

**UNIVERSITY OF CAPE COAST**

**COLLABORATIVE KNOWLEDGE MANAGEMENT: PERCEIVED  
BENEFITS AND CHALLENGES IN RURAL BANKING INDUSTRY IN  
THE EASTERN REGION OF GHANA**

BY

**SANKYE ALICE**

Dissertation submitted to the Department of Management studies of the School of Business, College of Humanities and Legal Studies, University of Cape Coast in partial fulfillment of the requirements for award of Master of Business Administration Degree in Human Resource Management.

**NOVEMBER 2015**

## DECLARATION

### Candidate's declaration

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

Candidate's signature ..... Date .....

Candidate's name: Alice Sankye

### Supervisor's Declaration

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

Supervisor's signature ..... Date .....

Candidate's name: Dr. N. Osei Owusu

## ABSTRACT

The aim of this study is to examine the extent of collaboration in knowledge management (CKM) and to explore the perceived benefits and challenges associated with it in rural banking industry in the Eastern Region of Ghana. It was an exploratory cross-sectional quantitative study with 105 employees surveyed. The study results indicated that there was low level of collaboration in knowledge management among the banks. However, majority of the employees perceived CKM to have benefits as well as challenges. In terms of benefits a greater number of the employees perceived the benefits of CKM to be: enhancing ability to address important issues effectively; bringing about the development of new skills; increasing utilisation of other expertise or services; acquiring useful knowledge or useful information on services, programmes or people in the community; having the ability to have greater impact on the quality of service than individual bank could have on its own leading to higher productivity. The study found out that majority of the employees perceived the challenges of CKM to be: mistrust; fear of loss of autonomy; different business cultures with different power structures; different funding cycles causing different creditworthiness; difficulty in combining skills due to different knowledge levels; and difficulty in coordinating affairs with full management commitment. In view of these, it is recommended that management must commit itself to CMK through communication and put into place the appropriate rewards and incentives for knowledge management activities. Also employees need to develop knowledge management skills through training in order to participate effectively.

## **ACKNOWLEDGEMENT**

My sincere gratitude goes to my Supervisor, Dr. N. Osei Owusu, a Senior Lecturer at the Department of Management Studies, University of Cape Coast for his inspiration, guidance and suggestions during the course of writing this work.

To all branch Managers of the Rural and Community Banks in the Koforidua Municipality for providing me with the needed information for the work. I wish to express my profound thanks to all those who have contributed in one way or the other in bringing this work into being. Next is my indebtedness to Mr. Frank Boakye of Pope John Senior High School and Mr. Mustaphar for their invaluable advice, support and encouragement over the years.

**DEDICATION**

To my mother,

Mary

## TABLE OF CONTENTS

	<b>Page</b>
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
<b>CHAPTER ONE: INTRODUCTION</b>	
Background to the Study	1
Statement of the Problem	4
Aim and Objectives of the Study	6
Aim	6
General Objective of the Study	7
Specific Objectives of the Study	7
Research Questions	7
Significance of the Study	8
Organisation of the study	9
<b>CHAPTER TWO: LITERATURE REVIEW</b>	
Introduction	10
Literature search	10
The concepts of Collaborative Management	12
Process of Collaboration	15
Governance	16

Administration	16
Autonomy	17
Mutuality	18
Norms	19
Types of Collaborative Management Relationships	21
The Concept of Knowledge Management and its dimensions	25
The Knowledge – Creating Process	28
Empirical studies on Knowledge Management	31
Benefits of Collaborative Knowledge Management	32
Barriers to Collaborative Knowledge Management	37
Research Gap	43
Summary	46
<b>CHAPTER THREE: RESEARCH DESIGN AND METHOD</b>	
Introduction	48
Research Design	48
Study Setting	49
Target Population	50
Sampling Methods and Sample Size	51
Data Collection Tool and Procedure	53
Data Collection Technique	54
Pre – Test	56
Data Analysis	56
Validity and Reliability	57

Ethical Consideration	59
Field Challenges	60
Summary of the Chapter	61
<b>CHAPTER FOUR: RESULTS AND DICUSSION</b>	
Introduction	62
Socio- Demographic Characteristics	63
The Extent of Collaboration in Knowledge Management among the Selected Rural Banks	64
Indicators for Perceived low Level of Collaboration in Knowledge Management among Banks	69
Employees Perception on the Benefits of Collaborative Knowledge Management (CKM)	72
Benefits Associated with Collaborative Knowledge Management	77
Perceptions on the Barriers of Collaborative Knowledge Management	82
Barriers Associated with Collaborative Knowledge Management	87
Discussion	92
<b>CHAPTER FIVE: CONCLUSION AND RECOMMENDATION</b>	
Introduction	101
Summary of Findings	101
Recommendations	104
Suggestions for Future Research	105



<b>REFERENCES</b>	106
<b>APPENDICES</b>	115
Introductory Letter	115
Questionnaire	116

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
1. The Results of the Demographic Features of the Respondents	63
2. Perceptions on the Extent of Collaboration in Knowledge	65
3. Non Parametric Pearson Chi-square Result and Spearman Correlation Depicting the Relationship between Demographic Features and low Level of Collaboration in Knowledge Management among Banks	66
4. Indicators for Perceived low Level of Collaboration in Knowledge Management among Banks	70
5. Benefits Associated with CKM	72
6. Non Parametric Pearson Chi-square Results and Spearman Correlation Depicting the Relationship between Demographic Features and Benefits Associated with CKM	73
7. Benefits Associated with CKM	78
8. Barriers to Collaborative Knowledge Management	82
9. Non Parametric Pearson Chi-square Results and Spearman Correlation Depicting the Relationship between Demographic Features and Barriers Associated with CKM	83
10. Perceived Barriers Associated with Collaborative Knowledge Management	88

## LIST OF FIGURES

<b>Figure</b>	<b>Page</b>
1. Important Factors that Build Collaboration	20
2. Working Together among Enterprises': An Integration Continuum	21
3. Modes of the Knowledge Creation	29
4. Collaboration and Employees' Opinions on CKM	45

## CHAPTER ONE

### INTRODUCTION

#### **Background to the Study**

For more than 2000 years ago the importance of collaboration among people was acknowledged by the great Greek philosopher Aristotle who said that for each individual among the many has a share of virtue and prudence, and when they meet together, they become in a manner one man, who has many feet, and hands, and sense.

The implication here is that collaboration is not a new phenomenon. Man, often called ‘the social animal,’ has been leading a cooperative life for many years now and today, everyone wants to collaborate. Even those who do not want to work together want to be seen to be willing, at least in principle if not in practice (Zadek, 2006). With the arrival of the new information technologies, the need for collaboration has even become more urgent. Consequently, the structures of enterprises have changed dramatically, shifting the focus of value creation from tangible based activities to intangible based value creation. According to Daum, (2003), the value of intangible assets has therefore constantly increased in the last two decades from an average of 40% of total market value of business corporations to over 80% at the end of the 20th century.

As companies search for ways to gain a competitive advantage, they are increasingly leveraging their knowledge capital. As we move in transition from the industrial to the knowledge society, effective use of knowledge among firms is becoming one of the most important distinguishing factors among companies.

As the information age supplanted the industrial age, managers sensed that knowledge would be more important than financial capital in producing wealth Martin, & Salomon, (2003). Currently it has been noted that intellectual capital is the nexus of the firm's social capital, human capital and knowledge management (Rastogi, 2002). According to International Data Corporation (IDC) (2001), worldwide, revenue for collaborative knowledge management services was to increase from \$2.3 billion in 2000 to \$12.696 billion in 2005, a 40.7% compound annual growth rate. Knowledge management services include consulting, implementation, operation (outsourcing), maintenance and training.

The evidence above demonstrates that many commentators see Labor-intensive manufacturing with a large pool of relatively cheap, relatively homogenous labor and hierarchical management giving way to knowledge-based organisations (Drucker, 1994; Barth, 2000; Davenport, 2005). Organisational hierarchies are being put aside as knowledge work calls for more collaboration. Firm only gains sustainable advances from what it collectively knows, how efficiently it uses what it knows, and how quickly it acquires and uses new knowledge (Davenport, & Prusak 1998). An organisation in the Knowledge Age is one that learns, remembers, and acts based on the best available information, knowledge, and know-how. All of these developments have created a strong need for a deliberate and systematic approach to cultivating and sharing a company's knowledge base. In essence, more than ever before companies are embracing the value of having more than one mind tackling a business problem. Business owners see the prospects of working with partners and vendors and other

stakeholders to create new products or new services. They certainly embrace the idea that their employees and teams will work more effectively and be exponentially more innovative if they are empowered to work together. Consequently, in today's global world, businesses and even public bodies are entering into collaborative arrangements in the context of knowledge management (Marwick, 2001). A large number of organisations have been engaged in joint ventures, strategic alliances or other forms of inter-organisational relations, where the usual aspiration of the engagement is the achievement of some form of "collaborative advantage" (Huxham, 1996). For example, a study of over 2,000 decision makers from 12 countries across government, business and non-governmental organisations by Bank of America found that nine out of 10 believe greater collaboration between business, government and other sectors is essential for global economic recovery. These findings align with research conducted in the UK by the National Audit Office (2012) highlighting the potential value government can achieve in their relationships with suppliers by adopting collaborative arrangement. In addition, according to a recent survey, 73% of knowledge workers reported working with people in different locations within their own company and 67% of knowledge workers reported working with people in other companies at least monthly (Forrester, 2009). Effective collaboration in knowledge management is no longer a competitive advantage for companies but rather it is imperative for business success today (Handoll et al., 2012).

Thus, increasingly, there is a demand for co-operation in knowledge sharing between organisations since they cannot tackle their problems and

innovative activities in isolation (Vangen, & Huxham, 2003). However, just as collaboration in knowledge management is becoming truly international, there is a relatively lack of knowledge on how such collaborative business working is perceived by employees in terms of benefits and challenges particularly in a developing countries like Ghana.

Equally on a national level there appears to be limited knowledge on the extent of collaboration in knowledge management going on in business circles in Ghana. It is against this background that this study was conducted.

### **Statement of the Problem**

In recent times, organisations are going beyond rivalry and focusing on collaboration, in particular knowledge management, as that will promote effective competitive advantage over their main rivals. In this sense, in today's business world, tangible assets no longer provide sustainable competitive advantages, rather the focusing of intangible assets and or intellectual capital that can be viewed as the basis for future sustained competitive analysis (Burton-Jones, 2001). This is because, according to Cosh, A., Fu, X. & Hughes, A., (2005) collaboration allows firms to expand their range of expertise, develop specialist products, and achieve various other corporate objectives. Collaboration with knowledge management provides a firm with greater access to domestic or international markets. This may lead to greater commercial success of the new products, and enhances the productivity of innovation through economics of scale

(Burton-Jones, 2001). Thus, collaboration will be positively associated with firms' innovative efficiency.

However, in spite of these benefits that are derived from collaborative activities, a relatively great amount of research has been dedicated to the collaborative activities in management studies. According to Heath, (2003) knowledge management has been a ten year 'buzzword', yet few successful collaborative knowledge management projects have been written up in literature and few organisations seem to claim strategic advantage from it. In addition, while today, it is generally recognised that knowledge is transforming the nature of production and thus jobs, the firm, the market and every aspect of knowledge activity, it is currently a poorly understood and thus undervalued economic resource (Burton-Jones, 2001). This means that collaborative knowledge management among firms can be viewed as an underestimated instrument of modern organisation management (Kozuch, 2009). This is particularly the case in Ghana, where business-to-business collaboration has received limited attention by Management Researchers. Compared with the situation in the developed countries where the popularity of inter-firm/organisational collaboration in tackling current national and global challenges is well illustrated by the growing number of articles, books, workshops, and policies addressing that topic Fishman, F, Salem, P. G., Allen, D. A., N. A., & Fahrbach, K., 2001; Lewis, 2006).

Such lack of research in this area in Ghana has led to paucity of information and in our understanding of what effective inter-firm collaborative knowledge management means. Additionally, there is little empirical evidence



supporting on what employees perceive as the benefits as well as the challenges involved in such collaborative knowledge management. This is particularly important because while inter-organisational collaborative arrangements seem to be a promising trend, interest about them at present goes beyond knowledge about how to make them work well (Eibinder, Robertson, Garcia, Vuckovic, & Patti, 2000; Weber, Lovrich, & Gaffney, 2007), and how to determine how well they work (Lewis, Scott, D'Urso, & Davis, 2008). Indeed, a general assumption in the collaboration literature is that if the collaborative process is effective, the outcome will also be good or positive (Keyton, J., Ford, D. J, & Smith, F. I., 2008; Longoria, 2005). However, this conjecture fails to acknowledge other challenges that can potentially influence quality outcomes in such collaborative management. There is therefore the need to investigate into these areas of collaborative knowledge management so as to know what the future holds for such practices in the developing world. It is in view of this that this study is undertaken.

## **Aim and Objectives of the Study**

### **Aim**

The main aim of this study is to investigate into the perceived benefits of collaborative knowledge management (CKM) and the barriers that undermine it by using employees in the selected Rural Banks in the Eastern Region of Ghana.

### **General Objective of the Study**

The main objectives of this study are two-folds: First, is to have a deeper understanding of the extent of collaborative knowledge management that exists in business circles in Ghana. The second objective is to make contributions to the empirical studies on the topic as well as making contributions on the debate about the significance and the challenges of collaborative knowledge management in Ghana.

### **Specific Objectives of the Study**

The specific objectives of this study are to:

- 1: assess the extent of collaborative knowledge management among the selected Rural Banks in the Eastern Region of Ghana.
- 2: examine the perceived benefits of collaborative knowledge management
- 3: explore the perceived barriers that can undermine collaborative knowledge management among the selected Rural Banks in the Eastern Region of Ghana.

### **Research Questions**

- 1: What is the level of collaborative knowledge management among the selected Rural Banks in the Eastern Region of Ghana?
- 2: What are the perceived benefits of collaborative knowledge management?
- 3: What are the perceived challenges that undermine collaborative knowledge management among the selected Rural Banks in the Eastern Region of Ghana?

### **Significance of the Study**

The significance of this study can be discussed in two dimensions: theoretical and practical. From a theoretical perspective, this study will help in clarifying whether collaborative knowledge management among companies has any significance in this modern time in developing countries like Ghana. This study addresses and contributes to the literature of creating business collaborative culture in terms of knowledge management and its benefits as well as its challenges. Conceptually the study combines and brings together the concepts of business collaborative culture into limelight. The study shows how Ghanaian business-to-business firms rely on collaboration in all of its aspects in their strategy formulation processes, and in their day-to-day operations. More specifically, the research offers insights into what challenges exist, and which are the most important benefits derived from collaborative culture of business-business relationship management. The importance of business wide collaboration in management studies has only recently gained more attention in the academic community and this shows the theoretical value of the study. In essence this study will serve as a basis for future research.

On the practical level, the significance of this study can be seen in terms of managerial implications which are to provide practitioners with starting points on how to adopt and improve the use of collaborative business cultural management. This is an especially important topic with the growing rise of technologies and social media which increase the potential customer touch points almost up to limitless amounts. This study in the field of collaborative business

management give practitioners, and especially management, some food for thought on how to make their competitor relationship management and customer-facing activities truly efficient. This is possible through the removal of internal boundaries and through making sure everyone understands the importance of customer focus.

The study also shows that being aware of the challenges as it will be revealed by this study, employees are likely to identify themselves with the company and its collaborative values, creating a capacity for better collaborative performance. Thus this study can be useful not only to the business community but also the external communities who are interested in collaborative working.

### **Organisation of the Study**

Chapter 1 introduced the topic of study and provided an overview of the study's background, problem statement, research questions, and researchable significance. Chapter 2 included a discussion of the conceptual framework and relevant literature with a specific focus on collaboration in knowledge management including the benefits as well as the challenges.

Chapter 3 presented the research methodology and design of the study. Chapter 4 outlined the study results and discussions based on the findings from the data, while the final chapter 5 presented the study's conclusion and recommendation.

## CHAPTER TWO

### LITERATURE REVIEW

#### **Introduction**

This chapter serves as the basis for the development of this study. The goal of this chapter is to review the relevant literature on collaborative knowledge management. Generally, it has been noted that the literature on the topic of the study is extensive and a focused search was therefore necessary. In view of this, there are four issues that have been focused in this chapter. The first section focuses on the discussions on the concept of collaboration including its typologies and purposes. The idea here is to offer an understanding of the collaborative management and the underlying reasons for practicing it. The second section discusses the concept of knowledge management while the third section dwells mainly on the benefits of collaboration. The fourth section discusses the challenges involved in collaborative knowledge management. The chapter concludes with the identification of the literature gap including the conceptual framework for the study.

#### **Literature Search**

The researcher started by carrying out a literature search with the aim of finding out the existing literature particularly from international and national peer reviewed published literature, about collaborative knowledge management which was selected as the main search term. However, based on the fact that terms can

be used interchangeably, certain terms like partnership, shared, collaborative alliance, organisational interdependence, joint-decision making were also used.

An analysis of relevant documentary materials was carried out. These materials included published and internal reports, statistical materials, policy and strategy, and other presented papers on the topic. Journals such as; Journal of Knowledge Management; Strategic Management Journal; Journal of International Business Studies; Journal of Organisational Change Management; The International Journal of Human Resource Management; The International Journal of Management Science; Academy of Management Journal and Journal of Management Development were all reviewed

However, while the review was relatively more geared towards journal articles, through 'snowball technique' references to chapters from books as well as archival materials from unpublished documents of government, business communities and workshop/seminar presentations relevant to the study that were found through other sources were also employed. In addition, the literature was reviewed from the websites which promote collaborative management.

Articles were selected for review if they represented a clear definition of the search terms and present evidence. The review drew on detailed case study evidence to explore the issues under considerations. This step yielded a number of articles of which about forty were considered for further examination. Further analysis was carried out with 'Rural Banking' added to the criteria for search terms as places where collaborative knowledge management actually had been conducted. However, the criterion of 'Rural Banking' did not yield any significant

results as there were not many studies conducted on it in Africa and for that matter Ghana.

### **The Concepts of Collaboration and Collaborative Management**

Defining collaboration is not straightforward. In the literature, as in common speech, understanding of collaboration varies broadly. As Eppel, (2008) notes, there is not a consistent approach to the way the language of collaboration is used as, for example, terms like: partnership, alliance, strategic alliance, joint venture, consortium, coalition which are often used interchangeably.

A useful definition is provided by Mattessich, & Monsey (as cited in Townsend, & Shelly, 2008, p.102): “Collaboration is a mutually beneficial and well defined relationship entered into by two or more organisations to achieve common goals. This relationship includes a commitment to mutual relationships and goals, a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards”.

Gray, (1989), also asserts that collaboration is a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited visions of what is possible.

Synthesizing a multidisciplinary literature, Graham, & Barter, (1999) define collaboration as a relational system in which two or more stake-holders pool together resources in order to meet objectives that neither could meet individually.

The definitions offered by Graham, & Barter, (1999) and Mattessich, & Monsey, (1992) share four broad themes. For example, each definitions stresses

that (1) the fundamental nature of collaboration is that of a joint activity in the form of a relational system between two or more organisations; (2) an intentional planning and design process results in mutually defined and shared organisational goals and objectives; (3) structural properties emerge from the relationship between organisations; and (4) emergent “synergistic” qualities characterize the process of collaboration

The above definitions demonstrate that across the range of definitions there are, however, common characteristics. Essentially, collaborating is looking for ways to work better together to achieve greater efficiencies and scale of outcome. It allows the facilitating and operating in multi-organisational arrangements to solve problems that cannot be solved or easily solved by single organisations. The theme of partnership comes through strongly. Collaboration means to co-labour, to co-operate to achieve common goals, working across boundaries in multi-sector relationship (Eppel, 2008). By collaborating, organisations hope to leverage the differences among them – in terms of knowledge, skills, and resources – so as to develop innovative, synergistic solutions to complex problems they cannot solve on their own (Hardy, Lawrence, & Grant, 2005).

