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**EXPLORING THE USE OF NETWORKING FOR CAPACITY BUILDING OF**

**PROCUREMENT PROFESSIONALS IN GHANA**

**(CASE STUDY: TAKORADI)**

**BY**

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**A THESIS PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS  
FOR A DEGREE OF MASTER OF SCIENCE IN  
PROCUREMENT MANAGEMENT**

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## **DECLARATION**

This work or any part thereof has not previously been submitted in any form to the University or to any other body whether for the purpose of assessment, publication or for any other purpose. Taking out expressions, acknowledgements, references cited in the work, I confirm that the intellectual content of this work is the result of my own efforts.

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## **ABSTRACT**

The importance of public procurement has received worldwide acknowledgement. Owing to this, a raft of policy interventions has been made in several developing countries, including Ghana to make its processes more efficient, and effective. Some of such interventions aim at building the capacity of the various professionals who manage the various procurement activities through conventional ways such as sponsored training programmes, and workshops. This research however took a different dimension by exploring the use of networking for capacity building of public procurement professionals in Ghana. In order to achieve this aim, specific objectives were set which included the identification of conditions for effective network formation, identification of opportunities in networking for capacity building of procurement professionals in Ghana and identification of potential challenges for using networking for knowledge capacity building of procurement professionals. The study adopted both qualitative and quantitative research methods in order to interrogate the various objectives. The data that was obtained was analysed using both qualitative and quantitative (using descriptive statistics) analysis techniques. In the end, it was revealed that networking can offer public procurement professionals the opportunity to acquire new knowledge from external professionals, know global trends about procurement practice, and obtain new information from other institutions about procurement. Again, it was revealed that most important potential challenges that can be faced are lack of mechanisms to check the accuracy of information that is shared, poor human relations, and reluctance in sharing knowledge with the network. It is recommended that a platform that can support a network of procurement professionals in Ghana should be developed in order to ensure effective interaction among procurement professionals for their capacity building.

**Keywords:** Capacity Building, Ghana, Knowledge, Networking, Procurement, Social Networking

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This thesis is dedicated to my lovely wife, Mrs Lydia Armah-Hammond and children.

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## **LIST OF ABBREVIATIONS**

<b>AESL</b> .....	Architectural and Engineering Services Limited
<b>CB</b> .....	Capacity Building
<b>DAC</b> .....	Development Assistance Committee
<b>EC</b> .....	European Commission
<b>EU</b> .....	European Union
<b>GDP</b> .....	Gross Domestic Product
<b>GHS</b> .....	Ghana Health Service
<b>PPA</b> .....	Public Procurement Authority
<b>PPE</b> .....	Public Procurement Entity
<b>OECD</b> .....	Organisation for Economic Co-operation and Development
<b>SPSS</b> .....	Statistical Package for Social Science
<b>STMA</b> .....	Sekondi-Takoradi Metropolitan Assembly

## **CHAPTER ONE**

### **GENERAL INTRODUCTION**

#### **1.1 BACKGROUND OF THE STUDY**

Public procurement is acknowledged in both developed and developing countries to be of great importance to their respective economies, and the world at large (Schapper, et al., 2006; Mandl, et al., 2008; Osei-Owusu & Gyapong, 2013). This acknowledgement is attributable to, among others, the size of capital that goes into procurement activities (Schapper, et al., 2006; Mandl, et al., 2008). For instance, in 2002, procurement of the European Union (EU) was estimated at about 16 percent of the Union's Gross Domestic Product (GDP), whiles ranging between 11percent, and 20 percent of the GDPs of member states (Malta, et al., 2011). Indeed, the World Bank has estimated that procurement represents about 25 percent of a country's GDP (Noble, 2009). In Ghana, public procurement is estimated to be between 50 to 70 percent of national budget, after personal emoluments (Osei-Tutu, et al., 2011). These percentages offer a plausible explanation for the significant attention that procurement derives from the various stakeholders around the globe.

Generally, public procurement is referred to as the purchasing, hiring, or obtaining by any other contractual means of goods, construction works, and services by the public sector (Embeli, et al., 2014). It is therefore regarded as the key component of public administration that forms the nexus between public financial system, and social and economic outcomes (Schapper & Malta, 2011). That is, government uses public funds by forming contractual relationships with private entities to provide services, goods or engineering and construction works or any combination thereof to meet the infrastructural needs of its

citizens (Govender & Watermeyer, 2000). In providing these infrastructural needs, government commits huge state capital, hence, requiring conscious efforts to make the procurement activities more effective and efficient in order to achieve value for money (Anvuur, et al., 2006). This will in turn reduce budget constraints as it ensures achieving the same results at lower levels of spending or even better outcomes at the same level of spending (Mandl, et al., 2008).

Owing to the sensitive nature of public procurement, the need for a high level of expertise to manage it cannot be overemphasised (Schapper, et al., 2006). This level of expertise is required in areas such as contract specification, risk management, ongoing relationship, and performance management of procurement (*ibid*). In this regard, the Public Procurement Authority (PPA) of Ghana has undertaken several capacity building programmes that are aimed at producing the relevant skills for the management of procurement activities in the country (PPAE- Bulletin, 2011). These programmes include the development of short to long term training modules for the training of public procurement personnel, and introduction of procurement courses in the nation's tertiary institutions, that is, polytechnics, and universities. These undertakings will in effect enable the nation to get personnel to manage public procurement activities (*ibid*). However, to hone the skills and knowledge needed in procurement, just like other professions, requires more than attaining a diploma or university degree, and as such, the initial period during which novice professionals develop their proficiency in the general professional role continues well beyond their initial qualification (Eraut, 1994). Therefore, there is the need to find innovative ways in shaping the skills and knowledge of procurement professionals in Ghana.

One of the concepts that has gained much attention in the research community in terms of knowledge and skills development of organisations is networking. Such publications include Tillquist (2002), Tepic, et al. (2012), and Ozkan-Canbolat (2014). The concept of networking has been employed to explain several organisational phenomena such as organizational

identity, organizational development, and organizational knowledge cycle (Bouzdine & Bourakova-Lorgnier, 2004). Networking seeks to gauge the level at which the relationships between actors (for example, individuals and organisations) in a network, and their implications for generating novel ideas and exercising social influence (Battilana & Casciaro, 2012; Bouzdine & Bourakova-Lorgnier, 2004; Ruan, et al., 2013). At the individual level, research suggests that an individual with a widespread network of connections over several collections of knowledge and expertise bridges holes between people and are exposed to more diverse knowledge (Tepic, et al., 2012). This research work therefore seeks to explore the possibility of building the knowledge capacity of public procurement professionals for efficient and effective management of public procurement activities in Ghana.

## **1.2 PROBLEM STATEMENT**

As revealed in Section 1.1, public procurement represents a significant component of government's expenditure, even in a developing country like Ghana. However, in a 2006 review, the Public Procurement Authority revealed, among other weaknesses that have characterised procurement institutions in Ghana, lack of qualified procurement personnel (Osei-Tutu, et al., 2011). Indeed, lack of compliance with Public Procurement Act by several Public Procurement Entities (PPEs) is also attributable to the lack of qualified personnel to handle the procurement processes (*ibid*). It must be noted that without competent professionals to handle the procurement activities of the various public procurement entities, the quest of achieving efficiency and value for money in public procurement will be stifled (Anvuur , et al., 2006; PPAE- Bulletin, 2011). However, little research has been done in Ghana to find out how the capacity of these procurement professionals can be built through networking to enable them handle procurement efficiently and effectively. It is against this backdrop that this research

work seeks to explore how networking can be used to help build the capacity of public procurement professionals in Ghana.

### **1.3 AIM OF THE STUDY**

The aim of the study is to explore the use of networking for capacity building of public procurement professionals in Ghana.

### **1.4 OBJECTIVES OF THE STUDY**

To achieve the aim of the study, the following objectives were set out:

- To identify conditions for effective network formation;
- To identify opportunities in networking for capacity building of procurement professionals in Ghana, and
- To identify potential challenges for using networking for knowledge capacity building of procurement professionals.

### **1.5 SCOPE OF THE STUDY**

Even though there is the need to build the capacity of the various procurement entities, this research work focuses on the knowledge capacity building of procurement professionals in Ghana. Again, while networking has been applied to the studies of the relationships and knowledge sharing between individuals and organisations (Tepic, et al., 2012; Ruan, et al., 2013; Tillquist, 2002; Ozkan-Canbolat, 2014), this research work is concerned with how networking can help build the knowledge capacity of the various individuals who manage procurement in their respective organisations.

## **1.6 SIGNIFICANCE OF THE STUDY**

Owing to the significance of public procurement, there is the need to get professionals who have the knowledge and skills to be able to manage its processes (Schapper, et al., 2006; Anvuur , et al., 2006). As the study explores how networking can help build the knowledge capacity of procurement professionals, it will help bring to the fore the areas in networking that can be exploited in order to improve the knowledge base of the various procurement professionals in Ghana.

The study will also contribute to the debate of finding innovative ways in improving the public procurement management system of the country. This is because, the study will elucidate the applicability of networking in improving the skills and knowledge base of individual professionals, particularly the handlers of procurement activities in Ghana.

## **1.7 RESEARCH METHODOLOGY**

In order to achieve the objectives of the study, the following research methodology was adopted. First of all, extant literature on the subject under study was reviewed to obtain an understanding of the main issues concerning public procurement, capacity building of procurement professionals, networking in general, and social networking. This made it possible for relevant constructs to emerge which were then used as the basis for the subsequent semi-structured interview, and questionnaire survey that were conducted.

Secondly, interviews were conducted with major stakeholders with regards to public procurement in order to obtain their views on the subject under consideration. These stakeholders included procurement professionals who work with public organisations, and consultancy firms in the Western Region of Ghana. These professionals were from the Public Procurement Authority (PPA), Sekondi-Takoradi Metropolitan Assembly (STMA), Takoradi



Polytechnic, Architectural and Engineering Services Limited (AESL), and Ghana Health Service (GHS). The various issues that were discussed were based on the issues that were raised during the literature review. The obtained data was then analysed using a qualitative data analysis software, Nvivo 8.0.

Thirdly, with regards to the quantitative approach, descriptive study by the use of constructs that were generated through the literature review, and the semi-structured interviews were used in designing questionnaires, which were pre-tested and distributed to 96 respondents, involving professionals of procurement related backgrounds (Quantity Surveyors, Project Managers, and Procurement Managers). Out of the 96 questionnaires, 69 useable filled questionnaires were received, representing 72 percent response rate. With a five-point Likert scale, the respondents were asked to rate the levels of importance of the conditions for network formation, opportunities in networking for capacity building of procurement professionals, and the potential challenges that can exist in the use of networking for capacity building. With regards to the analysis, Statistical Package for the Social Science (SPSS) was used in preparing and analysing the data using descriptive statistics, that is, percentages, means, and standard deviations.

