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**The Influence of Stakeholders on Project's Professional Team Selection: A Study of
Their Influence on Project Performance in Ghana**

by

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College of Arts and Built Environment
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MASTER OF SCIENCE

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DECLARATION

I hereby declare that, this submission is my own work towards the MSc Construction Management 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

It is well known to the organizations how stakeholders' management is conducted has great impact on project outcome. Stakeholder can be defined as "any group or individual who is in favor of project stakeholders to achieve the project's objectives. Certain stakeholders such as external factors, timing, change orders, cost issues project characteristic and client resources" have a lot of influence on project managers ability to select project professional team to deliver quality project. All this leading to complexity and uncertainty of construction project, in order to solve these problems and deliver quality projects, project managers need to understand factor that leading to stakeholders influence in Ghanaian construction industry. Through data collection and analysis, this research intended to do just that. In conducting the survey, data were collected from the contractors within the Greater Accra metropolitan assembly. The data were analyzed using frequencies and relative importance index. The analysis indicated that most of the respondents were of the view that their firms attach high level of importance to external factors and Critical success factors influence stakeholders management, stakeholders assessment was most important. Also it was deduced that out of the various approaches of engaging stakeholders in a construction project, professional service was the most important. Finally, it was gathered that among the various stakeholders' management method or response strategies, adaptation strategy was the most important. The results identified six significant stakeholder influences on selection project professional team, as external factors management, time management, project characteristic and client resources management, change order management, cost management and external factors management was the most important.

Key words=Stakeholders Influence, Selection Project team, Critical success factors

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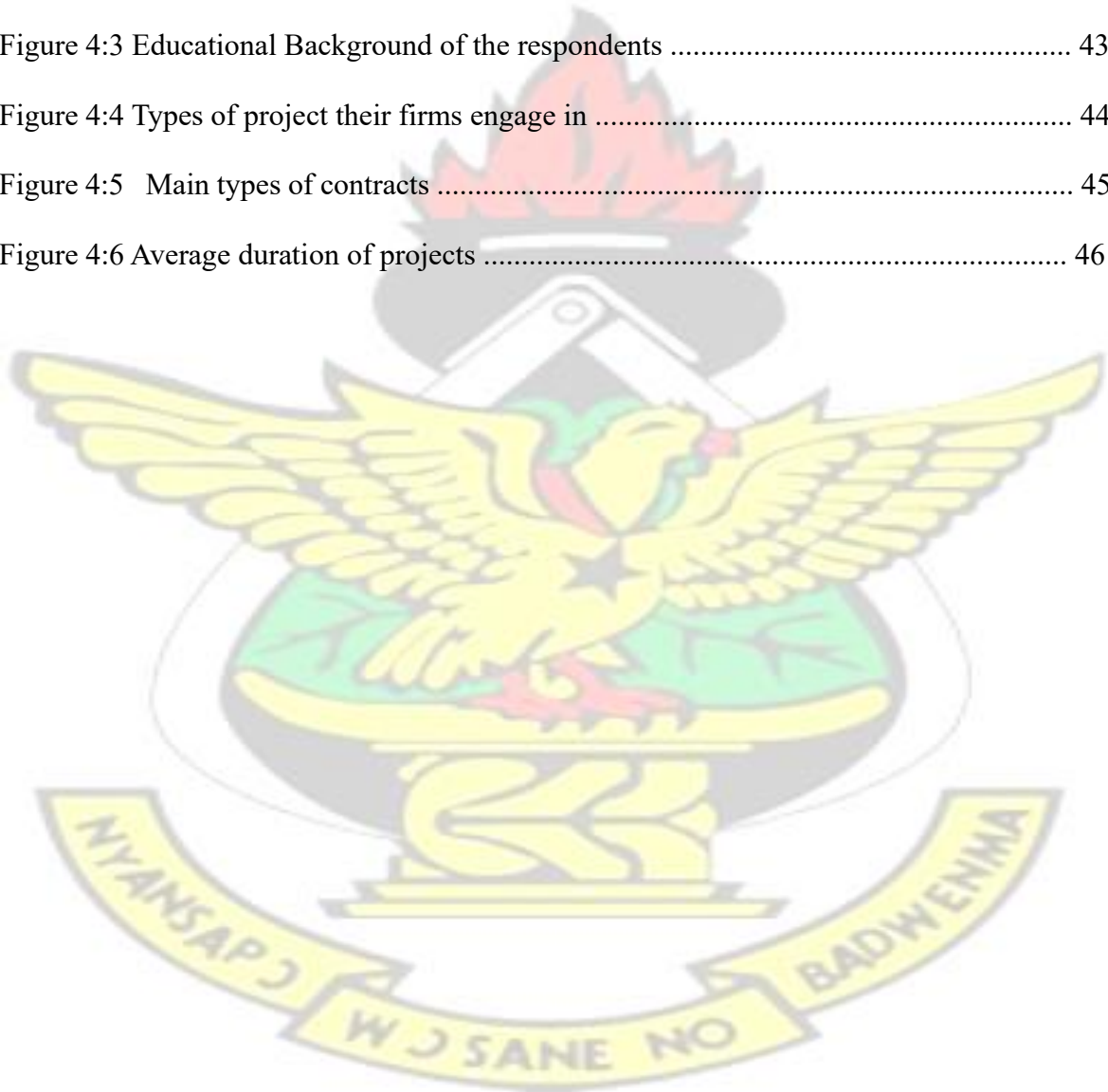
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ABRIVIATIONS AND ACRONYMS

