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COLLEGE OF ARCHITECTURE AND PLANNING

DEPARTMENT OF BUILDING TECHNOLOGY

MARKETING ORIENTATION OF QUANTITY SURVEYING CONSULTANCY

FIRMS IN GHANA: PRACTICES, BARRIERS AND POTENTIAL INNOVATIONS

BY

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DECLARATION

I hereby declare that this submission is my own work towards the MSc. and that, to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

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ABSTRACT

The potential of marketing as an investment for competitive advantage coupled with the intense competition that characterises the business environment of Quantity Surveying Consultancy Firms (QSCF) has sparked the need for some appraisal of the stage of marketing development of the QSCF in Ghana. The problem is research works on marketing in the professional industry is more generic and combines consulting engineering practices with other professional services: such reports are also prescriptive in nature and are based on experiences and observations of marketing professionals rather than an academic research. The body of literature on marketing of QSCF is very scanty with a few empirical studies that do not focus on marketing development '*per se*' but is rather a commentary of QSCF in a changing environment with emphases on new roles and responsibilities. The philosophy underpinning this study is that, the marketing orientation of a firm must be investigated using an integrated conceptual framework that considers marketing practices of the firm, marketing performance barriers and innovation performance factors that can create innovation outcomes, so that a complete picture about their dependencies are established to show the path to survival in the midst intense competition. The aim of this research is to explore the marketing orientation of QSCF using the philosophy indicated and to proffer measures that can boost their marketing orientation. The study adopted the philosophy of positivism, a deductive approach to scientific enquiry and a questionnaire survey which achieved a 100% response rate, with cross sectional time horizon. A total of 45 QSCF constituted the sample with the respondent being top managers or directors of marketing if they existed. Findings of the research reveal that firms are realising the importance of marketing orientation in managing the consultancy business as is manifested in their effort in planning and implementation of various marketing programmes. It is however noted that the lack of a systematic and the unstructured manner with which marketing practices are conducted indicates an ad-hoc approach which lacks the potential for a successful marketing programme. Professional limitations, resource constraints and association code of ethics continue to plug the way of marketing-oriented approach to QSCF management practices and that curtails the potential innovation performance of the firm. It was also found that in most cases, the size and age of firms as well as the educational background of respondents have no influence on their marketing orientation. As a result, marketing activities are conducted without innovation in view and that has resulted in various degrees of failures that characterises most QSCF marketing programme since a marketing programme which lacks innovation outcomes is not sustainable. This study has established the linkages between marketing practices, marketing orientation, marketing performance barriers and innovation performance factors to achieve innovation outcomes that can improve performance. The flowchart based on these linkages provides synchronised procedures which can be a useful guide to QSCF in achieving innovation in their marketing programmes to ensure the sustainability of such marketing programmes. The contribution of this paper is embedded in defining the future direction of marketing function in QSCF in Ghana. It will also derive the attention of managers to the importance of marketing concept. Future research must focus on the impact of marketing on business success of QSCF and other consulting practices in the built environment.

Keywords: Innovation, Marketing Practices, Marketing Barriers.

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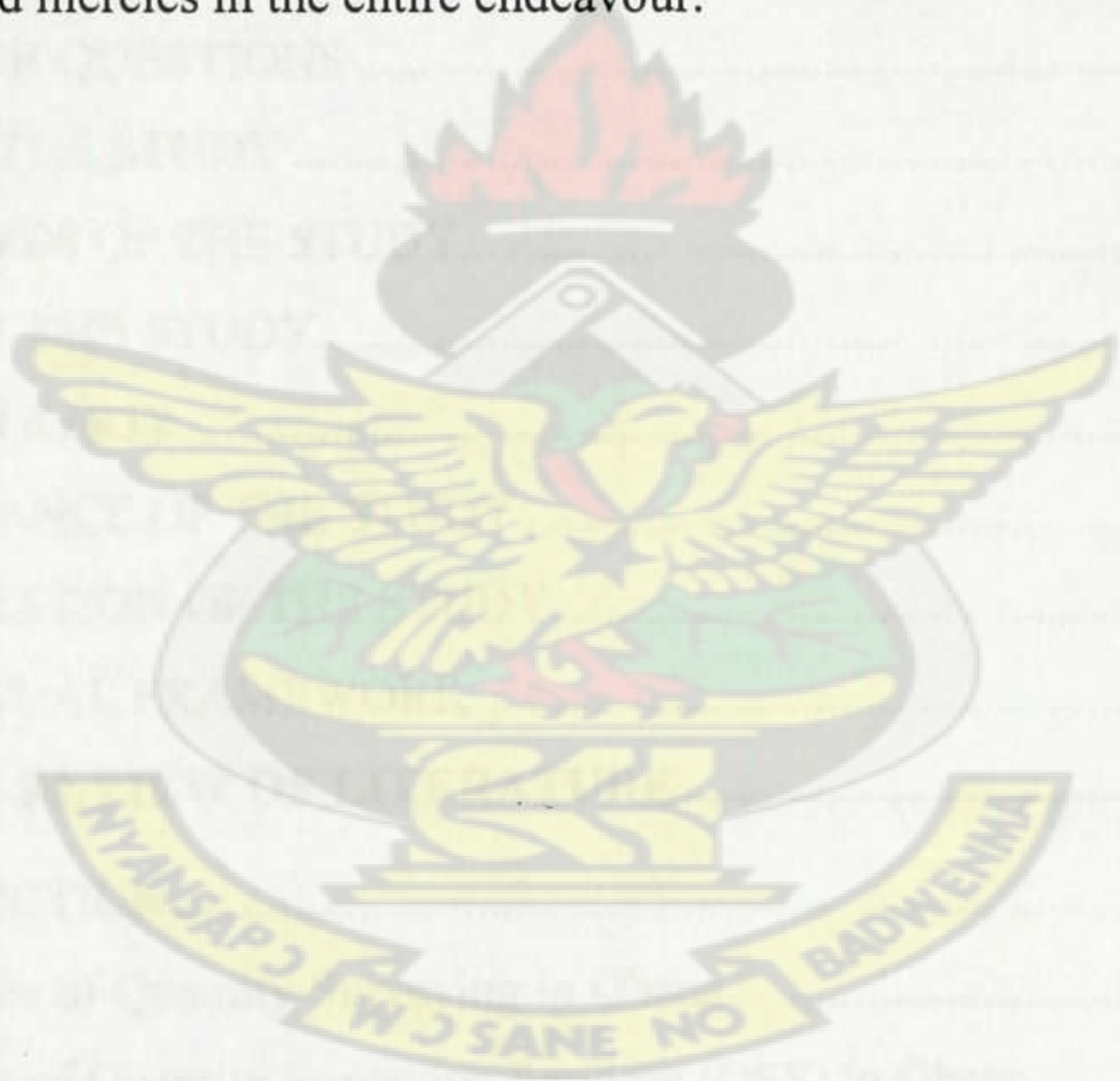


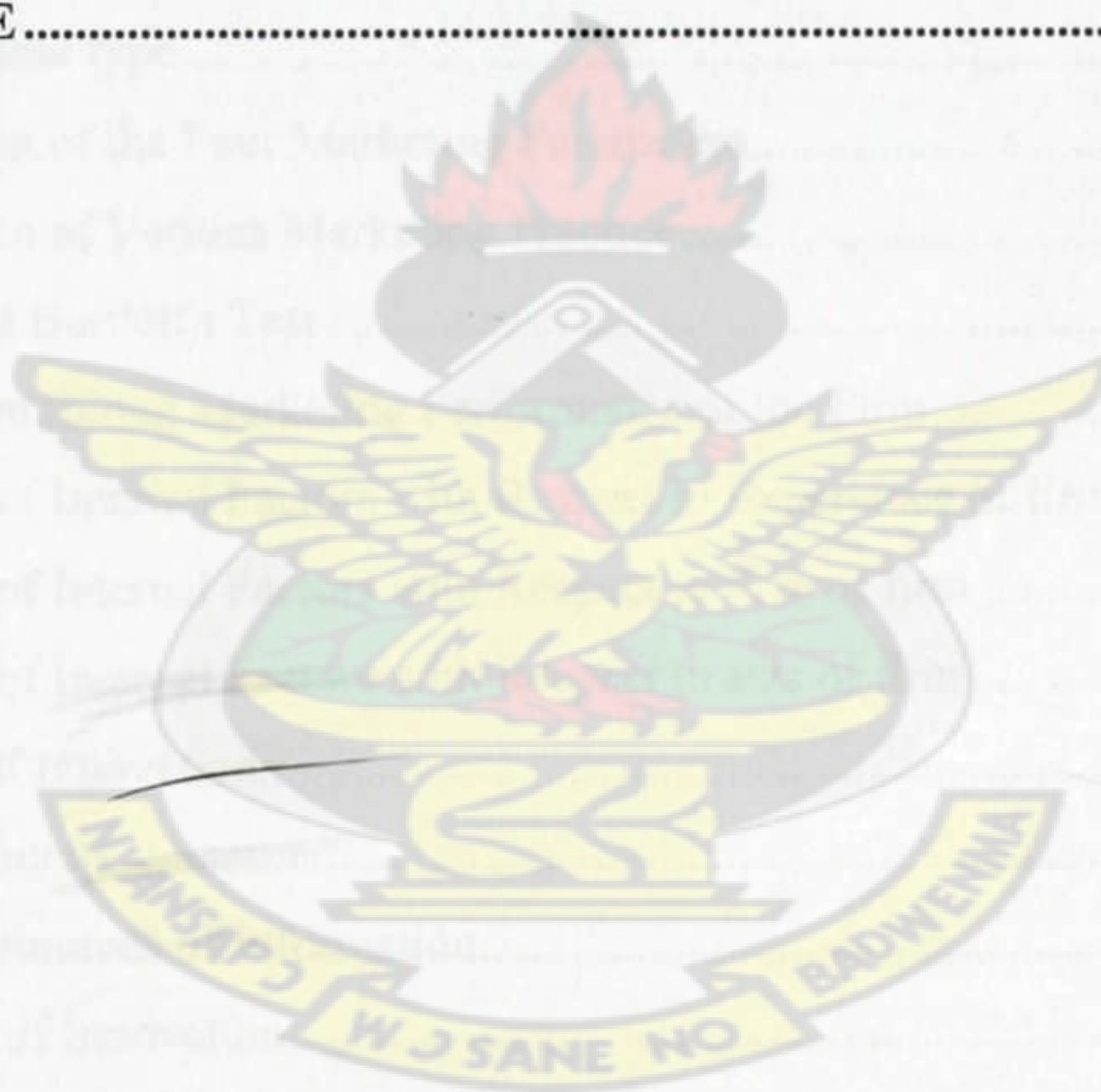
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CHAPTER ONE

GENERAL INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The Quantity Surveying Consulting Firms (QSCF) comes under one of the divisions of professional bodies that service the construction industry in Ghana. The QSCF is under the Quantity Surveying division of the Ghana Institution of Surveyors (GhIS) incorporated under the Professional Bodies Registration Decree, 1973 (NRCD 143).

The QSCF like other businesses/firms are in business to make profit in order to survive the competition in the market that characterizes the business environment. For the QSCF to successfully compete with its competitors and survive, it must achieve three major objectives comprising sufficient demand; a sustained growth; and a profitable volume (Kotler & Konner, 1977; Yisa *et al.*, 1995). Arditi *et el.* (2008) noted that clients have become more selective in choosing service providers who provide client-centered rather than technical-centered service. The authors indicated that since clients' desire personalised service, marketing has become a tool for attracting such client.

Marketing is a business philosophy that puts the customer at the centre of all the organisation's considerations (Dikmen *et al.*, 2005). Levitt (1983) noted that "the purpose of a business is to create a customer". Dikmen *et al.* (2005) argues that creating a customer means identifying needs in the market place, finding out which needs the firm can profitably serve, and creating an offering that to convert potential

buyers to into customer. This argument simply sets out the rationale for marketing by stating its ultimate desired outcome (Dikmen *et al.*, 2005). Friedman (1984) also identified marketing as an activity with a potential for increasing sales. In the words of Arditi *at al.* (2008) 'marketing is considered as an investment for creating a competitive edge-an empowerment for competitive advantage'. This assertion reveals the main benefit of marketing that makes it indispensable for the QSCF's survival and the desire for greater profitability.

Kotler and Conner (1977), concur that, marketing, far from being a negligible function in managing professional service firms, is now recognised as one of the more important functions for helping professional firms to meet the unprecedented challenges faced by professional practices including the QSCF. Surprisingly, marketing is less well developed in the QSCF and often performed in most firms on an *ad hoc* basis (Morgan & Morgan, 1990). Moore (1984) noted that marketing management has not yet been applied to any greater extent in the construction industry.

These indications suggest that the marketing function of quantity surveyors needs to be developed if the client is going to get an appropriate and quality professional service (Rwelamina and Bowen, 1995). Because this will avoid competition between QSCF being based solely on price, leading to reduced profitability, and, also provide a mechanism to QSCF to cope with the changing environments within which they find themselves. It is in line with this background that this study was undertaken to upraise the stage of marketing development in the QSCF and attempt to determine

the future direction of marketing function in QSCF. It also assessed potential problems and barriers to the adoption and implementation of marketing concept and also evaluated potential innovative factors in the activities of the QSCF firms in Ghana so as to improve its performance.

1.2 PROBLEM STATEMENT

Morgan and Morgan (1990) stated that marketing is less developed in the professional industry and often performed in most firms on an *ad hoc* basis. According to Morgan and Morgan (1991), marketing within the professional sector is considered at worst as an alien concept, and at best as a new development that is viewed with skepticism. Pheng (1991) also observed that marketing has attracted only little attention among professionals. This situation is in direct contrast to the role of marketing in the consumer goods industry (Gummesson, 1979), where marketing is accepted as one of the cornerstones of servicing the needs of clients and customers.

Peck (1994) is of the view that some consulting firms are still struggling to understand and implement effective marketing programmes. In the view of Rwelamila and Bowen (1995), QSCF are still clinging to an out dated, bull market philosophy: 'As long as we do good work we will always have plenty of work'. Stewart *et al.* (1998) sees this philosophy as an impediment that is preventing the QSCF from achieving sustainable growth.

The literature available on marketing in the professional industry is more generic (Kotler and Conner, 1977; Lidstone, 1984) and mostly combines consulting

engineering practices with several other professional services such as accounting, medicine, brokerage, insurance etc. (Rwelamila & Bowen, 1995). Morgan and Morgan (1991) reports that such literature are prescriptive in nature and are also based on the experiences and observation of American practising marketing consultants rather than an academic research.

The few academic research works that have been conducted in different countries comprises that of Morgan (1990) in the United Kingdom, Rwelamila and Lethola (1998) in South Africa, and Marr *et al.* (1996) in New Zealand. Morgan (1990) found that very seldom firms have their own marketing departments or specific individuals responsible for marketing. Even when marketing department exists, the consulting firms still struggle to implement marketing functions effectively. Merr *et al.* (1996) measured the perception of marketing by private engineering consultancies in New Zealand and found that competing on price is one of the major barriers to the consulting engineer's adoption of the marketing concept. The result obtained by Rwelamila and Lethola (1998) gives support to Morgan (1990) and Marr *et al.* (1996).

Rwelamina and Bowen (1995) noted that specifically on marketing of professional quantity surveying services, ~~the body~~ of literature available is scanty with a few empirical studies having been undertaken. Knowles (1986) and Davis (1992) added that the little existing literature does not focus on marketing development *per se*, rather it comments on quantity surveying practices in a changing environment with emphasis on new roles and responsibilities (Cooper, 1978 Jones, 1983; Jacobs, 1986).

This study explored the marketing orientation of QSCF in Ghana by ascertaining the marketing practices and actions adopted for managing QSCF in Ghana and identified barriers to mounting effective marketing programme by QSCF and also assessed potential marketing innovation factors with the view of improving performance.

1.3 RESEARCH QUESTIONS

- ❖ What marketing practices and actions are adopted for managing the QSCF in Ghana?
- ❖ What are the identifiable barriers to the marketing performance of QSCF in Ghana?
- ❖ What are the potential marketing innovation factors that can improve the performance of the QSCF in Ghana?

1.4 AIMS OF THE STUDY

The main aim of the study is to explore marketing orientation of the QSCF in Ghana, and proffer measures that will boost the marketing orientation of the QSCF, based on the findings.

1.5 OBJECTIVES OF THE STUDY

To meet the general aim, the study will focus on the following specific objectives:

1. To ascertain the marketing practices of the QSCF in Ghana;
2. To identify the underlying barriers inhibiting marketing performance of QSCF in Ghana;
3. To determine the underlying potential marketing innovations factors that can improve performance of the QSCF in Ghana; and
4. To proffer measures that will boost the marketing orientation of QSCF in Ghana to advance innovation and improvement performance.

1.6 SCOPE OF THE STUDY

The study was conducted in Greater Accra region of Ghana where a greater majority of the QSCF in Ghana can be located (GhIS, 2012). This region was chosen because majority of the firms that forms the target population were found there and this enhanced the administration of the survey instrument.

The study was only concerned with those QSCF in private (self employed) consultancy firms that are practising either as a sole proprietor or in partnership but not as an individual surveyor in paid up employment such as Quantity Surveyors in estates companies, financial institutions etc. The firms were registered business entities as against an individual quantity surveyor for an organisational entity. A total of 45 QSCF constituted the study sample size. Each of the firms was registered by the Ghana Institution of Surveyors (GhIS) as a practising QSCF in Ghana.

The Study focused attention on marketing practices, barriers to such practices and potential innovation factors that could be adopted by the QSCF in Ghana to improve performance.

1.7 METHODOLOGY

Because of the exploratory nature of the research, data was collected with the aim to establish the state of marketing orientation of the QSCF within the Ghanaian context by identifying significant variables or performance measures of marketing orientation within the QSCF in Ghana. That served as a guide for the operationalisation of relevant variables of marketing orientation of QSCF in the Ghanaian context (DePoy & Gitlin, 1998; Sarantakos, 2005).

Because of that, this study adopted the use of questionnaire as a data collection tool for the study. The choice of questionnaire as a data collection tool was influenced by the nature of the investigation and the type of the study population. (Kumar, 1999) The data collected from the QSCF was analyzed using the Statistical Package for Social Sciences (SPSS) version 17 software programme. The data was initially summarised into frequencies and percentages and cross tabulations carried out to examine relationships between various variables, in order to provide answers to the research objectives.

Further analysis were carried out using factor analysis because of the ability of this analysis tool to analyse relationships among difficult to interpret correlated variables in terms of a few conceptually meaningful, relatively independent factors, each of which represents some combination of original variables (Rumel 1970;

Kleinbaum et al. 1988; Comrey & Lee 1992) The variables were grouped into a relatively small number of factors and that were used to represent relationship among sets of many interrelated variables.

1.8 SIGNIFICANCE OF THE STUDY

An appraisal of marketing development is necessary to determine the future direction of the marketing function in QSCF and evaluate potential problems and barriers to the formulation and implementation of market-led strategies in these firms. The findings of this study have addressed certain marketing elements that are measurable within QSCF, in an effort to assess the extent to which the marketing concept has been adopted and implemented. The results of the study has provided the basis to proffer measure that will boost the marketing orientation of QSCF, and which will advance innovation and performance improvement as indicated in section 5.4 of the chapter five.

The flowchart in figures 5.1 has provided a logical means of addressing existing marketing problems by applying systematic marketing management process which focus on integrating marketing practices, marketing performance barriers and potential innovations of a business to achieve organisational success. By applying this, firms will be able to cope with the changes experienced in the industry to ensure their survival. The application of the proffered measures illustrated with a flowchart in figure 5.1 (Pp. 110) will help the firms to achieve market differentiation. That will lead to the creating of a competitive edge which is an empowerment for competitive advantage to outmanoeuvre competitors.

Again the barriers inhibiting marketing performance has also been highlighted for the QSCF to address. The study has also established the antecedents of QSCF marketing and that will be useful to policy makers in the professional consulting industry to address.

1.9 ORGANIZATION OF THE STUDY

The write-up is divided into five chapters. Chapter One comprises background to the study, statement of the problem, objectives of the study, significance of the study, and chapter organization. The Chapter Two, which is the literature review, comprises discussions on marketing in Quantity Surveying Consulting Firms in Ghana, marketing practices, and barriers to those practices as well as potential innovations. Chapter Three is the methodology of the study. Chapter Four comprises an analysis of the socio-demographic characteristics of QSCF, their marketing practices; marketing performance barriers and potential innovations. Chapter five comprised of the summary, conclusions, recommendations, and further research. This is further elaborated as shown with the conceptual framework in figure 1.10.

1.10 CONCEPTUAL FRAMEWORK

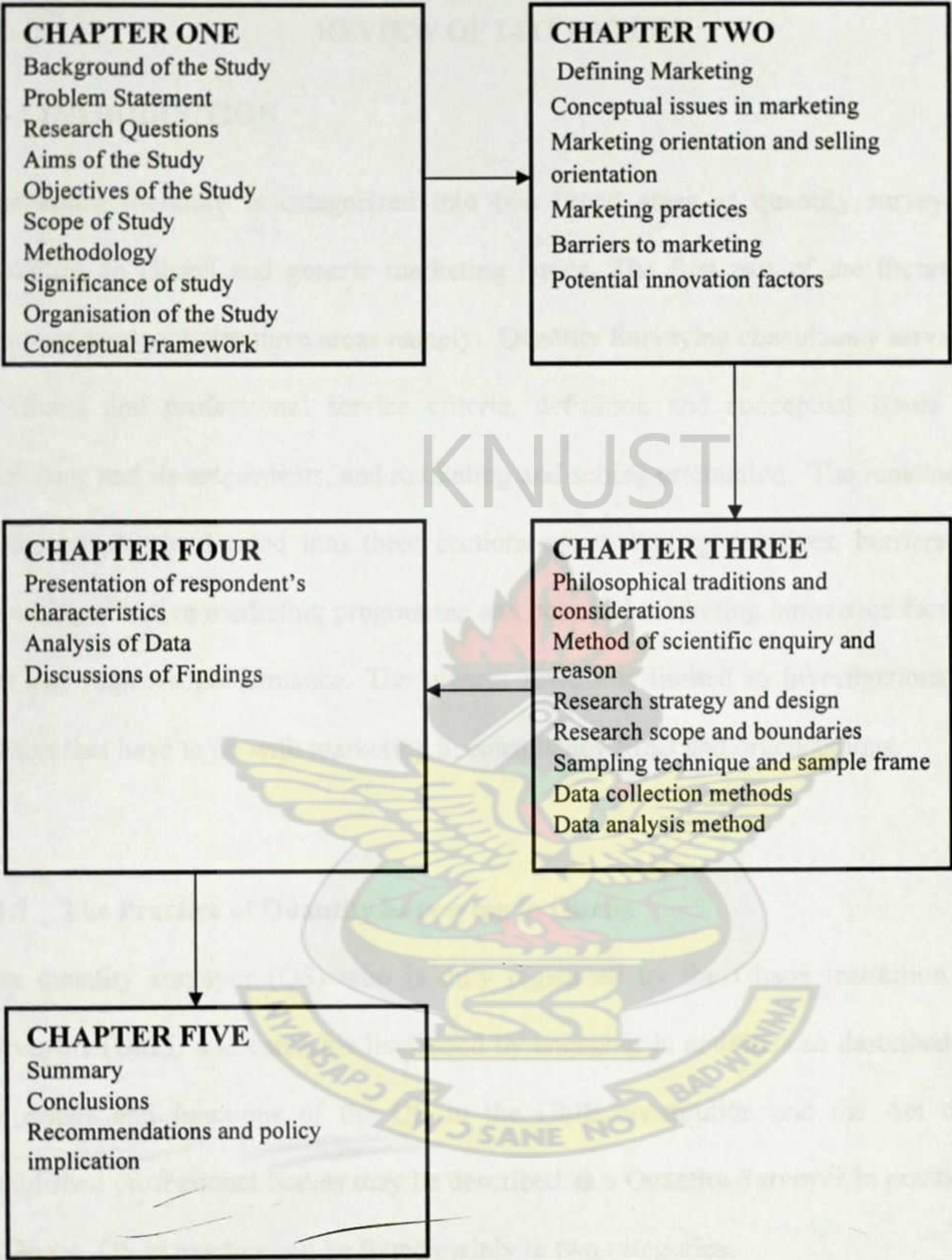


Figure 1.1: Conceptual Framework for the Study

CHAPTER TWO

REVIEW OF LITERATURE

2.1 INTRODUCTION

The entire literature is categorized into two broad areas as quantity surveying marketing in Ghana and generic marketing issues. The first part of the literature reviewed here includes three areas namely: Quantity Surveying consultancy services in Ghana and professional service criteria, definition and conceptual issues of marketing and its antecedents, and marketing and selling orientation. The remainder of the chapter is divided into three sections as: marketing practices, barriers to mounting effective marketing programme and potential marketing innovation factors that can improve performance. The present review is limited to investigations of matters that have to do with marketing in consultancy firms and organizations.