By definition, collaboration is simply the act of working with someone else to create something. During the collaboration process, people share resources and expertise, and join their efforts to deliver outputs beyond what individuals can achieve (Nunamaker et al., 2001). Much in the same way, in business, the product of collaboration creates value that was not there before, and that would not



necessarily be possible through individual efforts alone. Implicitly, the process of collaboration includes various types of interactions among people, such as communication, cooperation and coordination (Gerosa et al., 2006). As a result, collaboration processes are dynamic and complicated in nature and collaboration process management is critical to group productivity and performance (Thomson, & Perry, 2006). As far as business collaboration is concerned, it is essentially based on horizontal relations between different business entities, resulting from concluded agreements, which enable them the achievement of jointly set goals (Kozuch, 2009).

However, with regards to collaborative management, it can be defined as a collection of various management techniques that enlighten a sense of unity and teamwork among managers, supervisors, and the employees within a business organisation (Eden, & Huxham, 2001). The implication here is that collaborative management can widely be considered as the act of working together as a team to accomplish a common goal within a given timeframe. Gray, (1989) argues that the concept behind collaborative management style is to allow managers to combine their strengths with the strengths of their team and to make it possible to collectively overcome any weaknesses found among the team members by enhancing the efficiency and productivity of all the company.

Some of the significant features of collaborative management are that it is based on the principle of active participation of all team members in the planning and control process as well as in networking those using information, communication, and collaboration modules. Management is not regarded as an activity reserved

solely for managers but as an integral part of the team work of all team members. It creates a high level of transparency and a shared awareness of quality among team members (Eden, & Huxham, 2001; Gray, 1989). In this way, collaborative management is not about giving up control. It is about revising traditional attitudes that the manager must always be “right.” It is about letting go of ego and applauding all contributions to organisational success, creating a strong sense of pride shared by all (Linden, 2002).

### **Process of Collaboration**

Collaboration scholars as well as literature on inter-organisational relations and organisational behavior strongly support an integrative view of collaboration as a process through which actors can use their differences to jointly solve a problem (Gray, 1989; Ring, & Vande, V., 1994). Wood, & Grey, (1991) argue that this process component of collaboration is a “black box” and that it is least understood.

Thomson, & Perry, (2006) summarise the elements of the process component in three key dimensions: the structural dimension, the agency dimension and the social capital dimension. They emphasise that public managers must manage these three dimensions intentionally in order to collaborate effectively. Governance and administration are elements of the structural dimension, organisational autonomy describes the agency dimension, and mutuality and norms are part of the social capital dimension (Thomson et al., 2007). These dimensions allow classifying elements of collaboration processes as explained in below.

### **Governance:**

First of all, agencies that want to collaborate need to jointly make decisions about rules that will direct their activities and relationship. The partners must create structures with shared power arrangements which allow to determine who will make decisions, which actions will be allowed, what information needs to be shared, and how costs and benefits will be distributed (Ostrom, 1990). The dimension of governance implies a lack of hierarchical structure (Huxham, 1996). Awareness, that the agencies are not only responsible for reaching an agreement but also need to impose decisions on themselves as well as willingness to respect the interests and opinions of all parties needs to be given (Gray, 1989, Thomson, 2001).

The key to success is the partners' willingness to monitor themselves and each other. Factors that increase the likelihood of collective action are trust, reciprocity, communication, a shared vision and commitment to a supra-organisational goal (Thomson, & Perry, 2006).

### **Administration**

To achieve the intended goal of a collaborative alliance, an administrative structure needs to be in place in order to transition from decision to implementation of collaborative efforts. The key functions of the administration dimension are clarity of roles and responsibilities, coordination, concrete achievable goals, capacity to set boundaries, communication, and monitoring mechanisms. The implementation is complex, because traditional coordination

mechanisms such as hierarchy are less feasible, and communication among the different participants is based more on interdependent relationships than on contracts (O'Toole, 1996, Powell, 1990).

Thus, a central position is still necessary for coordinating communication, disseminating information, and keeping partners alert to the rules (Thomson, & Perry, 2006). Scholars agree that the key to implementing collaborative efforts is based on the right combination of administrative elements and the capacity to build relationships. Sagawa, & Segal, (2000), for example, advocate for the presence of boundary spanners, who manage and build interpersonal relationships.

### **Autonomy**

This dimension describes the need to reconcile individual and collective interests. Partners that collaborate face an intrinsic tension: They need to maintain their own individual organisational identities, missions and authority while at the same time adhering to the collaborative identity and goals (Van de Ven et al.1975, Wood, & Gray, 1991).

On the one hand, organisations protect their own identities in a collaborative alliance by maintaining individual control. Shared control, on the other hand, involves participants' willingness to share information about their organisations' operations (Wood, & Gray, 1991). This tension is especially problematic because collaborations typically respond to problems that organisations cannot solve individually (Gray, 1989, Huxham, 1996), yet the

missions of the individual organisations can create a difficult choice for the partners. When collaboration goals conflict with the autonomous goals of individual partner organisations, individual goals will usually trump collective goals, unless the problem is of sufficient urgency to all organisations and they understand the high costs of not engaging in a common solution (Logsdon, 1991).

### **Mutuality**

When organisations experience interdependence and a mutual need or purpose, organisations are more likely to enter inter-organisational collaboration. They have to experience mutually beneficial interdependencies which are based either on differing or on shared interests and goals. Complementarities describe a situation in which parties to a network agree to forego the right to pursue their own interests at the expense of other (Powell, 1990). It occurs when “one party has unique resources that another party needs or could benefit from and vice versa (Thomson, & Perry, 2006).

The likelihood that partners will collaborate depends on the consensus they can get out of differences based on each other’s needs. In contrast to complementarities, shared interests are based on homogeneity, i.e. commonalities among organisations such as similarity of mission or culture (Thomson, & Perry, 2006).

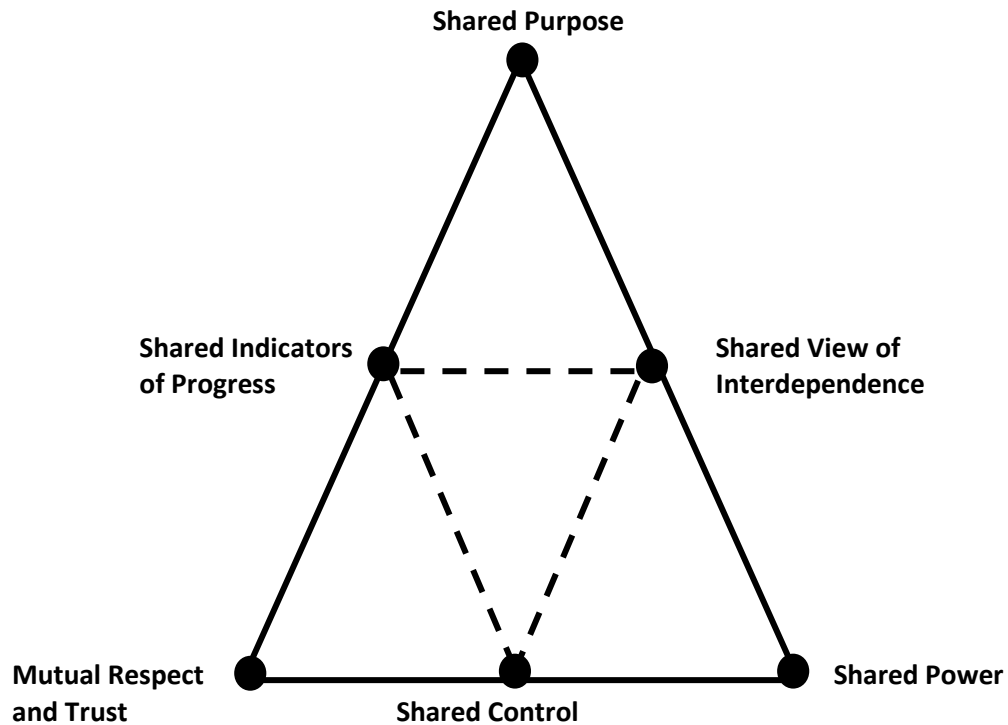
## Norms

Reciprocity is identified as a key factor for successful collaboration in the literature (Axelrod, 1984, Powell, 1990). Participants in collaboration often “demonstrate willingness to interact collaboratively only if their partners demonstrate the same willingness (Thomson, & Perry, 2006). This tit-for-tat reciprocity based on repeated interaction means that organisations accept to bear initial disproportional costs, because they expect that over time their partners will balance the distribution of costs and benefits (Axelrod, 1984, Ring, & Van de Ven, 1994). Overtime, as collaboration partners communicate and learn what works, elements, such as critical individual partner roles may develop and form the basis of reciprocal exchange (Thomson, & Perry, 2006).

The second element of norms is trust. Trust can be defined as a belief among individuals that their partners will make “good-faith efforts to behave in accordance with any commitments both explicit and implicit” (Cummings, & Bromiley, 1996 cited in Yeh, (2009)). Huxham, & Vangen’s, (2005) and Tubin, & Levin-Rozalis, (2008) conclude that trust is an important component of collaboration, but it takes an excessive amount of time at low productivity and nurturing to establish relationships and build trust. Overtime, partners can build reputation for trustworthy behavior and establish “psychological contracts” which allows moving from reciprocity to longer-term commitments based on personal relationships (Ring, & Vande Ven, 1994).

From the above discussion it can be noted that there are various factors that are necessary in building collaboration and these include shared goals, shared

power and control, shared accountability and shared view of legitimate interdependence (Kloth, & Applegate, 2004) as portrayed in figure 1 below.



**Figure 1: Important Factors that Build Collaboration**

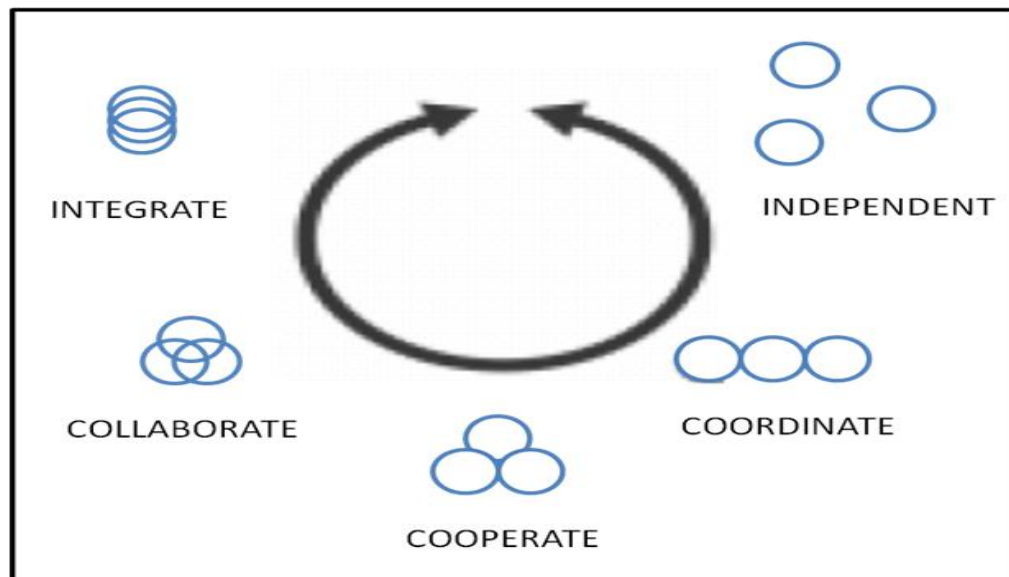
Source: Kloth and Applegate, (2004)

The above figure displayed in an interlinked triangle has six components based on “the Working Together Benchmarks” (First introduced by Chris Kloth, Change Works of the Heartland). The framework demonstrates the relationship dynamics of an alliance and the factors that increase its effectiveness. These include: shared purpose; shared power; shared view of interdependence; mutual

respect and trust; shared control and shared indicators of progress (i.e., shared accountability).

### **Types of business collaborative management relationships**

In the literature, collaboration has been characterised to have many levels and although most of these levels have often been used interchangeably, they differ in terms of their depth of interaction, integration, commitment, and complexity (Thomson, & Perry, 2006). Kloth, & Applegate, (2004) argue that businesses usually work together with a differentiation depending upon the type of collaborative management relationships they have as demonstrated in the figure 2 below.



**Figure 2: Working Together among Enterprises’: An integration Continuum**

Source: Kloth, & Applegate, (2004)



From the figure 2 above, it can be noted that there are five types of business collaborative management relationships. In the first place, before organisations begin to work together they may be described as working *independently*. Each has its own mission, vision, values and priorities, as well as its own distinct boundaries. Even when they are in the same sector or field, which might represent a basis for common interest or action, many organisations remain solely focused on shaping their own position in the sector or field. While they may know about their “competition”, they may not talk with their “competitors” about their read on future trends, new services or products they will offer or their financial strategies. In fact, they may find it hard to maintain secrecy about information related to their operations.

However, when businesses or agencies decide that there is value in working together on common interests, they can enter into a *coordination relationship*, which allows them to maintain their boundaries and distinct interests. In this case, the coordination relationship allows each to work together on common interests while maintaining their boundaries and ability to pursue distinct interests.

In a *cooperation relationship*, each business enterprise also maintains distinct boundaries and interests. However, the difference is that each organisation has an important part in achieving a very specific shared outcome (Kloth, & Applegate, 2004). This implies that there are times when businesses may work together to meet a need in the market place by recognising their distinct strengths. For example, in a car industry, rather than manufacture every part of a car within

a single company, the auto company contracts with other companies to make the parts and then assembles them. They provide a very specific set of technical specifications to all their partners, but may not share company strategies for marketing the product or information about other products they have in development. Thus, they may not share information on how the two cooperating organisations are dealing with their own internal capacity building or internal strategic debates on the impact of future trends in non-profit capacity and infrastructure building on future services provided. As with coordination, each organisation is able to maintain distinct boundaries and interests while sharing together a very specific shared outcome that each has an important part in achieving.

In respect to *collaboration*, businesses or agencies at times find that they have a shared goal that is best achieved by opening their organisational boundaries enough to share what might otherwise be considered proprietary information. In this sense, it can be said that in the context of this continuum, the key to collaboration is that organisations are willing to open their boundaries to achieve a compelling common purpose. They may have to choose to share control and accountability for their future with others over whom they have no direct influence.

Finally, in terms of *integration and full Circle*, some businesses may find that their interests are so similar and their futures so intertwined that they choose integration, which most commonly takes the form of a merger or acquisition.

Businesses may determine that the price of competition, access to market share or other interests make integration desirable.

However, it has to be remembered that every merger provides the parties with a chance to revisit the position of being independent in the sector, hence full circle.

For example, after banks and hospitals merge they become part of increasingly diverse financial and health care industries. When they do combine the systems they may soon realise that they are part of a new, independent system of organisations competing in the larger financial and health care marketplace.

Further, organisational partners may find that it is appropriate to engage in different approaches with the same partner, depending on the nature of the shared interests. In this context, the full circle attributes of working relationships will have to be considered and that will help potential partners make informed choices about the nature of their relationship.

In conclusion it can be said that conceptually, the five key dimensions of collaboration emerge from the growing body of research on collaboration (Gray, 1989, 1996, 2000; Huxham, 1996; Huxham, & Vangen, 2005), and precursor literatures on inter-organisational relations (Ring, & Vande Ven, 1994) and organisational behavior (Hellriegel, Slocum, & Woodman, 1986), which strongly support an integrative view of collaboration as a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible (Gray, 1989).

## The Concept of Knowledge Management and its Dimensions

Knowledge Management (KM) is a multidisciplinary field of study that covers a lot of ground and as such has been defined in various ways. For example, from the *business perspective*, Barclay & Murray, (1997) argue that *KM* is a business activity with two primary aspects: Treating the knowledge component of business activities as an explicit concern of business reflected in strategy, policy, and practice at all levels of the organisation; and, making a direct connection between an organisation's intellectual assets—both explicit (recorded) and tacit (personal know-how), and positive business results

Grey, (1996) also sees KM as a collaborative and integrated approach to the creation, capture, organisation, access and use of an enterprise's intellectual assets. Bhatt, (2001) argues knowledge management is more than the capturing, storing and transferring of information and states it requires interpretation and organisation of information from multiple perspectives. Bhatt, (2002) states knowledge as being more difficult to control than manufacturing activities because only part of the knowledge is internalised by the organisation, the other part is internalised by the individual.

Wiig, (1993) emphasises that given the importance of knowledge in virtually all areas of daily and commercial life, two knowledge-related aspects are crucial for viability and success at any level. These are knowledge *assets* that must be applied, nurtured, preserved, and used to the largest extent possible by both individuals and organisations. The second one is knowledge-related *processes* to create, build, compile, organise, transform, transfer, pool, apply, and

safeguard knowledge that must be carefully and explicitly managed in all affected areas.

In terms of dimension, Polanyi proposed the knowledge dichotomy of explicit and tacit dimension in the 1950s. Polanyi, (1967) said we should start from the fact that “*we can know more than we can tell*”. Polanyi termed this pre-logical phase of knowing as tacit knowledge.

According to Polanyi, (1967) Tacit knowledge is difficult to articulate and difficult to put into words, text, or drawings. Explicit knowledge represents content that has been captured in some tangible form such as words, audio recordings, or images. Tacit knowledge tends to reside within the heads of ‘*knowers*’, whereas explicit knowledge is usually contained within tangible or concrete media. However, it should be noted that this is a rather simplistic dichotomy. In fact, the property of *tacitness* is a property of the knower: that which is easily articulated by one person may be very difficult to externalise by another. The same content may be explicit for one person and tacit for another. There is also somewhat of a paradox at play here: highly skilled, experienced, and expert individuals may find it harder to articulate their know-how. Novices, on the other hand, are more apt to easily verbalise what they are attempting to do because they are typically following a manual or how-to process (Edvinsson, & Malone, 1997).

Typically, the more tacit knowledge is the more valuable it tends to be (Davenport, 2005). The paradox lies in the fact that the more difficult it is to articulate a concept such as *story*, the more valuable that knowledge may be. This

is often witnessed when people make reference to knowledge versus know-how, or knowing something versus knowing how to do something. Valuable tacit knowledge often results in some observable action when individuals understand and subsequently make use of knowledge. This involves all the know-how or all of the processes that were required in order to produce a final product whereas explicit knowledge tends to represent the final end product. Nonaka, & Konno, (1998) also argue that in the context of knowledge management both explicit and tacit knowledge interact to generate process of organisational knowledge creation. However, according to Grant (cited in Chauvel, & Despres, 2000), if knowledge exists in two principal forms, explicit and tacit, and at two major levels, the individual and the organisation then there are significant benefits to the organisation in shifting its primary knowledge base from individually held tacit knowledge to organisation-wide explicit knowledge.