PSC	Project Success Criteria
PSF	Projects Success Factors
CSF	Critical Success Factors
GDP	Gross Domestic Product
SI	Stakeholder Involvement
HVAC	Heating, Ventilation, and Air Conditioning
SSNIT	Social Security and National Insurance Trust
SNA	Strategic Need Analysis
CSR	Corporate Social Responsibility
PMI	Project Management Institute
PMBOK	Project Management Body of Knowledge
PTM	Primary Team Members
KSP	Key Supporting Participants
NGO	Non-Governmental Organization
SPSS	Statistical Package for Social Sciences
HND	Higher National Diploma
PhD	Doctor of Philosophy
RII	Relative Importance Index

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DEDICATION

This project work is wholeheartedly dedicated to God Almighty and to my lovely wife,
Mrs. Celestine K Akpalu and my family.

KNUST



CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background of Study

Stakeholders are defined by Project Management Institute (2008) as all persons and organizations who are immensely involved in a project and the interests of these stakeholders may be affected either in a positive or negative way depending on the successful project execution. Li et al. (2011) define Stakeholders as all individuals or organizations who can have influence on a project's output, those whose completion of the project affects their living environment positively or negatively as well as persons or organizations who enjoy direct and indirect benefits or suffer losses from the project results. According to Newcombe (2003), construction project stakeholders include the client, those going to use the facility, policy makers in the construction field, neighbors around where the project is being executed, community members, government, environmental protection agencies, the general public as well as all the construction team members. Stakeholders can be subdivided into internal stakeholders and external stakeholders, internal stakeholders are stakeholders who are directly involved in every decision taking by the organizations executing the project this includes the client, service providers, workers as well as customers. On the other hand external stakeholders are those whose lives and living environment are significantly affected by the project this includes, community members, neighbors and the general public. In view of this stakeholder management as defined by Yang et al (2011) is a systematic way of identifying, analyzing, communicating, making decisions and all other activities that need to be managed to realize a successful stakeholder management. The process of managing project stakeholders consists of all the management functions that is planning, organizing,

motivating, directing and controlling. The steps for the process are as follows; the first thing to do is to identify who the stakeholders are, information is then gathered, identifying the mission, pointing out strength and weaknesses, identifying strategy, making predictions of stakeholders behavior and the last step is to implement the stakeholder management strategy (Olander, 2007). Cleland and Ireland (2002) indicated that it is very relevant for the project for the project team to determine whether the project stakeholders are being managed successfully or not. Critical Success Factors have been identified as those Project management procedures which are important to be addresses to realize effective stakeholder management in every construction project.

1.2 Statement of the Problem

Stakeholder can be defined as “any group or individual who is in favor of project stakeholders to achieve the project”’s objectives.

However, Project Managers have been identified that some stakeholders such as external factors, project stakeholders team, Project characteristics, changes orders, Cost issues and Timing have a lot of influence on project managers ability to select project professional team to deliver quality project. Mathonsi and Thwala, (2012) stated that over the past number of years the construction industry has undergone changes in a manner never seen before. Natasa (2007) stated that many project stakeholders today, however, are increasingly dissatisfied with the stakeholders and its operational characteristics and actively seek alternative methods of organizational system to meet their increasingly complex demands.