2.1.1 The Practice of Quantity Surveying in Ghana

Any quantity surveyor (QS) who is duly registered by the Ghana Institution of Surveyors (GhIS) and earns his livelihood by engaging in activities so described as the duties and functions of the QS in the GhIS constitution and the Act that established professional bodies may be described as a Quantity Surveyor in practice. In Ghana, QS in practice can be found mainly in two categories:

There are those self employed in consultancy businesses in the private sector and the other group are those in employment in government institutions or in companies in the private sector.

The figure 2.1 below shows the distribution of QS in practice.

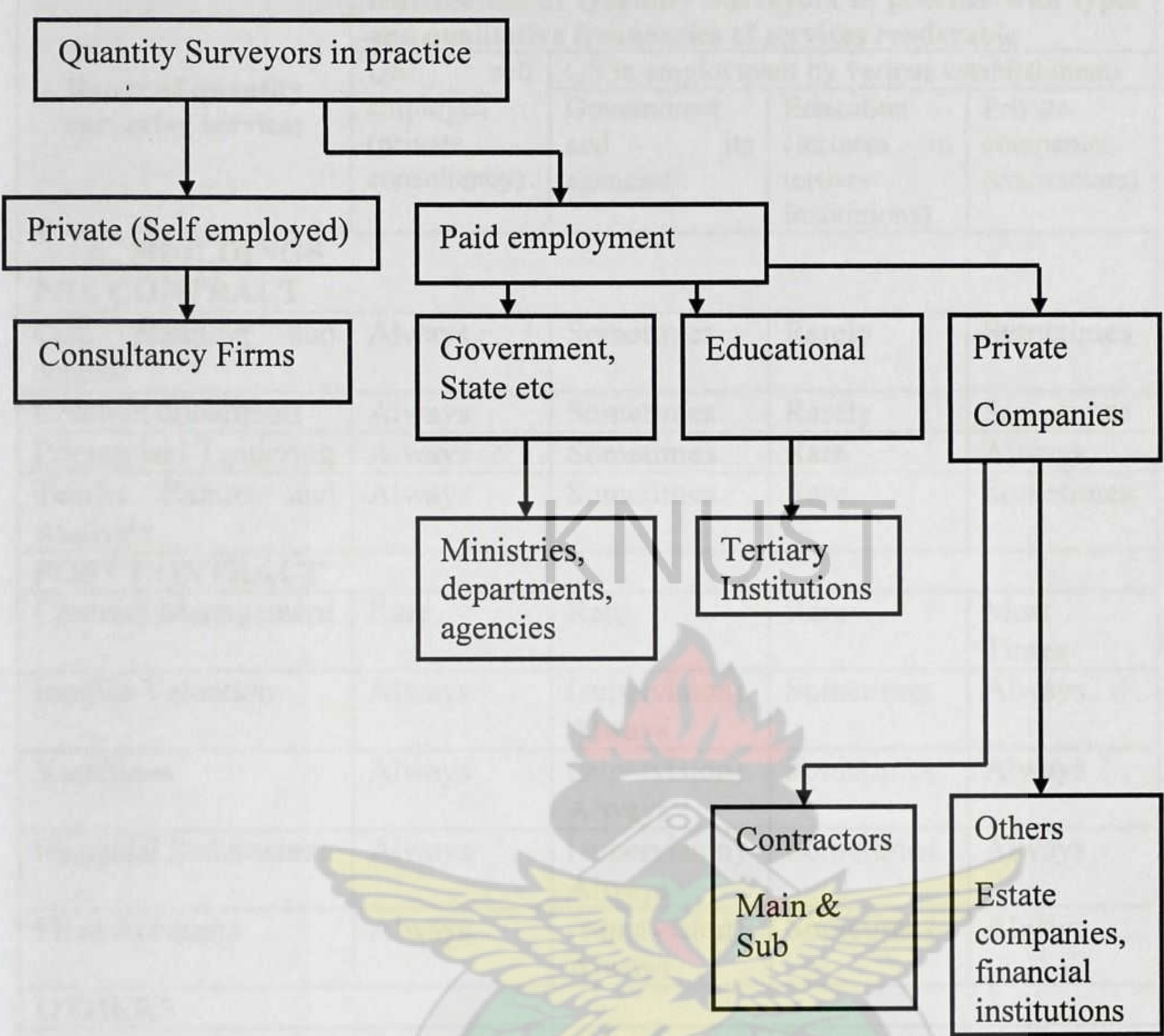


Figure 2.1: Distribution of Quantity Surveyors in Practice

Source: The Quantity Surveyor, 2005

2.1.2 Continuum of Quantity Surveying Services (QSS) in Ghana

The range of services offered by the QS is quite wide and it is not practicable for any job location or type of employment to offer all the range of services or provide the platform for experiencing all the services. The types of Quantity Surveying practices or functions that may exist in different places or types of employment and the relative qualitative frequencies of their occurrences in such places are summarized in table 2.1.

Table 2.1: Distribution of Quantity Surveyors in Practice

Range of quantity surveying services	Distribution of Quantity Surveyors in practice with types and qualitative frequencies of services renderable			
	QS self employed (private consultancy)	QS in employment by various establishments		
		Government and its agencies	Education (lectures in tertiary institutions)	Private companies (contractors)
A. BUILDINGS				
PRE CONTRACT				
Cost planning and control	Always	Sometimes	Rarely	Sometimes
Contract documents	Always	Sometimes	Rarely	Sometimes
Pricing and Tendering	Always	Sometimes	Rare	Always
Tender Report and Analysis	Always	Sometimes	Rare	Sometimes
POST CONTRACT				
Contract Management	Rare	Rare	Rare	Most Times
Interim Valuation	Always	(supervision) Always	Sometimes	Always
Variations	Always	(supervision) Always	Sometimes	Always
Financial Statements	Always	(supervision) Always	Sometimes	Always
Final Accounts	Always	(supervision) Always	Sometimes	Always
OTHERS				
Investments Appraisal	Sometimes	Sometimes	Sometimes	Sometimes
Arbitration	Sometimes	Rare	Rare	Rare
Project Management	Sometimes	Rare	Rare	Rare
ENGINEERING PROJECTS				
PRE CONTRACT				
Bills of Quantities	Sometimes	Rare	Rare	Sometimes
POST CONTRACT				
Valuations, etc.	Sometimes	Rare	Rare	Most Times
B. RESEARCH AND TRAINING	Rare	Rare	Always	Rare

Source: The Quantity Surveyor, 2005

For Quantity Surveying practices under employment, the overall organizational set-up and structure may be such that priority is given to some types of function over others. In government services, focus is on general supervision of the projects and

any private consultants where they are involved in the project. In tertiary institutions, the focus is on instruction, training and research.

2.1.3 Professional Services and Quantity Surveying Consultancy Firm (QSCF) in Ghana

Gummesson (1978) views professional services differently from other services, arguing that the former are mainly advisory in nature and are delivered by skilled professionals. To distinguish professional services from other services offered on the market, Gummesson (1978) developed the following criteria: the service should be provided by qualified personnel, be advisory, and focus on problem solving; the professionals should have an identity, in other words, to be known on the market for their specialties and under a specific name such as 'architect' or 'management consultant'; the service should be an assignment given from the buyers to the sellers; the professionals should be independent of suppliers of other services or goods

Maister (1982) used the 'term Professional Service Firm' (PSF) for companies involved in consulting businesses. These firms practice the phrase 'our people are our asset' frequently; a PSF tends to sell to its clients the services of a particular individual than the services of the firm. Maister (1982) argues that professional services usually involve a high degree of interaction with the client.

Conchar (1998) offered an updated definition of professional services as: "performances of assignments or service agreements which apply some form of expert or tacit knowledge by professionally accredited and affiliated service providers, whose relationship with buyers of the service is of a fiduciary nature. The

service provider should have a distinct economic identity, and their professional assignments should serve as the primary source of revenue to that business unit.”

Based on the two definitions, Jaafar *et al.* (2008) concludes that professional services refer to the independent services offered by qualified personnel who are knowledgeable in their specific area (which should be attached to a distinct economic identity), and these services serve as a primary source of income to the company. In relation to marketing in such firms, Kotler and Connor (1977) defined marketing in professional services as:

‘organized activities and programmes by professional services firms that are designed to retain present clients and attract new clients by sensing, serving, and satisfying their needs through the delivery of appropriate services on a paid basis in a manner consistent with credible professional goals and norms’.

Jaafar *et al.* (2008) observed that most of the professional service firms perceive marketing as an unimportant management function and argues that many professional practitioners who serve the construction industry like architect, civil and structural engineers, mechanical and electrical engineers surveyors, etc. have ignored the importance of marketing preferring to act on ‘ad hoc’ basis fashion

The finding of Jaafar *et al.* (2008) though in Malaysia is similar to other studies conducted in other countries, for example Morgan (1990) in United Kingdom, Rwelamila and Lethola (1998) in South Africa, Marr, Sherrard & Predergast (1996) in South Africa. Although the findings are not the same in all the countries, they all, attest to the neglect of marketing management in professional services firms in one way or the other. According to Morgan and Morgan (1991), marketing within the professional sector is considered at worst as an alien concept, and at best as a new

development that is viewed with scepticism. This situation is in direct contrast to the role of marketing in the consumer goods industry (Gummesson, 1979), where marketing is accepted as one of the corner stones of servicing the needs of clients and customers.

2.2 THEORETICAL EXPLANATION OF MARKETING

Namo and Fellows (1993) found a wider variety of definitions of marketing even among marketing professionals; and supported their argument with two definitions by Kotler (1984) and Ohmae (1988). Kotler defined marketing in terms of human activity directed at satisfying needs and wants through exchange, and Ohmae saw it as discovering what customers want and orienting the firm to satisfying those wants. Scanlon (1988) simplified the definition of marketing to 'the concept of matching services to wants in the market place'. Scanlon (1988) elaborates further that businesses can be regarded as having three main common components, namely:

- '(i) markets, providing opportunities to supply services or products and so generate revenue,*
- (ii) activities, constrained by resources and limiting business transactions to specific services and products, and,*
- (iii) competition, setting price and service expectations and so tending to limit further the sales opportunities of the business.'*

Scanlon (1988) argues based on these components of business that, marketing strategy formulation is the process of relating markets to activities. Strategy formulation results in a 'mix', being the specific profile of services/products and clients/customers that make up the marketplace for the organization. Selling is the process of creating volume by placing services/products into marketplace in a competitive environment. Operational management is charged with producing

adequate services/products in a competitive environment and its success in doing this is a measure of performance.

Based on the foregoing, Rwelamila and Bowen (1995) conclude that marketing is therefore the process of orchestrating these dynamic relationships. In view of Rwelamila and Bowen (1995), the two main purposes of marketing may be seen as:

- *'the development of services or products that will meet client or customer needs in a profitable and competitive manner, and,*
- *communicating an awareness amongst clients or customers in the marketplace of the services or products that are on offer from the organization'.*

2.2.1 Conceptual Issues of Marketing

Marketing has been a subject of various definitions articulated by different individuals to suit various situations. Cicmil and Nicholson (1998) noted that definitions of marketing are broad and varying, with a proliferation of concepts and misconceptions about its nature. Fisher (1989) identified an unbalanced view of marketing, and noted that to a larger number of firms, marketing appears to be synonymous with selling, business lunches, and double-glazing type. Shearer (1990) brought to light the problem of conceptualizing marketing in construction. The research also found a prevalence of the view that marketing in construction is in essence selling promises, because the client is normally being asked to buy something that does not exist.

Morgan and Bernicle (1991) noted that many construction enterprises still often fails to realize that marketing entails more than just playing with a few isolated promotional tools, such as distributing brochures, advertising, and film shows, which

they often employ without following a structured marketing plan formulated in line with the organizations aims and objectives. It also appears that the conceptual difficulty is only a part of the wider debate about the meaning of marketing.

Construction researchers are no exception to this problem with the definition of marketing. Arditi and Davis (1988) described marketing as consisting of activities such as contacts with potential clients, gaining information regarding conditions, potential customers, and projects: prequalifying with clients: estimating project cost: submitting proposal: entering into contracts, negotiating changes and claims, and finally, developing new technology of different contract forms.

2.2.2 The Antecedents

A number of reasons may have contributed to this as many researchers continue to assign to this one reason or the other. Yisa *et al.* (1995) noted that comparing to other contraction management functions such as estimating, scheduling and cost control, literature on marketing in construction is very sparse. This according to them suggests that the industry's professionals are being educated without a systematic study of this important aspect of management. Harris (1991) noted that professional education and training have always been streamlined and narrowed down to production of highly scientifically trained professionals from the universities with little or no management training. This points to lack of marketing as being part of the wider problem.

This according to Fisher (1989) has bought about many deeply held misconceptions about the appropriateness of and value of general management skills and marketing skills in particular, as a result, construction firm owners do not seem to be aware of the economic payoff to be derived from the appropriate use of modern management systems and are, as a consequence, unwilling to incur the cost of operating these systems on their construction projects. Pheng (1991) therefore observed that marketing has attracted only little attention among construction contractors and professionals alike. Morgan and Bernicle (1991) noted that the U.K. construction industry has been slow in adopting marketing principle. This Morgan and Morgan (1990) believe is due to the fact marketing is still a new phenomenon viewed with scepticism.

Freidman (1984) is of the view that the firms in the past have not met with difficulties in obtaining the required level of works to maintain survival and profit. So they rely on their reputation and quality of their work to continue winning new order. This prevents them from recognizing the essence of marketing. Pearce (1992) pointed out the most popular belief in the industry, that is, the most important part of the organization is the production side. Yisa *et al.* (1995) explains that the professionals look for opportunities that fit their capabilities rather than adapting their capabilities to suit current and future market opportunities. Bell (1981) also noted of the existence of a wide misconception/perception that only clients can create demand for work, and that the firm themselves are not capable of doing so. Other researchers also argue that the industry is not capable of being planned, citing the dynamic environment as a reason that prevents any long and medium term planning (More, 1984; Pearce, 1992).

2.3 MARKETING AND SELLING ORIENTATION

2.3.1 Marketing Orientation Concept

Avlonitis and Gounaris (1999) noted that during the last 20 years two main conceptualizations of the notion have been developed: one that interprets Marketing Orientation as basically a company attitude and a second that explains it as basically company behaviour. Drucker (1954) is of the view that “marketing is not a specific company activity rather it involves the entire organization viewed from the customers point”. Similarly, Felton (1959) approached it as ‘a way of thinking in doing business that is based on the integration and co-ordination of all marketing activities which, in turn, will integrate with the rest of the company activities in an effort to maximize long term profitability’.

Cespedes (1990) introduced the term Marketing Organisation and used it to describe the functional department of the company that executes marketing related activities (e.g. pricing, distribution, promotion etc.), while the concept of marketing was identified with a certain way of thinking concerning the company's priorities and goals. In a similar direction are also the ideas of Deshpande and Webster (1989) who grant philosophical/cultural qualities to Marketing Orientation. In doing so, a company's propensity to innovate is use measures its level of Marketing Orientation, (Deshpande *et al.*, 1992). In that study , the term ‘customer orientation’ was used to describe a specific set of beliefs that puts the customers' interests first and ahead of those of all other stakeholders (e.g. owners, managers, employees) which, in their view, should be considered as part of a broader, and more fundamental, corporate culture.

Avlonitis and Gounaris (1999) observed that citations of writings that approach Marketing Orientation as a company philosophy are merely indicative and by no means exhaustive. Others have also developed and stated similar views, all treating Marketing Orientation as mainly a company philosophy (Houston, 1986; Dixon, 1990). Avlonitis and Gounaris (1999) summarize the basic facets of Marketing Orientation as a company philosophy as:

' a priority in customers when evaluating the company and its products and the extent to which both the company and its products satisfy specific customers' needs; a priority in elevating marketing as the prevailing culture of the company so the entire organization will mobilize towards satisfying customers' needs; and a priority in adjusting products according to the market needs and wants, rather than according to the company's perceptions and beliefs, so that customer satisfaction can be delivered'.

Aside this, there exist other concepts that regard Marketing Orientation as primarily specific company behaviour. Trout and Ries (1985) perceive 'Marketing Orientation as an effort to compile market intelligence upon which the effort to build a competitive advantage is based'. The argument goes further by supporting that customer orientation is not as crucial as a competitor orientation is, as the later will enable the company to identify the weaknesses of its competitors and strike them back where they suffer. Elliot (1987) supports the behavioural approach in explaining Marketing Orientation and believes that the concept of Marketing Orientation and the philosophy to set a priority to satisfy customers' needs is insufficient and suggests that the designing of strategies that are purposed to achieve customer satisfaction should be considered as part of the Marketing Orientation concept.

This strategic-behavioural approach in explaining Marketing Orientation has found acceptance and support by other authors too (Bonoma, 1985; Bonoma and Clark, 1992). In fact, attempts have been made to explain Marketing Orientation as the understanding of the significance of marketing for the company. Avlonitis and Gounaris (1999) believe that this calls for the development of marketing skills (with particular emphasis on the designing and implementation of marketing strategies) by the people of the company while, at the same time, emphasis needs to be given on the required changes in the organisational structure and marketing systems of the company (Canning, 1989; Kohli and Jaworski, 1990).

Within this framework, Kohli and Jaworski (1990) have set three main priorities for a Marketing Oriented company as: 'priority in market intelligence collection (to understand the market); priority in intelligence dissemination throughout the company (to familiarise it with the market); and priority in responsiveness to this intelligence (through the strategies and plans that the company designs and implements)'

Considering the two dominant approaches of Marketing Orientation, Avlonitis and Gounaris (1999) observes that unless the company has developed a certain attitude, strategies that will aim to maximize its adaptation to the market cannot be designed. Avlonitis and Gounaris (1999) further argue that strategies designed to increase the degree of the company's adaptation to the market cannot be actually implemented unless the compulsion to do so is appreciated. Avlonitis and Gounaris (1999) therefore concluded that it appears that the two main approaches that have been developed actually complement each other instead of opposing.

2.3.2 Marketing Orientation verses Selling Orientation

Marketing orientation, according to Payne (1988) is the degree of responsiveness of an organization its market need. Marketing orientation puts the customer's needs at the forefront of the value chain, and as a philosophy, it implies new approaches to functional management (Cicmil and Nicholas, 1998). Cicmil and Nicholas (1998) explains that if perceived as a business function its existence to look after sales, branding, publicity and promotion, marketing often becomes an isolated but glorified department detached from operations and the core business purpose which servicing the customer.

In this situation, Cicmil and Nichoson (1998) argue that instead of being part of the value chain closet to the customers feeding their changing needs and requirements back into the system, marketing becomes a selling oriented activity which links the business capability of producing a product or service with the process of converting it into revenue. Egan (1995) describes this as selling orientation and represents it diagrammatically as follows;

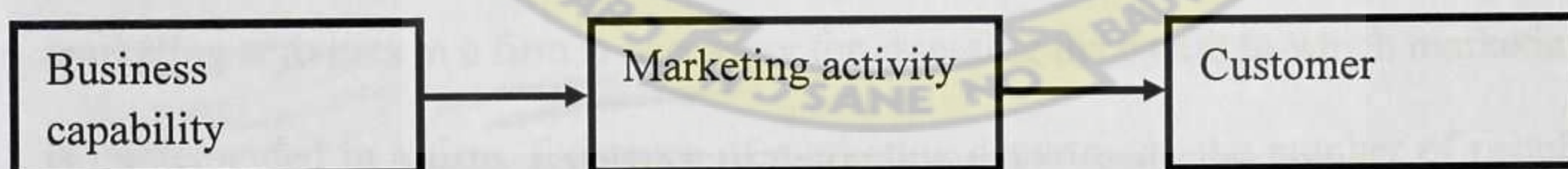


Figure 2.2: Sales Perspective

Source: adapted from Egan (1995)

Cicmil & Nicholson (1998) noted that with the emergence of management philosophies that emphasize the importance of customer orientation such as TQM,

the marketing concept takes a new, “marketing Orientation” form and becomes a driving force behind strategic management of organization. Kotler (1991) and Drucker (1974) among others, imply, marketing orientation reverses the way managers look at their business, customer needs become a template for business planning and creation of service or product portfolio.

Egan (1995) illustrates the marketing orientation as follows;

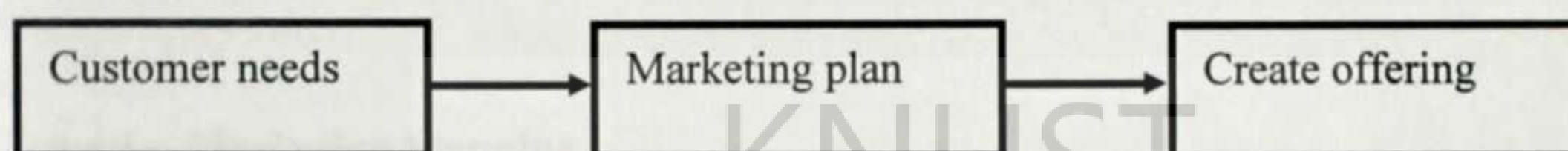


Figure 2.3: Marketing Perspective

Source: adapted from Egan (1995)

The section that follows reviews studies that investigated marketing practices of professional consultancy firms.

2.4 MARKETING PRACTICES

Dickman, *et al.* (2005) argues that knowledge about the way of carrying out marketing activities in a firm is necessary for assessing the extent to which marketing is implemented in a firm. Existence of marketing department, the number of people working in the department, status of the head of marketing in the organization and the existence of an independent sales department besides the marketing department are some of the criteria that are used for such assessment.

Again, specific marketing activities such as marketing research, marketing planning, advertising, public relations, in-house marketing education and marketing intelligence also adds to such assessment (Dikmen *et al.*, 2005). Yisa, *et al.* (1995) sorted out the above criteria and categorized them into three issues as follows: marketing planning, organization for marketing and marketing resources. A fourth category to this list is marketing and promotional techniques (Naoum, 2001)

2.4.1 Marketing Planning

Yisa, *et al.* (1995) noted that the central objective of marketing planning is to allocate the firm's resources as effectively as possible. This allocation, in the view of Kotler (1972) requires careful consideration of the firm's strength, an assessment of the market place, definition of long-term goals, identification of particular marketing opportunities, and the implementation of measurable programs for exploiting these opportunities. Friedman (1984) described marketing planning as thinking systematically about the future and making current decisions on that basis. Marketing planning according to Friedman (1984) is a continuous process because changes in construction industry and in general business environment are continuous. Friedman (1984) therefore stressed that effective marketing begins with planning and proper planning begins with long-range view of the entire business.

Yisa *et al.* (1995) again noted that for every organization there should be a natural hierarchy of business activities that moves from an external focus through to internal action and control. This means that the extent of formal marketing planning has influence on the overall success of the marketing program. Yisa, *et al.* (1995)

outlined some important aspect of a marketing plan and argued that absence of that will affect its success. They touched on the level of management the responsibility for marketing programs lay and linked it to the importance the firm attaches to it. Again, they looked at the time ingredient which provides the marketing participants with a schedule for reaching various levels of accomplishment.

2.4.2 Organization of Marketing Function

The way marketing function is managed is crucial to its success. Yisa, *et al.* (1995) argues that the degrees or level to which marketing is seen as a priority by top management, the marketing organization through structure, line of authority, and responsibility, and the monitoring of marketing programs are key ingredients to the overall success of the program.

2.4.3 Marketing Resources

Davis (1981) stated the composition of marketing budget with many construction firms in the past as wages, sales expenses, product literature, and limited public-relations activities. In recent times, both professionals and practitioners have been seen to be engaged in other marketing activities that include professional activities designed to influence the market place, market research; cooperate identify programs and other marketing aids, such as the use of information services. (Yisa *et al.*, 1995)

Yisa, *et al.* (1995) is of the view that the resource in terms of manpower, skills and budget available for these activities must be adequate enough to accomplish its

objective. They appraised a system where there exist adequate numbers of employees whose responsibilities are wholly dedicated to marketing functions. The employment of marketing professionals, ie individuals who have professional qualification in marketing and allocation of enough funds from annual turnover to support annual expenditure on marketing was also highlighted as necessary ingredients for the overall success of the marketing programme.