## **1.8 ORGANISATION OF THE STUDY**

This research work was made up of five chapters which covered the general introduction, literature review, research methodology, empirical research (analysis or data presentation), and conclusion and recommendations. The various chapters and what they entailed have been briefly presented as follows:

**Chapter One:** This chapter presented the general introduction of the study. This included the problem statement, the aim, and objectives, and the methodology of the research.

**Chapter Two:** In this chapter, a reviewed of extant literature on the concepts of the study was conducted. The concepts of public procurement, capacity building, knowledge and skills, and networking were elucidated. This included the significance of public procurement, and capacity building of procurement professionals. Again, the potential opportunities in networking for capacity building of procurement professionals, and potential challenges in the use of networking for capacity building were elaborated.

**Chapter Three:** This chapter generally presented and justified the research strategy and data collection techniques. It covered a discussion of the research methods used in this study, and focused on the methods that were used in conducting the empirical research, and research design and data analysis techniques that were used.

**Chapter Four:** This chapter presented the data analysis, the presentation, and discussion of results. The various discussions were based on the objectives of the research.

**Chapter Five:** This chapter revisited the aim and objectives of this research work, where findings were summarized and related to the research objectives. Conclusions from this research work were derived and linked to the research objectives, and based on these conclusions, recommendations were made. The limitations of this work were also highlighted.

## **CHAPTER TWO**

### **NETWORKING FOR PUBLIC PROCUREMENT PROFESSIONALS**

#### **2.1 INTRODUCTION**

The previous chapter presented the background of the study; problem statement; aim of the study; objectives of the study; scope of the study; and the significance of the study. This helped to put the subject of the study into perspective. This chapter therefore goes further to present a review of extant literature on the phenomenon under study. The chapter captures the significance of procurement; the concept of capacity building; capacity building of procurement professionals; the concept of networking; networking for capacity building; opportunities in networking for capacity building; and the potential challenges in the use of networking for capacity building of public procurement professionals.

#### **2.2 SIGNIFICANCE OF PUBLIC PROCUREMENT**

Public procurement is a very important component in both the developed and developing countries (Schapper, et al., 2006; Govender & Watermeyer, 2000; Noble, 2009; Edler & Georghiou, 2007; Snider & Rendon, 2008). Indeed, it is seen as the connection between public financial system, and social and economic outcomes and as such, politically sensitive (Schapper & Malta, 2011; Schapper, et al., 2006). The importance of public procurement has been acknowledged by viewing it from several facets which include but not limited to the contracting out of public functions and its implications; social equity and minority contracting; and the unique challenges of contracting for public services (Snider & Rendon, 2012). In most instances, the significance of procurement, both private and public have been expressed as a percentage of the GDP and budgetary allocation of an organisation, or a

country. For example, the World Bank estimates that procurement represents about 25 percent of a country's GDP (Noble, 2009).

More so, in 2005, procurement stood at 20 percent of the European Union's GDP, while representing 10 percent of the GDPs across Africa (Mandl, et al., 2008; Dza, et al., 2013). In Ghana, public procurement represents about 50 to 70 percent of the annual national budget, after personal emoluments and as such, 90 percent of all development partners' inflows go into procurement related activities in the country (Osei-Tutu, et al., 2011; Dza, et al., 2013).

Owing to the significance of public procurement, it is seen as a major tool that can be used in achieving a raft of socio-economic objectives (Edler & Georghiou, 2007; Watermeyer, 2004; McCrudden, 2004). These policy objectives include supporting domestic suppliers or local economic development; remedies for historically disadvantaged groups; and green procurement (Snider & Rendon, 2012). Snider & Rendon (2012) however assert that the success of these procurement objectives is predicated on how effective the procurement function will be. Noble (2009) corroborates this assertion by pointing out, among other things that ineffective procurement practices can lead to gaps in actual GDP and stresses the need to ensure effectiveness in procurement to make some savings to address other national priorities.

## **2.3 CONCEPT OF CAPACITY BUILDING**

In this section, the concept of capacity building would be elucidated and put into the perspective of this research work. This comprises the definition of the term capacity and capacity building. These have been respectively presented under subsections 2.3.1 and 2.3.2.

### **2.3.1 Definition of Capacity**

The term capacity has different meanings, depending on its contextual usage as there is no standard definition (Morgan, 2006). For instance, Morgan (2006) in a framework referred to

capacity as the overall ability of a system to create value. This definition is simply put but carries a broader perspective in that a system as used in this context, can be an individual, or an organisation (Kululanga, 2012). In this regard, it can be asserted that capacity refers to the ability of an individuals or organisations to create value. Indeed, when it used at individual's level, capacity is generally referred to as an individual's ability to solve problems and achieve objectives (Mamman, 2014). This definition emphasises the individual's ability to solve problems.

It is acknowledged that the efficiency and effectiveness in organisational functions, including procurement is greatly dependent on the skills and knowledge base of the professionals involved in its processes (Barsemoi, et al., 2014). In this regard, it can be asserted that the knowledge and skills of procurement professionals predicate their ability to manage procurement processes in their respective entities. Hence, this research work adapts Mamman's definition for capacity as follows: *The requisite knowledge and skills of procurement professionals needed in the management of procurement activities in their respective organisations.*

### **2.3.2 Capacity Building (CB)**

Using the understanding obtained from Section 2.3.1, the capacity building as used in this research work is presented in this section. Capacity building (CB) is pervasive of the activities of several organisations and countries including the United Nations and the World Bank (Abaza, et al., 2002; Lusthaus, et al., 1999). For some institutions, capacity building refers to any support that strengthens an institution's ability to effectively and efficiently design, implement and evaluate development activities according to its mission (Lusthaus, et al., 1999). In this definition, the focus is on support that is provided to an institution as the unit of emphasis. However, capacity building covers a much broader spectrum, covering for instance

a country's human, scientific, technological, organisational, and resource capabilities (Abaza, et al., 2002).

Capacity building is also considered as an intentional and coordinated efforts to strengthen individuals' ability to solve problems and achieve objectives through provision of knowledge and skills (Mamman, 2014). In this definition of capacity building, the focus is on the individual and his or her knowledge and skills requirement to attain a given objective. Inasmuch as the definition is limited to the individual, it falls in line with the scope of this research work, which focuses on the individual professionals who manage procurement activities in the various public procurement entities.

However, it must be noted that in all the definitions, capacity building is borne out of conscious efforts and it is not an ad hoc venture. Thus, for the purposes of this research work, the following definition for capacity building will be adapted: *An intentional and coordinated effort aimed at improving the knowledge and skills base of professionals in order to effectively and efficiently manage public procurement activities in their various entities.*

## **2.4 IMPERATIVES FOR CB OF PROCUREMENT PROFESSIONALS**

As it has been revealed in Section 2.2, public procurement constitutes a significant component of governments' expenditure. It is therefore imperative to make sure that the various procurement activities are executed effectively and efficiently. As it has been asserted by Anvuur, et al (2006), and Schapper, et al (2006), one of the means to ensure the effectiveness and efficiency in procurement is by making sure the procurement process is managed by professionals who have the required knowledge and skills. Acknowledging the need for qualified manpower in the field of procurement, a lot of organisations and countries have undertaken several capacity building programmes which are aimed at training procurement practitioners to obtain the requisite knowledge and skills (Jensen, 2009).

In Ghana, the Public Procurement Authority (PPA) of Ghana has responded to the need for qualified personnel to manage procurement activities by undertaking several capacity building programmes to ensure that the country obtains the relevant skills for the management of procurement activities in the country (PPAE- Bulletin, 2011). Jensen (2009) however reveals that such programmes have not yielded the desired outcomes.

Again, there are several reports that suggest the lack of capacity of procurement professionals to handle procurement activities. For instance, OECD/DAC in 2007 revealed in a report that there are instances of incorrect interpretation and application of some provisions of the procurement law; poor record management; poor procurement planning; and poor contract management (Dza, et al., 2013). These inefficiencies and challenges can be attributed to lack of qualified personnel to manage procurement activities in the various government entities (Osei-Tutu, et al., 2011; Barsemoi, et al., 2014). This therefore begs the need to build the capacity of the various procurement professionals in order to ensure a proper management of the various procurement activities.

More so, the complexity of public procurement begs the need for competent procurement professionals in the management of its processes. Indeed, this is partly borne out of the fact that public procurement needs to be carried out with a raft of complex and long term criteria apart from the usual economic considerations (Odhiambo & Kamau, 2003). Also, owing to the nature of public procurement, it is seen as being particularly enigmatic, amongst the least understood and most vulnerable areas of public administration (Schapper, et al., 2006). Hence, it is imperative to find innovative means to building the capacity of the procurement professionals who manage public procurement processes in Ghana. This research work focuses on ascertaining the opportunities available in the use networking of the various procurement professionals to improve upon their knowledge and skills base.

## **2.5 PROCUREMENT PROFESSIONALS IN GHANA**

Public procurement covers goods, works, and consultancy services (Govender & Watermeyer, 2000; Osei-Tutu, et al., 2011; Anvuur , et al., 2006). This draws expertise from professionals with different backgrounds who work directly as employees or consultants to the various procurement entities (Anvuur , et al., 2006; Ayarkwa, et al., 2013). For instance, government procures a lot of construction works through independent consultants who carry out procurement processes including the selection of suitable contractors for the execution of the various projects (Anvuur , et al., 2006). This is a plausible explanation to why procurement is considered as fundamental value chain activity, covering different value adding actors such as suppliers, subcontractors, construction firms, engineering and design firms, consultants, project and owners, and encompasses a wide range of work specialties (Ghazali, et al., 2012). The various professionals who manage the various public procurement activities are of Purchasing and Supply, Quantity Surveying, Project, and Procurement Management backgrounds (PPAE-Bulletin, 2011; Orgen, et al., 2013; Ayarkwa, et al., 2013).

## **2.6 KNOWLEDGE AND SKILLS OF PROCUREMENT PROFESSIONALS**

There has been a raft of literature on the concept of knowledge and knowledge management around the globe (Waterfield, 2010). Examples of such authors include but not limited to Argote, et al. (2003); Baggio & Cooper (2010); Cader (2007); Trevithick (2008); and Denford & Chan (2011). They have respectively looked at several perspectives of knowledge and its management. Argote, et al (2003) for instance looked at managing knowledge in organizations by capturing an integrative framework and a review of emerging themes. Again, Trevithick (2008) considered the knowledge base of social work by capturing a framework for practice. All these further enrich literature on the subject of knowledge and its management.



