant to the procurement process, compared to the intangible services rendered by Service-Providers. Industry groups is very important to all the firms used as case studies. It is categorized into Service-Providers and Service-Producers. This is because, the kind of the industry group determines the nature of its products. As such, Service-Producers have their unique products as compared to Service-Producers. These industry groups therefore factor this important variable in concluding on purchase decisions. Regarding the type of involvement in the Buying Center, it is observed that Service-Producers engage more of Lateral involvement and Service-Providers engage more of Vertical involvement. However, there is the possibility of stating that a Service-Provider can engage both, as seen in the result for Zoomlion Ghana Company Limited. In this regard, we cannot be conclusive that Service-Providers and Service-Producers are strictly into Vertical and Lateral involvement respectively.

5.3 Test Of Propositions

5.3.1 Proposition 1

(The relationship between Novelty and Complexity of purchase)

Pine (1993) emphasized that, "in the world of today's competitive business, there is an increasing demand for customized products, driving companies to constantly expand their offered product variety, often with the effect of introducing more complexity into the

product families". Wilson et al.(2010); Ulrikkeholm et al.(2014), therefore added that, the variety of products that offer customers something they are willing to pay for is good complexity; that which they will not pay for, or pay enough for is bad complexity. Naumann and Kim (1986) researched and found out that, "non-routine production technologies result in low levels of purchasing structure".

Moreover, Chung et al. (2009); Javed & Hasnu (2013), argued that, "people while purchasing food and other items are very sensitive to extrinsic information". Ugaldo and Lee (1998); Javed & Hasnu (2013), added that, "the consumers perceive products on the basis of external and internal features of the product". "The extrinsic cue includes the brand name of the product, design or color and products' country-of-origin" (Verlegh & Steenkamp, 1999; Javed & Hasnu (2013). According to Marchant and Ward (2003); Javed & Hasnu (2013), "these extrinsic cues are helpful in the decision making of customers."

This is to emphasize the complexities in relation to novelty of purchase, arising from product features, specifications, techicalities and consumer benefits. This section of the work considers a multi-variate approach to measuring the key associations between the variables in the Buying Center concepts in the quest to test for afore-mentioned propositions in the study. The first proposition stated in this research work was that, "Novelty of purchase is positively related to the Complexity of purchase". This is going to be examined with respect to the interview results.

Table 8: A demonstration of the The association between Complexity and Novelty of purchase

Companies	Novelty Of	Complexity Of
	Purchase	Purchase
	Assessment (High/Medium/Low)	
First Sky Limited		
	High	High
Blue Skies Company Limited		
	High	High
Renny Foods Limited		
	High	High
Bediako Memorial Institute Limited		
	Low	Low
St. Joseph Hospital		
	Low	Low
Zoomlion Ghana Limited		
	Medium	Low

Table 8 depicts the multivariate assessement independent variables to find out the association between Complexity of Purchase and Novelty of purchase. It is observed that, there is a positive association between the two variables for the industry groups (categorized into Service-Providers and Service-Producers). The exception seen is with regards to Zoomlion Ghana Company Limited, an organization that naturally engages in all two types of involvements (Lateral and Vertical) in its Buying Center practices. As a result, it is seen that there is moderate Novelty of Purchase corresponding to a low level of complexity of purchase. The remaining five firms however, follows a positive relationship between complexity and novelty of purchase. The higher the novelty of purchase, the higher the complexity. Nevertheless, the high scores are recorded mostly for Service-Producers and low scores for Service-Providers. These are further elaborated in the subsequent paragraphs. It has been earlier mentioned that, complexity of purchase for the purpose of this study, is measured by way of examining the type of product (standard or customized), uses indicators such as: technology involved, initial or a repeat purchase, expertise knowledge, ease of installation and after-sales requirements.

First Sky Limited considers its purchase decision as complex when the purchase decision is to be taken on a substance that is outside the core mandates of their operations. As a result of this, only the key Procurement Manager, respective Zonal Manager and Accountant make up the Buying Center and the final approval for purchases is granted by the CEO. Where contracts are outside the core manadate of normal operations, advanced technology and expertise knowledge will be required in concluding purchase decisions. This therefore confirms the complexity of the purchase decision during such periods in the organization. First Sky Limited makes new purchase decisions as and when needed and mostly group purchases (where its sub companies buy together in one bulk) constitute new purchases. Group purchases usually involve unique products they may or may not be familiaiar with yet they require huge investments. In such purchases, both Management and departments are involved in taking the decisions but there a major percentage of Management involvement than departments.

Blue Skies Company Limited on the other hand, is of the opinion that, complexities in purchase decisions are inevitable in their operations due to the kind of equipment and machinery involved in their processes. Spare parts specification and other machinery

features for their processes enhance the complexity of purchase decisions. It is also not an easy task to maintain these machinery or even seek for after sales services as it all comes with a cost. This therefore has the capability of increasing the cost of operations for the organization. Hence, only CEO and the Procurement Department are responsible and accountable for handling such complexities. The company makes new purchases when the demand is outside what has been forecasted. This therefore introduces unfamiliar products to the organization which has great impact on the organization with regards to investment It is therefore the sole responsibility of CEO and the Procurement requirements. Department to conclude on the new purchases. Both Management and Departments are involved in taking the decisions but there is a major percentage of department involvement than Management in its Buying Center practices. To Renny Foods, complexity of purchase is encountered whenever standards are defaulted. This is because, they have set standards and benchmarks that are strictly adhered to for the Cereal Mix and formulate purchase decisions monthly. Any defaults therefore calls for adjustment of the system, hence, making the purchase decision complex.

Additionally, the firm must therefore procure the necessary machines and adopt very efficient skills in correcting such defaults. The CEO and the field staff form the Buying Center and they are responsible for managing such complexities. The company takes new purchase decisions as and when defaults standards occur. This may have great impact on the organization when it affects a lot of the batches of the products. Information on such challenges are known to Management and those of the field experts. As such, both Management and departments are involved in taking the decisions but there a major percentage of department involvement than Managements.

Bediako Memorial Institute Limited also described complexity of purchase with regards to the availability of finance to carry out the purchase. When funds are available, the purchase decision is not complex and the otherwise due to bureaucratic procedures is true. Purchase decisions are therefore concluded and approved by Top Management after consulting the respective teachers and departments. Novelty of Purchase is also dependent on the item in need. As a result, both Management and departments are involved in taking the decisions but there a major percentage of Management involvement than departments. Majority of such products are unfamiliar to the organization yet, they can be associated with the line of

operations as a result of the free flow of information being shared between Management and responsible Buying Center members.

Zoomlion Ghana Limited also consider a purchase decision as complex when the laid down protocols are not followed. To every requisition, there are set protocols it must follow. A breach of this regulation makes the purchase decision complex to conclude. Hence, it behooves on the Stores Manager, Respective Department and CEO to finalize decisions to remedy the complexities. As above mentioned, Novelty of purchased is measured by considering the experience and information the Organization has with the new product, the uniqueness of the purchase, familiarity with the product, investment requirements, order size and impact on the Organization either short or long term. Zoomlion also faces new purchases as and when requisitions are received or from unforeseen contingencies that threatens their operations. Interestingly, there is an equal level of Management and department involvement in concluding on new purchases.

Non-availability of funds due to bureaucratic delays is a key factor to what is defined as complexity of purchase by St. Joseph Hospital. The Management board therefore meet to decide and conclude on purchases to be made aimed at rendering quality services. To St. Joseph Hospital, new purchases show up as and when requisition of new items are raised. There is therefore a high percentage of Top Management involvement than departments as a result of the delicate nature of those health equipment, the level of quality standards being required and the impact on the image of the Hospital.

When asked about Management and Departments involvement in new purchase decisions, First Sky Limited scored 6 for Management involvement and 4 For Departments involvements in its Buying Center (where 6 was the highest score and 1 was the lowest). This shows that Management is massively involved when there is novelty of purchase. The reason being that, it is a group purchase which is not usual of their normal purchase procedures, which is done as and when needed. This feature therefore introduces complexity of purchase in its Buying Center Structures which usually crops up when it undertakes any purchase activities out of its core mandate, such as group purchase. The more the company engages in activities outside their core mandate, herein referred to as new purchases, the more complex the purchase decision procedures become in uts Buying Center. Thus, with

regards to First Sky Limited, a Service-Producing Private Organization, complexity of purchase and novelty of purchase are positively related.