2.4.4 Marketing Activities

The specific marketing activities that a firm undertakes may give an indication as to whether the firms see marketing to be all as advertising or not. (Dikmen, *et al.*, 2005) They described the thought that marketing and selling are the same as a misconception that is common in the industry. Richardson (1996) found similar misconception in the UK industry. The activities include marketing research, marketing planning, advertising, public relations and marketing intelligence (Dickman *et al.*, 2005). Naoum (2001) added others such as company brochure, company newsletter, seminars, presentations, videos, site boards, introductory letter and company logo to the list of activities.

Jafaar *et al.* (2008) further added launching of new services and selection of marketing staff and training, service selection and development, income forecasting and setting of fee structure. This list of marketing activities has been enlarged to twenty five activities under five main categories by Arditi, *et al.* (2008). The categories are: product, price, promotion, place and people. This all embracing list developed by Artiti, *et al.* (2008) captures every single marketing activity.

2.5 BARRIERS TO EFFECTIVE MARKETING PROGRAMME

A number of factors have been identified to be responsible for the low utilization of marketing by professional service firms. These factors controls or limits the firms growing need for greater commercialization of their services in a highly competitive market (Morgan *et al.*, 1994). Kotler and Conner (1977) described the three key factors as follows: disdain of commercialism, association code of ethics and equating marketing with selling.

2.5.1 Disdain of Commercialism

Kotler and Conner (1977) noted that a few professionals live to think of themselves as business men, they rather show that they are motivated by service to their clients than the money they receive for carrying out such service. This attitude is making the firms reluctant to pursuing any effective marketing programme even though there is a growing need for greater commercialization of their services because of the stiff competition prevailing in the market (Morgan *et al.*, 1994).

2.5.2 Association Code of Ethics

Some associations have rules that must be followed by member firms while others have what they describe as Standards of Good Practice that firms must adhere. Kotler and Conner (1977) observed that professional associations have erected stringent rules against commercial behaviour. In some professions, an absolute prohibition exists against anything that resembles selling activity. Advertising, direct solicitation, and referral commissioning, have been banned (Kotler and Conner, 1997).

Jaafar *et al.* (2008) observed that the action of some professional association to ban the use of marketing activities such as advertising, direct solicitation and referral commission has led to the limited use of effective marketing strategies. Kotler & Conner (1997) also observed that other professional firms adhere to certain “standards of good practice” and this, according to them, tends to limit the use of effective marketing and sales techniques.

2.5.3 Equating Marketing with Selling

Although marketing is a much larger idea than selling, professional firms show little interest in it because they equate it to selling which the professional body place ban against. Fisher (1989) similarly found that to a large number of firms marketing is seen as synonymous with selling. Yisa *et al.* (1995) attributes this to ignorance or misunderstanding of the concept of marketing in the industry. Dickman *et al.* (2005) similarly described equating marketing to selling as one of the misconceptions about marketing in the industry. This in the view of Yisa *et al.* (1995) can be attributed to the fact that literature on marketing in construction is sparse, suggesting that the industry’s professionals are being educated without a systematic study of marketing which is an important aspect of management.

Besides these three issues raised by Kotler and Conner (1977), Morgan *et al.* (1994) also added four more issues to the list of barriers as follows: lack of in-house marketing expertise, professional limitations, lack of partner level acceptance of marketing as a legitimate business function and resource constraint.

2.5.4 Lack of In-House Marketing Expertise

The findings of Yisa *et al.* (1995) revealed that, in a larger percentage of firms marketing is managed by a partner/director/senior manager, in addition to other responsibilities. Yisa *et al.* (1995) indicated the percentages as 95%, 80% and 22% for architects, engineers and contractors respectively. This indicates a lack of importance placed on marketing and as a result no expert is employed to oversee it, rather it is added to the responsibilities of others who may even have no knowledge about it. The lack of in-house marketing expertise can also be attributed to the issue of low consultation fees that reduces the firms' revenue thereby making it difficult for the firms to pay for the services of a marketing expert.

2.5.5 Professional Limitation

Yisa *et al.* (1995) noted that when construction management function such as estimating, scheduling and cost control is compared, marketing lacks adequate literature. They concluded that the industry's professionals are not properly educated on marketing as an important management function. Similarly, Harris (1991) observed that professional education has always aimed at the production of highly scientifically, trained professionals from the universities with little or no management training. As pointed out earlier by Yisa *et al.* (1995), Harris (1991) also confirms that professional education and training is always streamlined and narrow to achieve that aim. It is the content of the training that makes the professionals handicap of marketing management techniques.

Again, Pearce (1992) points out that, in many cases, contractors and professionals alike believe that the most important part of the organization is the production side. They look for opportunities that fit their capabilities as contractors, rather than adapting their capabilities to suit current and future market opportunities (Yisa *et al.*, 1995). As a result, the professionals become limited in their ability to perform as managers, particularly on issues regarding marketing. These events end up with a lack of in-house marketing expertise to prepare and oversee the marketing program.

2.5.6 Lack of Partner Level Acceptance of Marketing as a Legitimate Business Function

In some firms marketing is managed by partners/directors/senior managers. Many firms depend on either directors or partners to do the marketing work (Yisa *et al.*, 1995, Jafaar *et al.*, 2008). In events where such partners are members of the professional bodies and therefore do not accept marketing as a legitimate business function, then the firms may not be able to mount any effective marketing programme.

2.5.7 Resource Constraint

Yisa *et al.* (1995) looked at resources for managing marketing in an organization in terms of manpower, skills and budget. The adequacy of these resources can guarantee a successful marketing program in the industry. However, because of the low consultation fees charged (Jaafer *et al.*, 2008) the firms are not able to allocate adequate funds to support marketing activities. Much attention is paid to the

production side (Pearce 1992) than the management side of which marketing is key (Dikmen *et al.*, 2005).

The limited budget prevents the firm from sourcing the services of external marketing experts, because the available funds are used to cover operating costs and production related issues such as supervision (Jafaar *et al.*, 2008) that are considered as most important part of the firm (Yisa *et al.*, 1995). Regarding the skills in terms of marketing skills the professionals are handicapped because their education and training are geared towards production of highly scientifically trained profession with little or no management training (Harris 1991) because the professionals believe that the important part of the organization is the production side but not the management side (Pearce, 1992) of which marketing is an important tool.

As far as the manpower requirements are concerned it is either lack of funds that limits the number of employees or the low levels of salaries to workers that do not encourage them to stay. Jafaar *et al.* (2008) observed a shortage of supporting employee especially CAD operators and attributed that to the low salary schemes offered by the firms compared with the manufacturing and other sectors. This in the view of Oglesby *et al.* (1989) can be attributed to the reason that firm owners (professionals) do not seem to be aware of the economic pay off to be derived from the appropriate use of modern management systems and are, as a consequence, unwilling to incur the cost of operating these systems on their construction projects.

2.5.8 Engineers Paradigm

Dikmen *et al*, (2005) explains that the presence of cultural barriers in the industry is a resistance to marketing-oriented approach to management of in the industry. Seymour and Rooke (1995) observe that management practices are dominated by the engineers' paradigm which has resulted in the limited use of market-driven strategic management. This in the view of Richardson (1996) is a hurdle that needs to overcome if marketing can be adopted and used in the industry.

The section that follows reviews studies that investigate production and organizational innovation factors in the contest of construction organization.

2.6 POTENTIAL MARKETING INNOVATION

Hardie and Karan (2008) believes that a lack of spare capacity or even basic resources can sometimes lead to a tendency for firms to rely heavily on 'business as usual' solutions rather than adopting new or innovative practices. The resultant attitude, is 'sticking strictly with what we know'. This in the view of Hardie and Karan (2008) can mean a loss of potential earnings, as well as loss of inventive solutions which would have benefited the firm.

A possible circuit breaker for this situation is suggested by the theory of innovation management which suggests that this situation can be turned around to release innovation as a driver of economic prosperity (Hardie and Karan, 2008) Generally, however, there has been limited study of the factors that favour or discourage

innovations in firms (Hardie and Karan, 2008). As a result the literature reviewed here is more generic than specific to the QSCF.

2.6.1 Meaning and Categories

The term innovation may often be used as a synonym for change but in academic literature the case is different. Ozorhorn *at al.* (2010) describes innovation as a complex and multidimensional process that has received the attention of researchers in all fields due to its contribution to economic growth, competitiveness and quality of life. Slaughter (1998) defines innovation as being understood to be “a non-trivial change in a product, process or system”. Such a change in the view of Hardie and Karan (2008) can be at the level of ‘world’s first’ or it can be at the level of ‘a first’ for a country, industry or individual organisation. Ozorhorn *at al.* (2010) explains that innovation in general terms is the creation and adoption of new knowledge to improve the value of products, processes, and services.

Phillips (1997) distinguishes between technological innovation and non-technological (including organizational and marketing) innovation. Technological innovations comprise implemented technologically new products and processes and significant technological improvements in products and processes. Organisational innovation in the firm includes significant changes in organisational structures; the implementation of advanced management techniques; and the implementation of new or substantially changed corporate strategic orientations.

In the same vein, Bossink (2004) explains that the innovation process generally includes both technological and organisational streams. Technological innovations

according to Bossink (2004) include improvements to construction materials, building processes and equipment whilst the organisational innovations include matters that have to do with communication systems, business strategies, human resources and knowledge management. Technological innovations are easier to recognise in an industry like construction, but it is possible that organisational innovations have more long lasting effects (Barrett and Sexton, 2006). Linkages between these two main streams of innovation have been found to be critical to success in project based industries like construction (Gann and Salter, 2000; Hardie *et al.* 2005).

It appears that the two main categorization made by Phillips (1997) and Bossink (2004) is too general and less specific because others have come out with other categorizations that are more detailed and specific. Henderson and Clark (1900) classified innovation as incremental, modular, architectural and radical depending on the degree of product/architectural knowledge required to implement. Again, DTI (2007) state that innovation can take several forms including product innovation (changes in the products/services) which an organisation offers; process innovation (changes in the ways in which they are created and delivered); position innovation (changes in the context in which the products/services are introduced); paradigm innovation (changes in the underlying mental models which frame what the organisation does). Marketing innovation, on the other hand, is the implementation of a new marketing method involving significant changes in product, price, and promotion strategy (OECD and Eurostat, 2005).

2.6.2 Innovation and the Construction Industry

Construction is a very diverse sector and there is not one single way in which innovation occurs. It will vary throughout the supply chain and project stages, and just as innovation will mean different things to different economies, so it is equally important to realise that the challenge and meaning of innovation for a small specialist sub-contractor will almost certainly be very different from that of a multinational construction contractor (Abbott *et al.*, 2008). As Blayse and Manley (2004) noted, building and construction is partly manufacturing (materials, components, equipment) and partly services (engineering, design, surveying, consulting, and management) industry. Therefore, the organisational context of construction innovations differs significantly from a great portion of manufacturing innovations (Slaughter, 1998).

2.6.3 Measuring Innovation in Construction

Ozorhorn *et al.* (2010) identified the need for innovation metrics to take into account of the varied ways in which innovation can happen in less technologically focussed sectors and the level of analysis. This is because modern construction companies largely function and innovate by the quality of their processes, the people operating them and the way in which they change and adapt to suit the changing business environment (Ozorhorn, *et al.* 2010). Much construction innovation is project-based and unrelated to formal research and development expenditure and many innovations, particularly organizational or process innovations are neither patented nor trademarked (Slaughter, 1993). Therefore, traditional indicators poorly reflect the true level of innovative activity in construction. This gulf between practice and measurement is the real innovation gap (NESTA, 2006).

Based on the analysis of construction innovation literature by Dickinson *et al.* (2005), studies on construction innovation so far lack specific focus on level of analysis, stage of lifecycle, and sector. The levels of analysis suggested so far involved the product, project, firm, industry and national levels. The construction firm level has received most attention in the analysed literature; this might be because the principal drivers for innovation are often created at the firm level (Seaden and Manseau, 2001). Innovation could be investigated in different stages of the project's lifecycle including the design, preparation, construction, and maintenance. As Winch (2003) argues, most product innovation in construction is excluded from the analyses in industry-based surveys. Architectural and engineering consulting firms that carry out most of the design work in construction, typically the most innovation in construction, are also excluded from the standard construction industry innovation classifications.

This point is developed further by Barrett *et al.* (2006) who point out that the standard definition of construction does not include much of the innovation rich and value-adding construction activity such as manufacturing, architectural and technical consultancy, business services, and real estate activities. The built environment cluster analysis provides a wider approach to analyse the operations and functions of the construction sector within the overall economy of a country (Carassus *et al.*, 2006). Adopting a built environment view helps analyse the major economic activities of manufacturing, production, asset management, project management, distribution, and services. A similar approach was adopted in one of the studies (Reichstein *et al.*, 2005) that included all firms in traditional construction as well as the firms involved in architectural activities, urban planning and landscape design,

quantity surveying and engineering consultancy and design activities in the variable broad construction sector.

2.6.4 Innovation Factors

While the history of every company which achieves successful adoption and delivery of innovative practice is clearly different in detail, it is speculated that there are some features which such firms have in common. The identification of these common features is useful to the firm itself as a validation of their own choices and practices but more importantly it can provide some suggestions for other companies wishing to lift their performance. In the construction industry context, this idea was championed by Winch (1998), who explicitly identified the need for “more case studies of the trajectories of construction innovations” to encourage innovative practice. There have been some specific instances of research which attempted to do this for particular segments of the wider Architecture, Engineering and Construction (AEC) industries. For example, Salter and Gann (2003) have identified many of the sources of innovation for engineering firms. Contractors and subcontractors, however, may well have different sources, as noted by Manley *et al.* (2004).

Gann (2001) found that the majority of construction organisations get their new ideas through published media and by participating in various industry networks. Blayse and Manley (2004) found that there are six primary influences which either drive or hinder construction innovation. These were: ‘Clients and manufacturers, the structure of production, networking, procurement systems, regulations and standards and the nature and quality of organisational resources’. However there has been relatively

little research into the operation of these factors for small contractors in the construction industry and virtually none in the QSCF.

It appears that not all of the above factors are applicable in a particular firm or organisation. In the study of Hardie and Karan (2008) on the enabling factors for innovation by small contractors, the factors that underpinned innovation were identified as: 'Networking with professional bodies and the wider community, organisational innovation and advanced business practices and good personnel and knowledge management' However, the limitations of these factors are overcome in recent studies that propose appropriate frameworks that capture innovation in totality.

2.6.5 Innovation Value Chain (IVC) and innovation framework for construction

The stages of innovation have been classified in various ways by different authors. Rogers (2003) offers five stages namely, knowledge, persuasion, decision, implementation and confirmation. Wolfe (1994) suggests ten stages including idea conception, awareness, matching, appraisal, persuasion, adoption decision, implementation, confirmation, routinization, and infusion. Tangkar and Arditi (2000) proposed a six-phase labyrinth of innovation, where the flow of successful innovation comprises need, creation, invention, innovation, diffusion, and adoption.

Hansen and Birkinshaw (2007) on the other hand presents innovation as a sequential, three-phase process that involves idea generation, idea development, and the diffusion of developed concepts that includes six critical tasks namely, internal

sourcing, cross-unit sourcing, external sourcing, selection, development, and companywide spread of the idea. In their classification, the whole process is referred as the IVC. The first phase is to generate ideas that can happen inside a unit, across units in a company, or outside the firm; the second phase is to convert or select ideas for funding and developing them into products or practices; and the third is to diffuse those products and practices.

Similarly, Roper *et al.* (2008) modelled IVC as a recursive process that has three main links such as 'knowledge sourcing' to assemble knowledge necessary for innovation, 'knowledge transformation' to translate knowledge into physical innovation, and finally 'knowledge exploitation' to improve the enterprise performance. The IVC offers a tailored and systematic approach to assessing firm-level innovation performance (Hansen and Birkinshaw, 2007). It is possible to apply the basis of the IVC framework and investigate the innovation process at the project level as well as the firm level.

Figure 4 shows the innovation framework that Ozorhon *et al.* (2010) adopted, where the stages of innovation are determined as ideas, conversion, and diffusion based on the IVC by Hansen and Birkinshaw (2007). In this model, based on the level of innovation capacity, ideas are generated through the acquisition of necessary knowledge and investment; these ideas are converted into product/ process/service innovations within the company; finally these innovations are exploited to achieve performance benefits and impacts. An innovation event, in the form of a new product or process, represents the end-of a series of knowledge sourcing and translation

activities and also the beginning of a process of value creation which may result in an improvement in the performance of the innovating business (Roper *et al.*, 2008).

The organisations employ a number of tools, techniques and strategies throughout the whole process and external factors such as drivers, barriers and enablers determine the effectiveness of creation and diffusion of innovation. In this respect, it can be stated that Milbergs’s (2004) framework at the national level is adapted for the construction industry to analyse firm level innovation process. The overall innovation performance is determined by the success of the IVC together with the benefits and impacts achieved through the innovations.

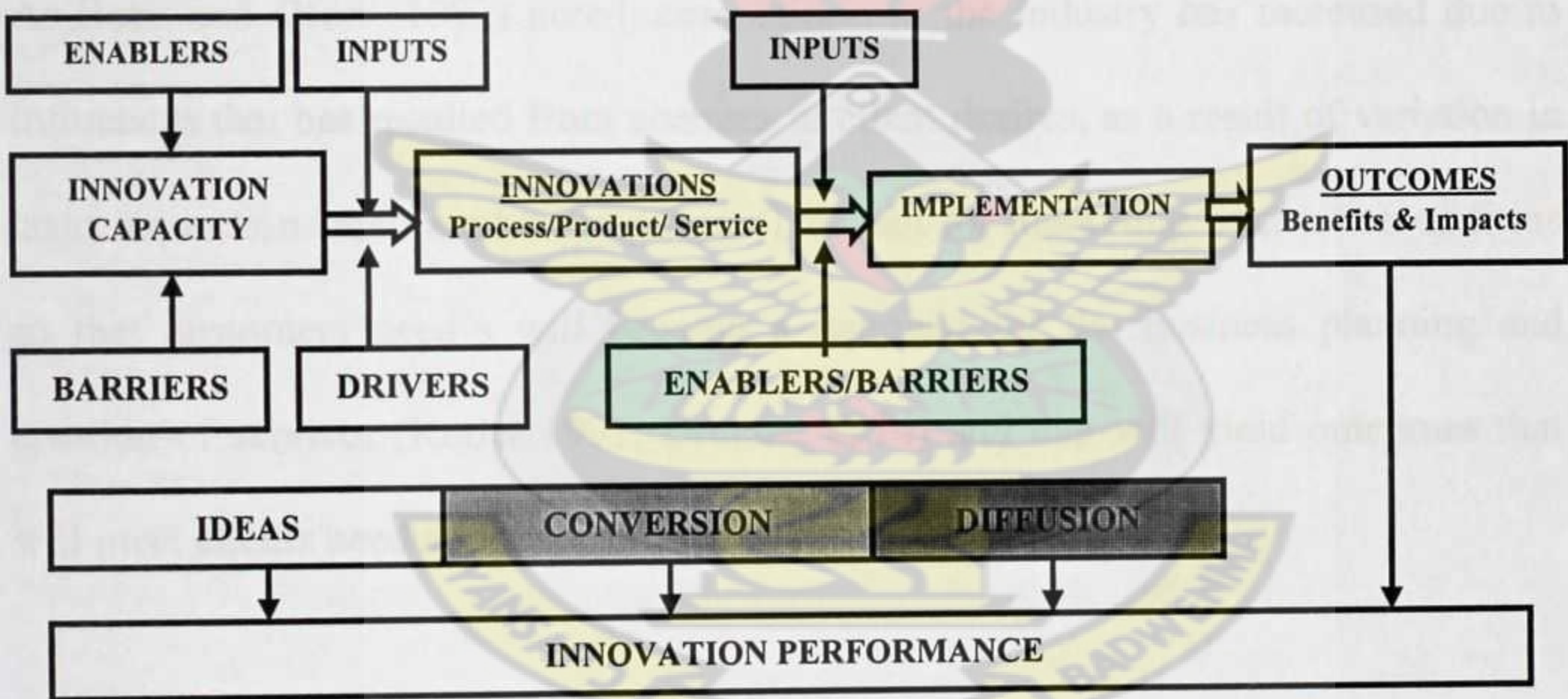


Figure 2.4: Framework for analyzing innovation in construction

Source: Adopted from Ozorhon et al. (2010)

2.7 MARKETING ORIENTATION AND INNOVATION

Drucker (1993) emphasized the importance of marketing and innovation for an enterprise with the following statement. “Because the purpose of a business is to create a customer, the business has two and only these two basic functions:

marketing and innovation. Marketing and innovation produce results, all the rest are cost.” Similar to this is the ideas of Desphande and Webster (1989) who used the degree of marketing orientation to explain a firms’ propensity to innovate. In the same vein, Payne (1988) described marketing orientation as the degree of responsiveness of a firm to satisfying the needs of its market.

These suggest that marketing orientation can stimulate an organizations urge to satisfy its market need and the attempt to achieve this can lead to innovation. This link must be maintained at all times because any innovation outcome that fails to meet the needs of the market may not be accepted no matter how good it might be. As Betts and Ofori (1992) noted, competition in the industry has increased due to influences that has resulted from changes in client desires, as a result of variation in taste, aspirations and purchasing power. This call for marketing orientation of firms so that customers need’s will become a template for the business planning and creation of services (Kotler 1991; Drucker 1974) and that will yield outcomes that will meet clients need and therefore guarantee its success.

2.8 SUMMARY OF LITERATURE

The literatures reviewed so far have touched on three key areas namely marketing practices, barrier to the marketing practices and potential marketing innovations. On the marketing practices, the key issues that were featured in the discussion included marketing planning, organization for marketing, marketing budget and marketing and promotional techniques.

On the barriers to the marketing practices, about seven barriers were identified out of which three issues were raised by Kotler and Conner (1977) as disdain to commercialism, association code ethics and equating marketing with selling. The other four as noted by Morgan *et al.* (1994) comprised of lack of in-house marketing expertise, professional limitation, lack of partner level acceptance of marketing as a legitimate management function and resource constraint.

Regarding the potential innovation factors, the six primary influences which either drive or hinder innovation dominated the discussions among other issues such as meaning and categories of innovation. The innovation factors as found by Blayse and Manley (2004) included: Clients and manufacturers, the structure of production, networking, procurement systems, regulations and standards, the nature and quality of organisational resources. Because, the organisations employ a number of tools, techniques and strategies throughout the whole process and external factors such as drivers, barriers and enablers determine the effectiveness of creation and diffusion of innovation, the approach by Ozohorn *et al.* (2010) considered comprehensive than the previous.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The research process involves a degree of philosophical retrospection and the process involves making choices at every step of the process. It is essential that the choices made have philosophical underpinning that will enhance its reliability and improve clarity. This chapter discusses among other issues the philosophical issues on which the research design is based. In addition to this is a discussion on the approaches and strategies adopted for the research as well as the approach to the choices made in the data collection and analysis method.

3.2 PHILOSOPHICAL TRADITIONS AND CONSIDERATIONS

3.2.1 Research Paradigm

Pollack (2007) describes the term paradigm as “a commonly shared set of assumptions, values and concepts within a community, which constitutes a way of viewing reality”. This shapes the researchers perception about the methodology to be adopted and techniques to be used. Alternatively, Bailey (1987) also sees paradigm as “a research perspective or view (a school of thought) that holds views about what research goals and methods are appropriate (how research should be conducted) and has its own values and assumptions”.

In social science research such as marketing, two main research paradigms are popular (Bailey 1987). On one hand is the positivism which assumes that social phenomenon obeys natural laws and can therefore be subjected to quantitative logic,

and on the other hand is interpretivism which argues that social phenomenon does not obey natural laws but is interpreted based on people's conviction, and or understanding of the realism surrounding the phenomenon (Bailey, 1987). Fellows and Liu (2008) describes such paradigm as "a theoretical framework which includes systems by which people view events" (p. 17). Paradigms operate to determine what views are adopted and also the approach to questioning the discovery. As a result, many works concerns verification of what is expected or /and explanation of unexpected results in accordance with the adopted, current paradigms.

3.2.2 Axiology, Ontology and Epistemology Considerations

It has been noted in practice that the difference between positivism and interpretivism is influenced by the axiological, ontological and epistemological assumptions underlying the research (Keraminiyage *et al*, 2005) as is illustrated in figures 3.1 below.