In sum, the critical difference between tacit and explicit knowledge relates to how easy or difficult it is to codify or express the knowledge in terms of which enables it to be understood by a broad audience. If knowledge can be codified in this way then it can be made explicit and thus readily transferable (Burton-Jones, 2001). In the knowledge management domain, the conversion of tacit knowledge to explicit knowledge is critical because knowledge becomes part of an organisation's network (Herschel, Nemati, & Steiger, 2001). According to Koskinen, (2003), several researchers consider that success of an organisation is formed by the interaction between individuals and several types of knowledge. Thus one organisation might need more tacit knowledge than another.

Alternatively there might be differences in the degree to which organisations are able to apply explicit knowledge.

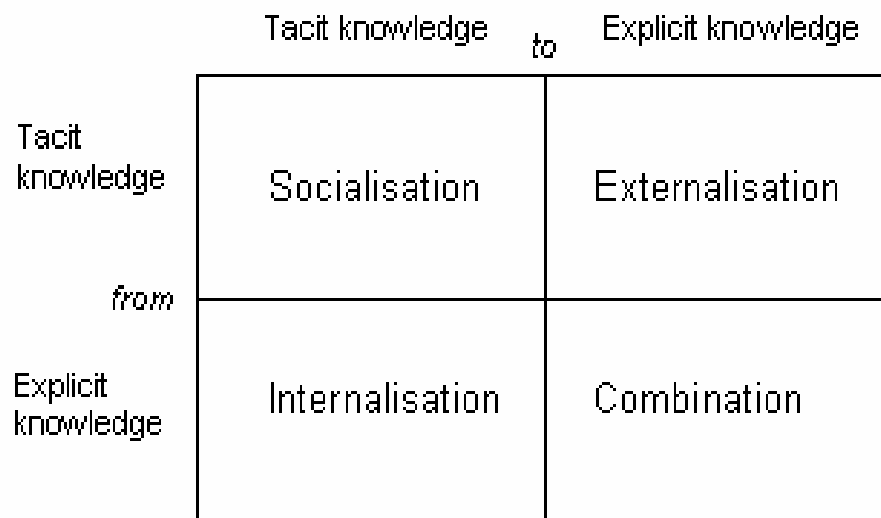
At the individual level, researchers and writers have identified the difference between explicit and tacit knowledge. Knowledge creation involves and combines different sources of information (Rebernik, & Sirec, 2007). The locus of knowledge can be found internally within local boundaries, or externally through intra-firm collaboration (Beckerand, & Gassmann, 2006). On an environmental level companies face the challenge of exchanging knowledge among different agents (Rebernik, & Sirec, 2007). Gillingham, & Roberts, (2006) reinforced the importance of three elements of knowledge management: people, process and technology. To ignore technology would be to restrict knowledge sharing in the organisation. This argument is supported by the Nonaka, Toyama, & Konno, (2000) who claim that through socialisation people are brought together to share tacit knowledge and combination which sorts and reconfigures existing explicit knowledge.

### **The Knowledge-Creating Process**

Nonaka, (1994) describes knowledge creation as an upward spiral process, starting at the individual level, moving up to the collective (group) level, and then to the organisational level, sometimes reaching out to the inter-organisational level. His *Socialisation, Externalisation, Combination* and *Internalisation* (SECI) framework describes a complex series of steps by which personal knowledge is created, transferred and becomes embedded within the fabric of an organisation.

Thus, the SECI framework basically describes the processes involved in creating knowledge, with individuals as the essential actors (Nonaka, 1994) and how it is transferred from the smallest part of the organisation – the individual – to the broader organisation wide context.

He argued the assumption that knowledge is created through conversion between tacit and explicit knowledge that allows us to postulate four different modes of knowledge conversion as shown in Figure 3 below. This model has become an analytical framework on knowledge activities in business organisation.



**Figure 3: The Modes of the Knowledge Creation**

Source: Nonaka's (1994) Modes of the Knowledge Creation

1: *Socialisation*: From tacit knowledge to tacit knowledge:

This is the mode of knowledge conversion that enables us to convert tacit knowledge through interaction between individuals. The key to acquiring tacit knowledge is experience. Socialisation typically occurs in a traditional



apprenticeship. It may also occur in informal social meetings outside of the workplace (Nonaka, Toyama, & Konno, 2000).

2: *Combination*: From explicit knowledge to explicit knowledge:

This mode of knowledge conversion involves the use of social processes to combine different bodies of explicit knowledge through such exchange mechanisms such as meetings and telephone conversations. In the context of the firm, explicit knowledge is collected from inside or outside the organisation and then combined, edited or processed to form new knowledge. The new explicit knowledge is then disseminated among members of the organisation (Nonaka, Toyama, & Konno, 2000).

3: *Externalisation*: From tacit knowledge to explicit knowledge:

This conversion is critical because it is a prerequisite to the knowledge amplification process wherein knowledge becomes part of an organisation's knowledge network (Herschel, Nemati, & Steiger, 2001). When tacit knowledge is made explicit, knowledge is crystallised, thus allowing it to be shared by others, and it becomes the basis of new knowledge (Nonaka, Toyama, Konno, 2000).

4: *Internalisation*: From explicit knowledge to tacit knowledge:

This mode is connected with theories of organisational culture. It is closely related to learning by doing (Nonaka, Toyama, & Konno, 2000). Explicit knowledge in the form of procedures and guidelines has to be actualised through action and practice. By reflecting on this explicit knowledge the reader can internalise the explicit knowledge to enrich their tacit knowledge base.

### **Empirical studies on Knowledge Management**

Martensson, (2000) states knowledge management can either be an operational tool or as strategically focused management tool. Wijnhoven, (2003) described knowledge management from an operation perspective stating the importance of knowledge management as a pre-requisite for higher productivity and flexibility. According to Denning, (2001) referring to a 1998 survey of North American senior executives, managers within organisations recognise the value of managing knowledge stating 77 percent rated “*improving the development, sharing, and use of knowledge throughout the business*” as very or extremely important.

In a study of knowledge management, Simonin, (1997) examined whether or not companies can develop specialised knowledge via experience and then use this knowledge to obtain further benefits. Simonin’s, (1997) results indicated that firms do learn from experience, mainly relating to collaboration and that firms benefits from collaborative knowledge management by being creative. Becerra-Fernandez, & Sabherwal, (2003) state the impact of knowledge management moves up from individuals to groups and then to the entire organisation. Sandrone, (1995) stated all employees have intimate knowledge of job conditions and are therefore able to make useful contributions when knowledge is shared. This has been evolved even further to suggest certain aspects of business have become ‘people-centric’ due to both the knowledge build up and the technological means to transfer information and knowledge. Keller, (2003) argued that better knowledge management had gradually become the key propellant in the growth

and improvement for a *nation's health, military might, economic competitiveness, artistic excellence, social harmony and political stability*".

Knowledge management systems can therefore be considered to be state of the art innovation (Adams, & Lamont, 2003). Pan, & Leidner, (2003) discuss how a knowledge management system has to be carefully designed and implemented. Alavi, & Leidner, (2001) state how organisational and management practices have become more knowledge-focused. As an organisation builds and expands its knowledge base, it builds its intellectual capital and consequently enhances its competitive advantage. Knowledge becomes a competitive asset, especially knowledge which is firm specific, private knowledge, in particular patents, copyrights and 'secret' procedures (Bailey, & Bogdanowicz, 2002). However, as best practices become disseminated within an industry, they become public knowledge (Matusik, & Hill, 1998). As individuals master firm specific best practices, such knowledge becomes portable. It is part of an individual's as well as a firm's human capital. In view of this Jones, Herschel, & Moesel, (2003) argue that knowledge can be built up exponentially by integrating the individual's knowledge with the "*shared organisational memory*".

### **The Benefits of Collaborative Knowledge Management**

The benefits of collaboration in knowledge management include: more effective use of staff as they utilise their skills cooperatively rather than competitively (Henneman, E.A., Lee, J.L., & Cohen J.I., 1995) It helps to bridge a gap between fragmented service provision, sustained energy, cross-pollination of

ideas, sharing of effort and ultimately sharing of organisational structure (El Ansari, & Phillips, 2001).

Collaborative knowledge management leads the growth of a new set of attitudes and skills which makes it possible that today's managers are able to relate very differently and absorb and integrate complexity. Simply put, it makes managers to be aware that organisational intelligence no longer resides solely at the top. It resides in workforces that increasingly have the specialised knowledge and skills required to create today's complex products and services. It motivates managers to become comfortable with the idea of being a member of an organisational team versus being controllers and the source of all knowledge.

Collaborative knowledge management also benefits financial institutions like central bankers in that it allows them to keep abreast with the developments in each other's jurisdictions by leveraging on each other's experience and knowledge to address any possible potential risks and vulnerabilities in the domestic as well as regional markets. In this context, a certain degree of 'openness' in information sharing is demanded, (Tapscott, & Williams, 2011). According to Tapscott, & Williams, (2011), effective sharing would require a relook at the concept of Intellectual Property as it requires releasing and handing over of some kind of assets.

Collaborative knowledge management also prevents managers to bark orders with the expectation of blind obedience. To be effective, collaboration makes managers realise that they must win the hearts, minds, and trust of

personnel who possess specialised knowledge and skills they do not have (Mattessich, & Monsey, 1992).

Through collaborative knowledge management, the growth of productivity is also enhanced. In a study by McKinsey et al (2009), it was revealed that productivity and enterprise collaboration in knowledge management well captures the tremendous value that organisations can realise from a carefully designed and flawlessly executed enterprise collaboration strategy. Indeed, the types of productivity itself can come in three different forms — individual, team, and enterprise productivity — each creating progressively more value than the one before. Productivity comes about due to right people participating in the right interactions at the right time to share information to drive the right decision, competitive advantage, profits and growth at levels previously unthinkable (i.e., transformational benefits) McKinsey et al (2009).

Collaboration in knowledge management also offers a built-in system of checks and balances, allowing group members to hold one another accountable for their work. It may aid inexperienced employees in producing higher quality outputs and meeting completion deadlines because they will be learning faster and at the same time feel accountable to succeed within their groups (Matthew, & Sternberg, 2006). Howells, & Wood, (1993) also asserted that collaborative knowledge management helps firms to gain market access in connection with new product development which ultimately contribute in reducing uncertainty as well as cost-sharing'. Following Howells, & Wood, the benefits to collaborating firms,

are summarised from Dunning, (1993), who asserts that inter-firm collaborative knowledge management assists in providing the following benefits:

1. Sharing of large investments needed for specific activities such as in R&D
2. Acceleration of return on investment through a more rapid diffusion of the firm's intelligible assets;
3. Spreading the risks;
4. Enhanced efficiency through economies of scale, specialisation and/or scope, and/or co-opting with the competition

As a strategic benefit for collaboration, it has been argued by Mytelka, (2001) that collaboration in knowledge management helps firms to create new entry barriers that set industry standards, rules, and competitive practices, control the evolution of technology, and reduce the shocks of radical change. In terms of monitoring technological developments, collaboration can be seen as a viable means to monitor several technological developments at relatively low costs' (Economic Commission for Europe (1987) and Korzeniowski, (1988) in Duysters, (1996). For the large firm, collaboration in knowledge management enable the monitoring of several state-of-the-art developments while concentrating on a few projects internally and/or scouting out new business opportunities (Duysters. 1996; Lorange, & Roos, 1992).

This activity is a precursor to developing new innovations and has the capacity to restrict the access of competitors and/or evolve into the creation of new industries and segments. In terms of collaborative type, the activity of monitoring technology developments is considered here to have characteristics of

an “option” alliance defined in the previous chapter. What is important to describing these relationships as an alliance is that the partnering firms commit resources that will result in reciprocal knowledge sharing.

It is within the process of monitoring technological developments that firms are able to develop the trust that may result in either a “Project” or “Core Competence” alliance and are then able to satisfy “strategic longevity” ( Mytelka, 2001).

In respect to restraining the competition, forming collaboration in knowledge management with an innovator can also prevent it from teaming up with another powerful competitor (Dussage, & Garette, 1999) and organising inter-firm collusion (Buckley, & Casson, 1988: in Buckley, 2000). The payoff to the large firm is dual-fold: one, gaining access to new and complementary technologies and two, to marginalise the access to these technologies by competitors. These types of collaborations can involve either intra- or inter-industry firms and exhibit the characteristics a “Core Competence” coalition.

Finally, having collaboration in knowledge management also helps in the creation of new industry segments. This type of collaborative behaviour is characterised by its capacity to broaden partnering firms into new industry segments and to restructure industries along Schumpeterian terms that result in “creative destruction” as new industries emerge and old industries restructure. For reasons of distributed ownership, power and loyalty, collaboration between firms is likely to evolve into a takeover by one of the parties or a joint venture for the innovation to succeed commercially. Schermerhorn, (1975) argues that interagency

cooperation prevents duplication of efforts and as such worth encouraging. In services, the problem of duplicating, overlapping, and fragmentary services due to a “coordination gap” between responsible agencies can be observed Schermerhorn, (1975) but it can be solved by inter-agency cooperation which is the suggested corrective strategy in the literature.

### **The Barriers to Collaborative Knowledge Management**

While collaborative knowledge management in business can bring about a number of benefits, there are difficulties that partners might encounter in their endeavor to establish a successful and effective collaboration. Challenges may occur both in the context of the relationship between the collaborating organisations and during the implementation of the collaboration objective on the ground. These challenges can be barriers that have potential to slow down, constrain, hinder or in another way negatively influence the process (Shavinina, 2003). Shavinina, (2003) claims that the opposite is a facilitator, something that influences the process in a positive manner but both barriers and facilitators are so tightly connected that lack of facilitators themselves lead to barriers. However according to Zahra, & George, (2002), the degree to which collaborating parties face most of the challenges during the partnership process is expected to be influenced by the partners’ relational history, the length of their collaboration, the amount of experience the partners have in collaborating with each other, the degree to which the business is involved in sustainability practices, and the type



of partnership. Barriers can be categorised as external (i.e. market or government related) or internal (i.e. structure and people related) as by Shavinina, (2003).

Many factors influence and affect the possibility for different entities to perform in collaborations, but a number of abilities and capabilities are of greater importance. Sherwood and Covin, (2008) mentioned three factors that can strongly influence the process of collaboration, and these are independent variables influencing the success of such a transaction.

The first is trust, not only on an individual but also on an organisational level, between parties – a factor that is needed to avoid barriers in the transfer, consisting of a resistance to both to initiation of change and the practices connected to it.

The second of the three influential factors is familiarity, in the meaning that the entity acquiring and managing knowledge will perform better in that aspect if it has knowledge and experience of the knowledge supplier, the technology involved and the transfer process.

The third factor involved is interaction. In this case, Sherwood, & Covin, (2008) propose that the success in knowledge management depends on the amount of interaction between the two entities. This is specified as the amount of people involved in the transfer, how formally they are assigned not only to the task but also to co-operate with the other parties' representatives and the amount and frequency of contact between these. This combined is, according to Sherwood, & Covin, (2008), related to the success in collaboration.

Cantoni, Bello, & Frigerio, (2001) also present two major barriers to collaborative knowledge management: localisation and culture. Localisation represents the physical barriers to transfer, most noticeably distance that can disrupt the flow of information between two parties. Culture on the other hand represents the psychological disruptions that appear, based on the difference in understanding, norms and practices in the respective organisation. Carlile, (2002) supports the barrier presented by Cantoni et al. (2001) by explaining how the transfer of knowledge is facilitated by two factors – homogeneity and co-location both contribute to the success of knowledge transfer in an innovation process.

Another barrier according to Wilson, (1989) is the fear of losing territories and or autonomy. Autonomy is defined by Philip Selznick as a condition of independence sufficient to permit a group to work out and maintain its individual identity (as cited in Wilson, 1989). Wilson, (1989) argues that high priority is attached by bureaucracies to autonomy and in collaboration firms are often worried about losing their independence. This leads to a struggle which makes coordination between firms very difficult. There are two parts the loss of autonomy: external and internal autonomy. The external aspect of autonomy refers to independence which is equivalent to jurisdiction or domain of the organisation. The internal aspect of autonomy represents identity or mission which is defined as a shared understanding of the core task of the agency. When firms are involved in collaborative activities by having similar tasks or coordinating tasks, the struggles over autonomy become especially visible. According to Wilson, (1989) turf conscious organisations are averse to division of

labor and cooperation, because they do not want to share power or they fear being dominated by other agencies.

Thus, a defining dimension of collaboration that captures both the potential dynamism and frustration implicit in collaborative endeavors is the reality that partners share a dual identity: They maintain their own distinct identities and organisational authority separate from a collaborative identity. This reality creates an intrinsic tension between organisational self-interest—achieving individual organisational missions and maintaining an identity distinct from the collaborative—and a collective interest—achieving collaboration goals and maintaining accountability to collaborative partners and their stakeholders (Bardach, 1998; Tschirhart, Christensen, & Perry, 2005; Wood, & Gray, 1991).

Huxham, (1996) refers to this tension as the autonomy–accountability dilemma. Representatives from participating organisations in the collaboration are likely to experience significant tension as they are pulled between feeling accountable to the demands of their parent organisation (and its constituents) and the demands of their collaborative partners (and the constituents of the collaboration). Unless the individuals representing their various parent organisations are fully empowered by their organisations to make judgements about what they may commit to in the collaboration, Huxham, (1996) writes, they will constantly have to check in with their “parents before action can happen” (5). This often exacerbates tension within the collaboration as collaborating partners wait to hear back from the parent organisations and the momentum that collaboration partners may have at first experienced slowly diffuses into what Huxham calls collaborative inertia. It

is not surprising, then, that when collaboration's goals conflict with the autonomous goals of individual partner organisations, identities are at stake and it is likely that individual missions will trump collaboration missions. This potential tension is significantly exacerbated by the reality that in collaboration, no formal authority hierarchies exist between collaborating partners; this means, writes Huxham, (1996), that working relationships between individuals from different organisations can only be formed on a goodwill basis.

Keanevey, (2008) also points out another possible barrier in collaboration including a set of attitudes and prejudices against each other. This maybe founded in a lack of understanding, communication and experience. A study by Gilja, (2013) also found that heterogeneity often introduces barriers in collaborative knowledge management in the area of communication, information sharing, decision making, and operations. Unless properly managed, the barriers may lead to a lack of mutual trust and respect, which are critical to collaboration.

Gilja, (2013) also found that lacking knowledge about other organisations' capabilities and requirements can be a source of barrier. Lacking knowledge about other organisations' capabilities and requirement here means that responsible personnel do not have sufficient knowledge about other organisations competence, material resources and requirements when operative. Knowledge about other organisations may exist in preparedness plans and action plans, but may not have been internalised by leadership personnel

Other barriers identified by Gilja, (2013) in addition to the above include first, organisational instability" which involves several organisational aspects

such as the degree of turnover, competence level, and number of available personnel across place, time and type of event. The element that these aspects have in common is fluctuation. Secondly, other firms may have unspecified organisational tasks which denote that some organisations do not have certain pre-designated event specific tasks and roles. In contrast others may have clearly defined tasks and roles across operations. Thirdly, there can be inadequate notification routines which denote that organisations are notified late or not notified at all of possible events that are to take place. Fourthly, there can be “tribal language” which is here meant the specific organisational terminology used to describe phenomena in the world. Different organisations or organisational subdivisions may use different words to describe the same phenomenon, or use abbreviations and “codes” known and mastered solely by members of the organisation or unit. “Tribal language” as a barrier becomes most evident in the specific practices constituting the interfaces between organisations such as radio communication and operative collaboration where personnel from different organisations are collaborating in close physical proximity (Gilja, 2013).