Blue Skies Company Limited also scored 4 and 6 for Management and Departments involvements in its Buying Center respectively. This showed that Departmets are greatly involved when new purchase decisions are concerned. This is because, to Blue Skies Company Limited, the people at the Departmental level are closer to the production procedures and can be able to accurately tell exactly what is needed to be purchased for a continuous flow of their operations. They experience novelty of purchase as and when needed since customer demand and expectations are volatile by nature. These customer characteristics eventually increase the complexities involved in managing novelty of purchase. To Blue Sky Company Limited, complexities are inevitable. Thus, dynamics in demand, (a major cause of complexity of purchase), has a positive association with novelty of purchase (which is also spontaneously undertaken). Hence, we can conclude from this evidence that, complexity and novelty of purchase are positively related in the Buying Center of Blue Sky Company Limited – a Service-Producing Private Organization.

Renny Foods Limited faces complexities when there is default in standards used. It has a high score of 6 to Department involvement and 4 to Management involvement in its Buying Center. This is because, those at the departmental level have greater influence on the Buying Center. However, novelty of purchase of purchase occurs when defaults in the system occur and this is also the source of the complexities in the purchase decisions of the organization. We see here that, there is a positive relation between complexity of purchase and novelty of purchase with regards to the Buying Center of Renny Foods Limited - a Service-Producing Private Organization.

Bediako Memorial Institute Limited also grants a score of 6 and 4 to Management and Departments invovements respectively in its Buying Center. It therefore employs vertical involvement a lot in its Buying Center structure. To Bediako Memorial Institute Limited, the nature of an item, (where it has not been purchased before), invokes the complexities in its Buying Center decisions. Funds are not readily available for such challenges because they are usually not included in the running budget. Such delays in the release of funds increases the complexity of its purchases decisions. Thus, the positive association between

novelty of purchase and complexity of purchase is also confirmed from the interview results of Bediako Memorial Institute Limited – A Service-Providing Private Organization.

St. Joseph Hospital experiences novelty of purchase when such purchase decisions are new yet, important to the delivery of quality services as and when requisitions for new items are generated. It gives a score of 6 and 2 to Management and Department involvement in the Buying Center respectively. Approval to finance new purchases must go through laid down structures and finally approved by the CEO. This causes undue delays in the release of funds for such purchases. Managerial procedure delays of funds for purchases as and when requisitions for new items are raised, activate the complexity of the purchase decisions as also seen in Bediako Memorial Institute Limited. Thus, it affirms the proposition that complexity and novelty of purchase are positively related for a Service-Providing Private Organization, St. Joseph Hospital.

Finally Zoomlion Ghana Limited follow standards for the procurement procedures and decisions. Novelty of purchase comes in when the item to be purchased does not follow the laid down procurement structures and procedures. These may usually stem from emergencies and requisition for new items outside what is known to the organization for its operations. These have the potential of interrupting the procurement structures laid down making the purchase decision complex. Therefore novelty of Purchase as experienced by Zoomlion Ghana Limited, a Service-Providing Private Organization, has a positive association with complexity of purchase in its Buying Center. From the above scenarios, we see highlights of the positive association between complexity and novelty of purchase for both Service-Producers and Service-Providers. As such, these evidences confirm the first proposition that, "Novelty of purchase is positively related to the Complexity of purchase".

5.3.2 Proposition 2

(The association between the importance of purchase and vertical involvement).

Hanssens and Weitz (1980) revealed from their studies of industrial advertising that, "a factor which affects buying behavior of individuals was labelled as importance of purchase". A study of the purchasing patterns of the offshore drilling industry in Norway, (Reve and Johansen, (1982); McQuiston, 1989), "found importance of the purchase decision to the organization to be one of the factors that affected both the number of participants and their

behavior throughout the purchase process". The higher the importance of the purchase decision to the profitability and productivity of the Organization, (whether Service-Providers or Service-Producers), the greater the vertical involvement. This is because, "vertically coordinated ties are purportedly effective responses to the uncertainties of fast-changing purchasing environment" (Buvik and John, 2000). Also, the less important or non-significant impact the purchase decision has on the performance, profitability and image of the Organization, the lesser the vertical involvement. Pae et al. (2002) and Woodside and Biemans (2005) examined "how Buying Center structures as well as Top Management participation and/or support during the purchase process impact the intra organizational diffusion of innovations".

"When Top Management involvement is intensive as in the case of vertical involvement in a Buying Center, then the nature of the Organization observes centralization of its processes at most. Centralization here refers to the distribution of formal control and power within an Organization. In Organizations with low degree of centralization, the distribution of power and control is more decentralized" (Lau, Goh & Phua, 1999). These researchers also found "a positive relationship between the novelty of purchase and the degree of centralization" (Lau, Goh & Phua, 1999). This section, however, addresses the second proposition in this paper which is: "the importance of purchase has a positive link with vertical involvement in the Buying Center".

Table 9: A demonstration of The association between the importance of purchase and vertical involvement

Companies	Importance Of Purchase	Vertical involvement	
	Assessment (High/Medium/Low)		
First Sky Limited			
	High	High	
Blue Skies Company Limited			
	High	Low	
Renny Foods Limited			
	High	Low	
Bediako Memorial Institute			
Limited	Low	High	
St. Joseph Hospital			
	Low	High	
Zoomlion Ghana Limited			
	High	Medium	

Table 9 shows a tabulated assessment of the result from analyzing the relationship between importance of purchase and vertical involvement, having in mind that it seeks to also test the second proposition above-mentioned. It is observed that, for three firms, there is a positive relationship between Importance of purchase and vertical involvement. Two however show an inverse relationship. This inverse relationship is because, for those Service-Producing companies, majority of the purchase decisions are taken on departmental basis (as a result of expertise knowledge and skills) and final approval is received by the CEO. These associations are further explained as follows. Importance of Purchase is measured by assessing the proportion or the volume of purchases, the productivity effect of the purchase, the opportunity cost for the product, Management involvement, formalities involved, capital turnover and other investments needed, impact on profitability, Organizational policies and culture and effect on firm's competitiveness.

Table 9 reveals the various views on Importance of purchase by selected private Organizations in Ghana. It is clearly seen that, vision and mission of Organization, cost of purchase, volume of trade and Management involvement are vital elements that all Organizations take note of before taking purchase decisions. This shows the level of importance of the purchase. Additionally, Purchases are important to First Sky Limited because needs are to be satisfied. To Blue Skies Company Limited, purchases are importance because they must respond to customer demands, in addition to a careful consideration of all the indicators of importance of purchase above-stated.

Renny Foods view purchases as important because the company has a responsibility to meet its monthly economic re-order level which eventually has greater effect on the profitability of the organization. Purchase by Bediako Memorial Institute Limited is important because, the purchases fall within budgets. There is therefore no misallocation of resources and this boosts the profitability of the firm's investments. Purchases is key to St. Joseph Hospital because, it facilitates the provision of quality services rendered to clients which is in line with the policies of the Organization. Zoomlion Ghana Limited views procurement as important as it satisfies requisition received and these formalities yields better turnover on investments. Procurement is therefore a key area which influences the entire operations of organizations.

In assessment of the interview results, numbers were attached to the choice of involvement in the Buying Center (a 100% rating of which the highest is 100% and lowest is 0%). It is seen that, First Sky Limited, St. Joseph Hospital and Bediako Memorial Institute Limited have vertically involved Buying Centers, with two out of the three being Service-Providers. The least percentage of those who adopt vertical involvement in the Buying Center is 50% whereas the highest percentage is 80%. Blue Skies Limited and Renny foods Limited on the other hand, are Service-Producers—which have laterally involved Buying Center structures. The lowest percentage of those who adopt Lateral involvement in the Buying Center is 50% whereas the highest percentage is 90%. Zoomlion Ghana Limited however observes all the two types of involvement in the Buying Centers and this is because of its laid down processes and procurement systems that are strictly adhered to. It therefore scores 50% for both Lateral and Vertical involvement in its Buying Center.