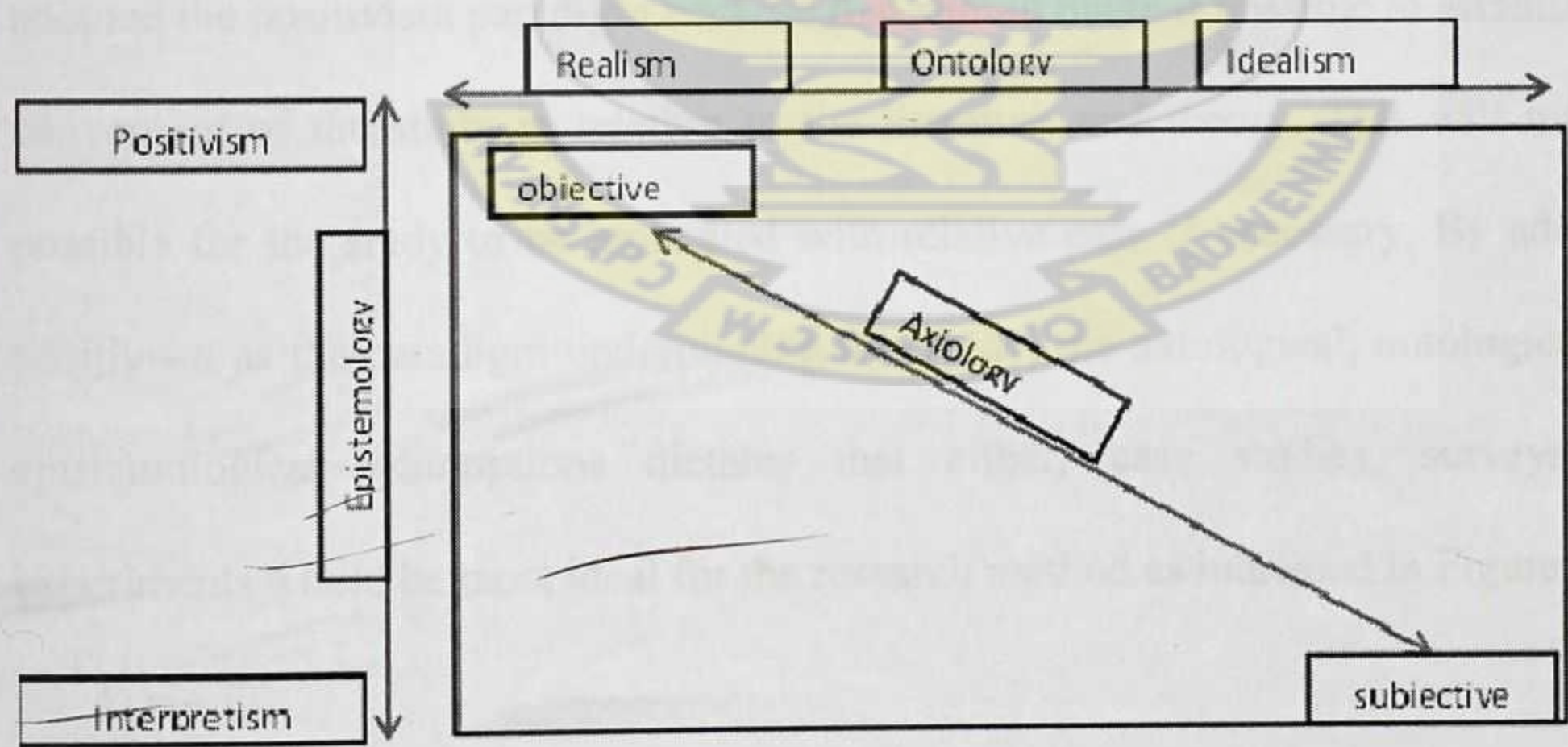


Figure 3.1: Dimensions of Research philosophy

Source: Adopted from Pathirage (2005)

Axiology considers the philosophy surrounding the reality, as to whether research philosophy is 'value free' or value driven. If the choice for what to study or how to study is examined by objective criteria, it can be described as value free research. On the other hand value laden is driven by subjective criteria. (Pathirage *et al.*, 2005). The ontological assumption is concerned with the nature of reality or idealism which influences the phenomenon that is being studied. Realists view the research reality with a pre-determined structure, whilst idealist advocates that different observers' may have different views. Epistemology is concerned with the relationship that exists between the researcher and the subject under investigation and offers the knowledge base that the researcher can use to investigate the relationship under consideration.

3.2.3 Research Paradigm Adopted

The research phenomenon under consideration and the key research questions influences the type of paradigm that has to be adopted (Pollack, 2007). The study adopted the positivism paradigm because that should make it possible to establish the convergent of the study in relation to the literature and theory. This will make it possible for the study to be replicated with relative ease if necessary. By adopting positivism as the paradigm underpinning this study, the axiological, ontological and epistemological assumptions dictates that either, case studies, surveys and experiments would be most ideal for the research method as indicated in Figure 3.2.

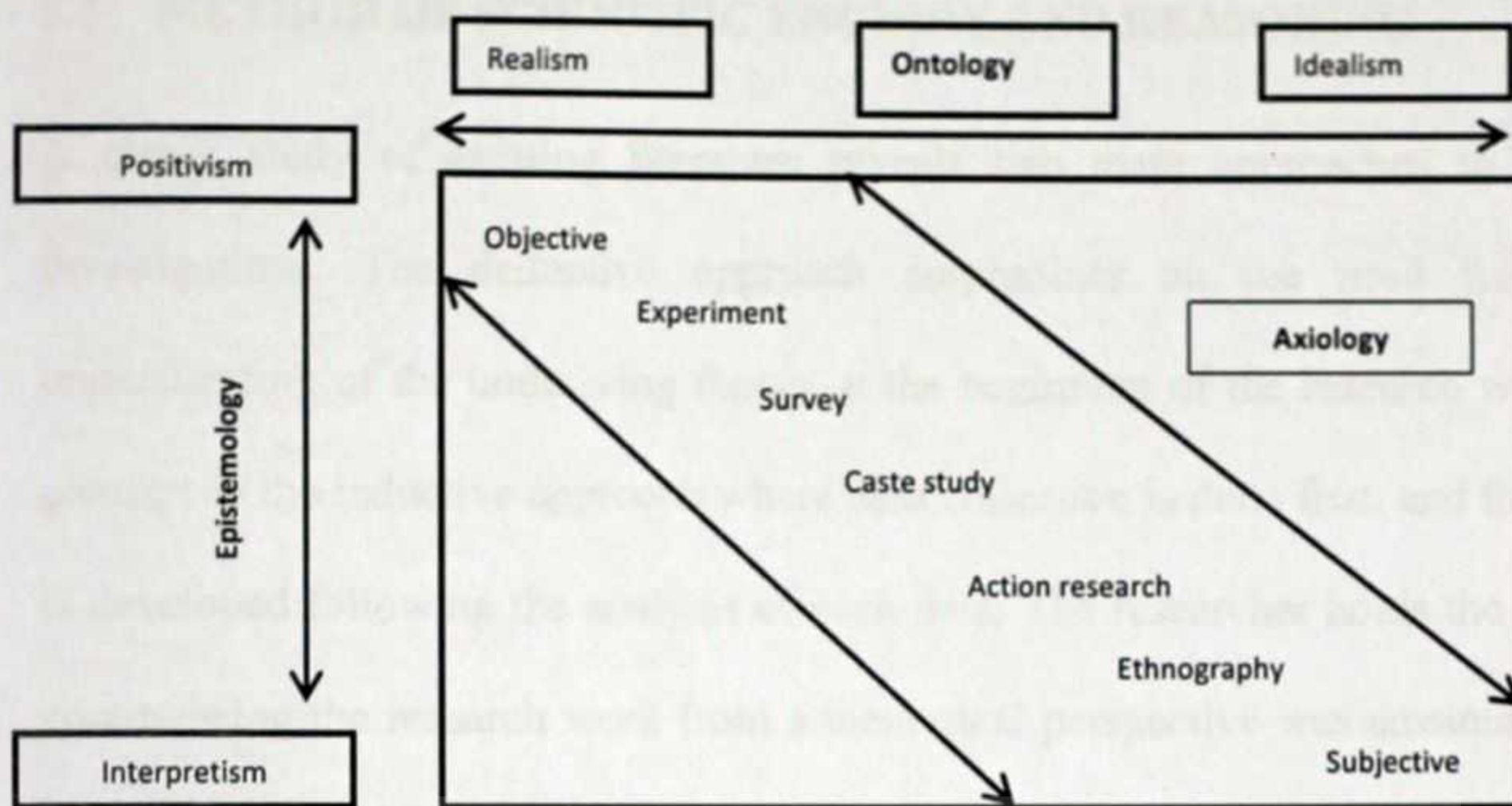


Figure 3.2: Influence of research philosophy on choice of research instrument

Source: Adopted from Pathirage (2005)

It is never possible to study this subject with experiment because experiments are carried out in laboratory setting where the investigator can manipulate behaviour directly, precisely and systematically (Yin, 2003). The nature of the investigation associated with this research, experiment was discounted. In surveys, samples are examined through questionnaires while case studies involves empirical enquiry that investigates a contemporary occurrence within a real life context (Yin, 2003). The theoretical basis for this study involved the collection of data to draw deductive conclusion but this cannot be done with case study approach which is built on induction or theory building. Considering these factors the survey technique was chosen as the most appropriate amongst the three possible options that were available.

3.3 METHOD OF SCIENTIFIC ENQUIRY AND REASONING

A closer study of existing literature reveals two main approaches to scientific investigations. The deductive approach emphasizes on the need for a clear understanding of the underlying theory at the beginning of the research which is in contrast to the inductive approach where data collection is done first, and then theory is developed following the analysis of such data. The researcher holds the view that commencing the research work from a theoretical perspective was advantageous for the study of marketing within the professional contest. This view was informed by the fact that a number of marketing studies that have been reported are supported by theoretical frameworks. The conceptual framework provides a rough picture of what data to collect as well as how to do it and that enhances efficiency and controllability of the data collection process (Fellows and Liu, 2008)

Within the extant literature, convergent views appear to suggest that the deductive approach mirrors the positivistic principles (Arditi *et al.*, 2008; Yisa *et al.*, 1995; Ozohorn *et al.*, 2010). Fellows and Liu (2008) explains that “quantitative approaches tends to relate to positivism and seek to gather factual data, to study relationships between facts and how such facts and relationships accord with theories and the findings of any research executed previously” (p.27) Yin (1994) advice that if the choice was made to use existing theories to formulate research questions and objectives, then the same theoretical propositions must be used to build a framework to organize the data collection and direct the data analysis. The data collection in the research was preceded by a review of theories and other similar studies that have been conducted. This was the approach that was adopted for the study and that

suggest a deductive method of scientific enquiry (Fellows and Liu, 2008). The next section gives further details of the fact established that deductive approach as a scientific method of enquiry mirrors the quantitative research strategy and that was used in the analysis.

3.4 RESEARCH STRATEGY AND DESIGN

3.4.1 Quantitative Approaches

This research falls in the quantitative research strategies. The approaches adopted in the research involved measurements in collecting the data. The approach was also built upon previous works which have developed principles that helped to decide the data requirements of this particular research. All the items that were measured in the research had their basis in theory from literature and that informed what had to be measured so as to achieve what was being measured.

The entire research had three key parts that were captured by the objectives. The first part involves marketing practices which was measured in terms of marketing planning, organization of marketing functions, marketing resources and marketing activities. These were built on the works of Yisa *et al.* (1995) and Arditi *et al.* (2008) that provided the theoretical basis for the measurements. In a similar manner, the second part which considers the marketing performance barriers were also deduced from literature such as that of Kotler and Conner, (1997) and Morgan *et al.* (1994) and that formed the basis for the measurement. In likewise manner, the third part which consisted of the potential innovation factor were also adapted from Ozohorn *et al.*, (2010) and used to measure the innovation performance of the QSCF. It is

obvious therefore that the measures had theoretical backings or principles that have been developed by others and have been used in similar studies. Judging based on the approach that is adopted for the study, it can be said that the research adopted mainly a quantitative approach as its strategy. As a result the ordinal data that was collected with a Likert rating scale was analyzed using quantitative analysis tools such as Factor Analysis (FA) and Principal Component Analysis (PCA) that were used. It becomes clear from the foregoing issues raised that the research is entrenched in the quantitative approach.

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3.4.2 Research Design and Process

This entails deciding on methodological approach in finding answers to the research questions set out in the chapter. It is about stating the way through which the research objectives can be accomplished (Fellows and Liu, 2008). That is to say the entire process and approach adopted for the studying the marketing orientation of the QSCF in Ghana. Kumar, (1999) identifies an eight step model for the research process and this was followed in the manner discussed below.

3.4.2.1 Formulating the Research Problem

This required stating the problem which was necessary to identify the researchers' destination. This was carefully done as specific and clear as possible because everything that follows the research process - study design, measurement procedures, sampling strategy, frame of analysis and the writing style of the dissertation report is greatly influenced by the way in which the research problem is formulated (Kumar, 1999).

3.4.2.2 Conceptualizing a Research Design

The use of scientific method in the research was considered at this stage since the validity of the findings of the research largely rest on how it was found (Kumar, 1999). The researcher considered issues such as the research design, logistical arrangements, measurement, procedures, sampling strategy, the frame of analysis and time frame for the study. This set out the logic in the enquiry.

3.4.2.3 Constructing an Instrument for Data Collection

This was the first practical step in carrying out the study. This was required as a means for collecting the data required for the study. This led to the construction of research instrument for the data collection – questionnaire.

3.4.2.4 Selecting a Sample

As the accuracy of the findings is largely dependant upon the way the sample is selected, the sample was therefore selected based on this two guiding principles: the avoidance of bias in the selection of the sample and the attainment of maximum precision for a given outlay of resources. This led to the selection of snowball sampling technique which is a form of non-random / probability sampling technique.

3.4.2.5 Research Proposal

After the preparatory works were done, everything was put together to provide adequate information in a manner that details out the operational plan for obtaining answers to the research questions for the research supervisor's attention.

3.4.2.6 Collecting Data

At the stage where the research problem had been formulated, study design developed, research instrument constructed and a sample selected, data collection was done next to provide the needed data from which inferences and conclusion could be drawn.

3.4.2.7 Data Processing

When the data was collected, analysis of the data was carried out using factor analysis and component analysis as well as Man-Whitney *U*-test and Wilcoxon test.

3.4.2.8 The Research Report

The report was written at this stage in an academic style, well divided into different chapters reflecting different themes embedded in the research. In all, five chapters constituted the research report with some front and end matters. The entire eight stage process is presented in figure 3.3 below. The figure considers the operational steps together with the required theoretical knowledge and the required intermediary knowledge that will make the process successful.

THE RESEARCH PROCESS

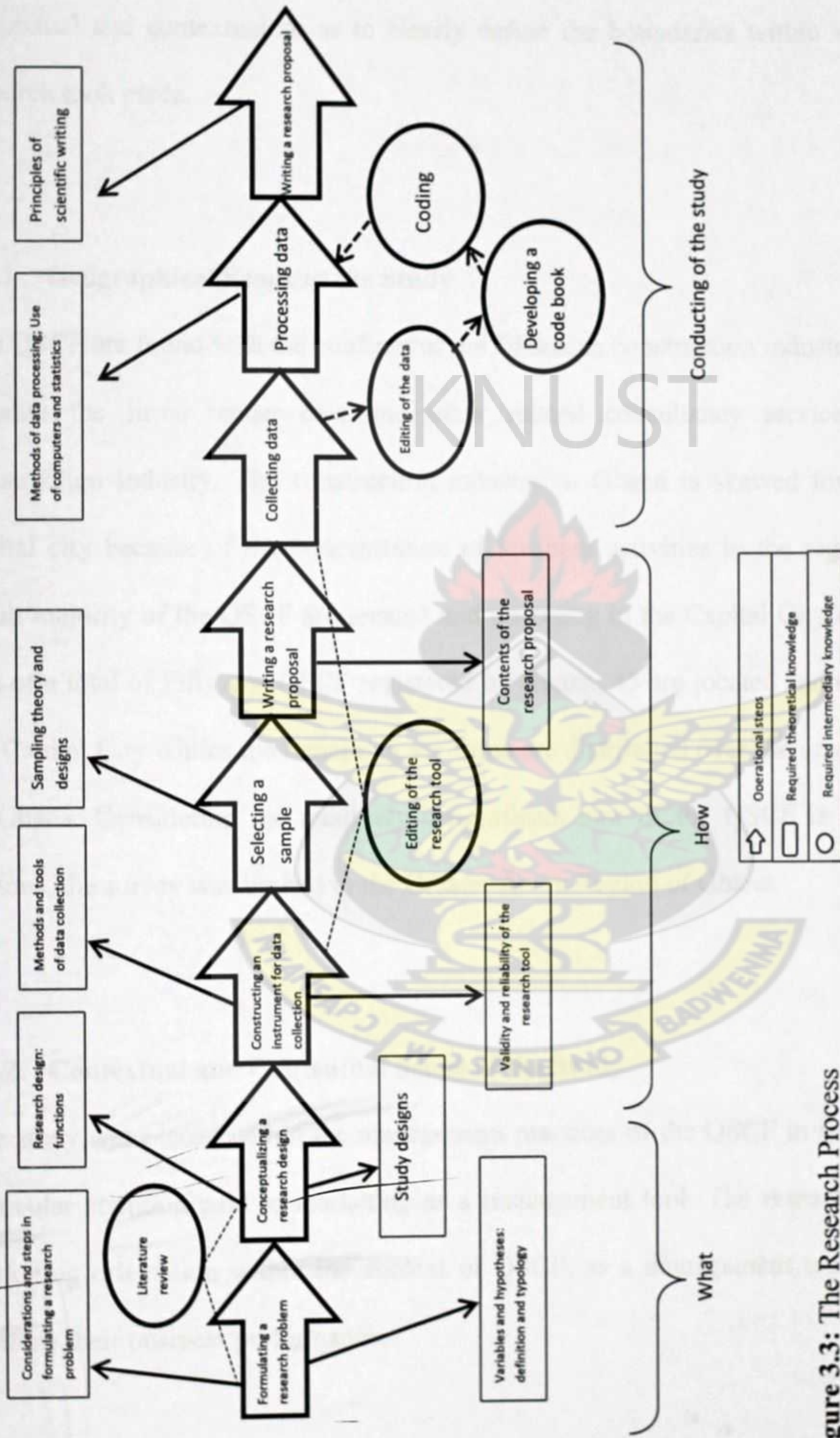


Figure 3.3: The Research Process

Source: Adopted from Kumar,

3.5 RESEARCH SCOPE AND BOUNDARIES

This section takes a look at the scope of the research in terms of its geographical, contextual and contextual so as to clearly define the boundaries within which the research took place.

3.5.1 Geographical Scope of the Study

The QSCF are found within the confines of the Ghanaian construction industry mostly, because the firms render cost and other related consultancy services to the construction industry. The construction industry in Ghana is skewed towards the capital city because of the concentration of business activities in the region. As a result majority of the QSCF are located and operating in the Capital City of Ghana. Out of a total of Fifty one QSCF registered by Ghana, 45 are located and operate in the Capital City while the remaining six firms are distributed over the other regions of Ghana. Considering the relatively insignificant size of the QSCF in the other regions, the survey was limited to the Greater Accra Region of Ghana.

3.5.2 Contextual and Contentual Scope of the Study

The study was placed within the management practices of the QSCF in Ghana with particular attention paid to ~~marketing~~ as a management tool. The research studied marketing orientation within the context of QSCF, as a management tool that can promote their business performance.

The content of the study comprised issues relating to marketing in the QSCF such as marketing practices in terms of marketing planning, organization of marketing function, marketing resources and marketing activities. These variables capture marketing practices from planning through to execution of the activities. It therefore provides a systematic approach to assessing the marketing practices of QSCF. That holistic approach captured the issue in totality. The work of Yisa *et al.* (1995) considered marketing planning, marketing organization and marketing resources, and the work of Arditi *et al.* (2008) also considered Parameters and constituents of marketing activities, but this study considers all the dimension of the issue to enhance a holistic assessment.

It also looked at marketing performance barriers in terms of external environmental barriers and internally generated barriers. These barriers captured all the barriers that were considered by Kotler and Conner, 1997; Morgan *et al.* (1994) and Dikmen, *et al.* (1995) under one single study. That approach afforded the opportunity to study the issues holistically. It finally, assessed the potential innovation factors that can advance innovation and improve performance such as drivers, enablers, external sources of information, internal inputs and barriers as well as innovation performance outcomes. These factors made it possible to study the subject with a step by step approach so as to identify their interconnections and contributions of the various parts to the innovation outcomes.

All issues regarding marketing were studied within the context of the professional service firms (PSF). It is important to note that the treatment given to marketing in

the profession service contest is quite different from the rest of other industry. These were all put together as an integrated and interconnected activity that can advance innovation and improve performance of QSCF in Ghana.

The respondents to the questionnaire were mainly Managing Directors (MD) of the QSCF. This decision was informed by the fact that marketing is a management tool and that the directors responsible for managing the firm was the most appropriate person for the study. The study discovered that 82% of the respondents (MD) were technical personnel mainly Quantity Surveyors and the remaining 18% of the respondents were people with management background instead of technical background.

3.6 SAMPLING TECHNIQUE AND SAMPLE FRAME

The technique that was adopted for selecting the sample is discussed in this section as well as the justification for its appropriateness for the study. Importance of sampling stems on the fact that it provides a practical means of enabling the data collection and processing of components of the research to be carried out whilst ensuring that the sample provides a good representation of the population.

3.6.1 Sampling Technique

The research adopted mainly non-probability/random sampling design of which snowball sampling technique is part. Non – probability sampling designs are suitable in situations where the number of elements in the population is either unknown or

cannot be individually identified (Kumar, 1996). Kumar (1996) describes the snowball sampling technique as a process of selecting a sample by using network. By adopting this approach, a few QSCF that were known and easily assessable were contacted and questionnaire administered to them. The known QSCF were then asked to identify the other QSCF and those identified by them also become a part of the sample. These new firm were also asked to identify other QSCF and in turn those identified also became the basis for further data collection. This process continued until the saturation point when the total number of QSCF operating in the Capital City was reached.

The usefulness of this sampling technique for the research stems from the way QSCF do their business. It is extremely difficult to get any information about either the firms or their activities. The names of the firms are available on the GHIS membership registered list, however the point of location of the firms as indicated by the registered list were in most cases nonexistent and in many cases that locations were not exact to enhance identification. Lack of directional signs even worsens the situation. It appears some did not even have offices and the researcher had to contact them at other avenues that brings the firms together such as the QS annual week celebration. These issues made it difficult to have ready access to the QSCF and it is upon these reasons that the snowball sampling technique was adopted for the study. Fellows and Liu (2008) emphasize that the snowball sampling involves data which are difficult to assess, perhaps because the individual sources of data cannot be identified readily. Under such situation, Fellows and Liu (2008) adds that the researcher may identify a very small number of sources (respondents) and, after collecting data from each one, requests that source to identify further sources thereby

progressively building a sufficient sample. This was the approach that was adopted as indicated.

3.6.2 Sample Frame and Criteria for Selection

Any quantity surveyor who is duly registered by the quantity surveying division of GHIS and earns his livelihood by engaging in activities so described as the duties and function of the quantity surveyor (QS) in the GhIS constitution and the Act establishing the professional bodies (NRCD 143) may be described as QS in practice. These QS in practice are found in two categories as:

1. Those self-employed in consultancy business in the private sector; and
2. Those in employment in Government or in companies in the private sector.

The other group of those in employment can be found in tertiary education institutions such as Universities and Polytechnics.

The research focuses on the first category of QS in practice which is made up of private self-employed firms that basically is a consultancy firm. This is because these firms by their set up allow them to experience almost all the services QSCF can offer. These are private consultancy firms that are in business to make profit by providing customer centered services to enable the firm survive in their business environment. This must be distinguished from QS in employment by various establishments such as government and its agencies, education and private companies. This distinction is necessary because for quantity surveying practice under employment, the overall organizational set-up and structure may be such that priority is given to some types of function than others. In government services, the focus is on general supervision of the projects and any private consultants where they are involved in the project. Likewise in contracting organization such as a

contractor, pre contract functions are significantly done only where such projects are offered to all for such. In the same way in tertiary institutions, the focus is on instruction, training and research. It is therefore evident that the QSCF are the only set-up that is involved in all the range of services on offer and as such can be described as doing business. These QSCF makes the sample frame of the study.

3.7 DATA COLLECTION METHODS

This section discusses the methods used in collecting the data. It looks at the sources and type of data, tools for collecting the data, design of the questionnaire and content, questionnaire administration and the response rate that was achieved.