Knowledge is considered as a major strategic resource that can be acquired, manipulated, and applied in order to produce a competitive advantage (Jansen, et al., 2005; Denford & Chan, 2011). Knowledge has been defined as what a person knows which involves the mental processes of comprehension, understanding, and learning that go on in the mind and only in the mind (Schlögl, 2005). Indeed, according to Waterfield (2010), knowledge requires complex assimilation, cross referencing, and analysis of a variety information which enhances the capacity to execute a given task (which is referred to as skills). Knowledge has been described in several ways depending on their nature, source, and how it can be transferred (Mussi, et al., 2014).

A skill on the other hand, is referred to as the level of performance, in relation to the accuracy, and speed in performing particular tasks (Winterton, et al., 2006). Winterton, et al. (2006) explained further that skill in selecting an appropriate response can be developed with practice, while its reaction time is affected by the number of alternatives, and can be accelerated by providing advance information, thereby reducing the alternatives. The need to improve the skills of professionals is particularly important, since the level of performance cannot be raised just by improving the knowledge alone (Bhardwaj, et al., 2013). The focus of this research therefore is to empirically ascertain how the knowledge and skills of public procurement professionals in Ghana can be honed through their interactions and relationships with their colleagues. The following subsections, 2.6.1, 2.6.2, and 2.6.3 will be used to explain respectively tacit knowledge, explicit knowledge, and sources of knowledge.

### **2.6.1 Tacit Knowledge**

Tacit knowledge is referred to as personal, context specific knowledge that is difficult to formalize, record, articulate or encode (Thai, 2001; Waterfield, 2010). These are held by individuals and small groups (Carroll, et al., 2003). It is argued that tacit knowledge is

predicated on experiences other than formal theories (Waterfield, 2010). The process of formalising tacit knowledge or converting it to explicit knowledge is called the knowledge building process (Thai, 2001). Even though public procurement practice can be considered as one of the knowledge-based professions (Ghazali, et al., 2012), hence, requiring a command of specific scientific knowledge that can only be acquired through an intensive period of study, there are other aspects of the procurement practice that are tacit in nature. The ability to handle complex procurement undertakings comes with having obtained a significant amount of experience, insight, and expertise on the job. This knowledge is stored in the individual professional's head and it can be shared through processes such as socialization, and externalization (Nonaka & Takeuchi, 1995; Bratianu, 2010).

### **2.6.2 Explicit Knowledge**

Explicit knowledge can be codified and transmitted into a systematic and formal representation or language (Thai, 2001). This form of knowledge has also been described as the focal knowledge which is about an object or a phenomenon in focus (Waterfield, 2010). It is also referred to as academic knowledge or “know-what” which is gained through formal education, or structured education (Smith, 2001). Tacit knowledge is also convertible to explicit knowledge through record discussions, descriptions, and innovations in a manual and then uses the content to create a new product (Thai, 2001; Smith, 2001). Explicit knowledge is as important for procurement practice as it is for other professional practices. This knowledge involves the techniques to acquire the goods and services from contractors and suppliers, outside of the project organisation (Thwala & Mathonsi, 2012). There is therefore the need for the individual procurement professionals to employ innovative means to enrich their explicit knowledge base since knowledge is a prerequisite to all professions (French, 2007).

### **2.6.3 Sources of Knowledge**

In broad terms, the sources of knowledge are grouped into internal and external sources (Svetina & Prodan, 2008; Argote, et al., 2003). This is much recent dimension of knowledge management that has attracted attention in research (Argote, et al., 2003). Researchers have sought to categorise the source of knowledge into internal and external aspects particularly because, some firms balance internal and external learning (Denford & Chan, 2011; Argote, et al., 2003). The following subsections elucidate these sources of knowledge of an organisation. To begin with, Subsection 2.6.3.1 explains the internal sources of knowledge to an organisation.

#### **2.6.3.1 Internal Sources of Knowledge**

This is obtained where new knowledge is generated and distributed by members within the organisation (Denford & Chan, 2011). The knowledge that is generated from this source tends to be unique, specific, and tacitly held, and hence, difficult to imitate (*ibid*). Generally, firms acquire internal knowledge through in-house research and development activities and by learning from continuous improvements in processes (Svetina & Prodan, 2008). More so, according to Svetina & Prodan (2008), employee skills, and internal education and training programs serve as major important sources of new knowledge for firms. In fact, knowledge coming from units is considered to be part of the same organization is more likely to transfer and improve the performance of a focal unit than knowledge coming from external sources (Argote, et al., 2003).

#### **2.6.3.2 External Sources of Knowledge**

This occurs when organizational members bring in knowledge from outside the firm (Denford & Chan, 2011). External sources of knowledge can further be divided into local, national, and

international sources based on where the source of knowledge is located (Svetina & Prodan, 2008). These externally generated knowledge come in more abstract, packaged, and widely available forms, and therefore, more easily imitated (Denford & Chan, 2011). However, according Svetina & Prodan (2008), one of the external sources of knowledge, inter-firm collaboration has possibly received the most widespread research attention. In Indeed, it is asserted that organisational members are more likely to value knowledge from external, rather than internal, sources, maybe it is because such a valuation elevates the members' status (Argote, et al., 2003).

## **2.7 CONCEPT OF NETWORKING**

There is a growing amount of literature on networking in various perspectives around the world (Hermanrud, 2009). These have been captured under several themes including leadership networks (Hoppe & Reinelt, 2010); professional networks (Hitchcock, et al., 1995); strategic networks (Gulati, et al., 2000); and social networks (Hoppe & Reinelt, 2010). They have sought to gauge among others things, the effect that the relationships and interactions between nodes (such as peoples, groups, and organisations) have on their development and their survival. Indeed, the function that a system performs is contingent on the shape of its network and the relationships between its nodes (Baggio & Cooper, 2010). Network theories describe the relations constructed by independent nodes system, analyses inter-personal relations, and even the characteristics of these relations (Ozkan-Canbolat, 2014; Gulati, et al., 2002). The various nodes of a network such as persons, and organisations interrelate through a set of social relationships such as friendship, transfer of funds, and overlapping of memberships (Gulati, et al., 2002). The relationships evolving between the various nodes can be categorised based on the content, form, and intensity (Ruan, et al., 2013).

Networking can take different forms, be it formal or informal (Ebers, 1997; Golubović, 2009). As a business network is an instance of a social network (Bouzdine & Bourakova-Lorgnier, 2004), professional network can also be considered as a form of social network, in that it constitutes the inter-relationships of professionals with relevant professionals and entities (Bouzdine & Bourakova-Lorgnier, 2004; Rajagopal, et al., 2012). Professional networking is referred to as the act of making connections with other professionals, with or without the

intention of making long-term ties with them (Rajagopal, et al., 2012). However, the focus of this research work is on professional networking of procurement professionals in Ghana. This aims at finding potential opportunities that exist in networking for knowledge capacity building of the various procurement professionals.

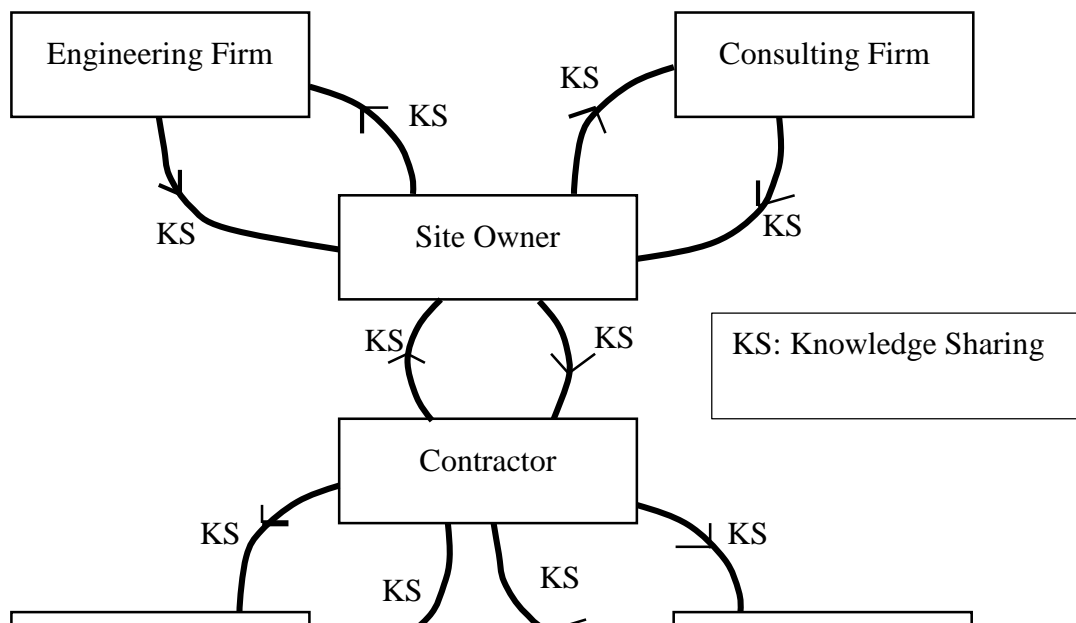
## **2.8 NETWORKING, KNOWLEDGE SHARING AND TRANSFER**

Networking, knowledge sharing, and transfer are concepts that pervade loads of organisational learning research. This is evidenced in the fact that networking is seen as being pivotal in the gaining access to new knowledge (Tsai, 2001). Again, networks are considered to be important when it comes to knowledge creation and sharing (Schlögl, 2005). However, the degree of structural closure in a network, i.e. the extent to which actors in a network are connected to each other has an important implications for generating new ideas, and exercising influence (Battilana & Casciaro, 2012). According to Nonaka & Takeuchi (1995), one of the four modes of knowledge creation is socialization, where knowledge can be shared with another person through dialogue, observation, imitation, or guidance. Hence, indicating that socialization boosts the creation of knowledge through combined perspectives (*ibid*).

It has been revealed that knowledge sharing particularly, tacit knowledge sharing can be enhanced by providing live conversations, relationship networking, and collaboration among individuals (Panahi, et al., 2012). However, research, with regards to knowledge sharing,

suggests that people contribute knowledge when they perceive reputation enhancement, when they have experiences to share, and when they are structurally embedded in the network (Hung, et al., 2010). It must be noted that knowledge sharing is realized at two levels, with each level serving as an effective mechanism to share knowledge of a certain type, be it tacit or explicit (Bouzdine & Bourakova-Lorgnier, 2004).