The results from the interview relating to importance of purchase revealed some very interesting facts and figures. As earlier stated importance of purchase takes into considertaion, the misison, vision, the volume of purchases, the productivity effect of the purchase, the opportunity cost for the product, Management involvement, formalities involved, capital turnover and other investments needed, impact on profitability, Organizational policies and culture and effect on firm's competitiveness.

The interview ratings for importance of purchase was a scale from 0% to 100%, where 100% was the most important and 0% was less important. It was however observed that, all six organizations (both Service-Producers and Service-Providers) assigned a 100% rating to importance of purchase, factoring in all the indicators as earlier mentioned. This shows that, Management places so much importance and urgency on Buying Center purchase decisions. Thus, Vertical involvement, (which measures the level of involvement of management in the Buying Center structure), has a positive relation with importance of purchase. This evidence also confirms the second proposition above mentioned. From the above scenarios, we see highlights of the positive association between complexity and importance of purchase for both Service-Producers and Service-Providers. As such, these evidences confirm the second proposition that, "the importance of purchase has a positive link with vertical involvement in the Buying Center".

5.3.3 Proposition 3

Comparison of the complexity of purchase across Service-Providers and Service-Producers

Netemeyer et al. (1991) noted that, "with globalization, made-in-different-countries-products are available in the market and now customers have the wide variety of choices to select the products from domestic and foreign products". However, O'Cass (2000) mentioned that, "products mean different things to different people and consumers form differing attachments to them". In the same vein, the tangible products of Service-Producers are different from the intangible products of Service-Providers.

Webster (1979) stated that, "complexity in the buying process reflects several factors: the influence of formal organizations, the number of persons involved, the complex financial and technical factors, the environment in which the firm operates and the frequently large sums of money involved". For the purposes of this paper, the firms are grouped into Service-Providers and Service-Producers.

"The optimal level of complexity in a product portfolio can be described as achieved when the combination of diminishing sales return and increasing costs due to complexity are taken equally into account" (Closs, Jacobs, Swink and Webb, 2008; Ulrikkeholm et al. 2014). Gronhaug (1975) discovered that, "the complexity of the buying task was correlated positively with the amount of information sought to make".

Kirsch and Kutschker (1982); McQuiston (1989), "derived a path diagram of what they title 'transaction episode'; they found that the complexity of the decision situation affected the number of participants as well as the frequency of conflicts between them". This section however tests the proposition that, "Service-Producers have higher complexity of purchase than Service-Providers".

Table 10: A demonstration of the Differences in complexity of Purchase between Product groups of Service-Producers and Service-Providers

Industry Groups	Category	
		Complexity Of
		Purchase
First Sky Limited		
-	Service-Producer	High
Blue Skies Company Limited		
	Service-Producer	High
Renny Foods Limited		
	Service-Producer	High
Bediako Memorial Institute Limited		
	Service-Provider	Low
St. Joseph Hospital		
_	Service-Provider	Low
Zoomlion Ghana Limited		
	Service-Provider	Low

Table 10 depicts a table on the differences in complexity of purchase between Service-Producers and Service-Providers. We observe a positive association between the two variables for all the industry groups. Yet, Service-Producers record a higher complexity as compared to Service-Providers. These are further explained in the subsequent paragraphs. However, Complexity of purchase has been earlier explained under the first proposition above-mentioned.

The interview results showed that First Sky Limited (Service-Producer), uses routine construction products, (example, sand, stones, cement, iron rods, wood, etc), which are purchased in bulk quantities due to the job demands. Due to the quality expectations and expertise knowledge on output (with associated complexities), the company uses the same size of its Buying Center to handle such purchase decisions. The expertise knowledge requirement comes in to take care of any complexities that the organizations may face in concluding on purchase decisions. Such products are not the same as those used by Service-Providers. As such, it confirms the proposition that, every industry and the nature of products it uses in its operations with their associated challenges and complexities – especially from Group purchases. Blue Skies Company Limited (Service-Producer), also uses fresh cuts fruits as its products. These are perishable in nature. For this reason, purchases are made based on demand. The delicate nature of these products increases the complexities of its purchase decisions. This renders complexity of purchase inevitable to the

Service-Producer. The products of Blue Skies Company Limited can therefore be said to have a positive relation with complexity of purchase on its Buying Center.

Renny Foods Limited (Service-Producer), also deals in Cereal Food mix. Its purchase decisions are made monthly and follows quality standards from the requirements of Ghana Standards Board. Complexities arise when these production procedures and systems are defaulted. However, we cannot let go of the fact whenever these laid down procedures are defaulted. Thus, the complexity becomes the next issue to be addressed by the company since the error must be corrected. This requires expertise knowledge and other technicalities. Thus there is a positive association between its product group and complexity of purchase Bediako Memorial Institute Limited (Service-Provider), also uses educational products in the delivery of quality and excellent service. These are purchased based on budgetted items. Complexity of purchase comes up when new item to be purchased is out of budget. Such items have the potential of delaying the release of funds because they are not part of the core mandate of the school as well as the bureaucratic measures encountered in order to receive approval for funds for designated projects. The nature of item (product group) and the complexity of purchase are therefore positively related.

St. Joseph Hospital (Service-Provider), also uses Health Service related materials in delivering quality services to its clients. They do such purchases based on requisition to ensure quality standards are not compromised. Management Board must always sit and deliberate on such purchases decisions before approval and funds are released. These bureauveratic processes delay the release of funds to purchase the health related materials. We can therefore confirm the proposition that there is a positive link between Product groups (of both Service-Producers and Service-Providers) and complexity of purchase. The final organization under the third proposition is Zoomlion Ghana Limited, a Service-Provider into sanitation projects. Its products are mainly cleaning materials, which is purchased as and when requisitions are generated. These requisitions follow laid down standards which must be strictly adhered to. Whenever these procedures are not followed, it increases the complexity of purchase decisions as requisitions do not get to the right and responsible persons in its Buying Center at the right time to influence the purchase decisions. We can therefore conclude that product group of this Service-Provider is positively linked to the complexity of purchase in the Buying Center.

From the results above, we also saw that two Service-Providing Organization (St. Joseph Hospital, Bediako Memorial Institute Limited) and a Service-Producing Organization (First Sky Limited) adopt vertical involvement due to the nature of its products. Two other Service-Producing organizations (Blue Skies Company Limited and Renny Foods Limited) also adopt Lateral involvement by virtue of the nature of its products. Zoomlion Ghana Limited however practices all two types of involvement as and when it is needed. We see here that, all the industry groups have their respective products.

However, we find some similarities in the tangibility of product for the Service-Producing Organizations. Also, the non-tangible products (which is mainly services) has similarities for all the Service-Providers. By this, we are able to differentiate and categorized products according to their respective industry groups. Product groups are therefore dependent on the type of industry group they belong. From the above-mentioned, we see highlights of the positive association between complexity of purchase for both Service-Producers and Service-Providers. These evidences confirm the third proposition that, "Service-Producers have higher complexity of purchase than Service-Providers".

5.3.4 Proposition 4

The effect of Novelty of purchase on Vertical involvement

"Novelty of purchase increases the number of players in the decision making and the increased participation requires more communication and information search in the buying process" (Johnston & Bonoma, 1981). As earlier menttioned, novelty of purchases introduces new challenges to Management yet they are required to deliver efficiently. This calls for in-depth research, communication and research such that, the right choices are made for the purchase decision to be effective.

Lau, Goh and Phua (1999) confirmed this by stating that, "purchasing agents need more information since it activates the Buying Center's various roles and the aforementioned prescribed information gathering mechanism of each role resulting in a more extensive information search. They added that, the degree of novelty of the purchases therefore increases the information search". Fitzsimmons et al. (1998) argued that, "services directed at the core business of the buying company are associated with increased risk as a result of

which higher level Management will be involved in the purchase decision". Additionally, Reese and Stone (1987), "found a statistically significant relationship between buyclass and vertical involvent". Thus, the relationship between Novelty of Purchase and Vertical Involvement is analysed in the subsequent paragraphs:

Table 11: A demonstration of the effect of Novelty of Purchase on Vertical Involvement.