3.7.1 Source and Type of Data

Two sets of data – primary and secondary data were used in the study. The primary data are the field data that were obtained from the respondents. This was gathered with a structured questionnaire whose content was made up of closed ended questions only, and the respondents themselves recorded their responses in the spaces provided in the questionnaire according to the instructions. The secondary data was extracted from documented facts using plain sheets and other relevant materials. The data extracted from literature formed the theoretical framework for the research. Both direct and indirect sources provided the data. The respondents were supposed to be directors of marketing but these were not available in most of the firms. In the event that a firm does not have a marketing director, the director or a top manager was contacted for the research.

3.7.2 Data Collection Tool

Questionnaire was the main tool that was used for the research study. A questionnaire is a written list of questions, the answers to which are recorded by respondents themselves. The respondents read the questions, interpret what is expected and then write down the answer. The content of the questionnaire was clear and easy to understand. The layout made it easy to read and at the same time pleasant to the eye with a carefully designed sequence that made it easier to follow.

The content of the questionnaire was mainly closed ended with spaces for respondents to indicate their preferred choice by ticking the spaces provided that matches the choice against the item being measured.

3.7.3 Design and Content of Questionnaire

The questionnaire was designed to be in line with the objectives. There were four main parts to the questionnaire with each part addressing one specific objective except the first part which was designated for demographic information about the firm.

3.7.3.1 Demographic

This section of the questionnaire contained demographic information related to the designation of the respondent in the firm; the size of the firm in terms of the number of employees; experience of the firm in terms of the number of years the firm has been in existence; the key component of education and training of the respondent and the type of work the firm offers its services. The purpose of this section was to compile general information about the characteristics of the firms and to make

different categorizations among the firms. The categorizations were used as control groups in the statistical analysis to establish the effect of different firm characteristics on their marketing practices. This information was needed to establish the potential credibility of the data and also as control variables to group the samples to enables comparison to be made in order to establish if any differences exists in the items being measured with regards to different groupings.

Given the descriptive nature of the data in this section of the questionnaire, descriptive statistics such as percentages, pie and bar charts, means, medians, mode and similar others were used to make meaning out of the data and to present the data in a manner that is appealing and quite understandable.

3.7.3.2 Marketing Practices

The second section of the questionnaire sought to elicit information on the firms' way of carrying out the marketing activities in order to assess the extent to which marketing is implemented in the firm by looking at the level of importance the firms attach to these practices. A total of 50 variables were categorized under four constructs namely: marketing planning, organization of marketing functions, marketing resources and marketing activities. The marketing activities alone had 25 variables and that made it necessary to categorize the variables also under headings such as product, price, place, promotion and people rated activities. This construct was adopted from Arditi *et al.* (2008). For the remaining 25 variables, 11 operational

variables were identified under marketing planning, 7 operational variables were identified under organization of marketing functions and 7 operational variables were also identified under the marketing resources construct.

Having decided on the rating scale, Likert scales was adopted to help elicit the appropriate ratings. The conventional five-point rating scale was used as Oppenheim (1992) suggests that more complex scoring systems possess no significant advantage. Subsequently, the variable were ranked per their level of importance by the respondents using Likert rating scale of 1-5, where 1 = not important, 2 = less important, 3 = moderately important, 4 = important and 5 = very important. Although, Likert rating scales are for ordinal data measurement, Blaikie, (2003) establishes that they can be assumed as interval measures if the spacing between them is equal as the situation is in this case. In that situation, statistical tools such as factor analysis can be used to analyze such data so that they can be incorporated into the development of the framework.

3.7.3.3 Marketing Performance Barriers

The third section of the questionnaire was used to elicit information regarding the barriers that hinder the firms' effort in mounting an effective marketing programme. In all eight factors were extracted from literature. Kotler and Conner (1997) identified three factors namely: disdain of commercialism, association code of ethics and equating marketing with selling. Morgan *et al.*, (1994) added additional four factors to the list as: professional limitations lack of partner, level acceptance of

marketing as a legitimate business function, resource constraints and lack of in-house marketing expertise. The last factor as identified by Dikmen *et al*, (2005) is Engineers Paradigm. The objective of this question is to identify the factors that inhibit the marketing performance of the firms and the various level of severity to the firms. These factors were put together as a measure for the marketing performance barrier. The Likert scale was again adopted to help elicit the appropriate ratings, as in the previous section. The convention five-point rating scale was used for the same reason indicated in the section 3.6.3.2.

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The variable were ranked per their level of severity by the respondents on a five-point likert rating scale of 1-5, where 1 = not severe, 2= less severe, 3= moderately severe, 4 = severe and 5=very severe. This was to be subjected to factor analysis to generate the correlation between the variables to enable classification of the factors into groups so that they can be incorporated into the framework to advance innovation and performance improvement.

3.7.3.4 Potential Innovation

The innovation performance factors represented another dimension of the research. It is believed that marketing orientation is a measure of a firm's propensity to innovate (Desphande et al., 1992). That suggests that marketing is irrelevant if cannot lead to innovation. The operational measures were operationalized from the constructs: drivers, inputs, sources, enablers and barriers. Seven operational measures were identified under drivers, eight under inputs, seventeen under sources, twelve under

enablers, and sixteen under barriers. A total of 60 variables were identified to represent the potential innovation parameter.

The drivers are the factors that create the need for an organization to innovate and the part of the section was intended to shed light on the main driver of innovation in the firm. This will create the awareness for the firms to take advantage. A total of seven factors constituted this construct. The inputs are the actions and processes that organizations take to generate ideas themselves. A total of eight variables constituted the construct. The sources are the external sources of information that can foster innovation unlike the inputs which are from the firms themselves. This was included to determine whether the push towards innovation in the form of new product or service or materials from suppliers or new concepts from external sources or the pull for innovation in order to meet demand is more significant or not. The enablers are the factors that promote innovation within a firm. The object of this question was to help understand the factors that are seen as significant in promoting innovation in an organization. Barriers are the factors that impede the uptake of innovation within an organization. The objective therefore was to elicit from the respondents the main barriers to innovation for their firm. The sources, enablers and barriers had 19, 12 and 16 variables respectively. Each of the five construct was ranked on a five-point Likert rating scale of 1-5, where 1 = not important, 2 = less important, 3 = moderately important, 4 = important and 5 = very important.

In this section also was another question whose objective was to assess the extent to which the firms derive the listed innovation outcomes. In all, 16 variables constituted

the construct that was ranked on a five-point Likert rating scale. The respondents indicated how often they realize those impact or outcomes of innovation on a five-point likert scale of 1-5, where 1= never, 2= rarely, 3= sometimes, 4= usually and 5 = always.

3.7.4 Questionnaire Instrumentation and Administration

A set of questionnaire had four pages and ten question in it. The question were neatly arranged and put in tables with boxes for respondents to indicate their preferred choices by ticking and appropriate box that corresponds with the question. Question number one to number five were on the firms demographics. This was followed by marketing practices questions up to question seven. Question eight was on marketing performance barriers while the remaining two questions were on potential innovation factors. The questionnaires were administered by the researcher himself with the help of an assistant who know the capital city very well. The assistant's job was to assist in the exact locations of the offices of QSCF. The research began the administration of the questionnaire with firms he knows and asks from the firm to give him direction to another firm named by the researcher. This continued until it got a point where it appears the remaining firms were non-existent.

After several attempts to locate some offices proved futile, another approach was adopted. When the questionnaire administration and retrieval entered the second month which is February, the researcher took advantage of annual week celebration programme of the GhIS, to contact those firms whose offices were never found by him. This was a success, as the directors of the firms who were present had the opportunity to collect copies of the questionnaire. Even that, the researcher had to go

to their offices several times and again in order to retrieve the answered questionnaire. In some firms the researcher had to go to their offices more than five times before he could get the questionnaire.

3.7.4.1 Response Rate

Kumar (1999) explains that one who obtains 50% response rate is lucky because sometimes it may be as low as 20%. However, a completely unprecedented situation occurred. Surprisingly, after two and half month of the fieldwork, the researcher was able to retrieve the entire administered questionnaire. This 100% response rate could be attributed to a number of strategies that the researcher put in place. Before the fieldwork begun, the researcher took the list of QSCF in Ghana from the GhIS. This could have made the work easier but the addresses that were indicated in the list were postal addresses but not office location addresses. The firms' whose location was not possible in the snowball approach were located at the lecture series that was organized by the GhIS. It was a coincident that the annual week celebration of the GhIS fell at the right time for the researcher. The researcher's participation of the annual week celebration yielded much unexpected results. This event made it possible for the researcher to administer the questionnaire in a collective situation and this according to Kumar (1999) is a sure strategy that can reduce or even eliminate the problem of low response rate that normally characterizes questionnaire survey.

3.8 DATA ANALYSIS METHOD

This section discusses data preparation and treatment prior to analysis as well as the analytical tools that were used in the analysis.

3.8.1 Data Preparation and Treatment

Upon receipt of the questionnaires which were duly filled by the respondents, a visual inspection of the data one after the other was done to determine the level of compliance to the instructions provided for answering the questionnaire. The impression gained after the exercise was that the respondents had done creditably well. On the basis of that, the entire returned questionnaires were declared usable for subsequent analysis.

Coding was done next. This involves assigning values for the variables involved for SPSS to recognize them by this numbers. Also, short codes were also used to represent the variables that look like sentences. After this exercise, data entry began by inputting the data into SPSS for subsequent analysis to begin. Data editing commenced at that point whenever it was detected that some the entries were missing. These issues were resolved by programming SPSS to automatically deal with the missing observations. The output of the SPSS was further confirmed by plotting histogram of the variables involved and using the mean values to replace the missing scores.

Finally, histograms of the raw data were plotted and printed. The print of the raw data was critically and carefully scrutinized visually to detect any errors that might have occurred at the point of entering the data into SPSS. The inspection did not reveal any inconsistencies. On the basis of that the data was declared ready for further analysis as discussed in the next section.

3.8.2 Analytical Tools

3.8.2.1 Analysis of Demographic data

The characteristics of the respondents firms was analyzed descriptively using such statistical tools like mean, mode, range, charts (pie and bar) and frequency distribution. The demographic variables that were measured include size of firm in terms of number of employees, experience of firm in terms of number of years and education type of respondents.

3.8.2.2 Factor Analysis (FA)

The specific objectives of the study were analyzed with Factor Analysis (FA). Factor Analysis is a multivariate method which analyses relationships among difficult to interpret correlated variables in terms of a few conceptually meaningful, relatively independent factors, each of which represents some combination of the original (Rummel, 1970; Kleibaum *et al.* 1988; Comrey & Lee, 1992). That is, variables are grouped into relatively small number of factors (factors extraction) that can be used to represent relationships among sets of many interrelated variables (Norusis 1992). Fellows and Liu (1997) describes a factor as a type of latent construct in that a

construct is an amalgamation of variables and is latent because it cannot be observed (and measured) directly but only through the constituent variables. Factor extraction is mostly done by means of Principal Component Analysis (CPA) which transforms the original set of variables into a smaller set of linear combinations that accounts for most of the variations of the original set.

Objective One

Principal component analysis (CPA) was used to find the weights of marketing practices (that is, marketing planning, organization of marketing functions, marketing resources and marketing activities). Since the marketing practices were already categorized into groups, they were treated as one latent factor in order to determine each practice's contribution to the explanation of the overall marketing practices. After using CPA in determining of the weight of each practice, their means were calculated. This was to aid in assessing how important each of the practice to the firms. The means and standard deviations were used since they take into consideration all the observations under study.

Mann-Whitney U test was used to compare differences in terms of age, size and educational type of the firms in terms of marketing practices. This test was used because it allows for comparison of two independent populations when the data are at ordinal level (Field, 2005). Here, rating of level of important of marketing practices using a Likert scale is an ordinal level measurement, thus, making Mann-Whitney U an appropriate test than t-test.

Also, the Wilcoxon signed rank test was used to determine whether two samples differ from each other when a relationship exists between the samples. That is, when each data point in one sample is paired with a data point in the other sample. The appropriateness of this nonparametric test for the study stems on the fact that the data are ordinal that was collected via a five-point rating scale.

Objective Two

The eight items on barriers to marketing performance were subjected to principal component (PC) with varimax (orthogonal) rotation, to ascertain the appropriate latent factors for the hypothesized two-factor model, since no latent factor has been extracted from the barriers as the barriers can be explained by two factors looking at the issues considered. Factor analysis was used since the measurement of the variables can be treated as scores (measure of level of important). Factor analysis would be an appropriate technique only if the underlining assumptions under factor analysis hold. The assumptions are sample size and correlation among the variables (barriers).

It appears that the reliability of factor analysis has been tied to the sample size by many researchers and many are of the view that appropriate sample size is the most important factor with the introduction of simulation and Monte Carlo test, empirical results have demonstrated that the absolute magnitude of the factor loadings is rather the most important factor (Guadagnoli and Velicer 1988). The authors assert that if a

factor has four or more loadings greater than 0.6, then it is reliable regardless of the sample size. On the basis of this the sample of 45 was subjected to factor analysis.

After extracting the factors, they were then run as one latent factor using Principal Component Analysis as has been described above.

Objective Three

The analysis for this objective was carried out in the same manner using the same analytical tools as described for objective number one. Details of tests that were carried out to determine the suitability of the data for the particular analysis conducted such as the Kaiser Mayer Olkin measure of sampling adequacy, Kendall's coefficient of concordance and Barlett's test of Sphericity are indicated appropriately in the next chapter.



CHAPTER FOUR

RESEARCH FINDINGS AND ANALYSIS

4.1 INTRODUCTION

The data collected from the questionnaire survey were analysed by using statistical techniques including descriptive statistics on various firm characteristics, inferences making and factor analysis of the various constructs. To generate a systematic analysis format, statistical software, statistical package for social sciences (SPSS) was used. General characteristics of respondents should be considered while interpreting the research findings.

4.2 CHARACTERISTICS OF FIRMS

4.2.1 Experience and Size of Firms

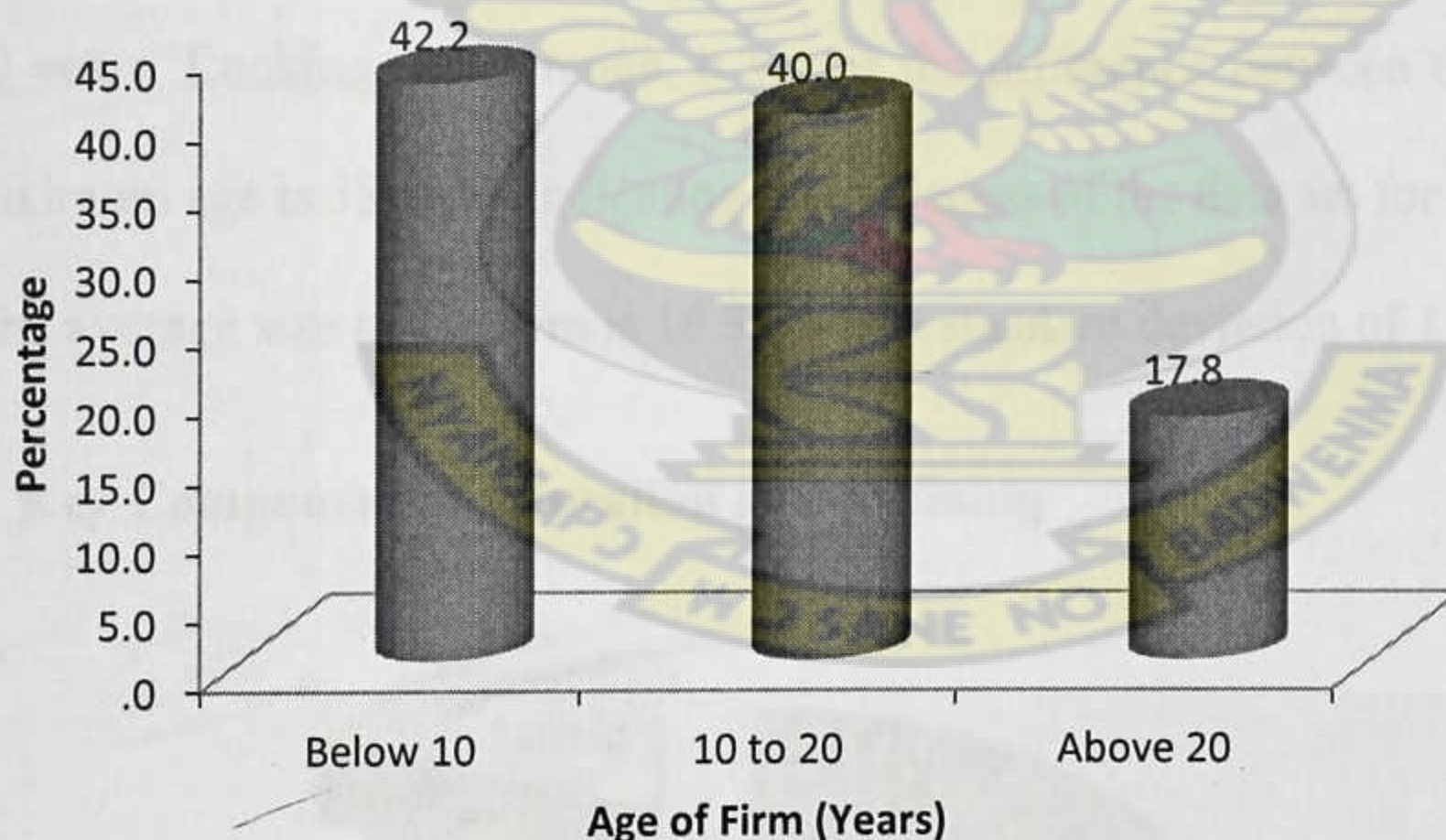


Figure 4.1: Experience of firms in terms of years of existence

From Figure 4.1, it appears a greater majority of the firms are below 20 years old. A total of 82.2% falls within this category with remaining 17.8% older than 20 years.

Table 4.1: Descriptive Statistics on age and size of firms

Statistic		Age of Firm (Years)	Firm Size (Number of Employees)
Mean		13.24	16.33
95% Confidence Interval for	Lower Bound	10.58	12.85
	Upper Bound	15.91	19.82
Mean			
5% Trimmed Mean		12.59	15.10
Median		11.00	13.00
Variance		78.462	134.545
Std. Deviation		8.858	11.599
Minimum		2	5
Maximum		40	52
Range		38	47
Interquartile Range		9	9
Skewness		1.316	1.738
Kurtosis		1.265	2.569

Source: Field Data, 2013

From table 4.1, the average age of the firms was 13.24 years with a standard deviation of 8.86 years. The least value was found to be 2 years, while the highest was 40 years. Looking at the range, it seems the difference between the minimum and maximum age is 38 years indicating the wideness of the data set for age of firms. Also, the average size of the firm is 16.33 with a standard deviation of 11.60.

4.2.2 Key Component of Education and Training

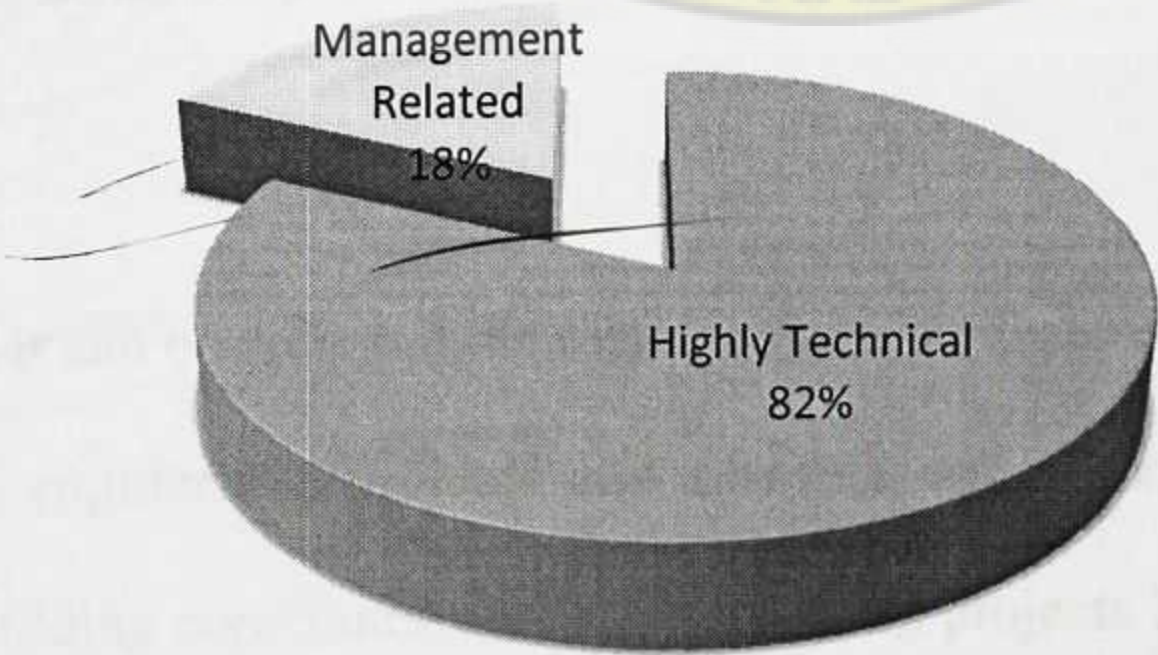


Figure 4.2: The key component of Education and Training of respondents

Source: Field Data

It was found from Figure 4.2, that majority of the quantity surveying firms' key focus on education and training is highly technical. In the industry dominated by 'engineer's paradigm' such situation is expected. Education and training of the professionals is narrowed towards production of highly qualified professional with no management training of which marketing is a key component. Again, Pearce (1992) attributed this to the fact that professionals believe that the most important part of their business is production side. As a result, professional education and training is streamlined or narrowed down to what will produce highly scientifically trained professional who have little or no management training (Harris, 1991). No wonder 82% of the respondents are highly technical professionals whilst the remaining 18% have some form of management related training.

4.2.3 Quantity Surveying Services

Table 4.2: Range of Services

Type of Work ^a	Responses		Percent of Cases
	N	Percent	
Building	41	66.1	93.2
Engineering Projects	20	32.3	45.5
Research and Training	1	1.6	2.3
Total	62	100.0	140.9

^a. Dichotomy group tabulated at value 1

Source: Field Data, 2013

In Table 4.2, it can be seen that the main services the firms offer are building related followed by engineering projects and research and development in that order. Evidently, building constitutes 66.1%, engineering projects 32.3% and research and development 1.6%. This is an indication that research and development is the least service offered by QSCF in Ghana.

4.3 MARKETING PRACTICES OF THE QSCF IN GHANA

Principal component analysis was used to find the weights of marketing practices (that is, marketing planning, organization of marketing functions, marketing resources and marketing activities). In order to determine the weights of different marketing practices within each marketing parameter, an index was calculated to normalize the factor scores, as only one principal component was extracted. The weight of the marketing practices was calculated using the factor score.