In order to build an effective knowledge sharing network, leaders use formal and informal social gatherings, offsite retreats, collocation, open office designs, and incentive systems that reward participation and collaboration (Bouzdine & Bourakova-Lorgnier, 2004). These, techniques aim to develop an effective communication between sub-networks based on emotive and/or reactive mechanisms (*ibid*). In Figure 2. 1, Ghazali, et al. (2012) illustrates how knowledge is shared among engineering firms, consulting firms, contractors, subcontractors, suppliers, and site owners through a collaboration at the procurement level of a given project. Through a collaboration of the various actors in the procurement of a given project, relevant knowledge can shared or transferred from one actor to another. However, this can be hindered by several factors including those that have been presented under Section 2.11. This study focuses on the interaction and relationships among public procurement professionals and a possible sharing and transferring relevant knowledge in order to improve their knowledge base and skills. Knowledge transfer is referred to as the process of systematically organized exchange of information and skills between units (Jiménez-Jiménez, et al., 2014). This becomes evident when experience acquired in one unit affects another, which can lead to the creation of new knowledge (Argote, et al., 2003).



**Figure 2. 1: Collaboration and knowledge sharing in the procurement activity**

## **2.9 CONDITIONS FOR NETWORKS FORMATION**

There are a number conditions that are taken under advisement when it comes to networks formation (Ebers, 1997). This section reviews literature on the factors or issues that are taken into account prior to networks formation. First of all, it is asserted that conditions such as personal reputations, prior relations, and firm reputations are important when it comes to network formation (*ibid*). For instance, with a good reputation, be it individual's or firm's people would like to establish a relationship with him in order to tap into his experience and knowledge. Again, haven obtained a good reputation in an area of endeavour, can make members of a given network less reluctant in sharing certain information. More so, research has found that people contribute to knowledge when they perceive reputation enhancement, when they have experiences to share, and when they are structurally embedded in the network (Hung, et al., 2010). Apropos prior relations, that is, among people and organisations, it is asserted that its structure in a market can affect, or replace information (Golubović, 2009).

In 2010, Conly and Udry revealed through a research that was conducted in Ghana that geographical proximity of network partners does determine communication between farmers (Leavy, 2011). People are comfortable when dealing with people who are close by than those who are at great distance apart. More so, proximity provides the network members with the opportunity to learn who knows what, so members know where to search for relevant

knowledge and information (Argote, et al., 2003). Indeed, operational and strategic integration, and some social control are required for a relationship to work (Ebers, 1997). Table 2. 1 presents a summary of the various conditions that are required for effective network formation as obtained from literature.

**Table 2. 1: Summary of Conditions for Network Formation**

<b>S/No</b>	<b>Conditions for Network Formation</b>	<b>Source</b>
1	Personal reputations	(Ebers, 1997)
2	Prior relations	(Ebers, 1997)
3	Firm's reputations	(Ebers, 1997)
4	Geographical proximity of network partners	(Leavy, 2011; Argote, et al., 2003)

## **2.10 OPPORTUNITIES FOR CAPACITY BUILDING THROUGH NETWORKING**

There are several postulated opportunities in forming networks, being it organisational, social, or professional. This has been captured mostly under the opportunities available for organisations to improve their capacities, and those that are available for individuals. In the following subsections, literature would be reviewed on the opportunities that networking offer individuals, and organisations.

### **2.10.1 Individuals in a Network**

In a related study, it is asserted that the frequency of consultations with other colleagues engenders a successful higher education faculty (Hitchcock, et al., 1995). According to Hitchcock, et al. (1995), this is evidenced in the more and significant research works they produce. In this regard, it can be asserted that the skills and knowledge base of an individual or a procurement professional can be greatly enhanced to carry out their various activities. More so, Lin (1999) asserts that networking offers an individual the opportunity to access information from sources which otherwise will not exist.



Networks help individuals to attain what they could not have accomplished on their own (Little, 2005). This is because, networks expand the pool of ideas, materials, and assistance on which individuals can draw; engage participants in mutual problem-solving; and inspire and recognize accomplishment (*ibid*). Again, it is asserted that the units within a network can gain competencies in new areas of their operations (Tsai, 2001). With individuals interacting in a social context, the ones that are provided by networking, their ability to innovate can improve greatly (Conley & Udry, 2010). This assertion is supported in literature as it is argued that innovations rarely occur as creative acts of individual geniuses, but more often as a result of interactive processes (Svetina & Prodan, 2008). More so, research suggests that the interaction of individuals in the field of endeavour fosters growth and technology diffusion (Conley & Udry, 2010).

### **2.10.2 Organisations in a Network**

Research has revealed that networks provide organisations with access to vital resources such as information, raw materials, specialised skills, and knowledge (Tillquist, 2002). This assertion is corroborated when it was stated that networks provide a firm with access to information, resources, markets, and technologies (Gulati, et al., 2000). Organisational networks engender innovative practices in the various organisations in a given network. Indeed, a lot of technological innovations for instance have been attributed to mainly a complex and wide range of inter-firm networks in the telecommunication industry (Ferreira, 2008). This shows that networks help organisations to improve their innovative capacity. However, Cohen & Levinthal (1990) argue that the ability of a firm to utilize an external knowledge to foster innovation is largely predicated on their prior related knowledge, which includes basic skills, and knowledge of the most recent scientific or technological developments in a given field. Again, research suggests that networks facilitate the creation of new knowledge (Tsai, 2001).

Thus, the interaction of the members in a given network helps the generation of new knowledge faster than otherwise.

In other instances, especially where knowledge is developing rapidly, organisations form connections to other parties to access relevant expertise which is otherwise yawningly dispersed (Smith-Doerr & Powell, 2005). As research has been revealed, through networks, organisations are able to connect with other organisations who operate in the same locality or the same country with them, and even those organisations who are outside their country (Pugh & Prusak, 2013; Scott & Thomas, 2013). Hence, making it possible to access relevant expertise which is dispersed. Furthermore, research postulates that networks provide an opportunity to reduce informational asymmetries in that firms in the network are able to gather superior information from the others (Ruan, et al., 2013). The summary of the various opportunities in networking for capacity building as obtained from literature have been presented in Table 2. 2.

**Table 2. 2: Summary of Opportunities in Networking for Knowledge CB**

Category	S/ No	Opportunities in Networking	Source
Individuals	1	Easy access to information	(Lin, 1999)
	2	Expand the pool of ideas, materials, and assistance	(Little, 2005)
	3	Engage participants in mutual problem-solving	(Little, 2005)
	4	Inspire and recognize accomplishment	(Little, 2005)
	5	Gain competencies in new areas	(Tsai, 2001)
	6	Improves individuals ability to innovate	(Svetina & Prodan, 2008)
Organisations	1	Access to specialised skills	(Gulati, et al., 2000); (Tillquist, 2002)
	2	Fostering technological innovations	(Ferreira, 2008)
	3	Enables access to new markets	(Gulati, et al., 2000)
	4	Access to raw materials	(Tillquist, 2002)
	5	Facilitates creation of new knowledge	(Tsai, 2001)

	6	Access new expertise	(Smith-Doerr & Powell, 2005)
	7	Access to superior information	(Ruan, et al., 2013)

## **2.11 CHALLENGES IN THE USE OF NETWORKING FOR CAPACITY BUILDING**

Even though a raft of research works postulate that knowledge and skills are transferable to other units or nodes in a network (see for example Hermanrud, 2009; Tsai, 2001; and Gulati, et al., 2002), there are other factors that can stifle the process. For instance, an individual's ability to absorb and apply the new knowledge seen as an aspect to reckon with when it comes to knowledge sharing and transfer (Tsai, 2001; Mussi, et al., 2014). This ability to is referred to as absorptive capacity, which represents an organisation's ability to recognise the value of new information, assimilate it, and apply it to commercial ends (Cohen & Levinthal, 1990). Thus, it is plausible to assert that low absorptive capacity of an individual or an organisation in a network will affect the level of knowledge that is derived.

Another instance that is likely to derail the knowledge sharing purpose of a network is the poor participation of members in the network (Pugh & Prusak, 2013). If the various members of the network do not show much interest in the network activities or do not patronise the network, it will not yield good results. More so, Pugh & Prusak (2013) cite goal ambiguity as one of the challenges to effective networking. This assertion goes to indicate that the effectiveness of networks requires that the purpose of the network needs to be stated clearly to members. Lack of data on the various individuals for a possible network formation a can be a major hurdle. For instance, in a related study, Conley & Udry (2010) reveal that lack of data on individuals in a network can present a difficulty in measuring the extent of social learning. This difficulty is pervasive in several sectors of the Ghanaian economy. Hence, this will make it difficult for potential network members to be identified. Another potential challenge that can be encountered in a network is an increase opportunities for deceit, deviance, and misconduct as

the trust that is engendered by the network can create opportunity for malfeasance (Golubović, 2009).

Again, the difficulty in transferring knowledge in a given network can be attributable to the nature or the type of the knowledge itself, that is, whether tacit, or explicit (Mussi, et al., 2014). This implies that for knowledge to be efficiently shared or transferred in a given network, much effort should be made to reduce the potential barriers that its nature can present. More so, the context of sharing knowledge may also present some form of challenges in the network. For instance, how the formality, complexity, information technology skills of the network members can also impede a given network with respect to knowledge sharing or transfer (Mussi, et al., 2014). These are considered as environmental factors that influence knowledge sharing or transfer (*ibid*).

**Table 2. 3: Summary of Challenges in the Use of Networking for CB**

S/No.	Challenges in Networking	Source
1	Ability of individuals to absorb the knowledge	(Tsai, 2001)
2	Poor participation of members	(Pugh & Prusak, 2013)
3	Goal ambiguity of the network	(Pugh & Prusak, 2013)
4	Lack of data on the network members	(Conley & Udry, 2010)
5	Creates opportunity for deceit, deviance, and misconduct	(Golubović, 2009)
6	Type of knowledge being transferred	(Mussi, et al., 2014)
7	Context of knowledge sharing	(Mussi, et al., 2014)

## 2.12 THEMATIC AREAS FOR THE RESEARCH

This section presents the thematic areas that were considered for the study. Thus, they are the areas that would be considered for the empirical studies. First of all, this research work focuses

on finding the various conditions relevant for effective network formation, and the various opportunities in that exist in networking that can help in the knowledge capacity building of procurement professionals in Ghana. More so, the various possible challenges that can be encountered in the use of networking for knowledge capacity building of procurement professionals in Ghana would be interrogated.

## **2.13 CHAPTER SUMMARY**

The reviewed extant literature on the various aspects of the study. This constituted the significance of procurement, imperatives for capacity building of procurement professionals; knowledge and skills; the concept of networking; potential opportunities and challenges in the use of networking for capacity building of procurement professionals in Ghana. The next chapter presents the research methodology which shows how the research was carried out. It captures among other things, the research design; research instrument; population; and sample size determination.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

The previous chapters presented the general introduction of the study, and the literature view on the phenomenon under study. These helped to respectively introduce the study, and put the study into perspective. This chapter goes further to present the methodology adopted for the research work in order to achieve the various objectives. This includes the design of research instrument; research design; study population; sample size determination; data collection; data analysis; and ethical considerations.