Companies	Novelty of Purchase	Vertical involvement	
	Assessment (High/Medium/Low)		
First Sky Limited			
	High	High	
Blue Skies Company Limited			
	High	Low	
Renny Foods Limited			
	High	Low	
Bediako Memorial Institute			
Limited	Low	High	
St. Joseph Hospital			
	Low	High	
Zoomlion Ghana Limited			
	Medium	Medium	

It is important to state here that, Novelty of purchase and vertical involvement have been previously explained under the first and second propositions respectively. However, in this section, we seek to find the association between novelty of purchase and vertical involvement. It is observed in Table 11 that, with one of the Service-Producing firms, (First Sky Limited), shows a positive relationship between Novelty of purchase and Vertical Involvement. The higher the novelty of purchase, the higher the vertical involvement and vice versa.

However, the remaining two Service-Producing firms show an inverse relationship between the variables. This is because, these firms engages the Departmental or Lateral Involvement at most. Management is involved to only approve financial and other critical purchase decisions. Thus, Management handles the complexities that come along with new purchase decisions. Yet, the bulk of decisions is handled on departmental basis due to their expertise and technical advantages.

With Service-Providers, an inverse relationship is also observed in the relationship between the variables. This is because from the interview results, it is usual that Service-Providers adopt vertical involvement in their Buying Centers. They do not face the kind of complexities Service-Producers face. Nevertheless, based on the delicate nature of their intangible services, Management involvement is key for the success of their operations. Services must be reliable, flexible, cost effective and dependable.

Management must therefore pay keen attention to these benchmarks to ensure that they thrive in the business terrain and maintain a competitive edge with its competitors. As a result, Management is mostly involved in the purchase decisions in the Buying Center. Therefore, we can probably conclude that, there is a positive relationship between Novellty of purchase and Vertical involvement.

5.4 Summary

This Chapter analyzed empirical findings and tested the propositions. Evidences from the interview guide were used to confirm the four propositions put forth. The next Chapter presents a detailed summary, discussions, managerial implications, limitations and conclusion of the research work for future work references.

CHAPTER 6

DISCUSSIONS, IMPLICATIONS, LIMITATIONS AND CONCLUSION

6.1 Introduction

This presents the final Chapter of the research work. Previous Chapters have considered the Introduction, Theoretical Perspective, Research Model and Propositions, Research Methodology, Empirical Findings and Test of Propositions. This Chapter therefore, is about the discussions, managerial implications, research limitations, proposal for future research work and conclusion.

6.2 Discussions

6.2.1 Summary of findings and discussions

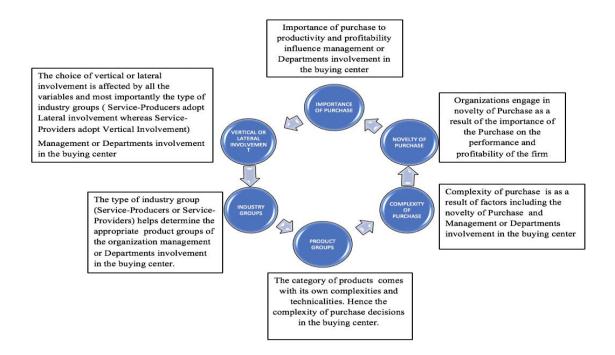
According to Frederick (1934), "the primary objective of marketers is to contact the man who actually brings about the purchase decision, regardless of his position or title". This data collation was as a result of a face-to face interview with respective Procurement Managers of the various industry groups.

The choice of Vertical or Lateral Involvement is affected by all the variables, importantly, the type of industry groups (as it was observed that Service-producers mostly adopt Lateral Involvement whereas Service-Providers adopted Vertical Involvement). The type of industry group (Service-Producers or Service-Providers) helps determine the appropriate product groups of the organization.

The category of products comes with its own complexities and technicalities. Hence the complexity of purchase decisions in the Buying Center. Complexity of purchase is as a result of factors including the novelty of Purchase. Organizations engage in novelty of Purchase as a result of the importance of the Purchase on the performance and profitability of the firm. Also, the importance of purchase to the productivity and profitability of the organization influence Management or Departments involvement in the Buying Center.

This is summarised in the table below and the relationship between the variables in the Buying Center concept are emphasized:

Figure 3: Summary discussions on the variables of the Buying Center



It is seen from the results of the interview, as above shown in table format, that majority of Service-Providers adopt vertical involvement in the Buying Center. The Service-Producers, for the benefit of this study, mostly engage Lateral involvement in the Buying Center. Also, complexities of the purchase decisions in Buying Centers for all the industry groups were as a result of Organizations undertaking new purchases (that is modify rebuy) or operating outside the core mandate of organizations. The determination of item and its required specification poses a major challenge and increases complexity of purchase in the Buying Center.

It gets to a point in the purchase process of the Organization, where it is necessitated that purchases are done out of the core mandate of the Organization. This may be due to a new task or contract awarded to the Organization which is quite unusual, yet the firm is expected to deliver. Complexities therefore crop up and there is the need to have it managed by responsible persons. Complexity of purchase decisions and novelty of purchase therefore have a positive association between them. Satisfying the dictates of a requisition for an already existing product or service is much easier than handling demands out of emergencies, technicalities of products or having to re-fix a defaulted system hence the challenge of complexity of purchase in the Buying Center processes.

It was also seen that, Management and Departments attribute great importance to purchases with careful considerations given to the vision, mission, cost of purchase, volume of trade, Management involvement and Organizational culture. All these have major influence on finalizing a purchase decision for any type of industry group. There is therefore a positive relationship between the importance of purchase and vertical involvement (this entails the involvement of top managers, CEO, Board of Directors and certain key high profiled persons in the Buying Center purchase decisions).

Additionally, these categories of industry groups are from diversified fields using varied products to achieve their missions and vision of operations. As previously stated, product specification, after-sales services and other technicalities which facilitates quicker decision making in the Buying Center is a key source of complexities of the purchase. For Service-Providers who do not necessarily deal with heavy machinery and tools, the bureaucratic structures and processes of getting services offered, increase the level of complexities in the Buying Center. In this regard, we can trace an association between product groups and complexity of purchase. Customer satisfaction, quality service, excellence delivery and performance, which are the ultimate of most Service-Providers, are indicators that cannot be easily weighted. As a result, Service-Producers have higher complexity of purchase than Service-Providers.

Moreover, one cannot mismatch the products of Service-Providers for that of Service-Producers. This will create problems for the Buying Center. Also, the members of the Buying Center will not be effective and efficient in the discharge of their obligations. Each industry group have their respective line of products. Service-Providers consider rendering quality, reliable services at affordable cost with their ultimate being customer satisfaction. Service-Producers on the other hand, take a look into making available, the right tools and processes at the right time and places aimed at eventually meeting customer demands with utmost satisfaction.

Though they all aim at satisfying customers, they use different approaches and systems as seen in the results from the observations above-mentioned. This must be well noted by the Buying Centers of these industry groups in the pursuit of efficient performing Buying Centers. The product group is therefore dependent on the nature or type of industry groups since every industry and its respective product requirements. There is therefore a clear cut

association can be seen with the Buying Center variables as they are independent for the successful operations of the Buying Center, whether it relates to Service-Providers or Service-Producers.

The choice of a type of involvement in the Buying Center is not restricted to only a one-off selection of either Vertical or Lateral Involvement. Instead, a thorough consideration of the various independent variables in the Buying Center is key to a successful selection. This is because, the type of involvement is interdependent on each other though they function differently. The rationale of this research work was to examine the association between Vertical involvement and Lateral involvement using Buying Center variables.