This makes it very important for construction firm to focus on factors relating to some stakeholders such as complexity and uncertainty. According to Ofori -Kuragu et al, (2016)

the pillars of the Ghanaian economy is the construction industries which contribute about 8.5% to the overall gross domestic product and employing 23% of the active population. In addition, the stakeholders play a critical role in sustainability and sustainable built environments in Ghana.

1.3 Aim and Objective of the Study

1.3.1 Aim

The aim of this study is to determine stakeholders' influences in the selection project team.

1.3.2 Objectives of the study

- To identify stakeholders' influence on selection project professional team in building industry
- To identify critical success factors that influenced stakeholders' management in building industry;
- To analyze approaches for engaging stakeholders in building industry; and
- To identify strategies for managing stakeholders in building industry.

1.4 Research Questions

- What are the stakeholders' influence on selection project professional team in building industry
- What are the critical success factors that influenced stakeholders' management in building industry
- What are the approaches for engaging stakeholders in building industry

- What are the strategies for managing stakeholders in building industry

1.5 Significance of the Study

This study will be very interesting for researchers and all construction practitioners workplace, because it underscores the importance of stakeholders' management in building construction industry.

This research will try to identify the best practice and how they can be applied to the researcher and construction practitioner's workplaces in Accra.

The findings of this research will contribute to knowledge in project management and assist practitioners, researchers in future proposal and identify criteria which determine selection of stakeholders system that will meet the specific requirement of the client. This would enable stakeholders to know the responses strategies that when adopted by them would help meet the requirement of the client, as well as improve performance of the project. For that matter they will obtain larger projects which would lead to their growth, increased employment rate and improve of our economy

1.6 Scope of the Study

The research focuses on the influence stakeholders have in the selection of project professional team to deliver quality project in building construction industry. The research will be conducted in the Greater Accra metropolis assembly of Ghana. The respondent will be contractors with (D1K1 (D2k2) and construction consultants, project managers, Architect and construction Engineers in the Greater Accra region of Ghana.

1.7 Limitation of the Study

This research was an effort of improvement stakeholders' performance in Ghana. There were some constraints encountered during the time of the research specifically in the data gathering process. One of the constraints encountered was limited financial resources, again respondents delayed in giving the feedback since they were busy with their work and this in the long run wasted time for the research. Lastly the generalization of the research did not allow for fair representation of the whole country since the research was only conducted in Accra because there were limited resources to visit all the cities in Ghana to conduct the research.

1.8 Research Methodology

This research focuses on identifying influence of stakeholders in selection project professional team in Ghanaian building industry. The research method employed was quantitative approach and defined as quantitative data is a numerical investigation into world issues by testing theories or hypothesis to know the viability and the trueness of such theories Creswell (1994). Data collection will involve primary and secondary data and primary data will involve the use of closed ended questionnaire based on the objectives.. Secondary data will involve journals, books, literature review and others. The questionnaire was delivered to various respondents by the hand. The sampling population was derived by the collation of list of construction firms that have operated with or are operating with the following agencies that manage Ghana Government contracts in the Greater Accra region at the various communities in the district as at the end of the 2016. Tema Development Corporation, Tema metropolis assembly, Ashaiman municipal assembly Kponekatamanso