#### **3.2 Research Strategy**

Research strategy refers to the way in which the objectives of a research work are interrogated, whether qualitative or quantitative (Naoum, 1998; Saunders, et al., 2007). Qualitative and quantitative research strategies represent the two main research strategies (Naoum, 1998). Qualitative research strategy is used in eliciting insights and understanding about the world based on the perception of people (Fellows & Liu, 2008). Indeed, Naoum (1998) reveals that qualitative approach to research is 'subjective' in nature which emphasises meanings, experiences, descriptions and more. More so, the data obtained through qualitative approach comprises detailed descriptions of people, events, situations, or observed behaviour, making it useful when there is limited amount of knowledge about the topic (Polit & Hungler, 2001; Naoum, 1998).

As regards the quantitative research approach, effort is made to gather factual data, study relationships between facts and ascertain how such facts and relationships match with theories and the findings of any research conducted earlier (Fellows & Liu, 2008). Again, it is

worth of note that data obtained through quantitative approach is numerical, making it "objective" in nature (Polit & Hungler, 2001).

When both qualitative and quantitative approaches are employed in a research, it is referred to as the mixed method (Creswell & Clark, 2007). These two methods, that is, qualitative and quantitative methods, have their advantages and disadvantages, and for that matter, they are sometimes used together for complementary purposes (Fellows & Liu, 2008). Thus, giving the opportunity for each of these methods to benefit from each other thereby avoiding the weakness in each approach (Mingers & Gill, 1997). With regards to this research, the two objectives of the research, that is, *“to identify conditions for effective network formation; to identify opportunities in networking for knowledge capacity building of procurement professionals in Ghana; and to identify potential challenges in the use of networking for knowledge capacity building of procurement professionals in Ghana”* were achieved using the mixed method. In each case, literature was reviewed thoroughly for a deeper understanding of the phenomenon at hand and to identify the various variables relating to potential opportunities in networking for knowledge capacity building and their challenges. Secondly, semi-structured interviews were conducted in order to obtain the views of relevant stakeholders on the issues that were raised in literature. The various variable that were obtained from both literature and the interview were then used to prepare the questionnaire for the survey.

### **3.3 Design of Research Instrument**

In order to achieve the objectives of the study, a review of extant literature concerning procurement, and networking was conducted. Subsequently, semi-structured interviews were conducted to obtain the views of stakeholders on the subject under study. More so, closed-ended questionnaire was designed to elicit information from respondents for analysis purposes. The following paragraphs respectively shed more light on the adopted instrument.

Firstly, extant literature on public procurement and the concept of networking was reviewed to identify the major issues that were used in preparing the interview schedule and the questionnaire (Saunders, et al., 2007). However, in doing the literature review, care was taken to use information that supports empirical research findings in that the quality of evidence provided by anecdotal information is weaker than that which is provided by empirical study (Aveyard, 2007). The literature review was used to interrogate all the objectives of the study.

Secondly, semi-structured interview was chosen as the method during the second phase of the research. This technique was chosen in order to encourage the various interviewees to freely discuss their own opinions or perceptions concerning public procurement, and networking for capacity building of procurement professionals in Ghana. With the open-ended questions associated with this method, there was the possibility for adjusting the questions depending on specific attributes each professional who took part in the interview. The semi-structured interview was neither a free conversation nor a highly structured questionnaire as suggested in literature (see for example, Saunders, et al., 2007). Thus, it provided the opportunity to regulate the order of the questions and the respondents had the opportunity to expand their ideas and speak in detail about diverse subjects rather than relying only on concepts and questions defined in advance of the interview (Saunders, et al., 2007). This suggests that semi-structured interviews are more flexible than standardised methods such as the structured interview or survey (refer to Appendix 2.1 for the Interview Questions for Major Stakeholders).

Finally, closed-ended questionnaire was designed to elicit information from procurement professionals who work with public organisations and consultancy firms in the Western Region of Ghana. The questionnaire was used to gauge the various respondents' opinion about the various issues that came out from the literature review, and the interview (Dillman, 2000; Aveyard, 2007). Again, the questionnaire offered the opportunity to get the study group to respond to the same set of questions (Bernard, 2000). In preparing the questionnaire, care was



taken to ensure that the questionnaire addresses the objectives of the study. Furthermore, the method of analysis, and the statistical software to be used in the analysis were taken into consideration at the questionnaire design stages (Burgess, 2001).

The questionnaire was divided into four (4) sections vis-à-vis: Section A, B, C, and D (see Appendix 2.2). The sections covered respectively, the Background of Respondents, Opportunities in Networking for Knowledge Capacity Building of Procurement Professionals, and Potential Challenges in the Use of Networking for Capacity Building of Procurement Professionals. Section A was included in the questionnaire in order to establish the reliability or credibility of the responses that was obtained from the participants. Sections B, C, and D, were also included in the questionnaire in order to afford the various respondents the opportunity to evaluate the various factors that were obtained from literature and the semi-structured interviews.

### **3.4 Study Population**

The study targeted public procurement professionals in Takoradi. These professionals include Procurement Managers, Project Managers, and Quantity Surveyors who work public sector organisations, and consultancy firms in Ghana. These group of professionals were chosen since they are directly involved in public procurement activities in Ghana. However, these respondents work in different organisations of interest, which made it difficult to obtain the population size from which a probability sample size could be drawn. Hence, the sample size was estimated using proportion (see Section 3.5).

### **3.5 Sample Size Determination**

It is very important to determine the sample size of a given population of any scientific research (Saunders, et al., 2007). This sample size needs to be representative of its population in order

to make the findings of the survey generalizable, within limits of a random error (Bartlett, et al., 2001). The quality and accuracy of a give research work are also contingent on the determined sample size (*ibid*). There is a raft of methods that can be employed in the determination of a sample size. These methods cover the use of censuring for a smaller population; the application of statistical formulae; the use of established sample determination tables; and the application of a sample size of a similar study (Israel, 2013; Saunders, et al., 2007). However, it is imperative to use a sample size that would be representative enough of its population (Field, 2005; Bartlett, et al., 2001).

The sample size for the study was established using a statistical formula. Using Equation 3.1, as suggested by Maisel & Persell (1996), the appropriate sample size for a given population can be estimated as follows, where (n) represents the appropriate sample size for the survey.

$$n = (Z \times \text{Standard Deviation/Confidence Interval})^2 \dots\dots\dots \text{Equation 3.1}$$

With Equation 3.1, (n) can be estimated by establishing the confidence interval, the Z-value (statistic of confidence level), and the estimated standard deviation (Naing, et al., 2006). Nonetheless, establishing the standard deviation was a difficult task because the data was yet to be collected. In such instances, where the standard deviation is not known, an approximate sample size can be estimated using expected proportions (P) (Maisel & Persell, 1996). P represents the number of cases in any given category divided by the total number of cases (Ahadzie, 2007). Without any experience to draw on, the worst case scenario with the P-value of 0.5, half way between, was considered (Ahadzie, 2007). With a P-value of 0.5, the largest standard error could be determined, which will require a researcher to select the largest possible sample size (Israel, 2013). Hence, the population standard deviation (St.Dev.) was estimated using Equation 3.2.

$$\text{St.Dev.} = \text{Square Root } [P (1-P)] \dots\dots\dots \text{Equation 3.2}$$

Therefore, St. Dev. = Square Root  $[0.5(1-0.5)] = 0.50$

Therefore, at confidence limit of 95%,  $P = 0.50$ ,  $Z = 1.96$ , and a confidence interval of plus or minus 0.1,  $n$  was estimated as follows:

$$n = (1.96 \times 0.50 / 0.1)^2 = 96$$

Thus, with ninety six (96) sample size obtained of the completed questionnaire, the data would be enough for a normal distribution of the sample to be achieved (Israel, 2013). Therefore, a sample size of ninety six (96) was used as the sample size of respondents for the questionnaire survey.

### **3.6 Data Collection**

This section discusses how the data was collected for the study. First of all, a thorough literature review was conducted on public procurement; capacity building; knowledge and skills; opportunities in networking for capacity building; and potential challenges in the use of networking for capacity building of procurement professionals. This offered the opportunity to understand the various aspects of the study, and to raise issues for the semi-structured interview that was yet to be conducted.

Secondly, semi-structured interview was conducted with seven (7) procurement professionals in Ghana to elicit their views on the various issues that emerged from literature, with regards to networking for knowledge capacity building of procurement professionals in Ghana. These professionals were purposively selected from public sector organisations in the Western Region of Ghana. They included officials from the Public Procurement Authority (PPA), Sekondi-Takoradi Metropolitan Assembly, Takoradi Polytechnic, Architectural and Engineering Services Limited, and Ghana Health Service.

Thirdly, close-ended questionnaires were developed to obtain responses from the various respondents on the issues that were raised in literature, and those from the semi-structured

interview. The questionnaires were distributed to and retrieved from procurement professionals who work with public client organisations, and consultancy firms in the Western Region of Ghana. These professionals include Procurement Managers, Project Managers, and Quantity Surveyors. Snow ball sampling method was employed in identifying the various respondents for the questionnaire survey. This method was chosen because of the difficulty in identifying the members of the desired population in the region (Saunders, et al., 2007; Denscombe, 2007). Firstly, contact was made with some of the respondents in the study population, that is, public procurement professionals in the region. Again, the identified respondents helped in identifying other respondents which continued until the estimated sample size was attained (see Section 3.5).

Out of the ninety six (96) questionnaires that were distributed, 69 were retrieved and were useable for analysis purposes, representing a response rate of 72 percent. The response rate was seen to be adequate when it was compared to other surveys in Ghana. Examples of such studies obtained response rates of 53.7, 44, and 37 percent (Owusu-Manu & Badu, 2009; Eyiah & Cook, 2003; Easterly, 1999).

### **3.7 Data Analysis**

This section presents how both the qualitative and quantitative data analysis was done. These have been respectively presented under subsections 3.7.1 and 3.7.2.

#### **3.7.1 Qualitative Data Analysis**

The qualitative analysis entailed inducting insights from the interview data, and processing the data further in order to gain more in-depth understanding of the phenomenon under study. The various transcripts of the interviews were categorized and coded using a qualitative data analysis software, Nvivo 8.0. The interview transcripts were coded based on what was

discussed and the key findings from the interviews. Subsequently, the key findings were then classified and arranged into categories that developed from the data.