The research problem this area of study sought to address included: Examining how complexity is related to the novelty of purchase, assessing the relationship between importance of purchase and vertical involvement, comparing the complexity of purchase Service-Providers and Service-Producers. From the operationalization of the variables in the Buying Center, the measures of the various variables in the Buying Center were examined. Four propositions were also tested in the research work following the analysis of the empirical findings.

All observations and confirmations were retrieved from the interview guide following collation of data from respective Provurement Mangers of the selected Private Organizations. These assessments help to appreciate the linkages between the variables in the Buying Center. We cannot be definite in saying an organization must be restricted to only one type of involvement in its Buying Center processes. This is dependent on the interplay of these dependent and independent variables as discussed in this paper. The two types of involvement are complementary since the circumstances under which the purchase decision is to be taken, after thoughtful considerations of this variables, is key to the selection of a type of involvement.

An organization (whether a Service-Provider or Service-Producer) can intermittently run its Buying Center on both types of involvements, as practiced by Zoomlion Ghana Limited, or simultaneously switch between the two types as and when needed. There are no strict rules about the selection of a type of involvement. It is mainly dependent on the prevailing conditions revolving round the product groups and industry groups, complexity, novelty and

importance of the purchase. Bello and Lohtia (1993) supports this by showing that, "participation of different specialization areas and functions changes during the buying process and differs between different buying situations".

6.3 Managerial Implications of study

This research work is an arm's length of previous studies in Organizational behavior and Business-to-Business purchase decisions. However, the focus of this paper is to compare the Lateral and Vertical Involvement in the Buying Center based on the associations between independent variables of the Buying Center concept. A Multiple Case Studies approach from selected private Organizations in Ghana was adopted for data collation and generation of propositions. There are several findings—that is worth considering and recommended for Managers, especially Procurement Managers, of various industry groups for an efficient and effective Buying Center operations. First of all, Managers must note that here are no hard and fast rules or restrictions about the selection of a type of involvement. Vertical and Lateral Involvement are interdependent and a selection of any of them is also dependent on the prevailing conditions revolving round the product groups and industry groups, complexity, novelty and importance of the purchase.

A good Buying Center is one that is able to fish out which type of involvement must be adopted at what time, and has the greatest positive impact on the productivity and profitability of the organization. Finally, it must be noted that, this area of study is a contribution to the extant literature on the Buying Center and serves as a reference for future research work. Management is therefore implored to give much attention to these key areas including product groups and industry groups (Service-Producers and Service-Providers), complexity, novelty and importance of the purchase in order to continually have well-functioning Buying Centers. In sum, the type of involvement selected in a Buying Center with its associated impact on the operations of the organization is key to the effectiveness and efficiency of the Decision-Making Unit.

6.4 Limitations of the study

A major limitation in this multiple case studies approach is the sample size and the limited number of dependent and independent variables being compared. A survey of six (6) companies is not representative enough for a whole country like Ghana looking at the commercial nature of the country. As a result of this limitations, we cannot use the findings

to make generalizations and conclusions on performances of private Organizations worldwide. The effectiveness and efficiency of a Buying Center can also not easily be weighted as a result of the small sample size. Moreover, the research coverage was only limited to Ghana-West Africa and specifically to only private organizations with a sample size of six. As such, we cannot use the results to serve as a worldwide benchmark for all Buying Centers across the globe since this is limited in scope and coverage.

6.4.1 Proposals for Further research

Due to the limitations of this area of study, it is recommended that future research take a look into the Buying Center of public organizations with increased number of sample size. Also, future research must consider a wider scope and coverage. The variables used in this work included two dependent variables and five independent variables in the Buying Center concept. As such, future research work must look at expanding the number of variables under consideration. Buvik (2001) is of the view that, "when we compare current literature and research within the purchasing and marketing disciplines, one striking observation is the scant use of reference to a basic theoretical frameworks and empirical research findings in the purchase field. This might erode the validity of purchasing research as well as weaken its academic status". Thus, it is suggested that, future work can consider increasing the number of variables under review for evaluation and also adopt a different dimension for a critical analysis of the Buying Center concept.

6.5 Conclusion

"The Buying Center's role in providing value in the Supply Chain and its participants has assumed an increasing level of importance given the strategic significance of Supply Chains to organizational success" (Hult, Ketchen and Nichols, 2002; Hult et al. 2004). This field of study implores qualitative measures and multiple case studies of private Organizations in Ghana to research on the topic, 'Novelty, Complexity, Importance, Products and Industry groups as Causal Determinants of the Buying Center Involvement (A multiple case study of Private Organizations in Ghana)'. By so doing, four propositions were made, and we conclude by saying that, the choice of either Lateral or Vertical involvement is dependent on the prevailing conditions revolving the product groups and industry groups, complexity, novelty and importance of the purchase. Nevertheless, an efficient and effective Buying Center is able to identify and adopt to a type of Buying Center involvement that generates greatest positive impact on the productivity and profitability of the organization.

7.0 REFERENCES

- Anderson, P. F. (1983). Marketing, scientific progress, and scientific method." Journal of marketing 47.4: 18-31.
- Anderson, Paul F. and Terry M. Chambers (1985), "A Reward/measurement Model of Organizational Buying Behavior," Journal of Marketing, 47 (Spring), 7-23.
- Andy Wood, J. (2005). Organizational configuration as an antecedent to Buying Centers' size and structure. Journal of Business & Industrial Marketing, 20(6), 263-275.
- Avan, B. I., & White, F. (2001). The proposition: An insight into research. JPMA, 51(49).
- Axelsson, B., & Wynstra, J. Y. F. (2002). Buying business services. John Wiley and Sons Inc.
- Bacharach, S. B., & Aiken, M. (1976). Structural and process constraints on influence in organizations: A level-specific analysis. Administrative Science Quarterly, 21(4).
- Backhaus, K., & Voeth, M. (2015). Handbuch Business to Business-Marketing. Grundlagen, Geschäftsmodelle, Instrumente des Industriegütermarketing, 2.
- Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. The Qualitative Report, 13(4), 544-556.
- Bellizzi, J.A. (1981): Organizational Size and Buying Influences, in: Industrial Marketing Management, Vol. 10, No. 1, pp. 17-21.
- Bello, D.C. & Lohtia, R. (1993). Improving trade show effectiveness by analyzing attendees. Industrial Marketing Management, Vol 2, pp. 311-318.
- Benton, S., van Erkom Schurink, C., & Desson, S. (2008). An overview of the development, validity and reliability of the English version 3.0 of the Insights Discovery Evaluator. London: University of Westminster's Business Psychology Centre, 1-10.
- Berkowitz, M. (1986): New Product Adoption by the Buying Organization: Who Are the Real Influencers?, in: Industrial Marketing Management, Vol. 15, No. 1, pp. 33-43.
- Berlo, D. K., Farace, R. V., Monge, P. R., Betty, S. A., & Danowski, J. A. (1972). An analysis of the communication structure of the Office of Civil Defense. Contract No. DAHC-2-70-C-0399.
- Blau, J. R., & Alba, R. D. (1982). Empowering nets of participation. Administrative science quarterly, 363-379.
- Boier, R. (2010). Multi-dimensional Understanding of the "Product" in the Marketing Decision Process. Studies and Scientific Researches. Economics Edition, (15).