Table 4.3: Weighted Importance Ranking of the Marketing Practices by QSCF

Marketing Practices	Comp. Matrix	Comp. Score Coefficient Matrix	Weight of Practices (%)	Mean	St. Dev.
Marketing Planning					
Long range view of the entire business	.503	.039	9.31	4.20	.919
Careful Consideration of the firm's Strength	.587	.045	10.85	4.11	1.049
Assessment of the marketplace	.349	.027	6.46	4.07	.863
Definition of long term goals	.679	.053	12.56	4.02	.988
Identification of particular marketing opportunities	.527	.041	9.75	3.89	1.027
Planning to achieve a measurable programs	.426	.033	7.88	3.89	1.049
Time length/period/coverage of marketing plans	.599	.046	11.07	3.84	.928
Must be a continuous process	.666	.052	12.31	3.80	.894
Level of management responsible for marketing programs	.621	.048	11.49	3.78	.927
Formal approach to marketing planning	.450	.035	8.32	3.73	.915
Overall Statistics				3.93	.718
Organization of Marketing functions					
Top management's perceived level of priority of marketing plans	.568	.044	11.849	3.91	.848
Priority given to marketing in the business strategy of the firm	.576	.045	12.022	3.62	1.134
Systematic monitoring and evaluating of marketing programs	.681	.053	14.202	3.47	.991
Structured marketing department	.802	.062	16.709	3.22	.927
Director/board member as the head of marketing department	.624	.048	13.006	3.18	1.093
Formal marketing organization	.769	.060	16.036	3.18	1.072
Head of marketing is responsible solely for marketing functions	.775	.060	16.152	3.16	1.147
Overall Statistics				3.31	.787
Marketing resources					
Accessibility of funds for marketing activities	.722	.056	16.77	3.64	1.171
Availability of funds for marketing activities	.725	.056	16.85	3.42	1.076
The number of employees solely responsible for marketing	.423	.033	9.82	3.36	.883
Expertise of the marketing professionals	.751	.058	17.45	3.24	1.026
Adequacy of funds allocated for marketing activities	.597	.046	13.88	3.24	1.111
Employment of marketing professionals	.771	.060	17.91	3.11	1.112
Use of external marketing agencies	.315	.024	7.32	3.07	1.176
Overall Statistics				3.29	.917

Source: Field Data, 2013

From Table 4.3, in terms of marketing planning, continuous process had the highest percentage weight 12.31%, while assessment of the marketplace had the lowest

percentage weight of 6.46%. This shows that continuous process contribute more to marketing planning, whereas assessment of the marketplace contribute less. On the other hand, comparing the level of importance of marketing practices under marketing planning in terms of their contribution to the overall success of QSCF marketing performance, long range view of the entire business had an average score of 4.20 with a standard deviation of .919 indicating that it is the most important practice, whereas formal approach to marketing planning is considered to be less important, since its mean is 3.73 and its standard deviation is .915. This may be due to the fact that the industry is not capable of being planned (Moore, 1984; Pearce, 1992) and that mindset stifles them of its benefit. With organization of marketing functions, head of marketing being solely responsible for marketing functions had the highest percentage weight of 16.15% with the lowest mean rating of 3.16 and a standard deviation of 1.15, while top management's perceived level of priority of marketing plans had the lowest percentage weight of 11.85% with the highest mean rating 3.91 and a standard deviation of .848. This means that, though head of marketing being responsible solely for marketing functions is not important comparing to other activities under organization of marketing functions, its contribution to the variation or the explanation of the overall marketing practices is high. Similarly, top management's perceived level of priority of marketing plans is considered to be the most important than the other marketing practices under organization of marketing functions but its contribution to the variation or the explanation of the overall marketing practices is the least amongst them all. The indication of this is that the factors with greater bearing on the practices are rather less important for the firms as evidenced by the rating scores they gave. This irony may be attributed to the lack of understanding of the true meaning of marketing as

well as the benefits that can be accrued from its adoption. With respect to marketing resources, employment of marketing professionals had the highest percentage weight 17.91%. This shows that employment of marketing professionals contribute more to marketing resources. Also, accessibility of funds for marketing activities had the highest average rating of important, since its mean score was 3.64 with a standard deviation of 1.171. This means that, accessibility of funds for marketing activities is more important under marketing resources when dealing with the overall success of QSCF marketing performance. On the other hand, Use of external marketing agencies had the lowest percentage weight of 7.32% with the lowest mean rating 3.07 and a standard deviation of 1.18. This means that, use of external marketing agencies is not important comparing to other activities under marketing resources and it contribution to the variation or the explanation of the overall marketing practices is also small relative to the others.

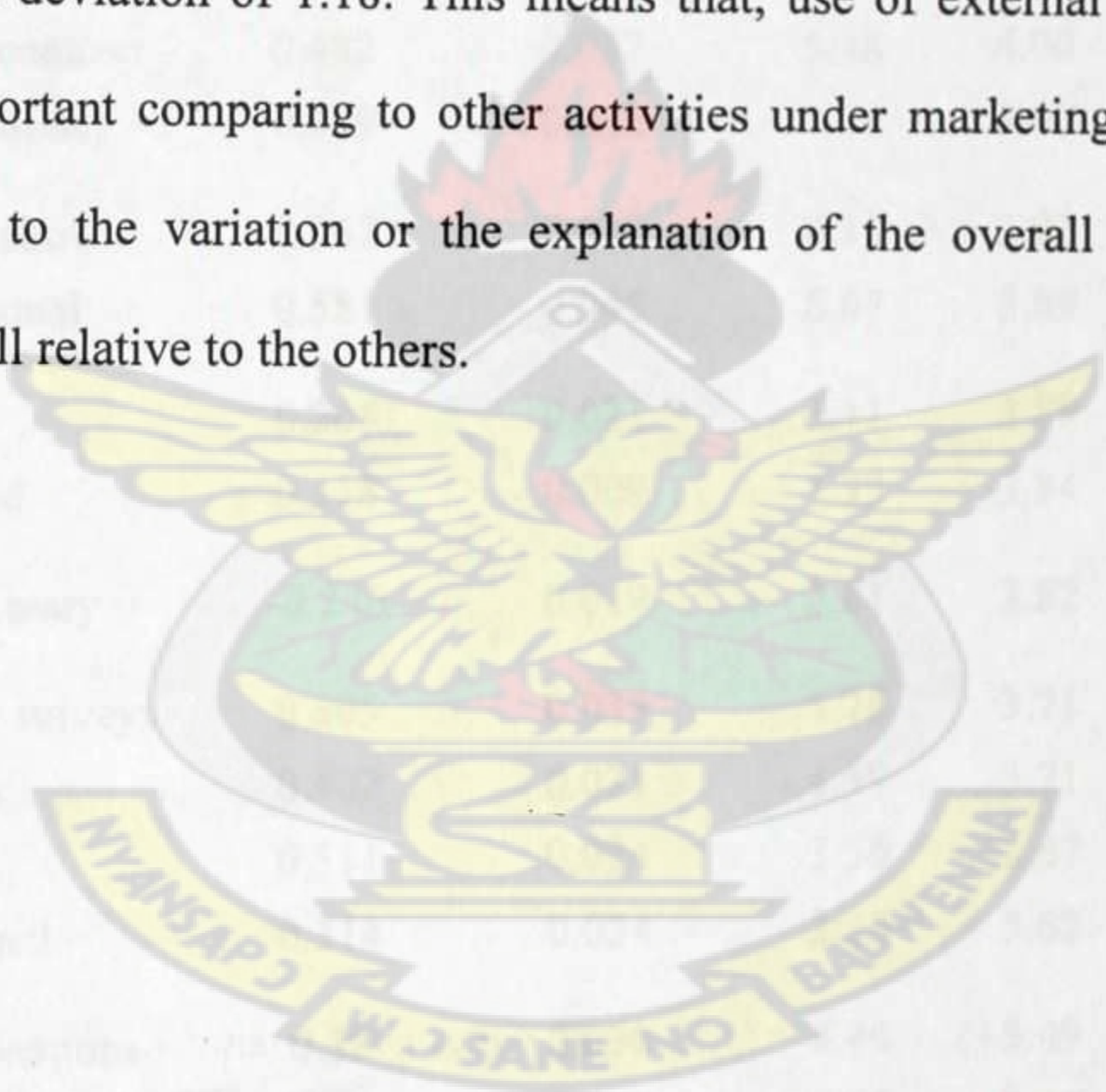


Table 4.4: Parameter and Constituent of Marketing Activities

Marketing Activities	Component Matrix	Component Score Coefficient Matrix	Weights of Activities	Mean	Std. Dev.
Product branding	0.22	0.017	2.52	4.33	0.769
Soliciting prospective clients	0.297	0.023	3.41	4.33	0.905
Recruiting high quality personnel	0.478	0.037	5.48	4.31	0.874
Seeking client satisfaction	0.403	0.031	4.59	4.29	0.991
Pursuing partnering agreements	0.187	0.015	2.22	4.20	0.869
Providing extended services	0.27	0.021	3.11	4.18	0.886
Seeking geographical expansion	-0.067	0.005	0.74	4.07	1.009
Maintaining company website	0.232	0.018	2.67	4.13	0.842
Offering competitive salaries	0.692	0.054	8.00	4.02	0.892
Offering customized contract	0.482	0.037	5.48	4.00	0.929
Making gifts with company logo	0.419	0.032	4.74	3.93	1.009
Participating in trade shows	0.367	0.028	4.15	3.91	0.949
Training for interpersonal skills	0.581	0.045	6.67	3.89	1.049
Training estimators	0.265	0.021	3.11	3.89	0.885
Printing brochures and newsletters	0.118	0.009	1.33	3.84	0.928
Providing free preliminary estimates	-0.246	0.019	2.81	3.82	1.114
Conducting customer surveys	0.505	0.039	5.78	3.71	1.079
Issuing news releases	0.402	0.031	4.59	3.71	0.991
Advertising	0.311	0.024	3.56	3.67	0.953
Employing professional marketers	0.314	0.024	3.56	3.62	1.154
Making charitable donations	0.38	0.030	4.44	3.49	0.968
Setting up scholarships/endowments	0.605	0.047	6.96	3.42	1.215
Proving client entertainment	0.069	0.005	0.74	3.36	1.09
Providing event/travel tickets	0.294	0.023	3.41	3.18	1.051
Organizing social events	0.518	0.040	5.93	3.16	1.186
Overall				3.86	.481

Source: Field Data, 2013

For the parameters and constituent of marketing activities; Product branding, Soliciting prospective clients, Recruiting high quality personnel and Seeking client

satisfaction had a mean score of 4.00. This shows that these activities are important to the QSCF. The importance that the firms attach to those activities suggests that the firms are becoming aware of the need to embrace marketing in order to survive in the competitive business environment. The need to be unique in product brand is necessary to achieve market differentiation which offers advantage to the firm over its competitors (Arditi *et al.*, 2008). Again, to build a brand depends on the quality of the personnel and it is the performance of this personnel that will lead to client satisfaction that will in turn ensure the firms survival.

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Pursuing partnering agreements, providing extended services, seeking geographical expansion, maintaining company website, Offering competitive salaries and Offering customized contract are activities that also had mean scores of at least 4.00. This indicates that, they are all important practices that have significant impact in the overall success of quantity surveying consultancy firms' marketing performance. Even though all the practices under parameters and constituent of marketing activities have percentage weight that do not exceed 10%, offering competitive salaries had the highest percentage weight 8.00%. This shows that offering competitive salaries contribute more to the variation or the explanation of parameter and constituent of marketing activities. On other hand, both providing client entertainment and seeking geographical expansion had the lowest percentage weight of .74% respectively. This means that they contribute less to the variation or the explanation of parameter and constituent of marketing activities.

4.3.1 Comparison of the Marketing Practice to Control Variables

The marketing practices are compared with the various samples grouping in terms of experience, size and the education type of respondent. This was done to determine if any significant differences exist in the various sample groups. Tables: 4.5, 4.6 and 4.7 gives the results of the Mann- Whitney *U* tests carried out to determine those differences.

Table 4.5: Comparison of the Weighted Importance Ranking of Marketing Practices by Experience

Marketing practices	Median Score		U	Z-value	P-value
	Years of Experience				
	Below 10	10 and Above			
Marketing planning	4.09	4.09	236.5	-.243	.808
Organisation of marketing functions	3.43	3.43	223.0	-.553	.580
Marketing resources	3.67	3.17	208.5	-.889	.374
Parameters and constituents of marketing activities	4.20	3.82	184.0	-1.449	.147

None of the differences are statistically significant at 95% confidence interval

Source: Field Data, 2013

Table 4.5 shows that there were no significant differences in marketing practices of QSCF who are below 10 years of operation and those who had at least 10 years of operation in terms of marketing planning ($U = 236.5$, $z = -0.243$, $P\text{-value} = 0.808$), organisation of marketing functions ($U = 223$, $z = -0.553$, $P\text{-value} = 0.580$), Marketing Resources ($U = 208.5$, $z = -0.889$, $P\text{-value} = 0.374$) and parameters and constituents of marketing activities ($U = 184$, $z = -1.449$, $P\text{-value} = 0.147$). The non significance of the differences in practices between the two categories of years of operation of the firms can be attributed to the fact that the firms look for

opportunities that fit their capabilities rather than adapt their capabilities to current and future market needs (Pearce, 1992). This attitude stifles any desire to develop.

Table 4.6: Comparison of the Weighted Importance Ranking of Marketing Practices by Firm size

Marketing practices	Median Score		U	Z-value	P-value
	Firm Size (Number of Employees)				
	Below 25	25 and Above			
Marketing Planning	4.09	4.59	12.0	-3.524	.000
Organisation of Marketing Functions	3.57	3.00	72.0	-1.506	.132
Marketing Resources	3.33	3.17	107.0	-.335	.737
Parameters and Constituents of Marketing Activities	3.88	3.90	109.0	-.267	.789

None of the differences are statistically significant at 95% confidence interval, except marketing planning

Source: Field Data, 2013

Table 4.6 shows that apart from marketing planning in which there is a significant difference in terms of firm size ($U = 12$, $z = -3.524$, $P\text{-value} = 0.000$), there are no significant differences in marketing practices of QSCF whose number employees are below 25 and those that are at least 25 in terms of organisation of marketing functions ($U = 72$, $z = -1.506$, $P\text{-value} = 0.132$), Marketing Resources ($U = 107$, $z = -0.335$, $P\text{-value} = 0.737$) and parameters and constituents of marketing activities ($U = 109$, $z = -.267$, $P\text{-value} = 0.789$). The non significant of the differences can be attributed to what has been described as inward-oriented management paradigm (Dikmen *et al.*, 2005). This culture prevents the firms from adopting modern managerial approaches such as marketing. As a result even when the firms grow in size no significant changes are seen in their management practices because business

is always done as usual. This is not surprising because management practices are dominated by the engineers paradigm as evidenced by the fact that 82% of the firms have top managers who are technically inclined than management.

Table 4.7: Comparison of the Weighted Importance Ranking of Marketing Practices by Educational type

Marketing practices	Median Score		U	Z-value	P-value
	Educational type				
	Highly Technical	Management Related			
Marketing Planning	4.09	4.14	142.5	-.164	.870
Organisation of Marketing Functions	3.57	3.22	112.0	-1.071	.284
Marketing Resources	3.17	2.42	96.5	-1.535	.125
Parameters and Constituents of Marketing Activities	3.88	3.86	125.0	-.683	.494

None of the differences are statistically significant at 95% confidence interval

Source: Field Data, 2013

Table 4.7 show that there are no significant differences in marketing practices of QSCF whose top managers holds qualification that is highly technical or management related. Evidently, the p-value for marketing planning, marketing resources, and marketing activities are 0.870, 0.284, 0.125 and 0.494, respectively, which are all greater than 0.05, indicating that there is no significant differences in the two categories. This can be attributed to the fact a greater majority of the respondents are highly technically inclined (82%).

The overall impression of the four marketing practices is that marketing planning is rated first followed by marketing activities and then organization of marketing functions and finally marketing resources as indicated by their means as 3.93, 3.86, 3.31 and 3.29 respectively. The Kandell's test was used to determine the existence of

any difference in the four marketing parameters. The result of which is given in Table 4.8

Table 4.8: Comparison of the Four Marketing Parameters

Statistics	Values
N	45
Kendall's W ^a	.286
Chi-Square	38.546
Df	3
Asymp. Sig.	.000

^a Kendall's Coefficient of Concordance

Source: Field Data, 2013

From Table 4.8, the kendall's coefficient of concordance is 0.286 with p-value of 0.000, indicating that there is a significant difference among the four marketing parameters. To identify which of the parameters that makes that difference, Wilcoxon signed rank test was used to identify the parameter(s) that contribute to the difference. Table 4.9 shows the results of the Wilcoxon's test.

Table 4.9: Comparison of Various Marketing Practice

Marketing Practices	Z	P-Value
Organisation of Marketing Functions Versus Marketing Planning	-4.623 ^a	0.000
Marketing Resources Versus Marketing Planning	-4.470 ^a	0.000
Marketing Activities Versus Marketing Planning	-2.060 ^a	0.039
Marketing Resources Versus Organisation of Marketing Functions	-.263 ^b	0.793
Marketing Activities Versus Organisation of Marketing Functions	-4.380 ^b	0.000
Marketing Activities Versus Marketing Resources	-5.841 ^a	0.000

^a. Based on positive ranks.

^b. Based on negative ranks.

^c. Wilcoxon Signed Ranks Test

Source: Field Data, 2013

Table 4.9 indicates that there are significant difference between organisation of marketing functions and marketing planning ($z=-4.42$, $-value=0.000$), marketing resources and marketing planning ($z=-4.47$, $-value=0.000$), marketing activities and marketing planning ($z=-2.06$, $-value=0.039$), marketing activities and organisation of marketing functions ($z=-4.38$, $-value=0.000$) and marketing activities and marketing practices ($z=-5.84$, $-value=0.000$) with the exception of marketing resources and organisation of marketing function in which there exist no statistically significant difference between them ($z=-.26$, $-value=0.793$). It suggests that QSCF attach more importance to marketing planning as well as performing the activities but organisation of marketing functions and marketing resources do not receive that same level of importance.

This indicates that some form of 'ad hoc' approach is adopted in performing marketing activities in the firm (Jaafar, *et al.*, 2008). It is important to note also that organisation of marketing functions and the allocation of the required resources if

they are not carefully done, all the planning and the activities that would be carried out is not likely to be successful.

4.4 UNDERLYING BARRIERS INHIBITING MARKETING PERFORMANCE OF QSCF IN GHANA

The eight items on barriers to marketing performance were subjected to principal component (PC) with varimax (orthogonal) rotation, to ascertain the appropriate latent factors for the hypothesized two-factor model. The factors were confirmed based on the content of the items with factor loadings exceeding .50, since the greater the loading, the higher the variable's status as a pure measure of the factor (Kilne, 2002). The result of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and the Bartlett's Test of Sphericity is shown in table 4.10.

Table 4.10: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.588
Bartlett's Test of Sphericity	Approx. Chi-Square	104.049
	Df	28
	Sig.	.000
Percentage variance explained by extracted factors		55.046%

Source: Field Data, 2013

To verify if the data is suitable for factor analysis, Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy and Bartlett's Test of Sphericity were used. From Table 4.10, with a KMO of .59 and a Bartlett's Test of Sphericity being statistically significant at 0.05, supporting the factorability of the data set (Ofori & Dampson, 2011). From screeplot in figure 4.3, there is a clear break or a change (or elbow) in

the shape of the plot, which is at factor two. Base on this, two factors was extracted to represent the barriers in marketing performance. From table 4.10, these two factors explained 55.05% of the total variation in the data.

The extracted factors together with the weights of each variable and their means are given in table 4.11.

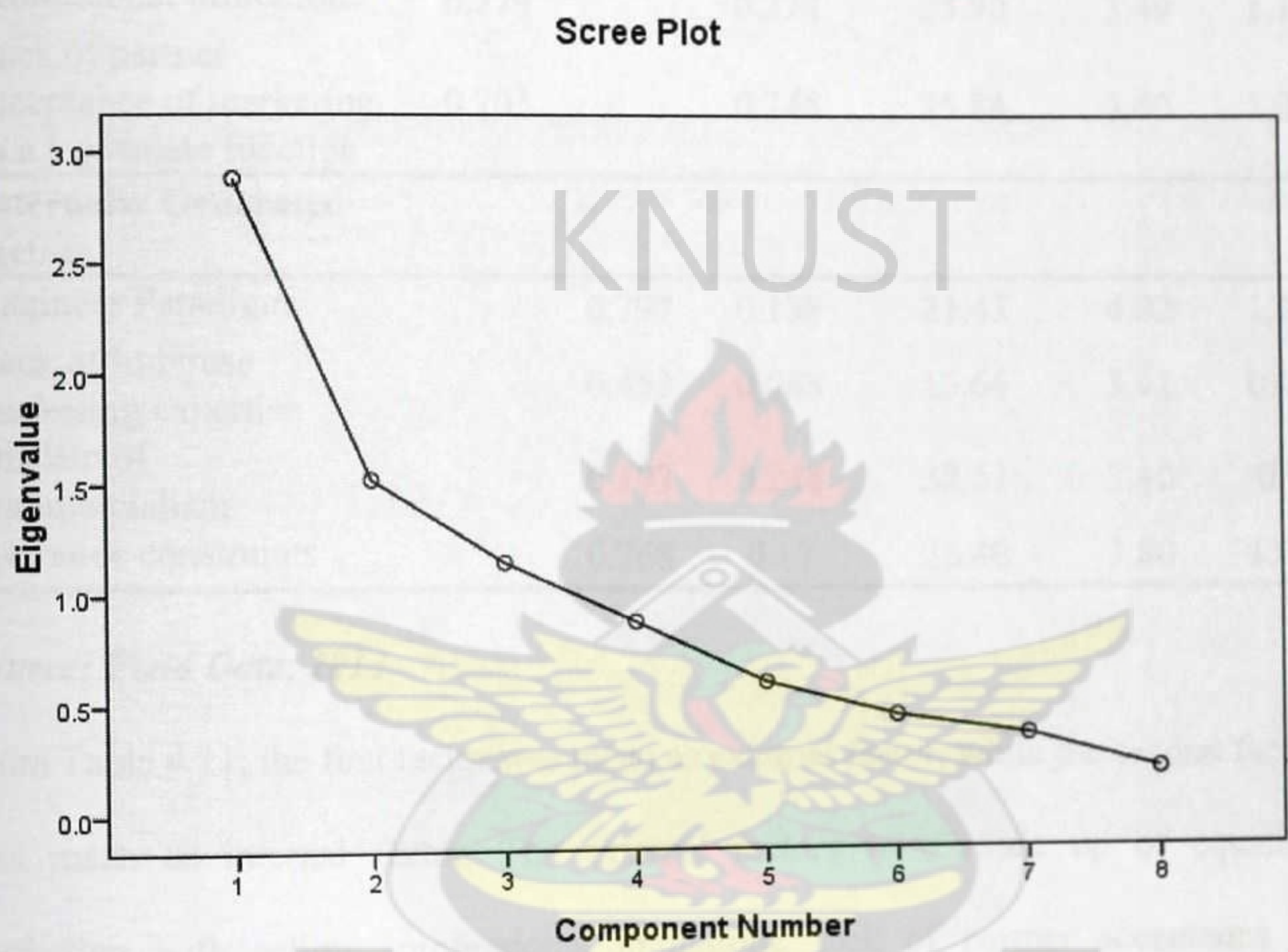


Figure 4.3: Scree plot of eigen values

Table 4.11: Factors Inhibiting Marketing Performance of the Firm

Barriers	Factor Loadings		Factor Score	Weight of Barriers	Mean	St. Dev.
	Ext.	Int.				
Externally Environmental Factors						
Association code of ethics	0.741		0.178	18.78	3.80	1.036
Equating marketing with selling	0.689		0.251	26.48	3.51	0.757
Professional limitations	0.779		0.274	28.90	3.49	1.121
Lack of partner acceptance of marketing as a legitimate function	0.703		0.245	25.84	3.40	1.074
Internally Generated factors						
Engineer Paradigm		0.797	0.138	21.43	4.02	1.252
Lack of in-house marketing expertise		0.453	0.088	13.66	3.91	0.701
Disdain of commercialism		0.193	0.248	38.51	3.40	0.78
Resource constraints		0.768	0.17	26.40	3.80	1.079

Source: Field Data, 2013

From Table 4.11, the first factor was mean as external factor, while the second factor was mean as internal factor. The external factors were made up of equating marketing with selling, professional limitations, lack of partner acceptance of marketing as a legitimate function and association code of ethics. They are the factors that pertain to the external environment within which the firms operate. They could also be described as institutional pressure that control or limit the activities of the firms. With the external factors, association code of ethics had a mean score of 3.8 with a standard deviation of 1.04. This indicates that association code of ethics is the most severe external barrier to marketing performance of the firms compare to other external factors. This is expected as Kotler and Conner (1977) attributes this to the fact that professional bodies have elected stringent rules against commercial behaviour. Again, lack of knowledge about the true meaning of marketing makes

them equate marketing to selling (Richardson, 1996) which prevents them from practising marketing because most selling techniques are banned by the professional bodies. On the contrary, association code of ethics is the external factor that contributes less to the variation in the data concerning barriers to marketing performance of the firms. This is because association code of ethics had a percentage weight of 18.78%. In addition, equating marketing with selling had the highest percentage weight of 26.48, meaning, it contribute more to the variation of barriers of marketing performance than the others.

The internal factors were made up of engineer paradigm, lack of in-house marketing expertise, disdain of commercialism and resource constraints. They are those that have to do with the firms themselves such as management culture, practices, etc.

With the internal factors, engineer paradigm had a mean score of 4.02 with a standard deviation of 1.25. This indicates that engineer paradigm is the most severe internal barrier to marketing performance of the firms as compared to other internal factors. This is not surprising because the engineers' paradigm has been described as being responsible for the cultural barrier that plugs the way of marketing-oriented approach to management (Seymour, 1995; Richardson, 1996). Dikmen *et al*, (2005) describes this cultural barrier as the major barrier that needs to be overcome if marketing can be adopted in the industry. In addition, lack of in-house marketing expertise is the internal factor that contributes less to the variation in the data concerning barriers to marketing performance of the firms. This is because lack of in-house marketing expertise had the lowest percentage weight of 13.66%. On the other hand, disdain of commercialism had the highest percentage weight of 38.51%,

meaning, it contribute more to the variation of barriers of marketing performance than the others internal factors.