### **3.7.2 Quantitative Data Analysis**

The data obtained through questionnaire survey was analysed using quantitative techniques as presented herein. Apart from the questions in the Section A of the survey questionnaire, Likert Scale was used to as a measure of the importance of the various variables that were presented under Sections B, C, and D. For example, under Section B, respondents were asked to rank on a scale of 1 to 5, the importance of the various conditions for network formation. In this case, “1” for instance, indicates “Not Important”, while “5” indicates “Most Important”. Again, “3” indicates “Important”, however, when a respondent chooses “3”, it is deemed to be “neutral” (Ayarkwa, et al., 2010). Statistical Package for the Social Sciences (SPSS 16.0) was used in the data processing and analyses.

Descriptive statistics, that is, percentages, means, and standard deviations was used in analysing the data (Field, 2005; Ahadzie, 2007; Ayarkwa, et al., 2010). In order to measure how representative the sample is likely to be of the population, the standard error was also presented. If the standard error is large, it means that there existed lot of variability between means of different samples, while a small standard error means that most sample means were similar to the population mean (Field, 2005). The variables were ranked using their mean values. However, the standard deviation values of the variables were also employed as criteria in the ranking, especially when it occurred that two or more variables had the same mean scores but with differing values of standard deviation. The various conditions that can be considered in network formation, the opportunities in networking for capacity building of procurement professionals, and the potential challenges in the use of networking for capacity building of

procurement professionals were analysed using descriptive statistics (see Sections 4.3.1, 4.3.2, 4.3.3, and 4.3.4).

### **3.8 Ethical Considerations of the Study**

It is a requirement for ethical considerations to be made in every scientific research (EC, 2010). These are concerned with issues pertaining to how a given research is carried out, that is, from the formulation and clarification of research topic to the writing up the research findings in a moral and responsible way (Saunders, et al., 2007). Chiefly among the issues that are concerned with research ethics include protecting confidentiality and for securing informed consent of the various respondents of the survey (Singer, 2008). Therefore ensured the following with regards to ethical considerations: First of all, before the interviews (refer to Appendix 1), and the administration of the questionnaire, the researcher introduced himself and the purpose of the study to the respondents in order to avoid impersonation. Secondly, participation in the study, that the interviews and questionnaire survey, was not made compulsory but, rather based on the willingness of respondents. Thirdly, anonymity of respondents was given the maximum consideration. During the field work, all forms of identification including names, addresses, and telephone numbers of respondents were avoided.

### **3.9 Chapter Summary**

This chapter presented the research methodology. It captured the research strategy that was adopted; design of the research instrument; population of the study; sample size determination; data collection; analysis; and ethical considerations. The chapter started with an open introduction which was subsequently followed by the research strategy. The research strategy presented how the research was conducted, bringing out the suitability of the mixed method for the research work. After the research strategy, the design of the research instrument came to shed light on how the closed-ended questionnaire was designed for the study. This was the

followed by the design of the research instrument; study population; sample size determination; data collection; and data analysis. The forthcoming chapter captures the analysis and discussion of both the qualitative and quantitative data that were collected in detail. Indeed, detail discussions of the various findings and linking them to the reviewed literature will be done.

## **CHAPTER FOUR**

### **ANALYSIS AND DISCUSSION OF RESULTS**

#### **4.1 INTRODUCTION**

The previous chapter dealt with the research methodology that was adopted for the study. It captured the various areas of research methodology such as the research design, design of the research instrument, data collection, and analysis. This chapter advances the report by presenting the analysis and discussion of the results of the study. This has been presented in several subsections which have been grouped broadly under qualitative and quantitative data analysis.

#### **4.2 QUALITATIVE ANALYSIS AND DISCUSSION**

This section presents the views of major stakeholders in the field of public procurement that were obtained through the semi-structured interview that was conducted. In all, seven (7) procurement professionals were purposively selected based on their experiences in the area of public procurement. The empirical data obtained from the semi-structured interviews which represent the viewpoints of relevant stakeholders have been presented under the following subsections:

- Background of Interviewees, and
- Networking for Capacity Building of Public Procurement Professionals

##### **4.2.1 Background of Interviewees**

A considerable number of the various interviewees have been in the industry for a good number of years. Out of the seven (7) respondents, five (5) have over twenty years of experience in the



field public procurement, whereas the other two are of fifteen (15), and ten (10) years. All the respondents hold key positions in their respective organisations. Again, the various respondents are members of their respective professional bodies. They include members of the Ghana Institution of Surveyors (2 respondents), Chartered Institute of Procurement and Supply (3 respondents), and Ghana Institution of Construction (2 respondents). Indeed, the respondents' years of experience, their positions in their organisations, and their professional associations suggest how knowledgeable the respondents are with regards to public procurement in Ghana (Sourani & Sohail, 2010). It can therefore be asserted that the opinions shared by these respondents represent an impression of what pertains in the field in relation to study area.

#### **4.2.2 Networking for Capacity Building of Public Procurement Professionals**

This section presents the opinions of the various interviewees with respect to their understanding of networking and professional networking, considerations that must be made in network formation, opportunities in networking for knowledge capacity building of public procurement professionals in Ghana, and potential challenges that can exist in networks. The following subsections present the various issues that were discussed.

##### **4.2.2.1 Stakeholders' Understanding of Networking and Professional Networking**

The term networking is used under several themes (refer to Section 2.7). However, for the purposes of this study, the term is used to refer to the interrelationship of the various public procurement professionals for mutual professional benefits. Hence, the various respondents were asked to give their opinions with regard to how they understand networking and professional networking. This was done in order to further put the discussion into perspective. In this regard, some of the interviewees referred to networking as

*“A supporting system of sharing information and services among individuals and groups, having a common interest” (informant’s view).*

This definition regards networking as a supporting system that allows the sharing of information among fellow professionals who are in a network for common interest. This system can be internet-based as used in social networks such as Facebook, and Myspace (Steinfeld, et al., 2009). With regards to professional networking, the interviewees asserted that it is concerned with a network of professionals for common purpose. For instance, one of the interviewees suggested that

*“Professional networking is all about how people within the same professional group support and share ideas of common interest in order to achieve professional goals” (informant’s view),* while another respondent revealed that

*“Professional networking can be a link between two or more professional bodies with regards to information sharing and other related issues” (informant’s view).*

The key issues raised in these definitions are about the connections of the professionals and the sharing of information.

#### **4.2.2.2 Considerations for Network Formation**

Even though the various respondents agreed that networking can help build the knowledge capacity of procurement professionals, there are other conditions that need to be taken under advisement in order to ensure its effectiveness. For instance, one of the respondents pointed out that for the network to be effective, the objectives of the professional network should be clearly stated and focused on. A plausible explanation that can be given as why there should be a clear stated objective for a professional network is that it will guide members with the kind of activities that are permissible and those that are not permissible in the network. Again, one of the things

that should be considered in network formation, according to one of the interviewees is that “*There should be an internet platform to facilitate the activities of the network*”.

#### 4.2.2.3 Opportunities in Networking for CB of Procurement Professionals

The various respondents revealed a considerable number of opportunities in networking that can help build the knowledge capacity of public procurement professionals in Ghana. These opportunities have been presented in Table 4. 1. The respondents believe that forming networking with other public procurement professionals will afford them with a number opportunities that will go a long way to building their knowledge capacity. Upon analysing and inducing understanding from the various responses, the various opportunities that networks can provide individual professionals with regards to knowledge capacity building were obtained.

**Table 4. 1: Opportunities in Networking for Knowledge CB of Procurement Professionals**

S/No	Opportunities
1	It makes one aware of new technology
2	Sharing professional information among members
3	Experiences and ideas can be put together
4	Career opportunities can be created
5	The opportunity to have a common by laws to govern the profession
6	Continuous professional development

Source: Author’s Field Work

Yet, the various variables were compared to those that were obtained in literature in order to form a unique list that was subsequently used in the preparation of the survey questionnaire. The results

of the analysis and discussion of the opportunities that exist in networking have been presented in Section 4.3.3.

#### 4.2.2.4 Potential Challenges in Networking for CB of Procurement Professionals

The various respondents revealed that there are potential challenges that can be faced in the bid to use networking for knowledge capacity building of public procurement professionals in Ghana. The various potential challenges as pointed out by the interviewees have been presented in Table 4. 2. The respondents believe that even though forming professional networks with other procurement professionals can help build their knowledge capacity, there are other instances that can mar the good intent of the network. Analysing the content of the various responses made it possible in identifying the various challenges as presented.

**Table 4. 2: Potential Challenges in the Use of Networking for Knowledge CB**

S/No	Challenges
1	Fear of leaking confidential issues outside the network
2	Fear of sharing information to an unknown member of the network
3	Interference by influential people in a geographical area
4	Language barrier
5	Scattered nature of professionals in the country
6	Poor human working relationship

Source: Author's Field Work

However, the various challenges were compared to those that were found in literature and then a unique list was presented on the survey questionnaire for an evaluation by the survey respondents.

The results have been presented under Section 4.3.4.

### **4.3 QUANTITATIVE ANALYSIS AND DISCUSSION**

This section presents the results of the quantitative analysis and discussion. This has been presented in subsections 4.3.1; 4.3.2; 4.3.3; and 4.3.4 which capture the Background Information; Conditions for Network Formation; Opportunities in Networking for Knowledge Capacity Building; and Potential Challenges in the Use of Networking for Knowledge CB respectively.

#### **4.3.1 Background Information of Respondents**

The background information of the various respondents was analysed using descriptive analysis. This aimed at presenting the background information of the various professionals who took part in the study. Knowing the background information of the respondents repose confidence in the reliability of the collected data. This was captured under the following headings in Table 4. 3:

- The respondent's profession/occupation;
- The respondent's status in his/her organization; and
- The respondent's years of experience in procurement practice;
- The respondent's highest level of education

From Table 4. 3, approximately 33%, and 39% of the respondents who took part in the survey are respectively Quantity Surveyors, and Project Managers. More so, approximately 28% of the various respondents are Procurement Managers in their organisations.

Again, from Table 4. 3, the majority of the respondents are senior officers in their organisations, representing approximately 62% of the total number of respondents. This was followed in terms of percentages by those who are Associate partners of their organisations, which represented approximately 15% of the respondents, while those who are junior officers in their organisations

represented approximately 13% of the respondents. More so, approximately 10% of the respondents are directors/principal partners of their organisations.