- Boier, R., & Țimiraș, L. C. (2006). Cercetarea de marketing. Editura Performantica Iasi.
- Buvik, A. (2001). The industrial purchasing research framework: a comparison of theoretical perspectives from micro economics, marketing and organization science. Journal of business & Industrial marketing, 16(6), 439-450.
- Buvik, A., & John, G. (2000). When does vertical coordination improve industrial purchasing relationships? Journal of Marketing, 64(4), 52-64.
- Campbell NCG (1985) An interaction approach to organizational buying behavior. J. Bus. Res. 13, 35-48.
- Cardozo, R. N., & Cagley, J. W. (1971). Experimental study of industrial buyer behavior. Journal of Marketing Research, 8(3), 329-334.
- Chung, C., Boyer, T. and Han, S. (2009), "Valuing Quality Attributes and Country of Origin in the Korean Beef Market", Journal of Agricultural Economics, Vol. 60 No. 3, pp. 682-698.
- Cibangu, K. S. (2012). Qualitative Research: The Toolkit of Theories in the Social Sciences. In Asunción López-Varela (Ed.). Theoretical and Methodological Approaches to Social Sciences and Knowledge Management, pp. 95–126. Intech.
- Closs, D.J., Jacobs, M.A., Swink, M. and Webb, G.S. (2008). Toward a theory of competencies for the management of product complexity: Six case studies. Journal of Operations Management, 26: 590-610.
- Creswell, J. W. (2009). Research Design: Qualitative, Quantitative and Mixed Method Approaches (3rd Ed.). Los Angeles: SAGE Publications.
- Crow, L.E.; Lindquist, J.D. (1985): Impact of Organizational and Buyer Characteristics on Buying Center, in: Industrial Marketing Management, Vol. 14, No. 1, pp. 49-58.
- Daly, L. E., Geoffrey J. B. & McGillivray, J. (1991) Interpretation and Uses of Medical Statistics. Fourth edition. Blackwell Scientific Publications, Oxford.
- Dawes, P. L., Dowling, G. R., & Patterson, P. G. (1992). Factors affecting the structure of Buying Centers for the purchase of professional business advisory services. International Journal of Research in Marketing, 9, 269-279.
- Dawes, P. L., Lee, D. Y., & Dowling, G. R. (1998). Information control and influence in emergent Buying Centers. Journal of Marketing, 62(3), 55-68.
- Dawes, P. L., Lee, D. Y., & Dowling, G. R. (1999). Informal information control in complex technological purchase situations. The Journal of High Technology Management Research, 10(2), 377-402.

- Dawes, P. L., Patterson, P. G., & Lee, D. Y. (1996). Internal and external Buying Center membership in high technology business markets. The Journal of High Technology Management Research, 7(1), 107-127.
- Dowling, G. R. (1995). The Dynamic Nature of Buying Centers: Do Researchers and Salespeople Aim at a Moving Target. University of New South Wales, Australian Graduate School of Management.
- Doyle, P., Woodside, A.G., and Michell, P. (1979): Organizations buying in new task and rebuy situations, Industrial Marketing Management, 8, pp.7-11.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. The Academy of Management Journal, 50(1), 25-32.
- Fisher, L. (1969). Industrial Marketing, London: Business Books.
- Fitzsimmons, J.A., J. Noh, and E. Thies (1998), "Purchasing business services," Journal of Business and Industrial Marketing, 13 (4/5), 370-80.
- Frederick, J. H. (1934). Industrial marketing. New York: Prentice -Hall, Inc
- Garrido-Samaniego, M. & Gutierrez-Cillan, J. (2004). Determinants of influence and participation in the Buying Center: An analysis of Spanish industrial companies. The Journal of Business & Industrial Marketing, 19 (4/5), 320-36.
- Ghingold, M., & Wilson, D. T. (1998). Buying Center structure: an extended framework for research. A Strategic Approach to Business Marketing, American Marketing Association, 180-193.
- Glock, C. H., & Hochrein, S. (2011). Purchasing Organization and Design: a literature review. Business Research, 4(2), 149-191.
- Grando, F., Granville, L. Z., & Lamb, L. C. (2018). Machine Learning in Network Centrality Measures: Tutorial and Outlook. ACM Computing Surveys (CSUR), 51(5), 102
- Grashof. John R. (1979). "Sharing the Purchasing Decision," Journal of Purchasing and Materials Management. 15 (Summer). 26-32.
- Grønhaug, K. (1975). Search behavior in organizational buying. Industrial Marketing Management, 4(1), 15-23.
- Hanssens, D.M., & Weitz, B.A. (1980). The effectiveness of industrial print advertisements across product categories. Journal of Marketing Research, 17 (3), 294-306.
- Heale R, James S, Garceau ML. 2016. A multiple-case study in nurse practitioner-led clinics: an exploration of the quality of care for patients with multimorbidity. Nurs Leadersh;29:37–45.

- Herbst, U., Barisch, S., & Voeth, M. (2008). International Buying Center Analysis—The Status Quo of Research. Journal of business market management, 2(3), 123.
- Hill RW (1972) The nature of industrial buying de- cisions. Ind. Mktg Mgmt 2, 45-55.
- Hill RW (1973) Marketing Technological Products to Industry. Pergamon Press, Oxford.
- Hult, G. T. M., Ferrell, O. C., & Schul, P. L. (1998). The effect of global leadership on purchasing process outcomes. European Journal of Marketing, 32(11/12), 1029–1051.
- Hult, G. T. M., Ketchen Jr, D. J., & Chabowski, B. R. (2007). Leadership, the Buying Center, and supply chain performance: A study of linked users, buyers, and suppliers. Industrial Marketing Management, 36(3), 393-403.
- Hult, G. T. M., Ketchen Jr., D. J., & Nichols Jr., E. L. (2002). An examination of cultural competitiveness and order fulfillment cycle time within supply chains. Academy of Management Journal, 45(3), 577–586.
- Hult, G. T. M., Ketchen Jr., D. J., & Slater, S. F. (2004). Information processing, knowledge development, and strategic supply chain performance. Academy of Management Journal, 47(2), 241–253.
- Hutt, M. D., & Reingen, P. H. (1987). Social Network Analysis: Emergent Versus Prescribed Patterns in Organizatizational Buying Behavior. ACR North American Advances.
- Jackson, R. W., Neidell, L. A., & Lunsford, D. A. (1995). An empirical investigation of the differences in goods and services as perceived by organizational buyers. Industrial Marketing Management, 24(2), 99-108.
- Jacobsen, I. D. (2002). Vad, hur och varför? Om metodval i företagsekonomi och andra samhällsvetenskapliga ämnen. Lund: Studentlitteratur.
- Järvi, P., & Munnukka, J. (2009). The dynamics and characteristics of Buying Center networks: A qualitative study on Finnish firms. Marketing Intelligence & Planning, 27(3), 439-457.
- Javed, A., & Hasnu, S. A. F. (2013). Impact of country-of-origin on product purchase decision. Journal of Marketing and Consumer Research, 1, 31-51.
- Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. Journal of marketing, 57(3), 53-70.
- Johnston, W. J. (1979), "Communications Networks and Influence Patterns in Industrial Buying Behavior," Ph.D. dissertation, University of Pittsburgh.

- Johnston, W.J. & Bonoma, T. (1981) "The Buying Center: structure and interaction patterns", Journal of Marketing, Vol 45, pp. 143-56
- José Garrido-Samaniego, M., & Gutiérrez-Cillán, J. (2004). Determinants of influence and participation in the buying center. An analysis of Spanish industrial companies. Journal of Business & Industrial Marketing, 19(5), 320-336.
- Julien, H. (2008). Content analysis. In L. M. Given (Ed.), The sage encyclopedia of qualitative research methods (pp. 120-121). Los Angeles: Sage.
- Karlsson, J., Engebretsen, L., & Dainty, K. (2003). Considerations on sample size and power calculations in randomized clinical trials. Arthroscopy: The Journal of Arthroscopic & Related Surgery, 19(9), 997-999.
- Kirsch, Walter and Michael Kutschker (1982). "Marketing and Buying Decisions in Industrial Markets," in Studies in Decision Making. Martin Irle, ed. New York: Walter de Gruyter, 443-88.
- Klähn, A. (2013): Die wahren Entscheider, in: Acquisa, 07-08/2013, S. 56-59.
- Knoke, D., & Kuklinski, J. H. (1991). Network analysis: basic concepts. Markets, hierarchies and networks, 173-182.
- Kohli, A. (1989). Determinants of influence in organizational buying: a contingency approach. Journal of marketing, 53(3), 50-65.
- Kothari, C. R. (2004). Research methodology: Methods and techniques. New Age International.
- Kotler, P. J. (2009). Principes van Marketing, 5e editie. Pearson Education.
- Kotteaku, A.G., Laios, L.G. and Moschuris, S. J. (1995) The Influence of Product Complexity on the Purchasing Structure. Omega, vol. 23, nr 1, ss. 27–39.
- Krapfel Jr., R. E. (1985). An advocacy behavior model of organizational buyers' vendor choice. Journal of Marketing, 49(4), 51–59.
- Laczniak, G.R. (1979): An Empirical Study of Hospital Buying, in: Industrial Marketing Management, Vol. 8, No. 1, pp. 57-62.
- Laios, L., & Xideas, E. (1994). An investigation into the structure of the purchasing function of state-controlled enterprises. Journal of Business Research, 29(1), 13-21.
- Lau, G. T., Goh, M., & Phua, S. L. (1999). Purchase-related factors and Buying Center structure: An empirical assessment. Industrial marketing Management, 28(6), 573-587.
- Lehmann DR and O'Shaughnessy J (1982) Decision criteria used in buying different categories of products. J. Purch. Mater. Mgmt 18, 9-14.