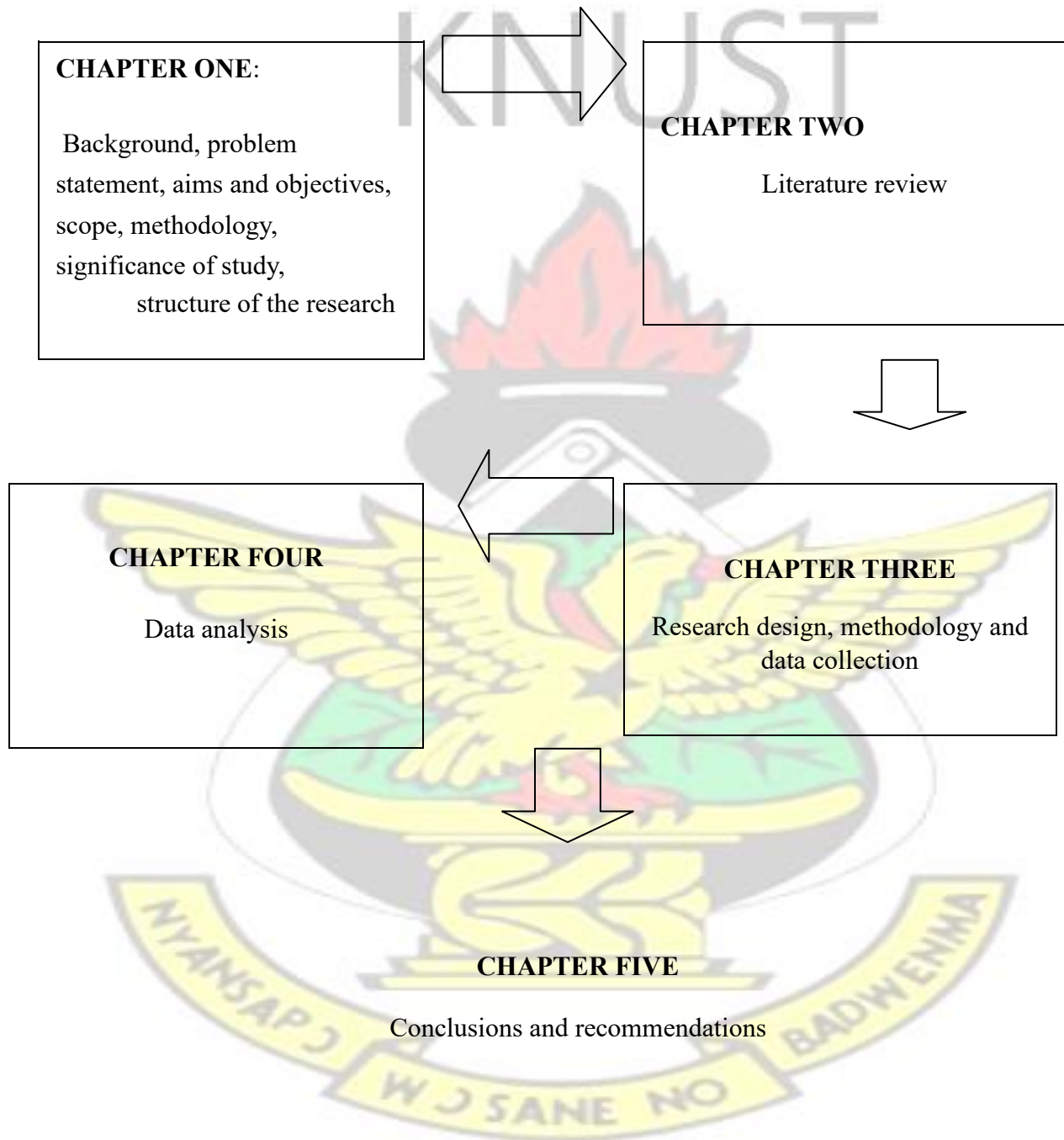
District assembly and. Tema Development Corporation, were visited to collate the sampling population because these agencies also implement and manage projects in the in Greater Accra region

The following were the result of the collation: Tema Development Corporation-20, Ashaiman municipal assembly -10, Tema metropolis assembly -15 and KponeKatamanso District assembly - 25. This gave a study population of 70 firms in the category of D1 K1 and D2 and K2 for building works. Snow ball sampling is selecting few key members for the research and these key members help identify other potential participant of the research (Fugar, 2010). For the purpose of this research the key members were ask to identify participant with D1 K1 D2 K2 characteristics. This technique was adopted to help the researcher to access hard- to-reach respondents. The firm which was observable and easy to trace and for that matter currently operating in the district was first contacted and this gave the lead to other firms with the same characteristics till a representative sample size of seventy (70) respondents was obtained