The final barrier according to Danaher, (2011) is lack of effective Leadership. Leadership develops out of trust among partners and in turn fosters trust and good working relationships. The collaboration needs to know it can count on the person representing their best interests and put the common good before personal gain. Effective leadership requires excellent communication. It is effective leadership that ensures the various partners participate on an equitable footing. Strong leadership is needed to communicate the vision, particularly with

those at higher levels (e.g. regional or provincial) or when seeking funding. Leadership is also needed to frame the vision from the perspective of the various sectors based on an understanding of how each sector is needed to describe the desired change. It is through effective leadership that the group can be inspired and the momentum kept going (Fawcett et al, 2010).

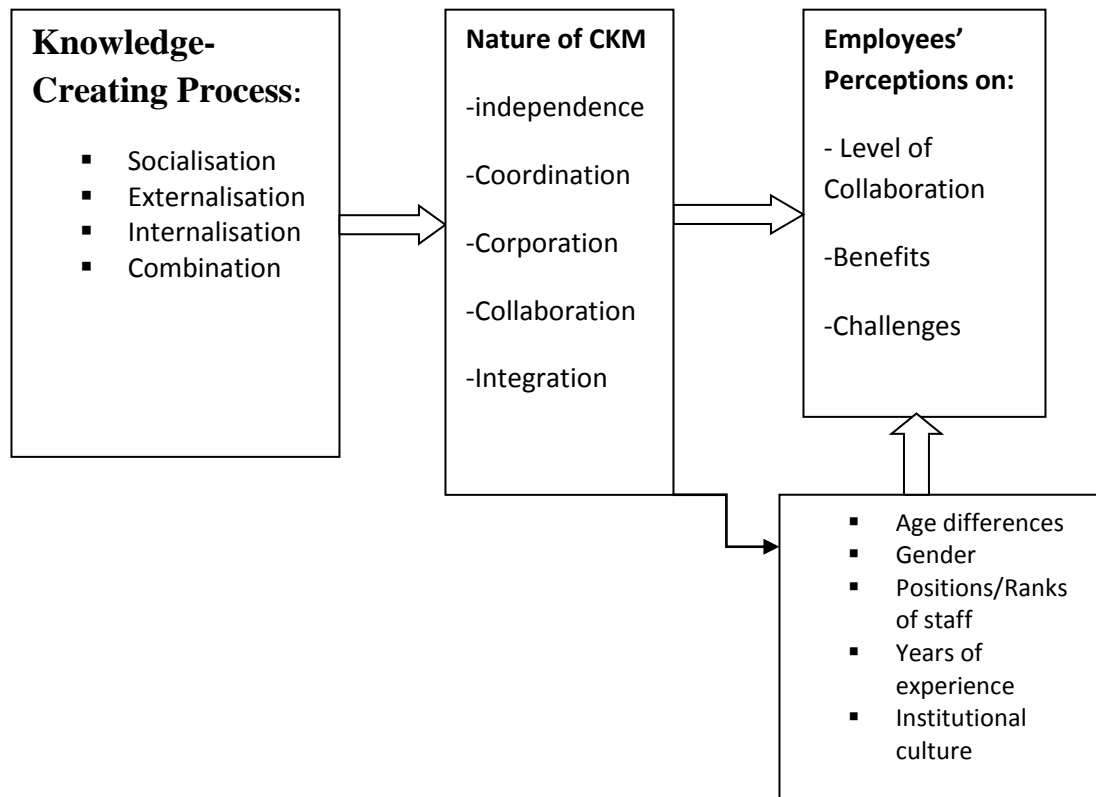
### **Research Gap**

Based on the literature review, it is fair to say that the subject of collaborative knowledge management is relevant and it has now become an important area for firms to focus. It has the potential to generate better competitive advantage among collaborators and consequently an organisational growth in productivity.

Thus in theory at least, decision making on collaborative knowledge management need to be promoted. However, in practice many organisations have little knowledge about how important collaborative knowledge management is. Also, based on the review, evidence has shown that although collaborative knowledge management can be significant step in ensuring improvement in innovativeness in private enterprises, little research is done on the subject in Ghanaian context particularly in the area of challenges. In a sense, whilst the literature is vast on collaborative knowledge management and the need to implement it in various institutions has been well discussed in the literature, very little attention has been given to it.

In particular the researcher found no study reporting exclusively on the level of collaboration among business enterprises in the Ghana as well as the barriers and the challenges involved in undertaking such joint activity. This can be considered as unhelpful to both the national development and the growth of business enterprises taking into account the fact that if productivity in these institutions is to be sustainable, collaboration in knowledge management needs to be developed and promoted at both the micro and macro levels. Through the case study, this study will try to contribute in filling the literature gap by exploring the extent of collaboration in knowledge management among business enterprises in the rural banking industry. The study also aims at investigating into challenges faced in carrying out collaborative knowledge management.

Based on the research objectives figure 4 below has been used as the framework underpinning this study. Figure 4 forms the basis of the conceptual framework on CKM which will be used in this study. The framework demonstrates that knowledge creation can be achieved through socialisation, externalisation, internalisation and combination, which in turn lead to the nature of collaborative knowledge management that will be put in place. Such nature will determine the perceptions that employees have on the level, benefits and challenges involved.



**Figure 4: Collaboration and Employees' Opinions on CKM Conceptual Framework**

Source: Author's construct, (2015) based on Nonaka's (1994) Modes of the Knowledge Creation and Kloth and Applegate (2004) integration Continuum

However the framework emphasises on the forces that are likely to influence staff perceptions on the CKM in areas such as: the level of collaboration, perceived benefits and the challenges faced in engaging in CKM. Implicitly, based on the framework, it can be said that one of the factors that can influence staff's perception is gender status, implying that , for instance, being a



female or male can have a significant impact on individual's views. This means that being a male contribute to differences in opinions about the level of collaboration compared to the female.

In the same way, when it comes to the benefits as well as the challenges faced in undertaking CKM, factors such as gender status, staff positions, years of staff experiences and age/generational differences can have significant influence on how staff perceives the level of collaboration, the benefits and challenges. In addition, in this study, institutional and / or organisational influence has been added to the factors influencing CKM. With this factor, it is argued that the level of collaboration can also be influenced by social and cultural factors. These factors have the tendency to make people unwilling to collaborate as they fear to lose their autonomy or due to bureaucracy. In essence, in the context of organisational/institutional culture, it can be considered to be those practices that, in addition to being directly connected with the institution, often exert influence on various aspects of its operations in collaborative activities.

From the above framework, it can be hypothesised that demographic features of employees have significant influence on individual perceptions and as such there are significant differences in perceptions among the groups.

### **Summary**

This chapter has provided as the background information which has acted as the stepping stone for the development of this study. The goal of this chapter has been to review the relevant literature on CKM. The first section concentrated

on the discussions on the concept of Collaboration as well as collaborative management including its purposes. The purpose here is to provide an understanding of the collaboration, its typologies and the underlying reasons for conducting it. The second section rather focused on knowledge management and its benefits: The third and the last section dwells mainly on the challenges faced in undertaking CKM. The chapter concludes with the identification of the literature gap before adding the conceptual framework of the study.

## CHAPTER THREE

### METHODOLOGY

#### **Introduction**

This chapter focuses on the study design and methodology. The chapter begins with the description of the study design which is based on a case study approach with some selected Rural Banks in the Eastern Region as the study area. In effect, the first section of the chapter will define the type of research design, the population and sample, the instrument, and the procedures used for the study. Secondly, the data analysis section focuses on the statistical analysis process of the study. Finally, the chapter concludes with validity and reliability of the study, a description of the ethical consideration of the study, as well as the limitation of the study.

#### **Research Design**

The study design was cross-sectional and an exploratory in nature which seeks to discover the benefits and challenges of collaborative business relationship as perceived by employees in the selected Rural Banks in Eastern Region of Ghana.

It was a quantitative study with the use of an exploratory approach which was based on the argument made by Robson, (2002). According to Robinson, exploratory study is valuable particularly when there is very little information known about the phenomenon and one wishes to clarify ones understanding of a problem, particularly when one is unsure of the precise nature of the problem. Thus, such an approach is a valuable means of finding out ‘what is happening; to

seek new insights; to ask questions and to assess phenomena in a new light' (Robson, 2002). In view of this, this study used this approach because the study was considered to be addressing an issue which lacks knowledge and awareness in the area. In addition the problem was considered to be not very well understood with very little existing research on the subject area. Hence, the need to use exploratory research which has the purpose of identifying the relevant factors that might be contributing to the understanding of the research study.

Being an exploratory in nature, there was the need to use a case study method to achieve our research objectives as it could help to collect detailed information from various sources. In addition, it was believed that using a case study could help in getting a deeper insight into the problem and to have a better understanding on the viewpoints of my respondents (Yin, 1994).

### **The Study Setting**

The banking sector has become one of the most strategic sectors in the global economy in the last few decades. Knowledge management is acknowledged as a core competence for the banking industry. This is mainly because, the sector, in particular, requires advanced knowledge utilisation. Financial providing firms are supposed to be knowledge-oriented firms that are expected to apply the latest technologies. They have to gather and generate knowledge continuously, and disseminate it throughout the organisation and utilize it wisely, in order to satisfy the sophisticated needs of their customers while using the available resources in the most efficient way. Hence, knowledge

management implementation in the financial sector is seen as an attractive issue both for academicians and for practitioners.

Rural Banking industry is a promising industry in the financial sector in Ghana, which is why it has been chosen as a case study for knowledge management activities. Rural Banking industry is an industry which provides financial services in both the areas of cities and towns particularly in 'difficult to reach' communities in Ghana. They are unit banks owned by members of the rural community through purchase of shares and are licensed to provide financial intermediation. They were first initiated in 1976 to expand savings mobilisation and credit services in rural areas not served by commercial and development banks. The number expanded rapidly in the early 1980s, mainly to service the government's introduction of special checks instead of cash payment to cocoa farmers, though with adverse consequences for their financial performance (Nissanke, & Aryeetey, 1998).

### **The Target Population**

According to Punch, (1998), one cannot study everyone, everywhere, doing everything and so sampling decisions are required not only about which people to interview or which events to observe, but also about settings and processes. The study population therefore comprised of employees in some selected rural banks in the Eastern region of Ghana. These are; Odwenanoma, South Akim, Atiwa, Mponua, Adonten, Mumundu, Akwapem and Upper Manya Kro.

The *inclusion criteria* for this study were:

- Management support for the study
- Employees in any of these banks;
- Employees who gave written consent to take part in the study;

On the other hand the *exclusion criteria* were those employees who:

- Did not live in the community and not working in the rural banks
- Who have not had one or more babies
- Lack of support from the management for the study

The region in which the study was carried out was purposively selected for its convenience because it was easily accessible to the researcher since that was the region where the researcher was staying.

### **The Sampling Method and Sample Size**

Sampling is an integral element of a research methodology. At the completely best case scenario, it is possible to include the entire sample population (Saunders, Lewis, & Thornhill, 2009, p. 211) in the research being conducted. Unfortunately, this was almost never the case in reality. Therefore, sampling was needed considering the budget and time constraints on the researcher, and considering the fact that it would simply be very impractical, and impossible, to include the entire population due its vast size. Thus, in principle, there were a lot of employees who could potentially be considered to be respondents and needed to be sampled from the study population through the calculation of a sample size.

In calculating a sample size, the Cochran, (1963) formula that could be used to derive an estimate of the sample size should have been as follows:

$nr = Z^2pg/e^2$ . Which is valid where  $nr$  is the sample size,  $Z^2$  is the normal curve that cuts off an area  $a$  at the tails ( $1 - a$  equals the desired confidence level, e.g., 95%)  $1$ ,  $e$  is the desired level of precision,  $p$  is the estimated proportion of an attribute that is present in the population, and  $q$  is  $1-p$ . The value for  $Z$  is found in statistical tables which contain the area under the normal curve.

Nonetheless, the sample formula was not used to select the participants of the study. Instead, the study population was purposely chosen for practical reasons. Thus the sample of this research was determined using judgmental sampling which is a form of convenience sampling in which the population elements are selected based on the judgment of the researcher. Convenience sampling attempts to obtain a sample of convenient elements where the selection of sampling units is left primarily to the interviewer. This technique is recommended for less expensive and less time consuming researches (Shannon, & Bradshaw, 2002). Besides, the selected banks were close to the researcher and as such were practically possible to collect data on all the potential respondents. Consequently, based on the small size of the population of the study organisation, a census survey was employed. Harding, (2006) defined a census in research as a process of collecting data from every member of the population being studied at a point in time with respect to well defined characteristics. In other words, a census includes every member in a selected population. In this vein, the current study chose the use of the census approach to collect data from respondents due to the small population size of 80 employees at the time of administering the survey questionnaires.

According to Shannon, & Bradshaw, (2002), one of the strengths of the census survey is that everyone has an opportunity to participate and accuracy concerns are reduced. In relation to the current study, all employees in the organisation had an equal chance of participating in the survey, though some chose not to participate. Also, because all the employees had an equal opportunity of participating in the survey, there was a greater chance of obtaining responses that are representative of the demographic structure within the organisation.

Overall, the researcher decided to choose all the eight rural banks at the southern part of the eastern region with a population of 125 employees. Out of these figures, 20 respondents (16%) never returned the questionnaires but 105 (84%) did, hence 105 respondents took part in the study. Data entry was done after completing the data collection.

### **The Data Collection Procedure**

The tool that was used for data collection was a survey questionnaire. This tool was used because of the intention to collect data from a specific population was to ask the various respondents about their opinions on the topic. Survey questionnaires were self-administered. The language used throughout was English. However, because we sampled all of the respondents in the banks that were purposely selected the use of census technique was used. The frame of the accessible population was identified by the personnel records of the individual Banks. The list of employee participants was provided directly by each Banks from their personnel management databases



Surveys were distributed to eligible employee personally by the researcher. Thus employees who participated in the survey received a questionnaire delivered to their work station. A letter from the researcher describing the study and instructions was included in the packet along with a return envelope to the researcher's attention via the organisation's Human Resource Department. The cover letter was prepared according to Dillman's, (1978) suggestions. The letter and the survey are included in Appendix A. A follow-up email was sent to all eligible employees two weeks after the survey was sent. This encouraged completion and return of the surveys.

### **The Data Collection Technique**

In collecting data, there were two types of survey questions that were used namely *Open-ended* survey and *Closed-ended questions*. Both open and close ended questions were used to elicit responses needed to answer the research questions and achieve the objectives set for this study. The *Open-ended* questions allow respondents to answer in their own words as well allowing the researcher to explore ideas that would not otherwise be heard. They are also useful where additional insights are sought and the researcher is less familiar with the subject area and cannot offer specific response options (Salant, & Dillman, 1994). However, the disadvantages are that open ended questions are a bit difficult to answer and also more difficult to analyse. It is therefore not advisable to use it when data is needed from a large sample since analysis could be a problem (Saris, 1991).

In contrast, the latter (*closed-ended*) questions require the respondent to choose from among a given set of responses and require the respondent to examine each possible response independent of the other choice.

In general, according to Leary, (1995), there are distinct advantages in using a questionnaire rather than an interview methodology. One of such advantage is that questionnaires are less expensive and easier to administer than personal interviews. Robson, (1993) indicates that mailed surveys, for example, are extremely efficient at providing information in a relatively brief time period at low cost to the researcher. Also they allow confidentiality to be assured. However, it can be said that with this technique, the information one collects is not first-hand (like an observation) but rather “self-reported” data, or data collected in an indirect manner. Experts have argued that people are inherently biased about how they see the world and may report their own actions in a more favorable way than they may actually behave.

Part I of the survey contained demographic questions while the other four Parts had questionnaires on the level of collaboration, the perceived benefits, challenges and strategies to address the perceived challenges respectively.

Perceptions of on these issues were measured on a five point scale with 1 = strongly disagree; 2 =disagree; 3 = neither agree nor disagree; 4 = agree; and, 5 = strongly agree.

### **The Pre-Test**

Before the actual data collection, a pilot study (pre-test study) was done in one of the two of the local banks that are not Rural Banks but within the area. These banks were chosen for pre-testing because they had facilities and human resources which were similar to the rural banks in the study area.

In this study the pre-test of the research questionnaire was done aiming at testing the accuracy and strength of the questionnaire in eliciting data needed for the study. In other words, this was to help assess the clarity of the questions to the respondents and to elicit their understanding in regards to answering questions. The answered questionnaires were administered and at the same time analysed but the results were not added to the main results of this study.

### **The Data Analysis**

The data were analysed according to the objectives of the study and by the use of SPSS. The individual analysis of each objective is presented in this section. Objective 1 described participants based on specific demographic characteristics. Demographic characteristics were summarised using frequencies and percentages for all variables including: age; gender; job classification; years on the job. The other objectives were analysed by measuring the perception on a five point scale with 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; and, 5 = strongly agree. The mean and standard deviation were calculated for each item. The first stage in the analysis was the frequencies. This was done

using simple and cross tabulations. For each set of questions, a percentage number of people involved was calculated.

Cross-tabulations and *Chi-square* tests which are statistical techniques were also used to describe two or more variables at the same time. The *chi-square* is most commonly used statistical test to assess the statistical significance of the observed association in a cross-tabulation and contingency tables. The test assists in determining whether there exists a systematic association between the two variables in question. The actual test is done so that an expected value or frequency is computed for all cells assuming that no association exists between the variables. Then, these results are compared with the actual frequencies and the chi-square value is calculated (Malhotra, & Birks 2007; Bryman, & Bell 2003).

It is so that the greater the difference is between these frequencies, the greater the chi-square value is. This does not have significance on its own. Instead, it needs to be interpreted in relation to its associated level of statistical significance which is probability (p). It is an ordinary convention that in order to being at acceptable level, p should be lower than 0.05. (Bryman, & Bell, 2003).

Correlation (r) was also calculated to confirm the kind of association that exists between variables.

### **The Validity and Reliability**

Reliability and validity are important concepts for research as it is crucial to be able to measure issues accurately, meaning if the received answers are

actually the truth and can they be replicated (Shank, 2006). Without giving consideration for reliability and validity, the results of any research cannot be taken completely seriously. At the very least, caution needs to be executed when discussing the generalisability of a research (Shank, 2006). Reliability and validity are two key components to be considered when evaluating a particular instrument. Reliability, according to Bless, & Higson-Smith, (2000), is concerned with the consistency of the instrument, and an instrument is said to have high reliability if it can be trusted to give an accurate and consistent measurement of an unchanging value. In this study, reliability was assured by cross checking responses to ensure that the responses follow reasonable manner

The validity of an instrument, on the other hand, refers to how well an instrument measures the particular concept it is supposed to measure (Whitelaw, 2001). Thus validity is concerned with the truth, meaning if the obtained results are actually true and that the interview questions relate the central concepts of the research (Shank, 2006). The extent to which the methods to collect data indeed measure what the researcher claims to measure is referred to as internal validity. To enhance internal validity each employee was interviewed in the same way with regard to the research questions .The consistency in interview topics and interview questions ensured that differences in the information the interviewees gave can be attributed to actual variations between the interviewees rather than differences in the way the interviews were conducted. Furthermore, concepts were defined as precise as possible and translated in operational quantities.

The researcher also used a measure which is 'theory triangulation', which helps me to verify findings by using numerous perspectives (Yin, 1994). Besides, the literature was reviewed and the interview questions were sent to the academic supervisor of the dissertation for commentary. Any redundancies and misunderstandings were corrected based on the received feedback.