- Lewin, J. E., & Donthu, N. (2005). The influence of purchase situation on Buying Center structure and involvement: a select meta-analysis of organizational buying behavior research. Journal of Business Research, 58(10), 1381-1390.
- Lilien, G. L., & Wong, M. A. (1984). An exploratory investigation of the structure of the Buying Center in the metalworking industry. Journal of marketing research, 21(1), 1-11.
- Lynn, S.A. (1987): Identifying Buying Influences for a Professional Service: Implications for Marketing Efforts, in: Industrial Marketing Management, Vol. 16, No. 2, pp. 119-130.
- Malaval, P. (2001). Strategy and Management of Industrial Brands. Kluwer Academic Publishers.
- Marchant, C. and Ward, S. (2003). At home or abroad: an examination of expatriate and cross-national differences in the use of country of origin information. Journal of Asia Pacific Marketing, 2(1), 12-42.
- Marshall, C., & Rossman, G. B. (1999). Designing qualitative research (3rd ed.). Thousand Oaks, CA: Sage.
- Mattson, M. R. (1988). How to determine the composition and influence of a Buying Center. Industrial Marketing Management, 17(3), 205-214.
- McCabe, D. L. (1987), "Buying Group Structure: Constriction at the Top," Journal of Marketing, 51 (October), 89-98.
- McDonald, M., Rogers, B., & Woodburn, D. (2000). Key customers: How to manage them profitably. Butterworth-Heinemann.
- McLeod, S. A. (2008). Independent, dependent and extraneous variables. Simply Psychology.
- McQuiston, D. H. (1989), "Novelty, Complexity and Importance as Causal Determinants of Industrial Buyer Behavior, "Journal of Marketing, 53 (April), 66-79.
- McWilliams, R. D., Naumann, E., & Scott, S. (1992). Determining Buying Center size. Industrial Marketing Management, 21(1), 43-49.
- Michael, R. S. (2002). Strategies for educational inquiry. Center for Evaluation & Education Policy, 855, 1240.
- Mitchell, V.W. (1994), "Problems and risks in the purchasing of consultancy services", Service Industries Journal, Vol. 14 No. 3, pp. 315-39
- Morris, M.H. (1992). Industrial and Organizational Marketing, 2. ed. New York: Macmillan Pub. Co.

- Mugenda, O. M., & Mugenda, A. G. (1999). Research methods: Quantitative and qualitative approaches. Acts press.
- Naumann E and Kim JC (1986) A macro contingency approach to the study of purchasing behavior. J. Purch. Mater. Mgmt 22, 21~27
- Naumann, E.; Lincoln, D.J. (1989): Systems Theory Approach to Conducting Industrial Marketing Research, in: Journal of Business Research, Vol. 19, No. 2, pp. 151-164.
- Netemeyer, Richard G., Durvasula, Srinivas, Lichtenstein, Donald R. (1991), "A Cross-National Assessment of the Reliability and Validity", Vol. 28, No. 3, pp. 320.
- Nijhoff, E. (2013). Analyzing and capturing lessons learned in procurement strategy: a Kraljic portfolio matrix analysis of the Maasvlakte power plant 3 project (Master's thesis, University of Twente).
- Nilsson J and Høst V (1987) Reseller Assortment Decision Criteria, Aarhus University Press, Aarhus
- O'Cass, A. (2000). An assessment of consumers product, purchase decision, advertising and consumption involvement in fashion clothing. Journal of Economic Psychology, 21(5), 545-576.
- Pae, J.H.; Kim, N.; Han, J.K.; Yip, L. (2002): Managing intraorganizational diffusion of innovations Impact of Buying Center dynamics and environments, in: Industrial Marketing Management, Vol. 31, No. 8, pp. 719-726.
- Patchen, M. (1974). The locus and basis of influence on organizational decisions. Organizational Behavior and Human Performance, 11(2), 195-221.
- Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park, CA: Sage.
- Pfeffer, J. and Salancik, G. (1978). The External Control of Organisations. A Resource Dependence Approach, New York: Harper and Row Publishers.
- Pine, B.J. (1993). Mass Customization: The new frontier in Business Competition. Harvard: Harvard Business School Press.
- Polkinghorne, D. E. (2005). Language and Meaning: Data Collection in Qualitative Research. Journal of Counselling Psychology, 52, 137–145.
- Porter, M. E. (1985). Competitive advantage: creating and sustaining superior performance.

 The Free Press, New York
- Reese, R. M., & Stone, L. H. (1987). Participation in the buying process: a vendor's perspective. Journal of Business & Industrial Marketing, 2(1), 51-60.

- Reve, T., & Johansen, E. (1982). Organizational buying in the offshore oil industry. Industrial Marketing Management, 11(4), 275-282.
- Ribeiro Soriano, D. (2001). Quality in the consulting service—evaluation and impact: a survey in Spanish firms. Managing Service Quality: An International Journal, 11(1), 40-48.
- Robey, D.; Johnston, W.J. (1977): Lateral Influences and Vertical Authority in Organizational Buying, in: Industrial Marketing Management, Vol. 6, No. 6, pp. 451-462.
- Robinson, P., Faris, C. & Wind, Y. (1967), Industrial Buying and Creative Marketing, Allyn and Bacon, Boston.
- Schhoder, H. M., Driver, M. J., & Streukert, S. (1967). Human information processing: individuals and groups functioning in complex social situations.
- Shank, G. (2002). Qualitative Research. A Personal Skills Aproach. New Jersey: Merril Prentice Hall.
- Shaw, M. E. (1964). Communication Networks: in Advance in experimental social psychology. Berkovitz, L.
- Shaw, M.E. (1981), Group Dynamics: The Psychology of Small Group Behavior, 3 ed., McGraw-Hill Book co, New York.
- Sheth, J. N. (1973), "A model of industrial buying behavior", Journal of Marketing, Vol. 37, October, pp. 50-6.
- Ulgado, F., & Lee, M. (1998), "The Korean versus American marketplace: Consumer reactions to foreign products", Psychology and Marketing, Vol. 15, No. 6, pp. 595-614.
- Ulrikkeholm, J. B., Hvam, L., Mortensen, H. O., & Mortensen, N. H. (2014). Assessment and development of engineering design processes.
- Van Der Valk, W., Wynstra, F., & Axelsson, B. (2005). Buying business services: Analyzing the service buyer–service provider interface. In Proceedings of the 21st IMP Conference.
- Van Weele, A. J. (2000). Purchasing and Supply Chain Management. 5th edition. London: Cengage Learning.
- Venkatesh, R., Kohli, A. K., & Zaltman, G. (1995, October). Influence in Buying Centers. Journal of Marketing, 59, 71–82.