**Table 4. 3: Background Information of Respondents**

Attributes	N	Frequency	Percentage
<b>Profession/Occupation of Respondent</b>	69		
1. Quantity Surveyor		23	33.33
2. Project Manager		27	39.13
3. Procurement Manager		19	27.54
<b>Respondents Status in the Organization</b>	69		
1. Director/Principal Partner		7	10.14
2. Associate partner		10	14.50
3. Senior Officer		43	62.32
4. Junior Officer		9	13.04
<b>Number of Years in Relevant Service</b>	69		
1. < 5 years		11	15.94
2. 5-11 years		26	37.68
3. 12-16 years		14	20.29
4. Over 16 years		18	26.09
<b>Respondent's Highest Level of Education</b>	69		
1. Certificate		1	1.45
2. Diploma		8	11.59
3. First Degree		30	43.48
4. Master's Degree		30	43.48

**Source: Field work 2015**

Apropos the respondents' relevant years of experience, the majority of them have been involved in public procurement in Ghana for between 5 to 11 years, representing approximately 38%. More so, approximately 26% of the respondents have been involved in public procurement in Ghana for over 16 years, while approximately 20% of the respondents have had between 12 to 16 years of experience with regard to public procurement in Ghana. Again, approximately 16% of the respondents have had less than 5 years of experience in the field of public procurement in Ghana. Concerning the respondents' highest level of education, the majority of them have their first and master's degrees, each representing approximately 43%. More so, approximately 12% of the

respondents have attained their diplomas, while approximately 1% of the respondents have had certificates therefore rising the credibility of this thesis.

#### **4.3.2 Conditions for Network Formation**

As it has been reported in Section 3.7.2, the various respondents were asked to rate the importance of the various conditions for network formation. Table 4. 4 presents descriptive statistics showing the various mean, standard error (std. error), and the standard deviation (std. deviation) values as well as the rank of the conditions as a result of the ratings of the respondents. From Table 4. 4, the variable that obtained the highest mean value is personal reputations in the field of procurement (mean = 3.77). This earned it the first (1<sup>st</sup>) position out of the various variables. In this regard, it can be asserted that the respondents believe that personal reputation the most important among the various variables, which is in line with literature which was it as a very important motivation for knowledge sharing in networks (Hung, et al., 2010). This was followed by level of trust they have with other professionals (mean = 3.68). This is a key component for network formation as supported by Hung, et al. (2010) in that for certain vital and classified knowledge and information to be shared, one has to have trust in the members in the network before it can be shared for the benefit of the group. Prior relationships with other professionals received the lowest mean value.

**Table 4. 4: Descriptive Statistics Showing Conditions for Network Formation**

<b>Conditions for Network Formation</b>	<b>N</b>	<b>Mean</b>	<b>Std. Error</b>	<b>Std. Deviation</b>	<b>Rank</b>
Personal reputations in the field of procurement	69	3.77	0.106	0.877	<b>1<sup>st</sup></b>
Level of trust you have with other professionals	69	3.68	0.108	0.899	<b>2<sup>nd</sup></b>
Closeness with other professionals in terms of location	69	3.46	0.096	0.797	<b>3<sup>rd</sup></b>
Prior relationships with other procurement professionals	69	3.41	0.108	0.896	<b>4<sup>th</sup></b>
Valid N (listwise)	69				

**Source: Field work 2015**

This earned it the fourth (4<sup>th</sup>) position, while the third (3<sup>rd</sup>) position was earned by closeness with other procurement professionals (mean =3.46).

#### **4.3.3 Opportunities in Networking for Knowledge Capacity Building**

Table 4. 5 captures descriptive statistics showing opportunities in networking for knowledge capacity building of procurement professionals in Ghana as rated according to their importance by the various survey respondents.



**Table 4. 5: Descriptive Statistics Showing Opportunities in Networking for CB**

<b>Opportunities in Networking for Capacity Building</b>	<b>N</b>	<b>Mean</b>	<b>Std. Error</b>	<b>Std. Deviation</b>	<b>Rank</b>
Acquire new knowledge from external professionals	69	3.93	0.104	0.863	<b>1<sup>st</sup></b>
Knowing global trends about the procurement profession	69	3.93	0.108	0.896	<b>2<sup>nd</sup></b>
Obtain new information from other procurement professionals	69	3.91	0.087	0.722	<b>3<sup>rd</sup></b>
Obtain information about procurement from other institutions	69	3.77	0.083	0.689	<b>4<sup>th</sup></b>
Acquire new knowledge from internal professionals	69	3.75	0.108	0.898	<b>7<sup>th</sup></b>
Builds the confidence of the individual procurement professionals	69	3.75	0.102	0.847	<b>6<sup>th</sup></b>
Share innovative ideas in the field of procurement	69	3.75	0.091	0.755	<b>5<sup>th</sup></b>
Achieve good working relationships between procurement professionals	69	3.70	0.104	0.863	<b>8<sup>th</sup></b>
Share experiences in the field of procurement	69	3.65	0.094	0.783	<b>9<sup>th</sup></b>
Obtain referrals from other procurement professionals	69	3.38	0.109	0.909	<b>10<sup>th</sup></b>
Valid N (listwise)	69				

**Source: Field work 2015**

From the Table 4. 5, the mean, standard error, standard deviation values as well as the respective ranking of the various variables can be read. In terms of the ranking of the variables, the criterion that is used is the mean value. However, instances were two or more variables recorded the same mean values, their standard deviation values were used as the separating criterion. For instance, both acquire new knowledge from external professionals (mean = 3.93, Std. Deviation = 0.863), and knowing global trends about the procurement profession (mean = 3.93, Std. Deviation = 0.896) obtained the equal mean values, however, they obtained unequal standard deviation values as presented in their respective brackets. In such instances, the variable with the smaller standard

deviation is ranked first. Thus, haven ranked the opportunity to acquire new knowledge from external professionals first (1<sup>st</sup>). The same approach was adopted when the opportunity to acquire new knowledge from internal professionals, builds the confidence of the individual procurement professionals, and share innovative ideas in the field of procurement were ranked (refer to Table 4. 5 for their respective means and standard deviations). The variable which obtained the least of the ratings is the opportunity to obtain referrals from other procurement professionals with a mean value of 3.38, hence attaining the (10<sup>th</sup>) position.

#### **4.3.4 Potential Challenges in the Use of Networking for Knowledge Capacity Building**

Descriptive statistics showing the mean, standard error, and standard deviation values of the potential challenges in the use of networking for knowledge capacity building of public procurement professionals in Ghana have been presented in Table 4. 6. This also shows the respective rankings of the various variables according to the ratings of the survey respondents. Form Table 4. 6, the standard deviations of the various variables, except difficulty in acquiring professional data base in Ghana are below one (1.00), suggesting little variability the data collected, and there is consistency in agreement among the respondents (Field, 2005; Ahadzie, 2007). However, difficulty in acquiring professional data base in Ghana obtained a standard deviation which is greater than one (standard deviation = 1.036), suggesting that there is no consistency in agreement among the respondents (Field, 2005; Ahadzie, 2007). Again, with reference to Table 4. 6, the various respondents believe that lack of mechanisms to check the accuracy of information that is shared (mean = 3.80) in a given professional network can offer a challenge, hence earning the first (1<sup>st</sup>) position. If this is not checked, there will be the tendency to get the members in the network ill-informed.

**Table 4. 6: Descriptive Statistics Showing Potential Challenges in Networking for CB**

Potential Challenges in Networking	N	Mean	Std. Error	Std. Deviation	Rank
Lack of mechanisms to check the accuracy of information that is shared	69	3.80	0.108	0.901	1 <sup>st</sup>
Poor participation by procurement professionals	69	3.74	0.094	0.779	2 <sup>nd</sup>
Members reluctance in sharing knowledge with the network	69	3.72	0.103	0.856	3 <sup>rd</sup>
Lengthy time taken to wait for responses in a network	69	3.62	0.109	0.909	4 <sup>th</sup>
Fear of leaking confidential information through the network	69	3.62	0.111	0.925	5 <sup>th</sup>
Difficulty in acquiring professional data base in Ghana	69	3.57	0.125	1.036	6 <sup>th</sup>
Ability to absorb the knowledge that is shared and put into practice	69	3.35	0.116	0.968	7 <sup>th</sup>
Poor human relations of network members	69	3.30	0.117	0.975	8 <sup>th</sup>
Fear of sharing information with unknown member of the network	69	3.09	0.103	0.853	9 <sup>th</sup>
Valid N (listwise)	69				

**Source: Field work 2015**

The second (2<sup>nd</sup>) position was attained by poor participation by procurement professionals (mean). This is indeed a potential challenge to a network, and a professional network in particular in that erratic patronage network members will kill the interest of other members, hence, marring an otherwise good initiative in building the capacity of members. From Table 4. 6, members reluctance in sharing knowledge with the network (mean =3.72), lengthy time taken to wait for responses in a network (mean = 3.62), fear of leaking confidential information through the network (mean = 3.62), and difficulty in acquiring professional data base in Ghana (mean = 3.57) attained the third (3<sup>rd</sup>), fourth (4<sup>th</sup>), fifth (5<sup>th</sup>), and sixth (6<sup>th</sup>) positions respectively. Again, ability to absorb the knowledge that is shared and put into practice emerged as the seventh (7<sup>th</sup>) most important challenge. Taking into account the position of this variable, it can be asserted that the respondents

did not consider it as important challenge in knowledge sharing in a network as it has been seen as major factor in knowledge acquisition and management (Cohen & Levinthal, 1990). Furthermore, poor human relations of network members (mean = 3.30), and fear of sharing information with unknown member of the network (mean = 3.09) attained the eighth (8<sup>th</sup>) and ninth (9<sup>th</sup>) positions respectively.

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

The previous chapters presented the General Introduction; Networking for Capacity Building of Public Procurement Professionals; Research Methodology; and Analysis and Discussion of Results. This chapter carries the report further by presenting the general conclusion and recommendations from the findings of the study. This has been presented in sections, capturing how this research has achieved its established aim and objectives; key contribution of this research; research limitations; and recommendations for industry, policy-makers, and further research.

#### **5.2 FULFILMENT OF AIM AND OBJECTIVES**

The aim of the research was to explore the use of networking for capacity building of public procurement professionals in Ghana. To achieve this aim, two specific objectives were set. The fulfilment of each of the objectives has been captured under the following subsections:

##### **5.2.1 Fulfilment of Objective One**

The first objective of the study was to identify conditions for effective network formation. This begged the need for a thorough review of extant literature in order to identify generally the potential conditions for effective network formation (see Table 4. 4). Subsequently, semi-structured interviews were conducted in order to establishing potential conditions for effective network formation from the perspective of major stakeholders in public procurement in Ghana.

However, the various variables that emerged were further evaluated through questionnaire survey, which gave a broader perspective and aided in the establishment of the most important conditions which have been presented in Section 4.3.2.

### **5.2.2 Fulfilment of Objective Two**

The second objective of the study was to identify opportunities in networking for capacity building of procurement professionals in Ghana. This necessitated a thorough review of extant literature in order to identify generally the potential opportunities in networking for knowledge capacity building (see Table 2. 2). Subsequently, semi-structured interviews were conducted in the bid to establishing potential opportunities in networking for knowledge capacity building from the perspective of major stakeholders in public procurement in Ghana. However, the various variables that emerged were further evaluated through questionnaire survey which gave a broader perspective and aided in the establishment of the most important ones which have been presented in Section 4.3.3.