### **Ethical Consideration**

Researchers may encounter moral dilemmas due to using methods that are seen to have violation against human rights or possibly causing harm (Johnson, & Long, 2010). Thus, since human beings are entitled to human rights and need to be protected from harm and exploitation, the research and ethics committee of the Ethical Committee of the School of Business, University of Cape Coast reviewed the research project proposal and approved the research project to be implemented

Besides, the following issues were emphasised along with the intentions to use several strategies to deal adequately and ethically with the prospective participants prior to engaging in the study.

Each participant, whether in the survey or interview, was provided with an information sheet explaining the aims and purposes of the study and what is expected from their participation. Furthermore, all participants were made aware of the fact that they have the right to withdraw from the study at any time. Confidentiality, self-determination and subject anonymity were strictly preserved at every level of the study interview. All efforts were undertaken to avoid any

identification or disclosure of individual employees, the organisations or systems in order to maintain appropriate anonymity and to safeguard confidentiality.

### **The Field Challenges**

Although this research study was carefully prepared, there were some methodological and financial drawbacks.

First of all, the questionnaire used for the structured interview contained some questions which required that participants recall practices that may have taken place several months ago. Recall of information depends entirely on memory which can be imperfect and unreliable.

Secondly, the study sample size was small due to the limited funds for the research. Therefore the study findings may not be representative of the entire population.

Finally, the research was quantitative study with the use of exploratory approach hence very little information could be gathered due to very little existing research on the subject area. From the method used, most of the questions were provided with possible choices and as such most of the respondents were not given enough room to express their own opinions.

### **Summary of the chapter**

The purpose of this Chapter was to describe the methods used in achieving the aim of this study. The discussions of the various topics included: Research design and Setting; Target population with inclusion and exclusion criteria; Sampling method and Sample size; Data collection tool and technique; Pilot study; Validity and reliability of the study; Ethical considerations and Limitations of the study.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### INTRODUCTION

In this study, the main research question has been, “*How is collaborative business management perceived in terms of its benefits and challenges by the employees of the selected rural banks in the Eastern Region in Ghana?*” On the basis of this, survey questionnaires were undertaken to access the perceptions of the employees in the selected areas. The main intention was to have an in-depth understanding about the level of collaborative management among these rural banks and the perceived benefits and challenges involved in having such management in the study area. This chapter therefore provides the findings and discussions as they relate to the original research questions reflecting on the underlying objectives as outlined in Chapter one.

The first section discusses the demographic features of those surveyed. The second section, however, addresses the research questions relating to the topic namely:

- 1: What is the level of collaboration among the selected Rural Banks in the Eastern Region of Ghana?
- 2: What are the perceived benefits of collaborative management?
- 3: What are the perceived challenges that undermine collaborative management among the selected Rural Banks in the Eastern Region of Ghana?

Having answered all the research questions relating to the objectives, the third and final section will then focus on the discussion.

### Socio-Demographic Characteristics

In order to obtain the socio-demographic characteristics of the respondents, the first section of the questionnaires was designed in such a way that the respondents could provide answers relating to their backgrounds. After analysing their answers, the data that was obtained has been summarised and shown in Table 1.

Table 1

*The results of the demographic features of the respondents*

<b>Variable</b>		<b>Frequency</b>	<b>Percent</b>
Sex	Male	56	53.3
	Female	49	46.7
Age	20-30	21	20.0
	31-40	27	25.7
	41-50	25	23.8
	51-above	32	30.5
Staff	Junior	51	48.6
	Senior	54	51.4
Experience	Less than 1 year	23	21.9
	1-2 years	28	26.7
	3-10 years	24	24.9
	11 and above	30	28.6
<b>Total</b>		<b>105</b>	<b>100</b>

Source: The researchers' own analysis of the field interviews, 2015

Table 1 shows that 53.3% of the respondents were males and 46.7% were females. With respect to the age of the study participants, the largest group (n=32,

30.5%) was in the 51-above years age group. The second largest group (n=27, 25.5%) indicated their age as within the 31-40 year group. This was followed by those who were in 41-50 age group (n=25, 23.8%) while those within 20-30 age group were the minority (n=21, 20.0%). The implication is that most of our respondents were comparatively older ones with long tenure in the banking industry whereas the youngest age group was least represented. This shows that

With regard to number of years working experience, the results indicate that a greater number of the respondents, about 29%, have only worked for more than 10 years, (11 years and above) with 26.7% working for one to two years. 23 % of employees have worked for 3 to 10 years, while 22% have worked for less than 1 year. What this suggests is that those with more experience are strongly represented, while those with less experience are least represented. This is reflected in the professional ranking of the respondents with the junior staff forming the minority of the respondents (48.6%), while the senior staff is the majority of 51.4 %.

### **The Extent of Collaboration in Knowledge Management among the Selected Rural Banks**

On the question of the extent of collaboration in knowledge management among the selected Rural Banks, respondents were asked how far they do agree or disagree with the fact that there has been collaboration in knowledge management within the rural banking industry in their area. In response to this, it was realised that their perceptions on the level of collaboration were not encouraging as it can be seen from the Table 2 below.

Table 2

*Perception on the extent of collaboration in knowledge management among selected rural banks.*

	<b>Frequency</b>	<b>Percent</b>
Strongly disagree	32	30.5
Disagree	29	27.6
Neutral	5	4.8
Agree	34	32.4
strongly agree	5	4.8
<b>Total</b>	<b>105</b>	<b>100</b>

*Source:* The researcher's own analysis of the field interviews, 2015

From the Table 4.2, it can be noted that majority of the respondents (31%) strongly disagreed that there has been collaboration in knowledge management within the rural banking industry in their area. In addition 27.6 % also disagreed while only 4.8% neither disagreed nor agreed (i.e. neutral) on this question. In cumulative sense, more than half of our respondents (58.1%) at least disagreed. However 37.2% also had a different view. Among these employees, 32.4% agreed there has been collaboration in knowledge management while only 4.2% strongly agreed to the issue that there has been collaboration.

However, from the conceptual framework, it was stated that demographic factors are more likely to influence the perceptions of individuals on the level of collaboration. These factors are; age, tenure or number of years of experience, gender and rank/position. It was therefore decided to delve into the relationship

between demographic features and the low level of collaboration in knowledge management among banks. The results of the non-parametric Pearson Chi-square and Spearman correlation are shown in the Table 4.3 below

Among these respondents majority of the male (39.3%) agreed with only 5.4% strongly agreeing to the statement, while equal percentage figures of respondents (26.8%) each strongly disagreed and disagreed with only 1.8 % being neutral. In contrast, majority of the female (34.7%; 30.6%) strongly disagreed and disagreed respectively. Only 22.4 % agreed and 4.1% strongly agreed with 8.2% being neutral or undecided. These relatively small differences are reflected in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 5.349$ ;  $p=0.253 > \alpha 0.05$ ). This implies that being a female or male does not explain any significant difference in perceptions on collaboration. This is supported by a Spearman Correlation, (r) of 0.141 and 0.152 which indicates a trivial relationship between Gender and perceptions on collaboration in knowledge management.

Table 3

*Non parametric Pearson Chi-square Results and Spearman correlation depicting the relationship between demographic features and the low level of collaboration in knowledge management among banks*

Demographic Features	Spearman Correlation	Approx. Sig.	Pearson Chi-Square Critical ( $\chi^2$ )	Asymp. Sig. (2-sided)
<b>Sex</b>	<b>0.141</b>	<b>0.152</b>	<b>5.349</b>	<b>0.253</b>
<b>Age</b>	<b>0.037</b>	<b>0.711</b>	<b>13.044</b>	<b>0.366</b>
<b>Staff ranking</b>	<b>0.013</b>	<b>0.894</b>	<b>5.783</b>	<b>0.216</b>
<b>Experience</b>	<b>0.057</b>	<b>0.561</b>	<b>10.869</b>	<b>0.540</b>

Source: Field Survey, August, 2015  
Significant at  $\alpha 0.05$  (CI: 95%)

In terms of Age, the story does not seem very much different. Among those within the age bracket of 20-30, majority (38.1%) strongly disagreed, 14.3% disagreed, 23.8% agreed and 9.5% strongly agreed. 14.3% was neutral. In the same way, with those in the age group of 31-40, 33.3% and 30.3% disagreed and strongly disagreed respectively, while 30.3% and 3% agreed and strongly agreed respectively. Only 3.0% remained neutral. Similarly, those in the age group of 41-50 had the same pattern of agreements or disagreements. For example, the majority of 41.4% agreed while the same percentage figure of 27.6% strongly disagreed and disagreed with only 3.4% being undecided. Finally those in the higher age group of 51 and above had almost the same results. For these group, the majority of 36.4% disagreed while equal number of percentage (27.3%) also agreed and disagreed but with relatively a higher percentage number of 9.1% strongly agreeing. These small differences are reflected in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 13.044$ ;  $p=0.366 > \alpha 0.05$ ). This suggests that being in a younger age group or older age group does fairly explain any significant difference in perceptions on collaboration. This is consistent with a Spearman Correlation, (r) of 0.037 and 0.711 which indicates a reasonable amount of relationship between age group and perceptions on collaboration in knowledge management.

In respect to staff ranking, among the junior staff, 35.3% strongly disagreed whilst 19.6% disagreed, while 31.4% agreed and 7.8% strongly agreed. Only 5.9% did not decide on this matter. For the senior ones, 37.0% who formed the majority disagreed and 25.9% strongly disagreed. However, similar to junior

staff, 31.5% agreed while 1.9% strongly agreed. 3.7% only remained undecided. The differences are insignificant as it is highlighted in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 5.783$ ;  $p=0.216 > \alpha 0.05$ ). This suggests that the perception on collaboration that individuals have has little to do with being a senior or junior. This is supported by a Spearman Correlation, (r) of 0.013 and 0.894 which indicates a small relationship between staff ranking and their views on collaboration in knowledge management.

With regard to experiences the results are almost similar. With those who have less than 1 year, 43.5%; 13%, 8.7%, 30.4% and 4.3% strongly disagreed, disagreed, neutral, agreed and strongly agreed respectively. In the same way, those within the experience of 1-2 years, 33.3%, 27.8%, 2.8%, 27.8% and 8.3% strongly disagreed, disagreed, neutral, agreed and strongly agreed respectively. Those with 3-10 year experience had this result; 20.8%, 29.2%, 4.2%, 41.7% and 4.2 % strongly disagreed, disagreed, neutral, agreed and strongly agreed respectively. Finally, with those who had more experiences of 11 years and above; 22.7%, 45.5%. 4.5%, 27.3% strongly disagreed, disagreed, neutral and agreed

In terms of differences, it can be said that they are moderately significant as it can be seen in the values of Pearson Chi-Square and P-values ( $\chi^2 = 10.869$ ;  $p=0.540 > \alpha 0.05$ ). This suggests that the perception on collaboration that employees have is moderately influenced by being an experienced employee or inexperienced employee. This is backed by a Spearman Correlation, (r) of 0.057

and 0.561 which indicates a reasonable relationship between staff experience and their views on collaboration in knowledge management.

**Indicators for perceive low level of collaboration in knowledge management among banks**

In order to know more about their perceptions on the underlying reasons why most of the employees perceive that there has not been collaboration in knowledge management, the respondents were asked to answer certain questions pertaining to collaboration. The analysis and the results of their responses are presented in the table 4.4 below.



Table 4

*Indicators for perceiving low level of collaboration in knowledge management among banks*

	K=105				
	SD %	D %	N %	A %	SA %
Each bank has little communication with each other on each other's activities both in the past and the present.	0	1.0	4.8	45.7	48.6
Each bank makes its decisions independently	0	0	2.9	35.2	61.9
Each bank provides information to each other occasionally	0	0	1.9	72.4	25.7
Each bank supports each other in each other's task	41.9	49.5	4.8	3.8	0
Each bank shares ideas and decisions together	41.0	55.2	3.8	0	0
Banks reach consensus on all activities' Decisions	43.8	56.2	0	0	0

Source: fieldwork, 2015

(K= Number of respondents, SD= strongly disagree, D= disagree, N= neutral, A= agree, SA= strongly agree)

From the table, it is clear that when the employees were asked if there agreed or disagreed with the statement that “*Each bank has little or no communication with each other on each other's activities both in the past and the present*”, the majority of 48.6% strongly agreed while 45.7 agreed. In total, at least, 94.3% at least agreed with the statement. In contrast, only 1% disagreed with 4.8% being neutral. The positive response to this question is reflected in the responses that were given to the question that followed which was about the

extent to which respondents agree or disagree with the fact that “*Each bank makes its decisions independently*”. In answering this 61.9% strongly agreed while 35.2% agreed. It was only 2.9% that remained neutral. However, when it comes to the third question on whether “*Each bank provides information to each other occasionally*” majority of 72.4% and 25.7% agreed and strongly agreed respectively. Only 1.9% in this case, remained neutral. The idea here is that although there is no strong collaboration, there is a lower level of collaboration of communication and or cooperation. Nonetheless, when it comes to each bank supporting each other in each other’s task, 41.9% and 49.5% strongly disagreed and disagreed respectively. Only 3.8% agreed and 4.8% neither agreed nor disagreed. Similarly, the results in Table 3 also indicated that almost 96% at least disagreed that each bank shares ideas and decisions together. Indeed there was no indication that showed that bank reach consensus on all activities’ decisions with other bank. All the respondents either strongly disagreed (46%) or disagreed (59%) with that statement.

So far the finding of this section has indicated that although there is no strong collaboration in knowledge management however, when it comes to the question on whether “*Each bank provides information to each other occasionally*” based on Kloth, & Applegate, (2004) integration Continuum, there is a lower level of collaboration of coordination. The idea here is that such practice allows each bank to work together on common interests while maintaining their boundaries and ability to pursue distinct interests. This finding, from the perspective of Matusik, & Hill, 1998, is significant because as various best

practices become disseminated within an industry, they become public knowledge. As individuals master firm focuses on specific best practices, such knowledge becomes portable through the sharing of information. It becomes part of an individual's as well as a firm's human capital. In view of this Jones, Herschel, & Moesel, (2003) argue that knowledge can be built up exponentially by integrating the individual's knowledge with the "*shared organisational memory*".

### **Employees perceptions on the benefits of collaborative Knowledge Management (CKM)**

In line with the research objective two, the employees' perceptions on the benefits of collaborative Knowledge Management was assessed. In assessing them, the questions asked were about the extent to which they agree or disagree with the fact that CKM has any benefits to firms. The responses to these questions have been summarised in the table 4.5 below:

Table 5

<i>Benefits associated with CKM</i>		
	<b>Frequency</b>	<b>Percent</b>
Strongly disagree	3	2.9
Disagree	15	14.3
Neutral	6	5.7
Agree	41	39.0
strongly agree	40	38.1
<b>Total</b>	<b>105</b>	<b>100</b>

Source: field survey, August, 2015

From the results depicted in Table 4.5, it can be said that only a few employees (2.9% and 14.3%) strongly disagreed and disagreed respectively. Apart from these 18 employees who do not think CKM has any benefits, all but 5.7% (n=6) undecided had agreed that CKM has benefits to a firm. Out of the lot, 39% agreed and 38.1% also strongly agreed. Thus, 77% of those who took part in the questionnaires, at least agreed CKM is beneficial to a firm. What this means is that considering the benefits that a firm can have from CKM majority of the employees in rural banking industry perceived that it would be better for their industry to have CKM.

On the basis of the framework and as one of the main hypothesis of the study that the individual perceptions on CKM benefits are dependent on their demographic features, a step further was taken to assess how significant this hypothesis is. The results of the estimation is shown in the Table 4.6 below

Table 6

*Non parametric Pearson Chi-square Results and Spearman correlation depicting the relationship between demographic features and benefits associated with CKM.*

<b>Demographic Features</b>	<b>Spearman Correlation</b>	<b>Approx. Sig.</b>	<b>Pearson Chi-Square Critical (x<sup>2</sup>)</b>	<b>Asymp. Sig. (2-sided)</b>
<b>Sex</b>	<b>0.022</b>	<b>0.827</b>	<b>3.190</b>	<b>0.527</b>
<b>Age</b>	<b>1.345</b>	<b>0.000</b>	<b>33.541</b>	<b>0.001</b>
<b>Staff ranking</b>	<b>1.512</b>	<b>0.000</b>	<b>28.228</b>	<b>0.000</b>
<b>Experience</b>	<b>1.541</b>	<b>0.000</b>	<b>47.274</b>	<b>0.000</b>

Source: Field Survey, August, 2015

Significant at  $\alpha 0.05$  (CI: 95%)

Demographically, when it comes to sex, among the respondents' majority of the male (41.1%) agreed and 30.4% strongly agreed to the statement that CKM has benefits. Only 1.8% strongly disagreed and 17.9% disagreed with 8.9% undecided. In the case of the female, similar to males, a majority of 40.8% and 30.6% agreed and strongly agreed respectively. For those who strongly disagreed, only 8.2% of the females took that stance while 16.3% disagreed with 4.1% being neutral. These relatively small variations are reflected in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 3.190$ ;  $p=0.527 > \alpha 0.05$ ). This implies that being a female or male does not explain any significant difference in perceptions on collaboration. This is supported by a Spearman Correlation, ( $r$ ) of 0.022 and 0.827 which indicates a minor relationship between gender and perceptions on collaboration in knowledge management.

In respect to Age, the story does seem different. Among those within the age bracket of 20-30, while there was nobody who strongly disagreed, a large percentage number (42.9%) disagreed with 9.5% being neutral. Similarly 47.6% agreed with no strongly agreed individual. Compared with those in the age group of 31-40, 33.3%, the result is different. Among these, 12.1%, 18.2% and 3.0% strongly disagreed, disagreed and remained neutral respectively. These values were different from those who strongly agreed (39.4%) and agreed (27.3%). The idea here is that majority within this age group really perceived CKM to be beneficial compared to those in the previous age group of 20-30. Similarly, those in the age group of 41-50 had the same pattern of agreements. For instance, the

majority of 41.4% agreed while a higher percentage figure of 51.7% strongly agreed with only 3.4% strongly disagreeing and the same 3.4% being neutral

Finally those in the higher age group of 51 and above had almost the comparable results. For these group, the majority of 13.6% disagreed while equal number of percentage (13.6%) remained neutral. Unsurprisingly, a higher percentage number of the matured people agreed and strongly agreed (36.4% each). These significant differences are echoed in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 33.541$ ;  $p=0.001 < \alpha 0.05$ ). This suggests that being in a younger age group or older age group does significantly explain the difference in perceptions on collaboration in knowledge management. This is also consistent with a Spearman Correlation, ( $r = 0.345$  and  $0.000$ ) which indicates a significant amount of relationship between age group and perceptions on collaboration in knowledge management. Considering staff ranking, among the junior staff, 9.8% strongly disagreed while 29.4% disagreed, while 7.8% agreed and 43.1% strongly agreed. Only 7.8% did not decide on this matter. For the senior employees, there was no percentage figure for strongly agreed, only 5.6% who formed the minority disagreed and the same percentage figure of 5.6% remained neutral. However, in contrast to junior staff, while majority of the senior staff (50.0%) a strongly agreed, a relatively smaller number of employees 38.9% agreed. The differences are significant as it is revealed in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 28.228$ ;  $p=0.000 < \alpha 0.05$ ). This suggests that the perception on collaboration in knowledge management that employees have has to do with

being a senior or junior. In other words, the perception on the relevance of collaboration in knowledge management is contingent on the ranking of the individual employees. This is supported by a Spearman Correlation, ( $r$ ) of 0.512 and 0.000 indicating an important association between staff ranking and their views on collaboration in knowledge management.