- Verlegh, P. W. J., and Steenkamp, J. E. M. (1999), "A review and meta-analysis of country-of-origin research", Journal of Economic Psychology, Vol. 20, No. 5, pp. 521-546.
- Wallström, Å., 2002, Industrial Buying Behavior of Large Swedish Firms Case Studies of the Purchase of Educational Services, Doctoral Thesis, Luleå University of Technology, Luleå
- Webster F. E. (1979) Management science in industrial marketing. J. Mktg 42, No. 1, 21 27.
- Webster, F. E., and Wind, Y. (1972). A General Model for Under- standing Organizational Buying Behavior. Journal of Marketing 36, 12–19.
- West, D.C. (1997). Purchasing professional services: the case of advertising agencies. International Journal of Purchasing and Materials Management. Vol. 33 No. 3, pp. 2-9.
- Wilson, E. J., Lilien, G. L., & Wilson, D. T. (1991). Developing and testing a contingency paradigm of group choice in organizational buying. Journal of Marketing Research, 28(4), 452–466.
- Wilson, S. A. and Perumal, A. (2010). Waging War on Complexity Costs. Reshape Your Cost Structure, Free Up Cash Flows and Boost Productivity by Attacking Process, Product and Organizational Complexity. U.S.A.: McGraw-Hill.
- Woodside, A.G.; Biemans, W.G. (2005): Modeling innovation, manufacturing, diffusion and adoption/rejection processes, in: Journal of Business & Industrial Marketing, Vol. 20, No. 7, pp. 380-393.
- Woodward J (1965) Industrial Organization: Theory and Practice. Oxford University Press, London.
- Xideas, E., & Moschuris, S. (1998). The influence of product type on the purchasing structure. European Journal of Marketing, 32(11/12), 974-992.
- Yamashita, A., & Moonen, L. (2014, May). Assembling multiple-case studies: potential, principles and practical considerations. In Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering (p. 36). ACM.
- Yin, R. K. (2003). Case study research: Design and methods. Thousand Oaks, CA: Sage.
- Zaltman, G., & Bonoma, T. V. (1977). Organizational buying behavior: hypotheses and directions. Industrial Marketing Management, 6(1), 53-60.
- Zolkiewski, J. (2015). Buying Center. Wiley Encyclopedia of Management, 1-2.

OTHER REFERENCE SOURCES:

Unpublished report from respective Procurement Managers of:

- Zoomlion Ghana Limited
- First Sky Limited
- Blue Skies Company Limited
- Renny Foods Limited
- Bediako Memorial Institute Limited
- St. Joseph Hospital

INTERNET SOURCES

- www.bediakomemorial.com
- www.blueskies.com
- www.firstskyghana.com
- ir.knust.edu.gh
- http://javidac2.blogspot.com/2012/07/renny-foods-now-on-menu.html
- https://www.mejoresfotos.eu/awasa-wikiwand.html
- http://www.ghanadistricts.com/Home/LinkData/7188

7.1 Appendices

A PROPOSAL FOR A COMPARISON OF LATERAL AND VERTICAL

INVOLVEMENT IN THE BUYING CENTER (A Multiple Case Study of Private

Organizations in Ghana)

The Buying Center, also called the Decision-Making Unit (DMU), brings together

all the members of an Organization who become involved in the buying process for a

particular product or service.

Identifying and influencing all of the people involved in the buying decision is

prerequisite in the process of sales and a core fundamental in creating customer value which

eventually influences Organizational effectiveness and efficiency.

Buying Centers differ between service producing and service providing

Organizations in private Organizations especially in Ghana. As such, this proposal seeks to

implore qualitative measures and multiple case studies of private Organizations in Ghana to

measure the association between lateral and vertical involvement using the variables

including:

Product groups

➤ Industry groups (Service-Producers and Service-Providers)

Complexity of the purchase

➤ Novelty of the purchase

> Importance of the purchase

(These variables make up the independent variables) as against: The type of

involvement needed in the Buying Centers (dependent variables).

Your assistance is therefore needed for the success of this research work.

Thank you

Best regards,

Signed: Sophia Yawson

69

Appendix: 2

INTERVIEW GUIDE

A. INDUSTRY GROUPS

1. What is the purpose of establishing your Organization (service providing or producing) and why?

B. ORGANIZATIONAL STRUCTURE (TYPE OF INVOLVEMENT)

- 1. How centralized is the Organization on a scale of 1 to 6 with 6 being the highest?
- 2. Are the departments also allowed to take certain decisions on their own, how will you rate them on a scale of 1 to 6 with 6 being the highest?
- 3. Are there clearly spelt out line of command and communication?

C. PRODUCTS GROUPS

1. Are there any categories for the nature of products or services the Organization deals in (routine, leverage, strategic or bottleneck products)?

Notes:

Leverage products are products bought in large quantities.

Critical or bottleneck products are simply difficult to get. It could be that there is just one supplier or that the harvests failed.

Strategic

products form the key to the success for this product. Every product should have a certa in quality, but these items are so special that a supplier should understand what the cons equences would be if he fails to deliver the required quality.

Routine products are simply everything

else. The purchaser does not have to concentrate on

a specific aspect but tries to use

his negotiating skills to get the best deal. Most products will fall in this category. (The Kraljic (1983) portfolio analysis)

Product groups can also be categorized into raw materials, supplementary materials, semi manufactured products, components, finished products, investment goods, capital equipment, maintenance, repair and Operations (MRO) and services (Van Weele, 2000).

- 2. When do you make purchase decisions as a company?
- 3. Was Management involved in the purchase decision in the recent purchase?
- 4. How about departments involvements in purchase decisions?
- 5. Do you have a group in the company that is responsible for making such purchase decisions?
- 6. What is the size of the group as well as which people are involved?
- 7. Is it the same people for every purchase decision the company makes?
- 8. If yes, why do you adopt such a practice?
- 9. no, when do you make some changes in the people involved in the purchase decision?
- 10. On a scale of 1 to 6, 6 being the highest, how would you rate Management involvement in this purchase decision?

D. IMPORTANCE OF PURCHASE

- 1. On a scale of 0% to 100%, 100% being the most important, how much percentage will you attribute to the importance of purchase to the Organization?
- 2. When do you know the purchase is important with regards to using a scale of 0% to 100%, 100% being the most important:
 - Vision and mission of the Organization
 - Cost of purchase
 - Volume of trade
 - Management involvement
- 3. In considering your recent purchase, what made it important to the Organization?
- E. NOVELTY OF PURPOSE
- 1. When do you call a purchase decision new?
- 2. When do you mostly make new purchase decisions:
 - Yearly
 - Biannually
 - Others, please specify
- 3. Who is involved in making such new purchase decisions?
- 4. What is the policy of the Organization in making new purchase decisions?
- 5. Was Management involved in the purchase decision in the recent purchase?
- 6. How about departments involvements in purchase decisions?
- 7. On a scale of 1 to 6, 6 being the highest, how would you rate Management involvement in this new purchase decision?
- 8. On a scale of 1 to 6, 6 being the highest, how would you rate department involvement in this new purchase decision?

9.

F. COMPLEXITY OF PURCHASE

- 1. When do you call the purchase process complex?
- 2. On a scale of 0% to 100%, 100% being the most complex, what has been the nature of your purchases:
 - 1-3 years ago (if available)
 - 5-10years (if available)
 - 10 years and above (if available)
- 3. What is the company's definition of a complex purchase process and which products are mostly referred to as having "complex purchase procedures"?
- 4. How are these complexities managed by the Organization?
 - Policies
 - Procedures
 - Regulations
 - Organizational culture
 - G. On the whole which of these dimensions of Buying Center involvement as described below is the company best at. Rate your answer on a scale of 0% to 100%, 100% being the most suitable dimension for the company.
 - Vertical involvement
 - Lateral involvement

Notes:

Lateral involvement refers to the number of departments that are represented in the Buying Center or are involved in some way in the purchase decision. (eg Departmental heads or lower level Management constitutes the members in the Buying Center). (Johnston & Bonoma,1981)

Vertical involvement refers to the levels of Management that will beinvolved in and/or influen ce a particular purchase decision. (eg. CEO, or Top Management constitutes the Buying Center members). (Johnston & Bonoma, 1981)

8.1.2 Appendix:3

List of Abbreviations

MGR: Manager

ACCT: Accountant

CEO: Chief Executive Officer

DMU: Decision-Making Unit

EOQ: Economic Order Quantity

P1: Proposition 1

P2: Proposition 2

P3: Proposition 3

P4: Proposition 4

9.1.3 **Appendix 4**



Figure 4:Map of West Africa showing the location of Ghana

Source: Awasa Wikiwand (mejoresfotos.eu)