The Mann-Whitney U test was used to determine if there are any significant differences in the severity of the internal barriers to the firms when they are grouped in terms of experience, size and the education type of the top management. Tables 4.12, 4.13 and 14 gives the results of the Mann-Whitney U tests conducted on the various groups.

Table 4.12: Severity of Internal Factors with Respect to Experience of firm

Internal Factors	Median Score		U	Z-value	P-value
	Years of Experience				
	Below 10	10 and Above			
Engineer Paradigm	4.00	5.00	203.0	-1.094	.274
Lack of in-house marketing expertise	4.00	4.00	192.0	-1.484	.138
Disdain of commercialism	3.00	3.00	235.0	-.298	.766
Resource constraints	4.00	4.00	229.5	-.425	.671

Source: Field Data, 2013

Table 4.12 shows that there were no significant differences in severity of internal barriers to marketing practices for QSCF who have been in operation for not more 10 years and those who had at least 10 years of operation with respect to engineer paradigm ($U = 203$, $z = -1.094$, $P\text{-value} = 0.274$), lack of in-house marketing expertise ($U = 192$, $z = -1.484$, $P\text{-value} = 0.138$), disdain of commercialism ($U = 235$, $z = -0.298$, $P\text{-value} = 0.766$) and parameters and resource constraints ($U = 229.5$, $z = -.425$, $P\text{-value} = 0.671$). This can be attributed to the fact that in the QSCF production related issues are of greater concern than management issues and that may explain why the firms do not bother about the barriers to their marketing performance.

Table 4.13: Severity of Internal Factors with Respect to Size of firm

Internal Factors	Median Score		U	Z-value	P-value
	Firm Size (Number of Employees)				
	Below 25	25 and Above			
Engineer Paradigm	5.00	3.00	87.000	-1.084	.279
Lack of in-house marketing expertise	4.00	4.00	93.000	-.941	.347
Disdain of commercialism	3.00	3.00	90.500	-.956	.339
Resource constraints	4.00	3.00	103.500	-.476	.634

Source: Field Data, 2013

Table 4.13 show that there are no significant differences in the severity of internal barriers of marketing practices of QSCF whose top managers holds qualification that is highly technical or management related. This is supported by their respective p-values. For engineer paradigm, its p-value is equal to .279, for lack of in-house marketing expertise, its p-value is equal to .347, for disdain of commercialism, its p-value is equal to .339 and resource constraints, its p-value is equal to .634. All these p-values are greater than 0.05 level of significant which indicates that no statistical difference exists between them. It could be expected that the firms that are larger will have no problems with resource constraint and in-house marketing expertise. The test result therefore suggests that firms grow in size not in management practices.

Table 4.14: Severity of Internal Factors with Respect to size of firm

Internal Factors	Median Score		U	Z-value	P-value
	Key Component of Education and Training				
	Highly Technical	Management Related			
Engineer Paradigm	5.00	4.00	135.000	-.417	.676
Lack of in-house marketing expertise	4.00	4.00	131.000	-.593	.553
Disdain of commercialism	3.00	3.00	110.000	-1.219	.223
Resource constraints	4.00	4.00	122.500	-.800	.424

Source: Field Data, 2013

From Table 4.14, it can be observed that there were no statistical significant differences in the severity of internal barriers of marketing practices of QSCF whose top managers holds qualification that is highly technical or management related. This is because, engineer paradigm had a Mann-Witney U value of 135 with $z = -.417$ and $P\text{-value} = 0.274 > 0.05$. Lack of in-house marketing expertise had a Mann-Witney U value equal to 131 with $z = -.593$ and $P\text{-value} = 0.553 > 0.05$. Also, disdain of commercialism had a Mann-Witney U value of 110 with $z = -1.219$ and $P\text{-value} = 0.223$ and resource constraints had Mann-Witney U of 122.5 with $z = -.800$ and $P\text{-value} = 0.424$. All their p -values are clearly greater than 0.05 levels of significant, proving no differences in internal barriers to marketing practice with respect to education and training.

4.5 INNOVATIONS PERFORMANCE FACTORS

The analysis in this section is based on the framework of analyzing innovation in construction. The innovation process is made up of a series of knowledge sourcing which are translated into a new product or process. The effectiveness of the creation and diffusion is influenced by a number of tools, techniques and strategies which are

employed by the firms, which are affected by factors such as drivers, internal inputs and external sources, and enablers. These components of the innovation process are the determinants and outcomes of the innovation process.

In order to assess the component of the factors that affect the innovation performance of the firms, principal component analysis was used to find the weights of various marketing innovations (that is, drivers, inputs, sources, enablers, barriers and outcome of marketing innovations). In other to determine the weights of different marketing innovations within each parameter, an index was calculated to normalize the factor scores as only one principal component was extracted. The weight of the marketing innovations was calculated using the factor scores. The Tables 4.15, 4.16, 4.17, 4.18, 4.19 and 4.20 gives the result of the CPA for drivers, inputs, sources, enablers, barriers and outcomes of innovation respectively.

4.5.1 Drivers of Innovation

The drivers of innovation are the factors that create the need for an organization to innovate. The table 4.15 gives the results of the PCA

Table 4.15: Drivers of Innovation

ITEMS	Comp. Matrix	Score Coefficient Matrix	Weight of marketing activities	Mean	Std. Dev.
Performance (cost reduction, productivity, effectiveness)	.614	.028	20.20	4.51	.727
End-user requirements	.607	.028	19.94	4.04	.737
Regulation and legislation	.293	.013	9.65	4.00	.826
Competition	.338	.015	11.12	3.96	.796
Technological developments	.687	.031	22.58	3.91	.793
Aesthetics/ design trends	.210	.010	6.91	3.84	.824
Environment/ sustainability	.292	.013	9.60	3.73	.720

Source: Field Data, 2013

Upon analysis, Table 4.15 shows that with respect to drivers of innovation, technological developments had the highest percentage weight of 22.58%. This indicates that technological developments have more influence on drivers of innovation than the others. Also, performance improvement emerged as the main driver followed by meeting end-users requirement and regulation and legislation with respective means scores of 4.51 and 4.04. This suggests that whereas the firm admits that innovation must bring improvement in itself such improvement must meet-end-user requirement as well as regulations and legislation to be sustainable. This is necessary if such innovation will receive acceptance of users so that it will be patronized to generate the necessary benefits to the firm. This findings confirms that of other studies (e.g. BERR, 2008; Gann, 2000; Slaughter, 1993, 1998)

4.5.2 Internal Inputs and External Sources of Information

The framework for analysing innovation begins with the generation of ideas. This section analyzes the actions and processes the firms use in generating new ideas as well as the sources of these ideas.

Table 4.16: Internal Inputs

ITEMS	Comp. Matrix	Score Coefficient Matrix	Weight of marketing activities	Mean	Std. Dev.
Investment in ICT, purchase of software and equipment	.546	.025	15.34	4.38	.886
Information	.423	.019	11.89	4.07	.809
Establishment of network (technology alliances)	.493	.022	13.86	4.04	.796
Investment in training and education	.466	.021	13.09	3.93	.986
Research and development spending	.520	.024	14.61	3.91	.900
Number of people actively devoted to innovation	.488	.022	13.71	3.89	.982
Number of research and development projects	.416	.019	11.69	3.84	.928
Number of ideas or concepts	.207	.009	5.81	3.82	.716

Source: Field Data, 2013

Respondents regards ICT, software and equipment, information and training and education as main factors that foster innovation as in Table 4.16 (ICT mean= 4.38, software and equipment mean= 4.34; information mean=4.07 and so on). Surprisingly, research and development is not regarded as an important input. This is affirmed by NESTA (2006). Again, ICT, software and equipment had the highest percentage weight of 15.34%, indicating that it is the factor that influences most, the internal inputs of knowledge in terms of marketing innovation. The table 4.17 looks at the external sources of information for innovation in a firm.

Table 4.17: External Sources of Information

ITEMS	Comp. Matrix	Score Coefficient Matrix	Weight of marketing activities	Mean	Std. Dev.
Clients	.604	.028	6.40	4.40	.837
Construction skills	.619	.028	6.56	4.22	.902
End-users	.591	.027	6.26	4.18	.806
Partners	.734	.033	7.78	4.16	.999
Competitors	.481	.022	5.10	4.13	.726
Professional bodies	.713	.032	7.56	4.13	.919
Contractors	.578	.026	6.13	4.07	.837
Business link	.509	.023	5.39	4.04	.852
Financial advisors	.648	.030	6.87	4.04	.999
Companies from other industries	.373	.017	3.96	4.02	.866
Suppliers/ manufacturers	.512	.023	5.43	4.00	.826
Facility managers	.456	.021	4.83	3.93	.889
Conferences, workshops	.493	.022	5.23	3.82	.936
Governments	.659	.030	6.98	3.82	.936
Research institutes/ universities	.348	.016	3.69	3.80	.661
Best practice clubs	.541	.025	5.74	3.56	.990
Fairs, exhibitions	.575	.026	6.09	3.56	.725

Source: Field Data, 2013

Table 4.17 examines the relative performance of various external sources of information for innovation. The sources that emerged significantly include clients,

construction skills, end-users, partner, competitors and professional bodies. It indicates that the pull for innovation is significant than the push towards innovation. This affirms the findings of Dikmen *et al.* (2005), that clients (mean=4.40) construction skills (mean=4.22), end-users (mean=4.18), partner (mean=4.16), competitors (mean=4.13) and professional bodies (mean=4.13) are the major source of knowledge that support innovation.

4.5.3 Enablers of Innovation

The enablers are the factors that assist in the promotion of innovation within the firm. The table 4.18 gives the results of the PCA.

Table 4.18: Enablers of Innovation

ITEMS	Comp. Matrix	Score Coefficient Matrix	Weight of marketing activities	Mean	Std. Dev.
Leadership	.545	.025	8.47	4.36	.830
Supportive work environment	.684	.031	10.62	4.18	.960
Awards, grants, funds	.398	.018	6.18	4.16	.852
Use of problem solving techniques	.540	.025	8.39	4.13	.815
Deep understanding of the customer	.570	.026	8.86	4.13	.991
Emphasis on research and development	.527	.024	8.19	4.11	.804
Education and training policy	.519	.024	8.06	4.07	.837
Knowledge management practices	.648	.030	10.06	4.07	.889
Encouraging staff to get involved with external network	.514	.023	7.99	4.09	.925
Reward schemes	.501	.023	7.79	4.04	.737
Government schemes	.462	.021	7.18	4.02	.917
Collaboration with partners	.527	.024	8.19	3.84	.999

Source: Field Data, 2013

Here, Table 4.18 examines the factors that are seen to be significant in enabling innovation in a firm. It shows the extent the listed factors help in promoting

innovation in a firm. Upon analysis, leadership (mean=4.36) and supportive work environment (mean=4.18) emerged as the top two factors respectively. This indicates that when schemes are put in place without the above factors, they will not flourish. The next significant factor is awards, grants and funds with mean equals to 4.16 which also indicate that motivation of staff is equally important. Surprisingly, collaboration with partners (mean=3.84) was the least important factor. Which may be due to the attitude of some firms to work in isolation which indicate that the concept of partnering and its associated benefits are not properly understood by the firms.

4.5.4 Barriers to Innovation

These are the factors that are seen as impediments to the uptake of innovation activities in a firm. The PCA generated are given in table 4.19.

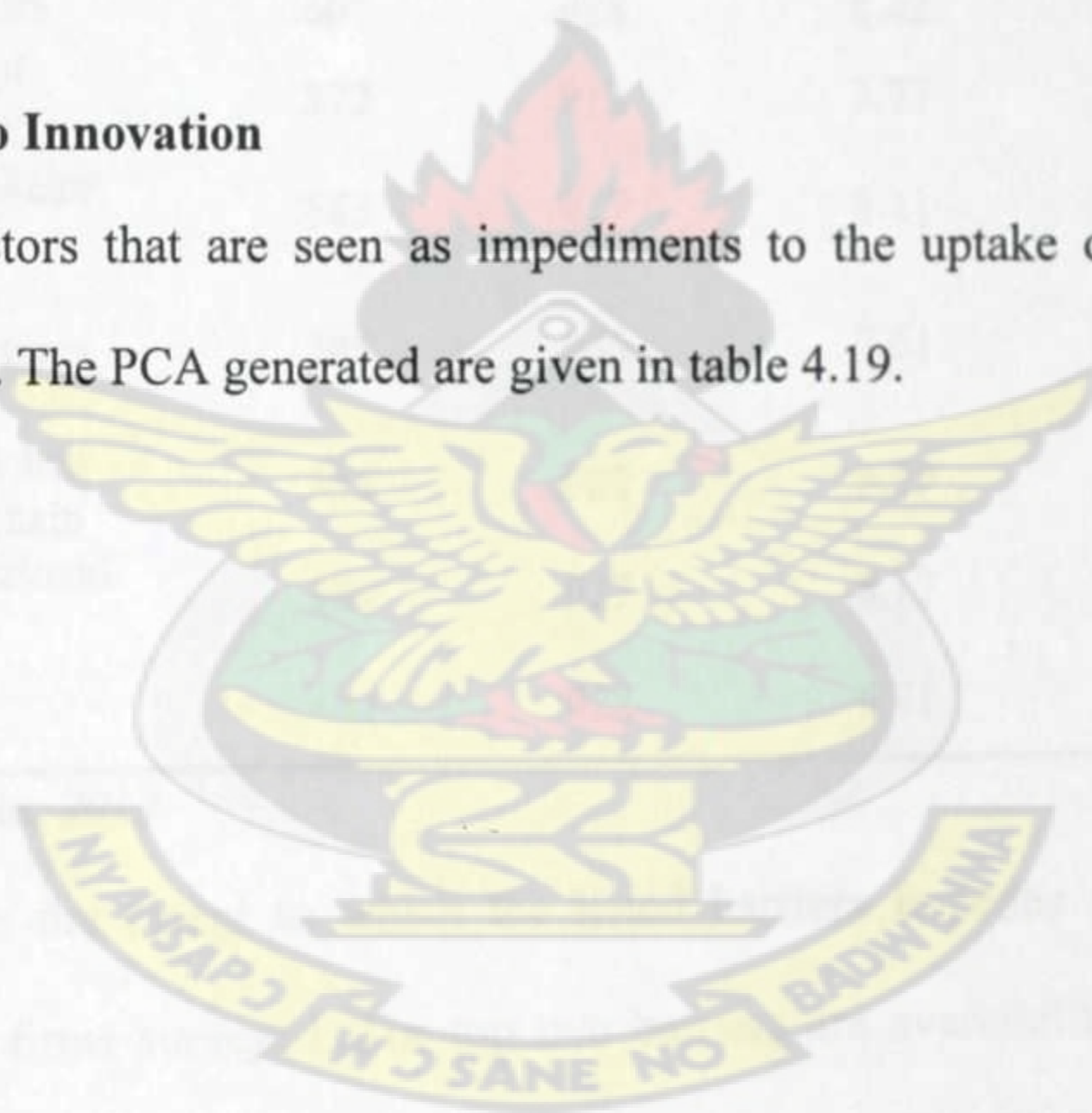


Table 4.19: Barriers to Innovation

ITEMS	Comp. Matrix	Score Coefficient Matrix	Weight of marketing activities	Mean	Std. Dev.
Availability of financial resources	.610	.028	8.47	4.22	.795
Economic conditions	.503	.023	6.98	4.11	.804
Fragmented nature of construction business	.450	.021	6.25	3.98	.812
Inappropriate legislation	.451	.021	6.26	3.96	.852
Belief that the industry is doing well without innovation	.191	.009	2.65	3.89	1.017
Lack of qualified staff	.432	.020	6.00	3.89	1.172
Unwillingness to change	.351	.016	4.86	3.87	.919
Lack of awareness	.273	.012	3.79	3.84	.796
Lack of government role model	.386	.018	5.35	3.82	.936
Lack of clear benefits	.607	.028	8.42	3.82	.971
Temporary nature of construction project	.272	.012	3.77	3.78	.823
Risk in commercializing innovations	.585	.027	8.11	3.76	.883
Lack of innovative investment / procedures / practices	.548	.025	7.61	3.68	.909
Adversarial approaches within the supply chain	.475	.022	6.59	3.68	.934
Extensive organizational change required	.589	.027	8.17	3.67	.674
Lack of end-user involvement	.484	.022	6.71	3.59	.972

Source: Field Data, 2013

Table 4.19 shows the extent to which the listed barriers impedes the uptake of innovation in the firms surveyed. The top two barriers are availability of financial resources (mean=4.22) and economic conditions (mean=4.11). This is interesting because financial concern is a number one driver yet a number one barrier. The firms claim to innovate to increase profit and at the same time believe that they cannot innovate unless economics allow. These factors are followed by fragmented nature of construction business (mean=3.98), inappropriate legislation (mean=3.96), belief

that the industry is doing well without innovation (mean=3.89), and lack of qualified staff (mean=3.89). This affirms the findings of Ozorhorn *et al.*, 2008.

4.5.5 Outcome of Marketing Innovation

These the benefits that could be derived from innovation activities or that will occur as a result of an innovation activity. The table 4.20 gives the PCA results.

Table 4.20: Outcome of Marketing Innovation

ITEMS	Comp. Matrix	Score Coefficient Matrix	Weight of marketing activities	Mean	Std. Dev.
Improvement of client satisfaction	.792	.036	8.20	4.43	.789
Improvement of product quality	.708	.032	7.33	4.43	.818
Increase in technical capability	.633	.029	6.55	4.39	.754
Improvement of processes	.697	.032	7.21	4.30	.823
Improvement of services	.676	.031	6.99	4.27	.727
Increase in organizational effectiveness	.524	.024	5.42	4.25	.781
Improvement of human resources	.645	.029	6.67	4.25	.943
Short and long term profitability	.715	.033	7.40	4.09	.910
Better firm image	.624	.028	6.46	4.07	1.043
Revenue growth due to new services	.634	.029	6.56	4.07	.789
Improvement of organizational structure	.657	.030	6.80	4.07	1.021
New processes	.609	.028	6.30	3.91	.772
New services	.621	.028	6.43	3.89	.784
Market penetration and growth	.457	.021	4.73	3.73	.949
Intellectual property (patents, trademarks, designs)	.672	.031	6.96	3.66	1.140

Source: Field Data, 2013

Table 4.20 shows the list of innovation outcomes and how the respondents rated them. The benefits that are seen as most significant includes improvement of client satisfaction (mean=4.43), and product quality (mean=4.43), increase in technical capability (mean=4.39), improvement of processes (mean=4.30) and improvement of

services (mean=4.27). This is an indication that although innovation in itself is important to the firm yet the external factors like client satisfaction, etc. are seen to provide the most significant benefit to the firm.

4.5.6 Comparisons of the innovation activities of the control groups

The Mann-Witney *U* test is used to test the significant differences in the in the control groups. The results of the Mann-Whitney *U* test on the various control groups are given in tables 4.21, 4.22, 4.23 ages of firm, size of firm and the education type of respondents respectively. With regards to age of firm, the results the Mann-Whitney *U* test are as follows:

Table 4.21: Comparison of Innovation Activities In term of Age of firm

	Median Score		U	Z-value	P-value
	Years of Experience				
	Below 10	10 and Above			
Marketing Innovation	4.0200	4.1500	173.500	-1.690	.091
Outcome of Marketing Innovation	4.0000	4.4350	126.000	-2.793	.005

Source: Field Data, 2013

Table 4.21 shows that there is no significant difference in marketing innovation of quantity surveying consultancy firms who are below 10 years of operation and those who had at least 10 years of operation (*U* = 13.5, *z* = -1.69, *P*-value = 0.091). On the other hand, there is a significant difference in outcome of marketing innovation of quantity surveying consultancy firms who are below 10 years of operation and those who had at least 10 years of operation organisation of marketing functions (*U* = 126, *z* = -2.793, *P*-value = 0.005).

With regards to size of firm, the Mann-Whitney U test results are given below

Table 4.22: Comparison of Innovation Activities in term of firm Size

	Median Score		U	Z-value	P-value
	Firm Size (Number of Employees)				
	Below 25	25 and Above			
Marketing Innovation	4.0300	4.4050	41.500	-2.522	.009
Outcome of Marketing Innovation	4.2000	4.6000	57.000	-2.012	.045

Source: Field Data, 2013

From Table 4.22, for marketing innovation and the outcome of the innovation, there are significant differences in terms of firm size. These assertions were due to the fact that both were significant at 0.05(p-values< 0.05).

In term of education background respondents, the results of the Mann-Whitney U test is given in table 4.23

Table 4.23: Comparison of Innovation Activities in term of Educational background of respondents

	Median Score		U	Z-value	P-value
	Key Component of Education and Training				
	Highly Technical	Management Related			
Marketing Innovation	4.1000	3.9700	140.500	-.223	.827
Outcome of Marketing Innovation	4.2000	4.3350	125.000	-.686	.511

Source: Field Data, 2013

Here at Table 4.23, there are no significant differences in marketing innovation and its outcomes for QSCF whose top managers' holds qualification that is highly technical or management related. Evidently, the p-value for marketing innovation and outcome of marketing innovation were 0.827 and 0.511 which are all greater than 0.05 level of significant.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATION

5.1 INTRODUCTION

The dissertation focused on the marketing orientation of Quantity Surveying consultancy firms in Ghana. The main introduction of the research was covered in the chapter one of this report. The second chapter discussed the theoretical/conceptual issues regarding marketing orientation and its antecedents. This was narrowed down to professional services firms and thereafter to the QSCF. It also established the linkages between the marketing orientation, marketing practices, barriers to marketing performance and innovation performance of firms. The chapter three continued with methodological issues that were considered for the study and the appropriate approaches that were adopted were justified. Presentation of analysis was discovered in chapter four together discussions on the result obtained. The research reaches its climax in this chapter with a summary of all the issues addressed throughout the study.

This section of the chapter continues with a summary of how the key objectives of the study were realised and also discusses the achievement of the research objectives so as to highlight the contributions of the research to knowledge. Finally, this chapter will sign off with recommendations for further research that can be carried out on the basis of the conclusions and limitations of the study.

5.2 REVIEW OF RESEARCH OBJECTIVES

As it has been indicated in the chapter one of this report, the research was undertaken with the aim to explore the marketing orientation of QSCF in Ghana, and to proffer measures that will advance innovation and improve performance. To achieve stated aim of the study, four research objectives were set. Questionnaire survey was conducted to achieve all the objectives.

The first objective was set to *ascertain the marketing practices of QSCF in Ghana*. Based on the four key dimensions of marketing practices of the firm identified in literature, a questionnaire survey was conducted to ascertain the level of importance attach to this practices by the firms. The four dimensions comprised of marketing planning, organisation of marketing function, marketing resources and marketing activities which was also categorised under the five items as: product, price, place, promotion and people related activities. Scored on a five point rating scale, the levels of importance as indicated by the firms were analysed to identify trends.

The trend that emerged showed that the QSCF attaches importance to the four marketing dimensions of marketing practices in this order importance ; marketing planning, marketing activities, organisation of marketing function and marketing resources. The fact that planning is important to the GSCF is encouraging, however if the execution of the activities are done after planning without organising of those activities and the allocation of required resource, it may not yield any good results.

This confirms the notion that marketing practices are done in an 'ad hoc' manner in professional consulting industry.

Again, further tests that were done to access any differences in marketing practices when the firms were grouped in terms of experience, size and educational background of respondents revealed that there are no significance differences. This suggests that even when the firm grows in terms of experience and size, business is still done as usual. No changes takes place in the management practices. This also confirms the notion that the engineers' paradigm which creates resistance to cultural change continues to be the major bottleneck the plugs the way of marketing oriented approach to management of QSCF in Ghana. This is not surprising because majority of the firms (82%) are technical men with little or no management training.

The second objective was to *identify underlying factors that inhibits marketing performance of QSCF in Ghana*. In all eight factors that respondents indicated their levels of severity to their firms were subjected to factors analysis out of which two factors emerge that were labelled as external environmental factors and internally generated factors. In terms of the level of severity of these factors, association of code ethics emerge as the most severe. This confirms the notion that professional associations have elected stringent rules against commercial behaviour, coupled with the misconception that marketing and selling are the same makes the firms shun marketing. Again, to ascertain differences in the severity of the internal generated factors to firms when grouped in terms of experience, size and educational background of the respondents, no significant differences was observed. The inability of the large firms to deal with the inhibiting factors to make them less severe indicate that the firm do not achieve any significant growth or the growth is only in terms of size or experience but not on the management practices. This confirm the notion that the major hurdle of resistance to cultural changes continues

to plug the way of the firms to adopting a marketing orientated strategic management approach in managing the firm.