Finally when it comes to experiences the results are almost similar. With those who have less than 1 year, there was no employee who strongly disagreed, rather 39.1% and 13%, disagreed and remained undecided respectively. However, while there was nobody who strongly agreed, a large percentage number of 47.8% agreed. Not in the similar way, those within the experience of 1-2 years had different results. For instance, 13.9%; 25%, 5.6%; 36.1% and 19.4% strongly disagreed, disagreed, neutral, agreed and strongly agreed respectively. However, those with more experience of 3-10 years' had remarkable results in terms of the benefits of CKM. While only 5% strongly disagreed and 10% disagreed, 35% agreed and majority of half of the respondents with such experience (50%) strongly agreed. Equally, those who had more experiences of 11 years and above had interesting results as majority of them also strongly agreed (59.1%) and relatively a large percentage figure (40.9%) also agreed. In terms of differences, it can be said that they are really significant as it can be seen in the values of Pearson Chi-Square and P-values ( $\chi^2 = 47.274$ ;  $p=0.000 < \alpha 0.05$ ). The idea here is that the perceptions on the benefits in collaboration in knowledge management that employees have is greatly influenced by being an experienced employee or inexperienced employee. This is backed by a Spearman Correlation, ( $r$ ) of 0.541

and 0.000 which depicts significant relationship between staff experience and their views on collaboration in knowledge management.

### **Various benefits associated with Collaborative Knowledge Management**

In an attempt to get more knowledge on employees' perceptions on the factors that they consider as the most beneficial in knowledge management collaboration, the respondents were asked to consider the extent to which they agree or disagree with certain statements related to the importance of knowledge management collaboration. The analysis and the results of their responses are presented in the table 4.7 below.



Table 7

*Various benefits associated with collaboration in knowledge management.*

Statements	K=105				
	SD %	D %	N %	A %	SA %
Enhances ability to address important issues Effectively	10.5	15.2	6.7	41.9	25.7
Development of new skills	4.8	21.0	4.8	34.3	35.2
Increased utilization of other expertise or services	8.6	9.0	7.6	31.4	33.3
Acquisition of useful knowledge/information About services, programmes or people in the Community that banks serve	5.7	15.2	5.7	65.8	13.3
Enhance ability to meet the diverse needs of Clients	3.8	4.8	8.6	36.2	46.7
Ability to have greater impact on the quality of service than individual bank could have on its own	0	10.5	6.7	36.2	46.7

Source: Fieldwork, 2015

(K= Number of respondents, SD= strongly disagree, D= disagree, N= neutral, A= agree, SA= strongly agree)

From the Table 7 above, it is clear that when the employees were asked if there agreed or disagreed with the statement that CKM “*Enhances ability to address important issues effectively*”, the majority of the respondents (41.9%) agreed while 25.7% strongly agreed. Only 10.5% and 15.2% strongly disagreed and disagreed respectively with remaining 6.7% undecided. In total, at least, 67.6.3% at least agreed with the statement as against 25.7% who also at least disagreed. Thus more than double of the percentage of those who disagreed agreed with such benefit.

The question that followed was about the extent to which respondents agree or disagree with the fact that “*CKM brings about the development of new skills*”.

In answering this, at least almost 70% agreed (with 35% strongly agreed and 34.3% agreed) that CKM leads to development of new skills whilst only 25.8% at least disagreed with 4.8% being neutral.

For these employees, they perceive that development of new skills is possible because CKM leads to “*increased utilization of other expertise or services*”. With this relevance, 66.7% at least agreed (33.3% strongly agreed and 31.4% agreed) in contrast to only 27.6% who also in most cases disagreed. Only 7.6% remained undecided. This finding is consistent with what Klein, (1999) has discussed in the literature. According to Klein, (1999) the importance of maintaining a balance between fluidity and institutionalisation as the dynamic equilibrium should ideally exist between innovation and organisational structure which helps to create new ideas and skills. This is because, the fluid intellectual domain consists of

individuals with ideas originating and growing from a given person (intuition), personal networks that form outside formal organisational charts assist in creating knowledge and as such boost the use of skills among people. Consequently, such interaction helps in discovering certain information and or knowledge in better ways of doing things which otherwise were not known to a person previously.

This argument made by Klein, (1999), is also reflected on the extent to which the respondents disagree or agree with the statement that CKM leads to the “*acquisition of useful knowledge/information about services, programs or people in the community that the banks serves*” With this question, at least, 79.1% agreed with only 20.9% disagreeing. Those who remained neutral were only 5.7%. Not surprisingly, majority of the respondents agreed with the statement that CKM has the benefits of “*Enhancing the ability to meet the diverse needs of clients*”. With this statement, while 36.2% agreed, a total of 46.7% strongly agreed. This is in contrast with only 3.8% and 4.8% who strongly disagreed and disagreed respectively and 8.6% of them remaining undecided.

Finally, majority of the respondents acknowledged that CKM has the “*ability to have greater impact on the quality of service than individual bank could have on its own*”. With this benefit, while only 10.5% disagreed, 36.2% agreed and a majority of 46.7% strongly agreed with only 6.7% remaining neutral.

From the discussion above, it has been found that CKM is perceived to have various benefits which are in line with the literature. For example, Earl, & Scott, (1999) argue that CKM helps to promote a cultural climate that rewards knowledge-sharing behaviors. To these experts, knowledge sharing also creates

an environment that makes it easier to build communication networks between employees who do not normally work together, but would generate value from exchanging information (Earl, & Scott, 1999). Stewart, (1998) is also of the opinion that CKM works with formal and informal communication networks and supports “communities of practice” or groups of experts who could learn from knowledge exchange. According to Dalkir, (2005) collaborative knowledge management provides benefits not only to individual employees, but also the communities of practice, and to the organisation itself. This three-tiered view of knowledge management helps emphasise why CKM is important today (Dalkir, 2005). For the individual, from the view point of Dalkir, (2005), CKM helps people do their jobs and save time through better decision making and problem solving. It also builds a sense of community bonds within the organisation and helps people to keep up to date with information. For the community of practice, Dalkir, (2005), asserts that CKM helps to develop professional skills, promotes peer-to-peer mentoring, facilitates more effective networking and develops a professional code of ethics that members can follow as it helps to develop a common language. For the organisation, Dalkir, (2005) again claim that CKM assists in driving strategy, solves problems quickly, diffuses best practices and improves knowledge embedded in products and services. It also cross-fertilises ideas and increases opportunities for innovation. It eventually enables organisations to stay ahead of the competition better and builds organisational friendship. Thus, CKM helps to create more effective use of staff as they utilise their skills cooperatively rather than competitively (Henneman et al. 1995).

### Perceptions on the Barriers of Collaborative Knowledge Management

As part of the research objective, there was the need to examine the employees' perceptions on the barriers of collaborative Knowledge Management. In trying to know their views on barriers various questions were asked. The responses to these questions about the extent to which they agree or disagree with them have been summarised in the table 4.8 below

Table 8

<i>Barriers to collaborative knowledge management</i>		
	<b>Frequency</b>	<b>Percent</b>
Strongly disagree	3	2.9
Disagree	4	3.8
Neutral	4	3.8
Agree	44	41.9
strongly agree	50	47.6
<b>Total</b>	<b>105</b>	<b>100</b>

Source: Fieldwork, 2015

From Table 4.8, the results indicated that a good percentage number of the employees have the opinion that barriers to CKM abound. Indeed, it was only 6.7% of those who took part in the survey, at least disagreed with the statement that CKM has no barriers with only 3.8% remaining neutral. This is in contrast to almost 90% of respondents who either agreed (41.9%) or strongly agreed (47.6%) that there are so many barriers to a firm when it comes to CKM. What this suggests is that the consequences of collaboration can result in benefits, but there

are also some barriers to working in collaboration as these employees rightly perceive.

However, based on the framework and as the main hypothesis of the study indicates: the individual perceptions on CKM barriers are contingent upon their demographic features, a further examination was conducted to find out how significant this hypothesis is. The results of the examination is shown in the table 9 below

Table 9

*Non parametric Pearson Chi-square Results and Spearman correlation depicting the relationship between demographic features and barriers associated with CKM*

<b>Demographic Features</b>	<b>Spearman Correlation</b>	<b>Approx. Sig.</b>	<b>Pearson Chi-Square Critical (x<sup>2</sup>)</b>	<b>Asymp. Sig. (2-sided)</b>
Sex	0.105	0.287	7.263	0.123
Age	0.107	0.278	17.127	0.145
Staff ranking	0.075	0.445	1.660	0.798
Experience	0.134	0.173	12.542	0.403

**Source: Field Survey, August, 2015**

Significant at  $\alpha 0.05$  (CI: 95%)

Considering the demographic features, when it comes to sex, it was found that among the respondents' majority of the male (53.6%) strongly agreed and 35.7% agreed to the statement that CKM has barriers. In all 89.3% believed in the fact that there are barriers involved in CKM. Only 1.8% strongly disagreed and 7.1% disagreed with 1.8% undecided. In the case of the female, analogous to males, a majority of 49.0% and 40.8% agreed and strongly agreed respectively. For those who strongly disagreed, only 4.1% of the females took that position whereas only 6.1% remained neutral. These relatively insignificant variations between both male and female are highlighted in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 7.263$ ;  $p=0.123 > \alpha 0.05$ ) in table 4.9 above. The implication here is that being a female or male does not explain any significant difference in perceptions on collaboration in knowledge management. This is supported by a Spearman Correlation, ( $r$ ) of 0.105 and 0.287 which depicts that there is only a trivial amount of relationship between the perceptions of gender and collaboration in knowledge management

In respect to Age, the story does not seem to be different. Among those within the age bracket of 20-30, while there was nobody who strongly disagreed, only 14.3% disagreed. However, a large percentage number (42.9%) agreed while at the same time 38.1% strongly agreed leaving only 4.8% as undecided. Similarly within the age group of 31-40, there was no disagreement amongst this age group. In contrast, among these, whereas 42.4% agreed a larger percentage figure of 48.5% strongly agreed, and 9.1% remained neutral. The idea here is that majority of about 90% within this age group really perceived CKM to have a number of

barriers. In the same way, those in the age group of 41-50 had the same pattern of agreements. For instance, while only 6.9% disagreed, the majority of 44.8% agreed while a higher percentage figure of 48.3% strongly agreed without any percentage figure being neutral

Finally, taking into account those in the higher age group of 51 and above, the results showed that only 9% at least disagreed (4.5% strongly disagreed and 4.5% disagreed) with no undecided. In contrast, the high percentage figure of 36.4% agreed while a higher figure of 54.5% strongly agreed. These relatively minor differences are reflected in the values of Pearson Chi-Square values and P-values ( $\chi^2 = 17.127$ ;  $p=0.145 > \alpha 0.05$ ). This suggests that being in a younger age group or older age group does not significantly explain the differences in perceptions on collaboration in knowledge management. This is also consistent with a Spearman Correlation, ( $r = 0.107$  and  $0.278$ ) which indicates an insignificant amount of relationship between age group and perceptions on collaboration in knowledge management.

Considering staff ranking, among the junior staff, only 3.9% and 5.9% strongly disagreed and disagreed respectively, while 41.2% agreed and 45.1% strongly agreed. Only 3.9% did not decide on this matter. For the senior employees, there was only 3.8% who at can be said to have at least disagreed with 3.7% remaining neutral. However, a large percentage number of 42.6% and 50.0% agreed and strongly agreed. However, in contrast to junior staff, while majority of the senior staff (50.0%) a strongly agreed, a relatively smaller number of employees 38.9% agreed. These differences are insignificant as it is revealed in the values of



Pearson Chi-Square values and P-values ( $\chi^2 = 1.660$ ;  $p=0.798 > \alpha 0.05$ ). This suggests that the perception on collaboration in knowledge management that employees have has nothing to do with being a senior or junior. In other words, the perception on the barriers of collaboration in knowledge management is not dependent on the ranking of the individual employees. This is supported by a Spearman Correlation, (r) of 0.075 and 0.445 indicating no significant association between staff ranking and their views on collaboration in knowledge management.

Lastly when it comes to experiences the results are almost the same with majority being in either agreement or strongly agreement with the assertion that there are barriers involved in CKM. With those who have less than 1 year, there was no employee who strongly disagreed, rather only 8.7% disagreed with no undecided. However, while there were 43.5% of respondents who agreed and a large percentage number of 47.8% strongly agreed. In a similar function, those within the experience of 1-2 years had almost the same results. For instance, 5.6%; 2.8%, 8.3%; 50.0% and 33.3% strongly disagreed, disagreed, neutral, agreed and strongly agreed respectively. Thus majority of the respondents in this group actually perceive that CKM has some barriers. Much in the same way, those with more experience of 3-10 years' also had the idea that CKM has a number of barriers. For instance, while only 4.2% disagreed, 37.5% agreed 58.3% also strongly agreed. Equally, those who had more experiences of 11 years and above had interesting results as majority of them also strongly agreed (59.1%) and 31.8% also agreed. Relatively a small percentage figure (4.5%) disagreed with

4.5% remaining neutral. In terms of differences, it can be said that they are really significant as it can be seen in the values of Pearson Chi-Square and P-values ( $\chi^2 = 12.542$ ;  $p=0.403 > \alpha 0.05$ ). The idea here is that the perceptions on the benefits in collaboration in knowledge management that employees have is not greatly influenced by being an experienced employee or inexperienced employee. This is backed by a Spearman Correlation, (r) of 0.134 and 0.17 which depict no significant relationship between staff experience and their views on collaboration in knowledge management.

Over all, it can be said that the challenges that are identified with CKM arise largely as a result of the complexities involved when firms engage in collaborative ventures (Wilkin et al., 2008). This suggests that promoting collaboration is more complex than imagined and that CKM is neither automatic nor effortless. It requires proper planning and for it is not well planned benefits such as skill development can be stifled due to the challenges involved (Gieskes, Hyland, & Magnusson, 2002).

### **Various Barriers Associated with Collaborative Knowledge Management**

In order to have an in-depth understanding about employees' perceptions on the various barriers that can inhibit CKM, the respondents were asked to consider the extent to which they agree or disagree with certain statements related to the barriers to CKM. The analysis and the results of their responses are presented in the table 10 below. Among the various barriers identified included problems of: Mistrust, loss of autonomy, different organisational cultures, different funding cycles causing different creditworthiness, different common

vision, lack of influence due to different funding cycles, difficulty in combining resources, lack of coordination and commitment and different power structures.

Table 10

*Perceived barriers associated with collaborative knowledge management*

Statements	K=105				
	SD %	D %	N %	A %	SA %
In CKM, there can be a problem of mistrust among partners	9.5	83.6	20.0	25.7	36.2
In CKM, there is the problem of loss of autonomy	6.7	19.0	5.7	32.4	36.2
In CKM, there is lack of influence in partnership activities	7.6	13.3	4.8	41.0	33.3
In CKM, different organisational cultures Can inhibit innovation	3.8	17.1	9.5	44.8	24.8
In CKM, there is a problem of combining perspectives, resources and skills of others due to different missions, visions and interests	1.9	5.7	18.1	43.8	30.5
In CKM, there is a problem of coordination And commitment	1.9	7.6	21.0	27.6	41.9
In CKM, there is a problem of different Powers and hierarchy structures causing Blurred accountability	4.8	9.5	11.4	44.8	29.5

Source: Fieldwork, 2015

(K= Number of respondents, SD= strongly disagree, D= disagree, N= neutral,

A= agree, SA= strongly agree)

Table 10 above reveals barriers associated with CKM as perceived by employees in the rural banking industry in the Eastern region of Ghana. From the results, it can be concluded that majority of the employees perceive that one of the barriers in CKM is “*mistrust among partners*”. On this issue, the majority of the respondents (36.2%) strongly agreed while 25.7% agreed. Only 9.5% and 8.6% strongly disagreed and disagreed respectively with a percentage number (20%) higher remaining undecided. In total, at least, 61.9% at least agreed with the statement as against only 18.1% who also at least disagreed. This finding is supported by the Berger et al. (2004) who argue that mistrust has been a major problem to organisations involved in collaborative efforts. From the perspectives of Berger et al. (2004), when mistrust exists, it can result in covert behaviour, opportunism, and further breakdowns in communication, which compound the other problems. The writers further argue” as in relationship marketing, social alliances cannot reach their potential without trust to underpin commitment to the relationship” (Berger et al. 2004; p.69),

In terms of loss of autonomy as a barrier, about 25.7% disagreed while 5.7% remained undecided. However, almost 69% agreed that individual firms tend to lose their independence with CKM.

This lack of autonomy as perceived by the employees often leads to lack of influence in partnership activities. This is reflected in the extent to which they agreed or disagreed with the statement that in CKM, there is lack of influence in partnership activities. For example, in line with this statement, while only 20.9% disagreed at least 74.3% agreed (with 33.3% strongly agreed and 41.0% agreed)

that lack of influence in partnership activities due to loss of autonomy is one of the barriers to CKM while only 4.8% remained undecided. This finding is significant in that according to Berger et al. (2004) this kind of problem arises due to mismatch of power or how the collaboration can be dominated by one of the partners. Berger et al, (2004), claim that the balance of power, depends on the assets each partner brings to the partnership. If the balance shifts towards one of the partners, this could limit the motivation for further contributions by the other and undermine the collaborative efforts. Dominance by one partner over the other could lead to issues related to feeling lack of ownership of the partnership and a disagreement between the parties (Berger et al., 2004).

Another barrier that was perceived by the employees surveyed was the fact that differences on organisational cultures can inhibit innovation. With this issue, 59.6% at least agreed (44.8% agreed and 24.8% strongly agreed) in contrast to only 20.9% who also in most cases disagreed. Only 9.5% were unconvinced. Differences in culture also bring about the problem of different powers and hierarchy structures causing blurred accountability. From the results it can be noted that 74.3% at least agreed while only 14.3% disagreed with only 11.4% remaining unsure.

Consistent with the literature, it can be said that such differing cultures can lead to misunderstanding which ranges from macro-level to misunderstanding of the context within which the partner is working to micro-level misunderstanding of the partner's objectives for partnering (Berger et al., 2004). Berger et al., (2004) find that managers in different organisations and businesses

often have simplistic understandings of the partners' efforts and context and have misconceptions or misinterpretations of their partnership objectives. According to Dailriz (2005) this leads to resistance to change in knowledge capture because of the effort required, the fear of loss of job security.

Alongside with differences in culture as a barrier, another barrier perceived by the respondents was the problem of combining perspectives, resources and skills of others due to different missions, visions, and interests. With this problem, at least, 74.3% agreed with only 7.6% at least disagreeing. Those who remained uncertain were only 18.1%. Not surprisingly, majority of the respondents 43.8% agreed with this barrier while 30.5% strongly agreed. These differences according to Berger et al, (2004) lead to mismatched partners which involves partners that cannot align with one another. While it is important that the partners have complementary skills or resources, with little or no overlap, collaboration will be difficult. Mismatch can make differences in organisational goals, missions, visions and decision processes. The consequence of this is that it makes it difficult to foster synergies in the collaborative efforts, and can lead to failure if issues are not addressed properly (Berger et al. 2004).