### **5.2.3 Fulfilment of Objective Three**

The third objective of the study was to identify potential challenges for using networking for knowledge capacity building of procurement professionals. This objective was achieved by undertaking a thorough review of extant literature, and semi-structured interviews in order to identify potential challenges in using networking for knowledge capacity building. Moreover, the various potential challenges that emerged were evaluated through questionnaire survey which gave a broader perspective and aided in the establishment of the most important challenges. The results from the questionnaire survey in this regard have been presented in Section 4.3.4 and Table 4. 6.

### **5.3 RESEARCH CONTRIBUTIONS**

This section presents the contributions that this study has made through its outcomes which have not been offered by other studies. These outcomes have been presented in this section.

Firstly, the study has been able to bring to the fore potential opportunities that can be seized in professional networks for knowledge capacity building of procurement professionals in general, and public procurement professionals in particular. This will help inform policy makers about the possibility in building their knowledge capacity through networking.

Secondly, the study elucidates potential challenges in networking that can hamper the knowledge capacity building process. This will be make procurement professionals to be mindful of the potential challenges that can be encountered in networks and subsequently take measures to address them.

### **5.4 RESEARCH LIMITATIONS**

There were some limitations in the execution of the research work which need to be brought to the fore. First of all, there was a great difficulty in reaching respondents for the face-to-face interviews, as the respondents had busy schedules which made them make several postponements. This was the main reason for limiting the study sample, particularly for interviews considering the available time and resources. Secondly, there was a possibility of occurrence of errors and inconsistencies in sampling of date.

Finally, limitations that came from the nature of the questions/topic being investigated are acknowledged.

## **5.5 RECOMMENDATIONS**

The findings and conclusions of this study have made it possible for a number of recommendations to be made to policy makers, industry players, and further research in order to building the capacity of public procurement professionals. These have been captured under the following subsections:

### **5.5.1 Policy Makers**

This study reports that public procurement professionals are very instrumental in achieving value for money in public procurement. Thus, policy makers should among other things, step up their measures in building the capacity of the various professionals who manage the procurement activities in Ghana. This will ensure that public procurement officials get the needed expertise in order man the procurement activities effectively and efficiently. Again, it is recommended that policy makers facilitate the formation of a platform that can enable interactions of the various public procurement professionals in Ghana in terms of knowledge sharing and exchanging of ideas.

### **5.5.2 Industry Players**

There is the need for establishing a professional body in Ghana that will, among other things regulate the activities of procurement professionals, help in organising and facilitating capacity building programmes for procurement professionals.

### **5.5.3 Further Research**

The following areas are recommended for further research: Firstly, it is recommended that further studies should conducted in order to develop a social network platform that will enable or facilitate the interactions of procurement professionals in Ghana with regards to knowledge sharing and



transfer. Secondly, research can be done to ascertain other innovative means that can help build the capacity of public procurement professionals in Ghana.

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## **APPENDIX 1: LETTER FOR THE STUDY**

LETTER TO MAJOR STAKEHOLDERS

Dear Sir,

**REQUEST TO BOOK APPOINTMENT TO CONDUCT INTERVIEW ON CAPACITY  
BUILDING OF PUBLIC PROCUREMENT PROFESSIONALS IN GHANA**

My name is Isaac Gyea Armah, an MSc student at the Department of Building Technology, Kwame Nkrumah University of Science and Technology, Kumasi. I would like to book an appointment with you to conduct an interview on the above research topic. This interview is part of an MSc study that seeks to explore the use of networking for knowledge capacity building of public procurement professionals in Ghana. Your responses are relevant for the study in that they will enable us to obtain an understanding of the issues pertaining to the research work.

I will like to obtain the views of major stakeholders on the subject, based on their experience and high profile works undertaken in relations to public procurement. The findings from this interview will aid in ascertaining the various opportunities that are obtainable from professional networks for knowledge capacity building of procurement professionals in Ghana.

I acknowledge that the interview is going to take some of your valuable time, however, I urge you to try and participate, as your contribution is very important towards the success of this research. **I assure you that all answers provided will be treated with the strictest confidentiality.** I would like to take this opportunity to thank you in advance for your cooperation.

Yours faithfully,

.....

Isaac Gyea Armah  
**MSc. Student**  
Mobile: 0208181133  
E-mail: i.armah.ia@gmail.com

**Project Supervisor**

Prof. E. Badu  
Department of Building Technology,  
KNUST, Kumasi.

## **APPENDIX 2: QUESTIONNAIRES FOR THE STUDY**

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY – KUMASI**  
**COLLEGE OF ARTS AND BUILT ENVIRONMENT**  
**DEPARTMENT OF BUILDING TECHNOLOGY**

**INTERVIEW QUESTIONS FOR PUBLIC PROCUREMENT PROFESSIONALS IN GHANA**

**RESEARCH TOPIC:** Exploring the Use of Networking for Capacity Building of Procurement Professionals in Ghana.

**AIM**

The aim of this interview is to obtain your views on professional networking and its potential for building the capacity of procurement professionals in Ghana. This will serve as a preliminary data set for this research work.

The interview would take approximately 30 minutes. All responses will remain confidential. Any information indicating your identity will be removed and will not be linked to your responses.

If you have any queries at all, please you can contact me on 0208181133 or by email: i.armah.ia@gmail.com

We would like to discuss the following topics during the interview:

A. Background Information

B. Networking

**Section A: Background Information**

The aim of this section is to identify the respondent's background information.

*Appendix 2.1: Interview Questions for Major Stakeholders*

1) How many years have you been working as a procurement professional?

.....

2) Which professional association do you belong to?

.....

3) Please what is your professional status?

.....

**Section B: Networking.**

1) How do you understand networking, and professional networking?

.....

2) In your opinion, what are some of the considerations that need to be made in professional networking in general, and public procurement in particular?

1. ....

2. ....

3. ....

4. ....

5. ....

6. ....

3) In your view, what are some of the potential opportunities that exist in professional networking that can help build the capacity of public procurement professionals in Ghana?

1. ....

*Appendix 2.1: Interview Questions for Major Stakeholders*

2. ....
3. ....
4. ....
5. ....
6. ....
- 4) In your opinion, what are some of the potential challenges in the use of professional networking for knowledge capacity building of public procurement professionals in Ghana?
  1. ....
  2. ....
  3. ....
  4. ....
  5. ....

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI**

**COLLEGE OF ARTS AND BUILT ENVIRONMENT**

**DEPARTMENT OF BUILDING TECHNOLOGY**

**(MSc. Procurement Management)**



**RESEARCH TOPIC:**

**EXPLORING THE USE OF NETWORKING FOR CAPACITY BUILDING OF  
PROCUREMENT PROFESSIONALS**

**BY**

**ISAAC GYEAN ARMAH (MGI OC, BSc.)**

**SUPERVISOR**

**PROF. EDWARD BADU**



### **Preamble**

I am Isaac Gyeon Armah, MSc Procurement Management student at the Department of Building Technology, Kwame Nkrumah University of Science and Technology, Kumasi. This research questionnaire has been designed to obtain the views of respondents concerning the use of networking for capacity building of procurement professionals in Ghana. The study aims at achieving the following objectives:

- To identify opportunities in networking for capacity building of procurement professionals in Ghana, and
- To identify potential challenges for using networking for knowledge capacity building of procurement professionals in Ghana.

The findings of your questionnaire and others will be used as one of the main data set for my MSc degree study at the Kwame Nkrumah University of Science and Technology. **Kindly respond to the questions by ticking (✓) the appropriate box for each item.**

Thank you in advance for your help in conducting this research and I look forward to receiving the completed questionnaire.

If you have any questions and contributions about this research, please email at [i.armah.ia@gmail.com](mailto:i.armah.ia@gmail.com) or call on 0208181133.

Isaac Gyeon Armah

## SECTION A: BACKGROUND INFORMATION

1. Please indicate your profession.

Quantity surveyor      Project manager      Procurement manager  
☐                      ☐                      ☐

Others (please specify).....

2. Please indicate your status in your organization:

Director/principal partner      Associate partner      Senior officer      Officer  
☐                      ☐                      ☐                      ☐

Others (please specify) .....

3. For how long have you been working as a procurement related professional?

Less than 5 years      5-10 years      11-15 years      Over 16 years  
☐                      ☐                      ☐                      ☐

4. Please, what is your current level of education?

Certificate      Diploma      First Degree      Master's Degree  
☐                      ☐                      ☐                      ☐

Others (please specify) .....

## SECTION B

Please rate the importance of the following conditions based on which you will form a professional network with other procurement professionals. (Please circle as follows: **1- Not Important, 2- Less Important, 3- Important, 4- More Important or 5- Most Important**)

i.	Personal reputations in the field of procurement	1	2	3	4	5
ii.	Prior relationships with other procurement professionals	1	2	3	4	5
iii.	Closeness with other professionals in terms of location	1	2	3	4	5
iv.	Level of trust you have with other professionals	1	2	3	4	5

*If other, please, specify*

v.	.....	1	2	3	4	5
vi.	.....	1	2	3	4	5
vii.	.....	1	2	3	4	5
viii.	.....	1	2	3	4	5

## SECTION C

Please indicate the importance of each of the opportunities available in networks that can help build the capacity of procurement professionals in Ghana by ticking their corresponding boxes.

**1= Not Important, 2 = Less Important, 3 = Important, 4 = More Important, 5 = Most Important**

S/ No	Opportunities in Networking	RANKING				
		1	2	3	4	5
1	Obtain referrals from other procurement professionals					
2	Obtain new information from other procurement professionals					
3	Obtain new information from other institutions about procurement					
4	Acquire new knowledge from external professionals					
5	Acquire new knowledge from internal professionals					
6	Knowing global trends about procurement profession					
7	Achieve good working relationship between procurement professionals					
8	Share experiences in the field of procurement					
9	Share innovative ideas in the field of procurement					
10	Builds the confidence of the individual procurement professionals					

## SECTION D

Kindly rank according to the level of importance of the following challenges that can exist in networking of procurement professionals.

**1= Not Important, 2 = Less Important, 3 = Important, 4 =More Important, 5 =**

S/ No	Potential Challenges in Networking	RANKING				
		1	2	3	4	5
1	Ability to absorb the knowledge that is shared and put into practice					
2	Fear of sharing information with unknown member of the network					
3	Fear of leaking confidential information through the network					
4	Poor human relations of network members					
5	Difficulty in acquiring professional data base in Ghana					
6	Lengthy time taken to wait for responses in a network					
7	Poor participation by procurement professionals					
8	Members reluctance in sharing knowledge with the network					
9	Lack of mechanisms to check the accuracy of information that is shared					