The third objective was *to assess the underlying marketing innovation factors that can improve performance of QSCF*. Using the framework for analysing innovation, the study adopted six parameters that cover the innovation process from idea generation, diffusion and implementation. The six parameters comprise drivers, inputs, sources, enablers, barriers and outcomes. With regard to drivers' performance, improvement emerges as most important followed by meeting the requirements of end-users requirement and regulation and legislation in order to be sustainable. Considering internal inputs and external sources of information, the firms indicated that ICT, purchase of software and equipment, investment in training and education are the main factors that foster innovation. Surprisingly research and development is not regarded as an important research input.

On the external sources of information, the sources that emerged significantly area: clients, construction skills, end-users, partners, competitors and professional bodies. This affirms the notion that the pull for innovation is significant than the push towards innovation. Similarly, the QSCF identified leadership, supportive work environment and awards, grants and funds as the top factors that promote innovation in the firm. Surprisingly, collaboration with partners was pointed as the least important factors. This suggests that the concept of partnering is not properly understood by the firms. Among the factors that impedes the uptake of innovation, availability of financial resources and economic conditions came out as the top two.

It is interesting to note that financial concern is a number one driver of innovation yet a number one barrier of innovation in QSCF.

5.3 RECOMMENDATIONS AND POLICY IMPLICATIONS

The last objective was set to proffer measures to boost marketing orientation, and which will advance innovation and performance improvement based on the findings. These measures that have been illustrated with a flowchart in Figure 5.1 have been developed based on the relationship between marketing practices, marketing orientation, marketing performance barriers and marketing innovation together with the innovation outcome as the result of the interaction between the various variables. The measures are built on the basis that the firms resource are limited and therefore cannot tackle all the issues that has been identified to be associated with performance improvement.

The prudent way to deal with the issue is to allocate resources judiciously and this can be achieved by identifying the variables that contribute most to each of the parameters first and thereafter to the other when there still exist some spare capacity. The variables with the large contribution to each of the parameters are identified from the principal component analysis and they are arranged in a descending order of contribution to each of the parameter. The flowchart also establishes the linkages between the four parameters outlined earlier from marketing practices to performance improvement.

5.4 MEASURES TO BOOST MARKETING ORIENTATION OF QSCF IN GHANA

As indicated in the Figure 5.1, the flowchart of measures to advance innovation and performance improvement has four phases or goes through four stages. The first stage requires the performance of marketing practice in order to achieve the level of marketing orientation that can advance innovation. In order to achieve this, the firms must control the modulator variables which are made up of internally generated factors and the external environmental factors. The ability and the level to which these factors are dealt with or are controlled is a measure of the firms' level of marketing orientation. It is at this point that the improvement in the firms' performance can be realised. Continuous review of this process will improve the firms' competitiveness and ensure its survival in the business world.

The flowchart that is illustrated in figure 5.1 has four phases. Each of the phases has a number of dimensions and factors that contributes to make it whole. Each of the phases also leads to one another until the final which is improvement in performance.

5.4.1 Market Practices

Marketing orientation as philosophy or as an attitude of firm is made manifest by the way and manner the marketing practices are carried out in a firm. The level of performance in terms of marketing planning, organisation of marketing functions,

marketing resources and marketing activities is a measure of the firms marketing orientation.

5.4.2 Marketing Performance Barriers

Between the marketing practices and marketing orientation is a barrier that can limit the marketing practices and that has serious implications for the firms marketing orientation. These barriers are in two folds: internally generated and external environment barriers. The firms must deal with these factors before they can achieve a measure of marketing orientation that can lead innovation. The employments of marketing professional, release of resources for marketing activities as well as a development of positive attitude towards commercial behaviour are key to overcoming the barriers.

5.4.3 Marketing Orientation

This is a measure of the firms' propensity to innovate. At the stage where the firm has achieved a reasonable level of marketing innovation, innovation becomes eminent. The attainment of that is influenced by the degree to which the marketing practices are carried out by the QSCF.

5.4.4 Innovation Factors

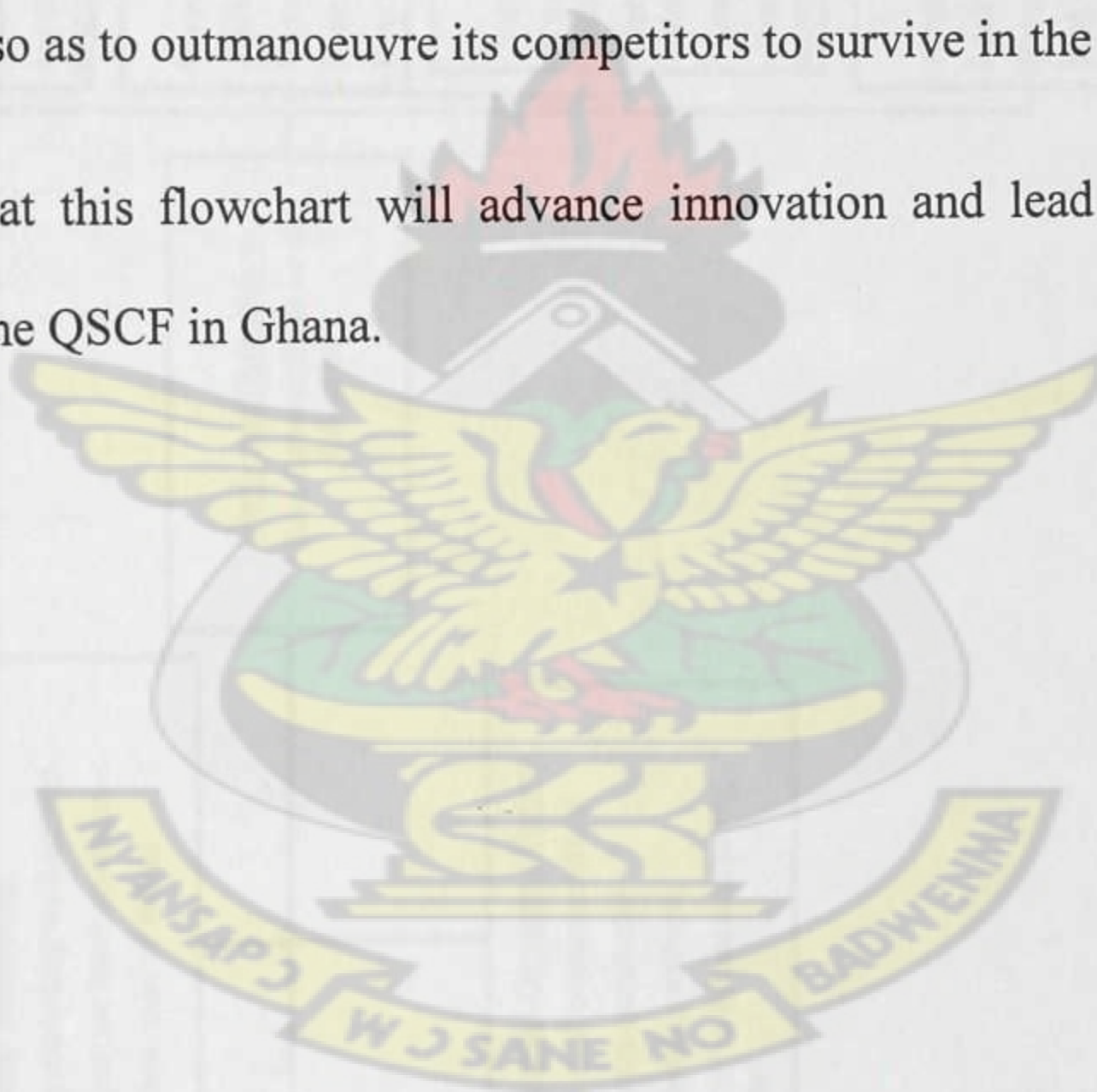
The success of the innovation activity depends on the factors each of which contributes one way or the other to the outcomes of the innovation programme. The factors include drivers, inputs, sources of information, enablers and barriers. These

factors deserve a careful consideration and utilization to achieve a desirable innovation outcome.

5.4.5 Innovation Outcomes

These are the results of the previous four phases. It is the final point when the results are achieved to benefit the firm. These may include improvement in processes, services, product, quality, organisational structure. These and many other that can lead to revenue growth, market penetration and growth. At this point, improved business performance is the overall result, which will enhance the firm's competitiveness so as to outmanoeuvre its competitors to survive in the industry.

It is believed that this flowchart will advance innovation and lead to improved performance of the QSCF in Ghana.



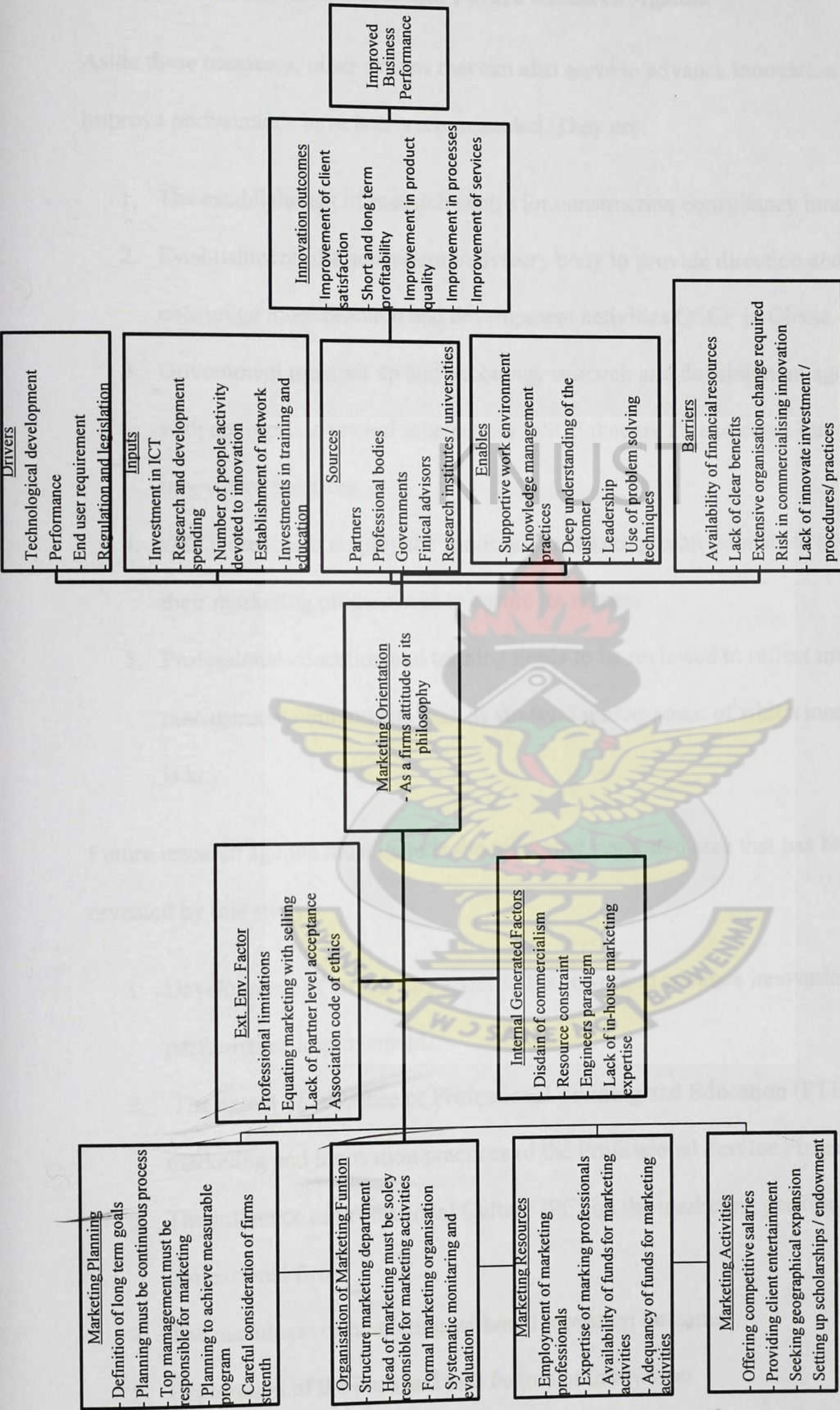


Figure 5.1: Flowchart of measures for advancing innovation and performance improvement.

5.5 Further Recommendations and Future Research Agenda

Aside these measures, other actions that can also serve to advance innovation and improve performance have been recommended. They are:

1. The establishment of research centre for construction consultancy innovation.
2. Establishment of a supervisory/advisory body to provide direction and encourage more research and development activities QSCF in Ghana.
3. Government must set up and encourage research and development agenda with appropriate reward schemes for QSCF that are able to come out with innovative practices.
4. QSCF must also employ the services of marketing professionals to oversee their marketing programmes to ensure its success.
5. Professional education and training needs to be reviewed to reflect more management components such as strategic management of which marketing is key.

Future research agenda must include the following suggested area that has been revealed by this study:

1. Development of an industry specific framework to advance innovation and performance improvement.
2. The extent of influence of Professional Training and Education (PTE) on the marketing and innovation practices of the Professional Service Firms (PSF)
3. The influence of Professional Culture (PC) on the marketing performance of professional firms
4. The usefulness of marketing without innovation outcomes.
5. Exploration of the push and pull factors of innovation.

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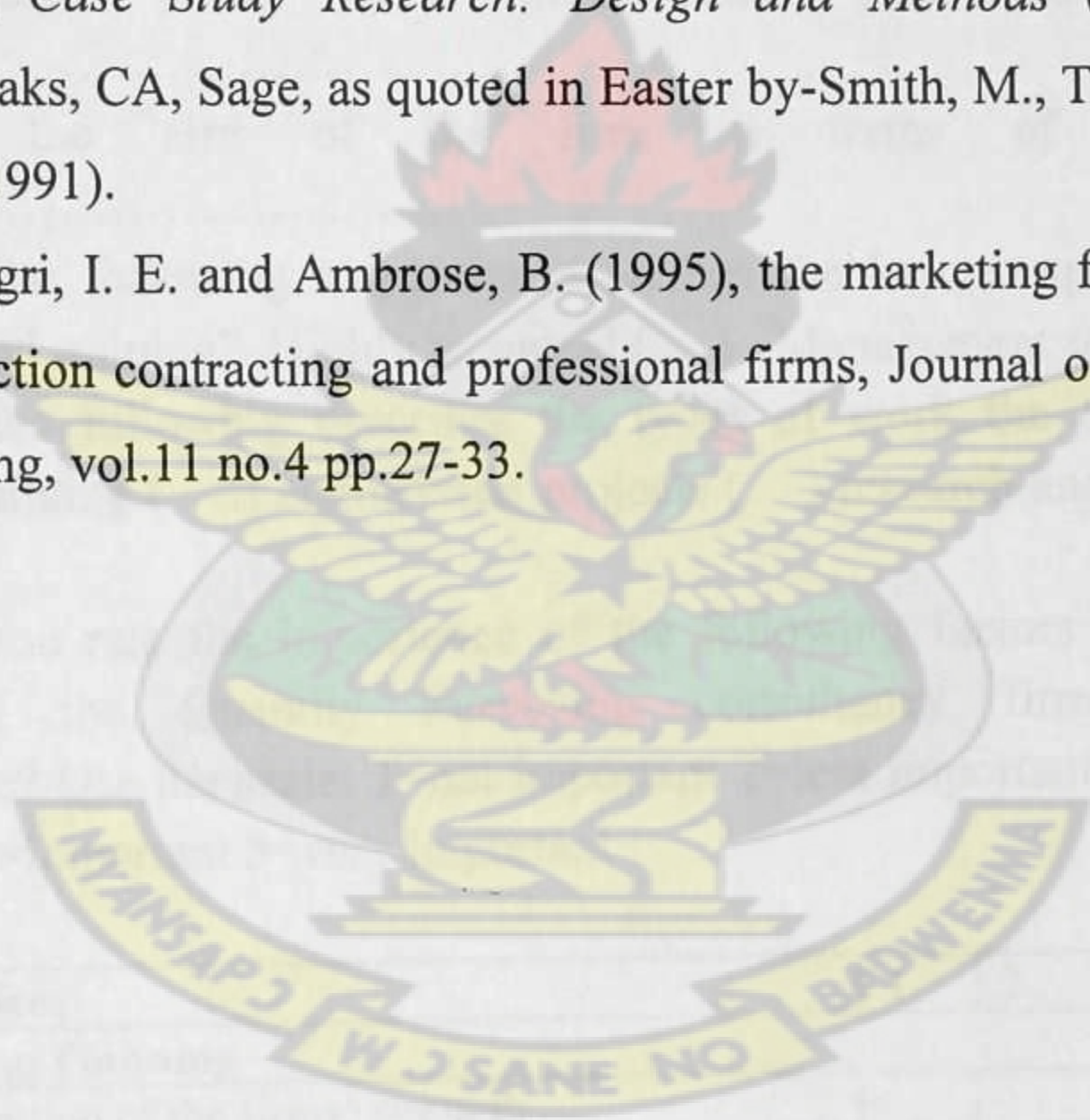
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APPENDIX 1

QUESTIONNAIRE

This questionnaire has been designed to solicit for information for the completion of Master of Science in Construction Management in KNUST Department of Building Technology. It is aimed at exploring the Marketing Orientation of Quantity Surveying Consultancy Firms in Ghana based on which an industry specific framework will be developed with view of improving their performance. It is solely for academic purposes and any information provided will be treated with the highest confidentiality. **Please, kindly respond to the questions by ticking (√) in the appropriate box for each item.**

1. What is your designation in terms of the following? Top manager ()
Director of marketing () partner () sole proprietor () other ()
specify.....
2. How many years has the firm been in existence?
.....
3. What is the size of the firm in terms of number of employees.....
4. Which of the following categories describes the key component of your education and training? Highly technical () Management related ()
5. Which of the following describes the types of work the firm offers its services? building () engineering projects () research and training ()
others ()
6. How will you rate the importance of the following factors to the overall success of the Quantity Surveying consultancy firm's marketing performance? Use the scale: 1=not important 2=less important 3=moderately important 4=important 5=very important

Marketing Practices	1	2	3	4	5
A. Marketing Planning					
1. Careful consideration of the firms' strength					
2. Assessment of the marketplace					
3. Definition of long term goals					
4. Identification of particular marketing opportunities					
6. Planning to achieve a measurable programs					
7. Long range view of the entire business					
8. Formal approach to marketing planning					
9. Level of management responsible for marketing programs					
10. Time length/period/coverage of marketing plans					
11. Must be a continuous process					
B. Organization of marketing functions					
1. Top management's perceived level of priority of marketing plans					
2. Structured marketing department					
3. Director/board member as the head of marketing					

department					
4. Head of marketing is responsible solely for marketing functions					
5. Systematic monitoring and evaluating of marketing programs					
6. Formal marketing organization					
7. Priority given to marketing in the business strategy of the firm					
C. Marketing resources					
1. The number of employees solely responsible for marketing					
2. Employment of marketing professionals					
3. Expertise of the marketing professionals					
4. Use of external marketing agencies					
5. Adequacy of funds allocated for marketing activities					
6. Availability of funds for marketing activities					
7. Accessibility of funds for marketing activities					

9. What will you say about the importance of the following marketing activities to improving the marketing performance of Quantity Surveying Consultancy Firms? Use the scale: : 1=not important, 2=less important, 3=moderately important, 4=important, 5=very important

Parameters and Constituents of Marketing Activities	1	2	3	4	5
A. Product-Related Activities					
1. Seeking client satisfaction					
2. Providing extended services					
3. Offering customized contract					
4. Training for interpersonal skills					
5. Offering competitive salaries					
6. Recruiting high quality personnel					
7. Conducting customer surveys					
1. Price-Related Activities					
1. Providing free preliminary estimates					
2. Training estimators					
3. Pursuing partnering agreements					
2. Place-Related Activities					
1. Seeking geographical expansion					
3. Promotion-Related Activities					
1. Advertising					
2. Product branding					
3. Printing brochures and newsletters					
4. Maintaining company website					
5. Making gifts with company logo					
6. Soliciting prospective clients					
7. Participating in trade shows					
8. Issuing news releases					
9. Employing professional marketers					
4. People-Related Activities					
1. Proving client entertainment					
2. Providing event/travel tickets					
3. Organizing social events					

4. Making charitable donations					
5. Setting up scholarships/endowments					

10. What will you say about the following barriers to mounting an effective marketing programme in Quantity Surveying Consultancy Firms? Use the scale: 1=not severe 2=less severe 3=moderately severe 4=severe 5=very severe.

Barriers to Marketing Performance	1	2	3	4	5
1. Disdain of commercialism					
2. Association code of ethics					
3. Equating marketing with selling					
4. Professional limitations					
5. Lack of partner acceptance of marketing as a legitimate function					
6. Resource constraints					
7. Lack of in-house marketing expertise					
8. Price competition					

11. How will you rate the importance of the following factors that affect the innovation performance of a firm? Use the scale: 1=not important 2=less important 3=moderately important 4=important 5=very important.

Marketing Innovation	1	2	3	4	5
A. Drivers					
1. Performance (cost reduction, productivity, effectiveness)					
2. Environment/sustainability					
3. End-user requirements					
4. Technological developments					
5. Competition					
6. Regulation and legislation					
7. Aesthetics/ design trends					
B. Inputs					
1. Information					
2. Investment in training and education					
3. Number of ideas or concepts					
4. Establishment of network (technology alliances)					
5. Investment in ICT, purchase of software and equipment					
6. Number of people actively devoted to innovation					
7. Research and development spending					
8. Number of research and development projects					
C. Sources					
1. Clients					
2. Partners					
3. End-users					
4. Suppliers/manufacturers					
5. Contractors					
6. Conferences, workshops					
7. Research institutes/universities					
8. Best practice clubs					
9. Construction skills					

10. Competitors					
11. Fairs, exhibitions					
12. Governments					
13. Professional bodies					
14. Companies from other industries					
15. Facility managers					
16. Business link					
17. Financial advisors					
D. Enablers					
1. Leadership					
2. Supportive work environment					
3. Collaboration with partners					
4. Deep understanding of the customer					
5. Education and training policy					
6. Knowledge management practices					
7. Encouraging staff to get involved with external network					
8. Use of problem solving techniques					
9. Awards, grants, funds					
10. Government schemes					
11. Reward schemes					
12. Emphasis on research and development					
E. Barriers					
1. Economic conditions					
2. Availability of financial resources					
3. Fragmented nature of construction business					
4. Unwillingness to change					
5. Lack of government role model					
6. Inappropriate legislation					
7. Risk in commercializing innovations					
8. Temporary nature of construction project					
9. Extensive organizational change required					
10. Lack of awareness					
11. lack of qualified staff					
12. Lack of end-user involvement					
13. Lack of innovative investment/procedures/practices					
14. Adversarial approaches within the supply chain					
15. Lack of clear benefits					
16. Belief that the industry is doing well without innovation					

12. To what extent does your firm derive the following outcomes of innovation?

Use the scale: 1=never, 2=rarely, 3=sometimes, 4=usually, 5=always

Outcome of Marketing Innovation	1	2	3	4	5
1. Better firm image					
2. Improvement of services					
3. Improvement of client satisfaction					
4. Improvement of product quality					
5. Improvement of processes					
6. Increase in technical capability					
7. Increase in organizational effectiveness					
8. New services					
9. New processes					

10. Market penetration and growth					
11. Revenue growth due to new services					
12. Short and long term profitability					
13. Improvement of organizational structure					
14. Improvement of human resources					
15. Intellectual property (patents, trademarks, designs)					

13. How important do you consider the following criteria when being selected by a client for your services. Use the scale: 1=not important 2=less important 3=moderately important 4=important 5=very important

Criteria	1	2	3	4	5
1. Turnover/size of practice					
2. Status/market share					
3. Financial standing/stability					
4. Technical capability/excellence					
5. Quality of personnel and expertise					
6. Obtaining/having quality assurance					
7. Being chartered					
8. Experience					
9. Professional reputation/track record					
10. Prior business relationship/clients					
11. Lowest price/fee					
12. Presentation					
13. Previous project (type)					
14. Range of services offered					
15. Geographical location					
16. Attention to detail					
17. Company offices and general image					
18. Negotiating skills					
19. Informal contract					
20. Responsiveness					

THANK YOU FOR YOUR PARTICIPATION