Another barrier associated with these differences is the problem of coordination and commitment in collaborative efforts of knowledge management. From the perspectives of the employees, this is really the case as exemplified in their responses. On this problem, 44.8% agreed, whereas 29.5% strongly agreed. Only 14.4% disagreed at least to the barrier apart from 9.5% that remained in doubt about this barrier and therefore could not decide. This revelation is

supported by Bruijn, & Tukker, (2002) who argued that no strategic joint venture can survive without the commitment of the management body. Top management is influential, and their commitment is necessary to secure the long-term participation of the organisations in the partnership. Commitment is necessary to anchor understanding and motivation for partnership within the organisation and without the joint relationship cannot be sustained (Rondinelli, & London, 2001).

### **Discussion**

In this study the aim has been to investigate into the perceived benefits of collaborative knowledge management (CKM) and the barriers that undermine it by using employees in the selected Rural Banks in the Eastern Region of Ghana. On the whole, on the basis of the results it can be said that the main objective of the study has been achieved. In the first place, the first finding indicated that there was no real collaboration in knowledge management, rather coordination among the banks. This means that, in contrast to collaboration when multiple agencies may perceive mutual benefit in working together by sharing ideas and skills, the coordination only focuses on sharing of certain tasks or information. This is often more of a top-down exercise as explained by Stanton, (2007). According to Stanton, coordination takes place when a leader with authority over multiple organisations directs the other members within an organisation to collaborate to achieve a specified joint purpose. Specifically, there is no any degree of voluntarism among the participants and even though they are required to become members of a collaborative arrangement, their actual participation could vary,

based on their own determinations and directives from a lead authority. This situation reflects parity, if not equality, among them, producing a horizontal cooperative arrangement among peers. Under this condition some members might not participate adequately or at all, even to the point of jeopardising the interagency enterprise (Stanton, 2007). Thus in comparison to collaboration, an interagency coordinative arrangement as found in this study, in principle, situates a lead official or agency with formal authority to instruct, direct, or order other members.

This setting still produces a hierarchical structure which can be inimical to collaborative knowledge management due to problem of authority.

Huxham, (1996) refers to this problem as the autonomy–accountability dilemma. Representatives from participating organisations in the collaboration are likely to experience significant tension as they are pulled between feeling accountable to the demands of their parent organisation (and its constituents) and the demands of their collaborative partners (and the constituents of the collaboration). Unless the individuals representing their various parent organisations are fully empowered by their organisations to make judgments about what they may commit to in the collaboration, Huxham, (1996) writes, they will constantly have to check in with their parents before action can happen. This often exacerbates tension within the collaboration as collaborating partners wait to hear back from the parent organisations and the momentum that collaboration partners may have at first experienced slowly diffuses into what Huxham calls collaborative inertia. It is not surprising, then, that when collaboration’s goals conflict with the autonomous



goals of individual partner organisations, identities are at stake and it is likely that individual missions will trump collaboration missions. This potential tension is significantly exacerbated by the reality that in collaboration, no formal authority hierarchies exist between collaborating partners; this means, writes Huxham, (1996), “that working relationships between individuals from different organisations can only be formed on a goodwill basis”

The second objective was to examine the perceived benefits of CKM. In this context it was found out that there were significant amount of benefits associated with CKM as perceived by the employees. Among them include:

- *Enhancing ability to address important issues effectively*
- *Bringing about the development of new skills*
- *Increasing utilisation of other expertise or services*
- *Acquiring useful knowledge/information about services, programs or people in the community that the banks*
- *Having the ability to have greater impact on the quality of service than individual bank could have on its own leading to higher productivity*

These findings are significant in that they are supported by the literature. For example, according to Denning, (2001) referring to a 1998 survey of North American senior executives, managers within organisations recognise the value of managing knowledge stating 77% rated “*improving the development, sharing, and use of knowledge throughout the business*” as very or extremely important. In a study of knowledge management, Simonin, (1997) also examined whether or not companies can develop specialised knowledge via experience and then use this

knowledge to obtain further benefits. Simonin's (1997) results indicated that firms do learn from experience, mainly relating to collaboration and that firms benefit from collaborative knowledge management by being creative, thereby developing their skills.

Sandrone, (1995) also stated that all employees have intimate knowledge of job conditions and are therefore able to make useful contributions when knowledge is shared. This has been evolved even further to suggest certain aspects of business have become 'people-centric' due to both the knowledge build up and the technological means to transfer information and knowledge. Keller, (2003) summarised the whole significance of CKM by arguing that CKM had gradually become the key propellant in the growth and improvement for a nation's health, military might, economic competitiveness, artistic excellence, social harmony and political stability.

The implication here is that knowledge management systems can be considered to be state of the art innovation (Adams & Lamont, 2003). In view of this, organisational and management practices have become more knowledge-focused in the current global world (Alavi, & Leidner, 2001). As an organisation builds and expands its knowledge base, it builds its intellectual capital and consequently enhances its competitive advantage. Knowledge therefore becomes a competitive asset, especially knowledge which is firm specific, private knowledge, in particular patents, copyrights and 'secret' procedures (Bailey, & Bogdanowicz, 2002).

In the field of financial institutions, Tapscott, & Williams (2011) assert that collaborative knowledge management also benefits financial institutions in that it allows them to keep abreast with the developments in each other's jurisdictions by leveraging on each other's experience and knowledge to address any possible potential risks and vulnerabilities in the domestic as well as regional markets. In this context, a certain degree of 'openness' in information sharing is demanded. In terms of productivity, it can be said that through CKM, the growth of productivity is also enhanced. In a study by McKinsey et al (2009) in enterprise collaboration in knowledge management, it was revealed that productivity for the firm was increased through a carefully designed and flawlessly executed enterprise collaboration strategy. Indeed, McKinsey et al (2009) posited that the types of productivity itself can come in three different forms — individual, team, and enterprise productivity — each creating progressively more value than the one before. Productivity comes about due to right people participating in the right interactions at the right time to share information to drive the right decision, competitive advantage, profits and growth at levels previously unthinkable (i.e., transformational benefits) McKinsey et al (2009).

Matthew, & Sternberg, (2006) also admit that collaboration in knowledge management offers a built-in system of checks and balances, allowing group members to hold one another accountable for their work. It may aid inexperienced employees in producing higher quality outputs and meeting completion deadlines because they will be learning faster and at the same time feel accountable to succeed within their groups (Matthew, & Sternberg, 2006). Finally, Howells, &

Wood, (1993) had the opinion that CKM helps firms to gain market access in connection with new product development which ultimately contribute in reducing uncertainty as well as cost-sharing.

In the area of barriers to CKM, the study found out that as much as CKM is a useful strategy to ensure productivities and to minimise risks, none of these benefit comes without a challenge. Among the various barriers identified included problems of:

Mistrust, loss of autonomy, different organisational cultures, different common vision, lack of influence due to different funding cycles, difficulty in combining resources, lack of coordination and commitment and different power structures.

These findings are particularly important because they reflect on what is existing in the management litterateur. For example, Sherwood, & Covin, (2008) argue that the first important item in collaborative arrangement is trust, not only on an individual but also on an organisational level, between parties – a factor that is needed to avoid barriers in the transfer, consisting of a resistance to both to initiation of change and the practices connected to it. Cantoni, Bello, & Frigerio, (2001) who presented two major barriers to collaborative knowledge management: localisation and culture also asserted that culture differences can cause psychological disruptions based on the difference in understanding, norms and practices in the respective organisation. Due to these differences in culture, there is a defining dimension of collaboration that captures both the potential dynamism and frustration implicit in collaborative endeavors is the reality that partners share a dual identity: Wilson, (1989) asserts that firms maintain their own distinct

identities and organisational authority separate from a collaborative identity. This reality creates an intrinsic tension between organisational self-interest—achieving individual organisational missions and maintaining an identity distinct from the collaborative—and a collective interest—achieving collaboration goals and maintaining accountability to collaborative partners and their stakeholders (Bardach, 1998; Tschirhart, Christensen, & Perry, 2005; Wood, & Gray, 1991).

The loss of autonomy as a barrier also supports Wilson's (1989) argument that the fear of losing territories and or autonomy is one of the biggest barriers. Wilson, (1989) argues that high priority is attached by bureaucracies to autonomy and in collaboration firms are often worried about losing their independence. This leads to a struggle which makes coordination between firms very difficult. According to Wilson's (1989), there are two parts of the loss of autonomy: external and internal autonomy. The external aspect of autonomy refers to independence which is equivalent to jurisdiction or domain of the organisation. The internal aspect of autonomy represents identity or mission which is defined as a shared understanding of the core task of the agency. When firms are involved in collaborative activities by having similar tasks or coordinating tasks, the struggles over autonomy become especially visible. From the perspective of Wilson, (1989) turf conscious organisations are averse to division of labor and cooperation, because they do not want to share power or they fear being dominated by other agencies.

In the area of lack of coordination and commitment, Keanevey, (2008) also points out another possible barrier in collaboration including a set of attitudes

and prejudices against each other. This maybe founded in a lack of understanding, communication and experience. A study by Gilja, (2013) found that lack of understanding due to heterogeneity often introduces barriers in collaborative knowledge management in the area of communication, information sharing, decision making, and operations.

Gilja, (2013) also found that lack of commitment can be due to lacking knowledge about other organisations' capabilities and requirements "Lacking knowledge about other organisations' capabilities and requirements" here means that responsible personnel do not have sufficient knowledge about other organisations competence, material resources and requirements when operative and this can lead to lack of commitment. Knowledge about other organisations may exist in preparedness plans and action plans, but may not have been internalised by leadership personnel.

Finally, the finding of different power structures is also significant as it can cause ineffective leadership struggle creating power vacuum. This is in line with Danaher, (2011) who argued that lack of effective Leadership has been a barrier in collaborative management. According to Danaher, (2011) leadership develops out of trust among partners and in turn fosters trust and good working relationships. The collaboration needs to know it can count on the person representing their best interests and put the common good before personal gain. Effective leadership requires excellent communication. It is effective leadership that ensures the various partners participate on an equitable footing. Strong leadership is needed to communicate the vision, particularly with those at higher

levels (e.g. regional or provincial) or when seeking funding. Leadership is also needed to frame the vision from the perspective of the various sectors based on an understanding of how each sector is needed to describe the desired change. It is through effective leadership that the group can be inspired and the momentum kept going (Fawcett et al., 2010).

## CHAPTER FIVE

### CONCLUSION AND RECOMMENDATION

#### Introduction

This last chapter of the study presents the whole study results in relation to the research questions and objectives. Based on the study outcomes, conclusion is then drawn taking into consideration the findings and the conceptual framework that underpin this study in chapter two. The final section of this study focuses on the recommendations and the future research study.

#### Summary of Findings

The aim of this study has been to examine the perceived benefits of collaborative knowledge management (CKM) and the barriers that undermine it by using employees in the selected Rural Banks in the Eastern Region of Ghana.

The general purposes were two-folds: First, is to have a deeper understanding of the extent of collaborative knowledge management that exists in business circles in Ghana in the context of rural banking industry. The second objective is to make contributions to the empirical studies on the topic as well as making contributions on the debate about the significance and the challenges of collaborative knowledge management in Ghana.

Specifically, there were three main objectives of this study which included:

1: Assessing the extent of collaborative knowledge management among the selected Rural Banks in the Eastern Region of Ghana.

2: Examining the perceived benefits of collaborative knowledge management



3: Exploring the perceived barriers that can undermine collaborative knowledge management among the selected Rural Banks in the Eastern Region of Ghana.

Findings from the research are presented according to the objectives of the study. The first research finding revealed that there was no real collaboration in knowledge management instead there was only coordination among the banks. This means that once various rural banks realise that there is value in working together on common interests, they enter into a *coordination relationship*, which allows them to maintain their boundaries and distinct interests. In this case, the coordination relationship allows each to work together on common interests in the knowledge management while maintaining their boundaries and ability to pursue distinct interests.

With regards to the second research objective, it was found out that there were significant amount of benefits associated with CKM as perceived by the employees. Among them include:

- *Enhancing ability to address important issues effectively*
- *Bringing about the development of new skills*
- *Increasing utilisation of other expertise or services*
- *Acquiring useful knowledge/information about services, programs or people in the community that the banks is situated*
- *Having the ability to have greater impact on the quality of service than individual bank could have on its own leading to higher productivity*

However, it was found out that the employees' perceptions were contingent on the demographic features with the exception of gender. This means that it was

only in the area of gender that was realised that being a male or female does not matter in terms of each perception's on benefits. Apart from this feature, all other ones (i.e. staff ranking, age differentials and experiences) were significantly related to perceptions on benefits. Thus the differences in perceptions among individuals can be explained by the age of the person, the experiences the employee has and finally the staff ranking, whether the employee is a junior or senior.

Finally, with the third research objective it was found out that among the various barriers identified included problems of:

- *Mistrust, loss of autonomy,*
- *Different organisational cultures,*
- *Different common vision,*
- *Lack of influence due to different funding cycles,*
- *Difficulty in combining resources,*
- *Lack of coordination and commitment, and*
- *Different power structures.*

With all these barriers, it was observed that there was no significant difference among the demographic variables. This is to say neither gender, age, rank, nor experience play any significant roles in explaining the differences in perceptions among the employees. Thus it is fair to conclude that in the areas of the demographic features, majority of the employees perceived that barriers do exist in CKM.

## Recommendations

Based on the finding of this study, particularly the barriers the following recommendations are provided.

1: In the first place, it can be said that in order for knowledge management to succeed, it has to tap into what is important to knowledge workers—what is of value to them and to their professional practice as well as what the organisation stands to gain. Thus it is important to get the balance right. If the KM initiative is too big, it risks being too general, too abstract, too top-down, and far too remote to catalyse the requisite level of buy-in from individuals. On the other hand, if the KM initiative is too small, however, then it may not be enough to provide sufficient interaction between knowledge workers to generate synergy.

2: There must be the appropriate knowledge management technology that must be supportive

3: Management must also commit itself to putting into place the appropriate rewards and incentives for knowledge management activities.

4: Last but not least, employees need to develop knowledge management skills in order to participate effectively. These skills and competencies are quite diverse and varied, given the multidisciplinary nature of the field, but one particular link is often neglected, and that is the link between knowledge management skills and information acquisition skills. These two must be complementary to each other through training.

### **Suggestions for future Research**

The entire field of research of collaborative knowledge management is very wide and extensive. There are many theoretical directions for CKM which need to be further examined. Such directions include the linkages with the resource-based view (Zahay, 2008; Nguyen, & Waring, 2013) and the research stream on CKM and organisational learning (Zahay, 2008; Battor, & Battour, 2013), for example. These directions would provide needed depth to the research on CKM.

Moreover, there is the need for research linking CKM with actual business performance. This dissertation provides understanding on the kind of collaboration existing in rural banking industry yet the actual and measurable effects on quantitative and qualitative performance measures is an area in need of research. Moreover, there is the need to extend further studies outside the geographic focus of Rural Banking Industry in order to account for cultural implications and variations in collaborative knowledge management.

This dissertation focused solely on business-to-business companies in order to bring a clear focus and to improve the generalisability of the results. Nevertheless, there is a clear need to conduct studies about CKM in business-to-consumer contexts in order to gain better understanding of the phenomena's wider reach. Furthermore, industry specific studies on the topic are required as they shed light on the relationships between unique industry characteristics and CKM. Also a more detailed study regarding the creation process of CKM is needed. Such a research would bring clarification to the required steps with which to reach CKM.

## REFERENCES

- Adams, G.L., Lamont, B.T., (2003). *Knowledge Management Systems and Developing Sustainable Competitive Advantage*. Journal of Knowledge Management. Vol. 7. No.2. pp 142-154.
- Alavi, M., Leidner, D.E., (2001). *Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues*. MIS Quarterly. Vol. 25. No.1 pp 107-136.
- Axelrod, Robert, 1984. *The Evolution of Cooperation* . Princeton, NJ : Princeton University Press
- Bailey, E.K., Bogdanowicz, M.S., (2002). *The Value of Knowledge and the Values of the New Knowledge Worker: Generation X in the New Economy*. Journal of European Industrial Training. pp 125-129.
- Barclay, R., & Murray, P. 1997. What is knowledge management? [Online]. Available WWW: <http://www.media-access.com/whatis.html> (Accessed 10 October 2015).
- Bardach, E., (1998). *Getting Agencies to Work Together: The Practice and Theory of Managerial Craftsmanship*. Washington, DC: Brookings Institution Press.
- Bart, S., (2000,). Heeding the sage of the knowledge age. *CRM Magazine*. May. Retrieved July 18, 2015, from <http://www.destinationcrm.com/articles/default.asp?ArticleID=832>.
- Bhatt, G., (2001) “Knowledge Management in Organisations: Examining the Interactions between Technologies, Techniques, and People.” *Journal of Knowledge Management*, Vol. 5, No. 1, pp.68-75.
- Becerra-Fernandez, I., Gonzalez, A. & Sabherwal, R. (2004). *Knowledge management Challenges, Solutions, and Technologies*. New Jersey: Pearson Education, Inc.
- Becker, B., & Gassmann O., (2006). ‘Corporate Incubators: Industrial R&D and What Universities Can Learn from Them’. *Journal of Technology Transfer*, 31 (4): 469–83.
- Berger I.E., Cunningha, P.H., & Drumwright, M.E., (2004), Social Alliance: Company| Non-Profit Collaboration. *California Management Review* 47 (1), 58-90
- Bhatt, G., (2002) “Organizing knowledge in the knowledge development cycle.” *Journal of Knowledge Management*, Vol. 4, No. 1, pp. 15-26.
- Burton-Jones, A,(2001). *Knowledge Capitalism: Business, Work and Learning in the New Economy*. Oxford University Press. ISBN 0-19-924254-2

- Cantoni, F., Bello, M., & Frigerio, C. (2001). *Lowering the barriers to knowledge transfer and dissemination: the Italian cooperative banks experience*. Global Co-Operation in the New Millennium The 9th European Conference on Information Systems Bled, Slovenia, June 27-29.
- Carlile, P. R. (2002). A Pragmatic View of Knowledge and Boundaries: Boundary Objects in New Product Development. *Organisation Science*. vol. 13, no. 4, pp. 442-455.
- Cosh, A., Fu, X., & Hughes, A., (2005). Management Characteristics, Collaboration and Innovative Efficiency: Evidence from UK Survey Data. Working Paper ed. Cambridge: Centre for Business Research, University of Cambridge.
- Cummings, L., & Bromiley, P., (1996), The Organisational Trust Inventory. In *Trust in Organisations* , edited by Roderick M . Kramer and Tom R .Tyler , 302 – 30 . Thousand Oaks, CA : Sage Publications.
- Dailriz (2005) Knowledge Management in Theory and Practice Elsevier Butterworth–Heinemann
- Danaher, A. (2011). "Reducing Health Inequities: Enablers and Barriers to Inter-sectoral Collaboration, Wellesley Institute Coordination in Disasters: Lessons from the Research Literature", *International Journal of Mass Emergencies and Disasters*, 20 (2): 197-224.
- Daum, J.H. (2003), Intangible assets and value creation, John Wiley & Sons, Chichester.
- Davenport, T., & Prusak, L., 1998. *Working knowledge*. Boston, MA : Harvard Business School Press.
- Davenport , T. 2005 . *Thinking for a living, how to get better performance and results from knowledge workers* . Boston, MA : Harvard Business School Press .
- Denning, S. (2001), *The Springboard*, Boston, MA: KMCI Press/Butterworth Heinemann.
- Despres, C. & Chauvel, D. 2000. A Thematic Analysis of the Thinking in Knowledge Management .In Charles Despres & Daniele Chauvel (Eds.), *Knowledge Horizons: The Present and the Promise of Knowledge Management*. Butterworth-Heinemann
- Drucker, P. (1994). The social age of transformation. *Atlantic Monthly*. November . Retrieved July 18, 2015, from <http://www.theatlantic.com/politics/ecbig/soctrans>. htm.

- Einbinder, S., Robertson, P.J., Garcia, A., Vuckovic, G., & Patti, R.J. (2000). Interorganisational collaboration in social service organisations: A study of the prerequisites to success. *Journal of Children and Poverty*, 6(2), 119\_140.
- Eden, C. & C. Huxham. 2001. The Negotiation of Purpose in Multi-Organisational Collaborative Groups. *Journal of Management Studies*, 38(3): 373-393.
- Edvinsson, L. & M.S. Malone,(1997). *Intellectual capital*. 1st ed., New York: HarperBusiness. xi, 225.
- El Ansari, W. & Phillips, C. (2001) Interprofessional collaboration: a stakeholder approach to evaluation of voluntary participation in community partnerships, *Journal of Interprofessional Care*, 15(4): 351–68.
- Eppel, E. (2008). Better connected services for Kiwis: Achieving outcomes by joining up. A Literature Review. School of Government. Victoria University of Wellington.
- Fawcett, S., Magnan, G. M., & McCarter, M. W. (2008) Benefits, barriers, and bridges to effective supply chain management, *Supply Chain Management: An International Journal*, 13(1), pp. 35–48).
- Foster-Fishman, P. G., Salem, D. A., Allen, N. A., & Fahrback, K. (2001). Facilitating interorganisational collaboration: The Contributions of interorganisational alliances. *American Journal of Community Psychology*, 29(6), 875–905.
- Forrester Research, Inc (2009) Collaboration Platforms, Q3 For Information & Knowledge Management Professionals
- Gilja, H., (2013) Barriers for Communication and Collaboration in Emergency Response- A qualitative case - study on operative emergency management in the Sør-and Nord-Trøndelag counties, Norway. Thesis unpublished
- Gillingham H, Roberts B (2006). “Implementing Knowledge Management: A Practical Approach”, *Journal of Knowledge Management Practice*, Vol. 7, No. 1, available at <http://www.tlinc.com/articl107.htm> (accessed 1 December 2009).
- Gladstone, B. (2000). *From Know-how to knowledge: The essential guide to understanding and implementing knowledge management*. London: The Industrial Society.
- Gray, B. (1989). *Collaborating: Finding common ground for multiparty problems*. San Francisco, CA: Jossey-Bass.

- Graham, J. R., & Barter, K. (1999). Collaboration: A social work practice method. *Families in Society: The Journal of Contemporary Social Services*, 80, 6-13.
- Grey, D.(1996). What is knowledge management? The Knowledge Management Forum. March  
<http://www.km-forum.org/t000008.htm> (Accessed July 20th 2015)
- Handoll, H. H., Stott, D. J., Elstub, L. J., Elliott, J. C., Kavanagh, A. L., & Madhok, R. (2012). A framework for effective collaboration between specialist and broad spectrum groups for delivering priority Cochrane reviews. *Journal of Clinical Epidemiology*, 66(5), 490-495.
- Hardy, C., Lawrence, T.B., & Grant, D. (2005). Discourse and Collaboration: The role of conversations and collective identity. *Academy of Management Review*. Vol 30. (1).
- Heath, J., (2003). *Harvesting and Using Corporate Knowledge*. Work Study. Vol. 52. No. 4. pp 184-189. MCB UP Limited. ISSN 0043-8022
- Hellriegel , Don , John W . Slocum , & Richard W. Woodman (1986) .  
Organisational Behavior . 4th ed . New York : West .
- Henneman, E.A., Lee, J.L. & Cohen J.I. (1995) Collaboration: a concept analysis, *Journal of Advanced Nursing*, 21: 103–9.
- Herschel, R., Nemati, H., & Steiger, D. (2001) Managing the Tacit to Explicit Knowledge Conversion Problem: Knowledge Exchange Protocols Managing the Tacit Knowledge Problem. *Journal of Knowledge Management*, 5(1), pp.107-116.
- Huxham, C., 1996. Collaboration and Collaborative Advantage . In *Creating Collaborative Advantage*, edited by Chris Huxham , 1 – 18 . Thousand Oaks, CA: Sage Publications.
- Jones, N.B., Herschel, R. T., Moesel, D.D., (2003). *Using “Knowledge Champions” to Facilitate Knowledge Management*. Journal of Knowledge Management. Vol. 7. No. 1. pp 49-63. MCB UP Limited. ISSN 1367-3270.
- Keaveney, S. (2008). The blame game: An attribution theory approach to marketer-engineer conflict in high-technology companies. *Industrial Marketing Management*, 37, 653-663.



- Koskinen K. U. (2003), “ Evaluation of tacit knowledge utilisation in work units”, *Journal of Knowledge Management* vol.7, no.5, pp. 67-81.
- Kozuch B (2009), The Culture of Collaboration. Theoretical Aspects *Journal of Intercultural Management* Vol. 1, No. 2, November 2009, pp. 17–29
- Keyton, J., Ford, D. J, & Smith, F. I. (2008). A mesolevel communicative model of collaboration. *Communication Theory*, 18, 376-406.
- Kloth, C., & Applegate, B. (2004) Inter-Organisation Collaboration & Partnerships: A Critical Analysis .Paper presented at the Organisational Development (OD) Network Annual Conference. Online:  
<http://209.34.253.86/upload/Interorganisational%20Collaboration%20Article.pdf> ( Accessed on July 20 2015
- Keller, G., (2003). *Reviewed Work(s): The Uses of the University by Clark Kerr*. *The Journal of Higher Education*, Vol. 74, No.2. (Mar.-Apr., 2003), pp. 231-236.
- Lewis, L.K. (2006). Collaboration: Review of communication scholarship and a research agenda. In C. Beck (Ed.), *Communication yearbook 30* (pp. 197\_247). Thousand Oaks, CA: Sage.
- Linden, Russell M. (2002). Working across boundaries: Making collaboration work in government and nonprofit organisations. San-Francisco, CA: Jossey-Bass
- Logsdon , Jeanne M . 1991 . Interests and Interdependence in the Formation of Problem-Solving Collaborations .*Journal of Applied Behavioral Science* 27 (1): 23 – 37 .
- Longoria, A. R. (2005). Is interorganisational collaboration always a good thing? *Journal of Sociology and Social Welfare*, 32, 123-139.
- Martensson, M. (2000). A critical review of knowledge management as a management tool.*Journal of Knowledge Management*, 4(3), 204-216.
- Martin, X.Y.F. & Salomon, R. (2003). Knowledge Transfer Capacity its Implications for the theory of multinational Corporation. *Journal of International Business Studies*, 34(4), 356-373.

- Marwick, A.D. (2001). Knowledge management technology. *IBM Systems Journal*, 40(4), 814-830.
- Mattessich, P.W., & Monsey, B.R. (1992). Collaboration: What makes it work: A review of research literature on factors influencing successful collaboration? *Amherst H. Wilder Foundation*. St Paul.
- Matusik, S.F., Hill, W.L., (1998). *The Utilisation of Contingent Work, Knowledge Creation and Competitive Advantage*. Academy of Management Review. Vol. 23. No. 4. pp 680-697.
- Nissanke, M, & Aryeetey E., (1998). Financial Integration and Development, London: Routledge Studies in Development Economics.
- Nonaka, I., (1994), "A dynamic theory of organisational knowledge creation", *Organisation Science*, 5(1), pp. 14-37
- Nonaka, I. & Konno, N. (1998). The concept of "ba": Building a foundation for knowledge creation. *California Management Review*, 40, 40-54.
- Nonaka, I., Toyama, R., Konno, N., (2000), "SECI, Ba and leadership: a unified model of dynamic knowledge creation", *Long Range Planning*, 33(1), pp. 5-34
- Nunamaker, J., Briggs, R.O., & de Vreede G. J., (2001) "From Information Technology to Value Creation Technology". In G. Dickson and G. DeSanctis. *Information technology and the New Enterprise: New Models for Managers*. Prentice Hall. 2002.
- Ostrom, Elinor. 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. New York: Cambridge University Press.
- O'Toole, Laurence J., Jr., (1996). Rational Choice and the Public Management of Inter-Organisational Networks . In *The State of Public Management* , edited by Donald F . Kettl and H. Brinton Milward , 241 – 63 . Baltimore : Johns Hopkins University Press.
- Pan, S.L., Leidner, D.E., (2003). *Bridging Communities of Practise with Information Technology in Pursuit of Global Knowledge Sharing*. Journal of Strategic Information Systems. Vol. 12. pp 71-88.
- Polanyi, M. (1967). The tacit dimension. NY: Anchor Books.

- Powell, Walter W. (1990). Neither Market nor Hierarchy: Network Forms of Organisation. In *Research in Organisational Behavior*, vol. 12, edited by Barry M. Staw and Larry L. Cummings, 295 – 336. Greenwich, CT: JAI Press.
- Punch, K. F. (1998) *Survey Research: The Basics*. London: Sage.
- Rebernik M, Sirec K (2007) Fostering innovation by unlearning tacit knowledge. *Kybernetes* 36: 406-419.
- Ring, P. S., & Van de Ven, A. 1994. Developmental processes of cooperative inter-organisational relationships. *Academy of Management Review*, 18: 90–118.
- Thomson, A. M. 2001a. *Collaboration: Meaning and Measurement*. Ph.D. dissertation., Indiana University – Bloomington .
- Robson, C. (2002) *Real World Research* (second edition). Oxford: Blackwell.
- Romaldim V (2002) Collaborative Technologies for Knowledge Management: Making the Tacit Explicit? Informing Science
- Rondinelli, D., & London, S. (2001). Partnering for Sustainability: Managing Nonprofit Organisation - Corporate Environmental Alliances, Chapel Hill: Centre for Global Business.
- Sagawa, Shirley , & Segal, E., (2000) . *Common Interest, Common Good: Creating Value through Business and Social Sector Partnerships* .Boston : Harvard Business School Press.
- Sandrone, V., (1995). *F.W. Taylor and Scientific Management*. Quality Resource Website. <http://www.quality.org/TQM-MSI/taylor.html>. Accessed on July 30th, 2015
- Shavinina, L. V. (2003). The international handbook on innovation, Oxford: Elsevier
- Sherwood, A. L., Covin, J. G. (2008). Knowledge acquisition in university-industry alliances: an empirical investigation from a learning theory perspective. *Journal of product innovation management*, vol. 25, no. 2, pp. 162-179.
- Simonin, B. (1997). The importance of collaborative know-how: An empirical test of the learning organisation. *Academy of Management Journal*, 40(5), 509–533.

- Tapscott, D., & Williams, A.D. (2006). WIKINOMICS How Mass Collaboration Changes Everything. United States of America: Janson Text with Daily News.
- Thomson, A. M., & Perry, J. L. (2006). 'Collaboration processes: Inside the black box', *Public Administration Review*, Dec, N. 66, Special Issue, pp. 20-32.
- Townsend, A., & Shelley, K. (2008). Validating an instrument for assessing workforce collaboration *Community College Journal of Research and Practice*, 32, 101-112.
- Tschirhart, M., Christensen R.K, and Perry J.L, (2005), The Paradox of Branding and Collaboration. *Public Performance and Management Review*, 29(1): 67–84.
- Tubin, D., & Levin-Rozalis, M. (2008). Interorganisational cooperation: the structural aspect of nurturing trust. *International Journal of Public Sector Management*, 21(7), 704-722.
- Van de Ven, Andrew, H., Dennis C .Emmett, and Richard Koenig, Jr . 1975. Theoretical and Conceptual Issues in Inter-Organisational Theory. In *Inter-Organisational Theory*, edited by AnantR .Negandhi , 19 – 38 . Kent, OH : Kent State University Press.
- Vangen, S &Huxham, C, 2003a, Enacting leadership for collaborative advantage: dilemmas of ideology and pragmatism in the activities of partnership managers. In *British Journal of Management*, 14, S61–S76
- Weber, E. P., Lovrich, N. P., & Gaffney, M.(2007). Assessing collaborative capacity in a multi-dimensional world. *Administration & Society*, 39(2), 194-220.
- Wiig, K. (1993). Knowledge management foundations. Arlington, TX: Schema Press
- Wijnhoven, F. (2003), “Operational knowledge management: identification of knowledge objects, operation methods, and goals and means for the support function”, *Journal of the Operational Research Society*, Vol. 54, pp. 194-203.
- Wilson, T. D. (1989). Towards an information management curriculum, *Journal of Information Science*, 15: 203–210.

- Wood, Donna, J, & Gray B. 1991. Toward a Comprehensive Theory of Collaboration. *Journal of Applied Behavioral Science* 27 ( 2 ): 139 – 62 .
- Wood, Donna J. & Gray, B., (1991). Toward a Comprehensive Theory of Collaboration. *Journal of Applied Behavioral Science*, 27(1): 139–62.
- Yeh, Y.S. (2009), Building trust in m-commerce: contributions from quality and satisfaction. *Online Information Review*, 33/ 6 pp, 1066-1086
- Yin, R. K. (1994) *Case Study Research: Design and Methods*. Beverly Hills, CA: Sage.
- Zahra, S.A., George, G., (2002). *Absorptive Capacity: A Review, Reconceptualisation and Extension*. *The Academy of Management Review*. Vol. 27, No. 2. pp 185-203.
- Zadek, S (2006) *The Logic of Collaborative Governance: Corporate Responsibility, Accountability and the Social Contract*, Working Paper, CSR Initiative, Center for Government and Business, J F Kennedy School of Government, Harvard University, Cambridge. Mass.

APPENDICES

Appendix A: Introductory Letter

**UNIVERSITY OF CAPE COAST  
SCHOOL OF BUSINESS  
DEPARTMENT OF MANAGEMENT STUDIES**

*Telephone* 03321 32440/32444 Ext. 219/220  
*Direct* 03321 37870

*Telegr:*  
*Telex.*



**UNIVERSITY POST OFFICE  
CAPE COAST, GHANA**

Dear Sir/Madam,

**INTRODUCTORY LETTER TO THE MANAGEMENT OF THE RURAL  
BANKS**

The bearer of this letter, Ms Alice Sankye, is an (Human Resource Management) sandwich student of the School of Business. She is writing her thesis on “Collaborative Knowledge Management challenges in Rural Bank Industry in the Eastern Region of Ghana”.

We would be grateful if you could assist her with the filling of the questionnaires and any other information that she may need to complete her work.

We appreciate your co-operation.

Yours faithfully,

*Signed*

F. O. Boachie-Mensah

**HEAD**

**Appendix B: Introductory Letter to the correspondents**

**UNIVERSITY OF CAPE COAST**

**SCHOOL OF BUSINESS**

**DEPARTMENT OF MANAGEMENT STUDIES**

**QUESTIONNAIRE ON AN EVALUATION OF PERFORMANCE  
APPRAISAL SYSTEM OF THE UNIVERSITY OF CAPE COAST**

Dear Respondent,

I am a student of University of Cape Coast, offering Master of Commerce (Human Resource Management) Programme at the Department of Management Studies, School of Business. This questionnaire is designed to ascertain information for my research work on the topic: “on **“COLLABORATIVE KNOWLEDGE MANAGEMENT CHALLENGES IN RURAL BANK INDUSTRY IN THE EASTERN REGION OF GHANA”**”.

This research is in partial fulfillment of the requirement for the award of a Master of Commerce (Human Resource Management) Degree at the University of Cape Coast.

All the answers you provide will be treated with utmost confidentiality and for academic purpose only. Please feel free to answer the questions as candid as possible.

Thank you.

**APPENDICE TWO (QUESTIONNAIRES)**

Answer the questions either by ticking [] or writing a small statement where necessary.

**SECTION A: SOCIO-DEMOGRAPHIC DATA OF RESPONDENTS.**

1. Gender: Male [] Female []
2. Age Range: 20-30 [] 31-40[ ] 41-50[ ] 51 and above [ ]
3. Staff position: Junior [ ] Senior [ ]
4. Years of Work Experience:  
Under 2 yrs [ ] 2-5yrs [ ] 6-9yrs [ ] 10-13 yrs[ ] 14 yrs and above [ ]

1: Is there any rural bank in this area that your bank has knowledge of its programmes, but does not participate in their activities at all? Yes (  ); No (  )

How many are they? .....

Please name them?.....

2: Is there any bank that your bank has knowledge on its programmes and at the same time share information on their activities? Yes (  ); No (  )

If yes, please name them.....

3: Is there any rural bank that your bank has knowledge of its programmes and not only shares information, but also shares ideas to guide and modify their own planning and activities? Yes (  ); No (  )

If yes, please name them.....

4: Is there any bank that your bank share both information and ideas and also jointly plan and modify delivery of service based on mutual consent? Yes (  ); No (  )

If yes, please name them.....



**QUESTIONNAIRES ON ASSESSING THE EXTENT OF COLLABORATION AMONGST THE RURAL BANKS**

<b>How far do you agree or disagree with the following statement. Indicate it, please</b>	<b>Strongly disagree (1)</b>	<b>Disagree (2)</b>	<b>Neutral (3)</b>	<b>Agree (4)</b>	<b>Strongly agree (5)</b>
1: Each Rural Bank in this area has loosely and independent defined roles for its employees					
2: Each Bank has little or no communication with each other in the past on each other's activities					
3: Each Bank makes its decisions independently					
4: Each Bank provides information to each other					
5: Each Bank supports each other in other's task					
6: In recent times, each Bank has good frequent communication with each other on strategic plans					
7: Banks share information and resources together					
8: Banks share ideas and some shared decision making					
9: Banks reach consensus on all decisions					

**QUESTIONNAIRES ON ASSESSING THE PERCEIVED BENEFITS OF COLLABORATION IN KNOWLEDGE MANAGEMENT**

<b>Considering the BENEFITS of Collaborative management, please indicate whether you agree or disagree with the statement that Collaboration leads to:</b>	<b>Strongly disagree (1)</b>	<b>Disagree (2)</b>	<b>Neutral (3)</b>	<b>Agree (4)</b>	<b>Strongly agree (5)</b>
1: Enhanced ability to address important issues					
2: Development of new skills					
3: Increased utilisation of other expertise or services					
4: Acquisition of useful knowledge about services, programs or people in the community that the banks serve.					
4: Enhanced ability to meet the diverse needs of clients.					
5: Ability to have a greater impact on the quality of service than individual bank could have on its own					

**QUESTIONNAIRES ON ASSESSING THE PERCEIVED BARRIERS OF COLLABORATION IN KNOWLEDGE MANAGEMENT**

<b>Considering the BENEFITS of Collaborative management, please indicate whether you agree or disagree with the statement that Collaboration leads to:</b>					
1: Lack of dedicated leadership who will be able to take responsibility for the partnership					
2: Diversion of time and resources away from other priorities or obligations					
3: Insufficient influence in partnership activities					
4: Conflict between individual job and the partnership's work					
5: Insufficient recognition given to employees for contributing to the accomplishments of the partnership					
6: Lack of manpower resources who can inspire or motivate people involved in the partnership					
7: How well the partners will be able to include the views and priorities of the people affected by the partnership's work (i.e. Empowering people involved in the partnership					
8: How well the partners will be able to develop goals that are widely understood and supported among partners/collaborators					
9: how well the employees will be able to work to					

develop a common vision and mission within the partnership due to differences in interests					
10: How well collaborators can combine the perspectives, resources, and skills of partners					
11: How well collaborators can coordinate and communicate among partners					
12: How well collaborators can organize partnership activities, including meetings and projects					