1.9 Organization of the Study

The research has been structured into five chapters. The first chapter deals with the general introduction of the study which includes background of the research, stating what the problem is, aim ant objective the research seems to achieve, the scope the research will cover, methodology, significant and organization of the research. The second chapter covers all the reviewed on related literature. The third chapter also explains into details the method use for the research. The fourth chapter discussed the data collection procedures and analysis and the last chapter which is chapter five summarizes and concludes the whole research as well

as proposes recommendations to help solve the problem stated. The figure below gives a graphical representation of how the study was organized.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter explains into details what stakeholder management entails and influences of procurement strategies in Ghanaian construction industry. Stakeholders is define by Project Management Institute (2008) as all persons and organization who are immensely involved in a project and the interest of this stakeholders may be affected either in a positive or negative way depending on the successful project execution. Olander (2007) indicated that project stakeholders are affected by the management procedures adopted. Olander and Landin (2005) affirm that it is important to recognize the influence stakeholders have on a project in order to put strategies in place to efficiently and effectively plan the stakeholders management procedures. The Chapter provides an in-depth knowledge based on literature review on related subject for stakeholder, types of stakeholders, strategies for managing stakeholder, critical success factor influence stakeholder management, influence of stakeholders on procurement strategy, procurement approaches and Ghanaian construction industry as well as analyze approaches for engaging stakeholder

2.1 Stakeholder definitions

Stakeholder can be defined as “any group or individual who is in favor of project stakeholders to achieve the project’s objectives. According to Freeman (1984) this definition is considered as the bases of stakeholder management and is often cited by most researchers. Mitchell et al. (1997) describe the definition as being general since it’s all inclusive. Li et al. (2011) define Stakeholders as all individuals or organization who can have influence on

a projects' output, those who the completion of the project affect their living environment positively or negatively as well as persons or organization who enjoy direct and indirect benefit or suffer losses from the project results.

2.2 Stakeholders in construction

Construction industries or projects have stakeholders involved in its activities just like any other stakeholders in any other projects. According to Newcombe (2003), construction project stakeholders includes the client, those going to use the facility, policy makers in the construction field, neighbors around where the project is being executed, community members, government, environmental protection agencies, the general public as well as all the construction team members. Stakeholders can be subdivided into internal stakeholders and external stakeholders, internal stakeholders are stakeholders who are directly involved in every decision taking by the organizations executing the project this include the client, service providers, workers as well as customers.

2.3 Types of stakeholders

Stakeholders can be subdivided into internal stakeholders and external stakeholders, internal stakeholders are stakeholders who are directly involved in every decision taking by the organisations executing the project this include the client, service providers, workers as well as customers. On the other hand external stakeholders are those whose lives and living environment are significantly affected by the project this include, community members, neighbours and the general public. Traditionally it has been a strong emphasis in the construction sector that the internal stakeholders are those involved in procurement and site

management whiles external stakeholders target public officials and policies and regulations that guilds the development of construction project (Atkin and Skitmore, 2008).

Newcombe (2003) further classify stakeholders as direct and indirect, Smith and love

(2004) also identify types of stakeholders as direct and indirect whiles Carrol and

Buchholtz(2006) classify stakeholders as primary stakeholders and secondary stakeholders.

Primary stakeholders are the individuals, group or organization without whose participation the project cannot be executed. On the hand secondary stakeholders are the individuals or group who have interest in the project. Service providers can be considered as direct stakeholders because they have direct relationship with organization executing the project.

2.4 Organizational systems for selection project professional teams

A. . We have the old organizational system

- traditional organizational system

B. Current organizationalsystem

- design and construct organizational system
- management organizational system
- public private partnership organizational system

2.4.1 Traditional organizational system

Larmour (2011) argues that this approach is used to describe organizational system which involves the employer design team producing a full project design, cost control and the project professional teams are responsible for carrying out the construction. The project

professional teams are usually appointed by competitive tendering. Types of contract under the traditional organizational system as follows

2.4.2 Lump sum

Young (1993) viewed a lump sum contract as a contract where an agreed price has been determined for the execution of the work and performance of the obligations by the parties before the execution of the contract. This is supported by Khumpaisal (2007) who focused on construction industry and opined that maximum possible risk to the contractor occurs in the lump sum contract in which the extent of the work is moderately well identified and the cost of the work is tendered as a non-possible change project. This type of contract might be appropriate where there is certainty of contract prize is required before construction commence.

2.4.3 Measurement

Davis et al., (2008) state that this approach is re-measurement contracts, where the contract sum is known on completion and after re-measurement to some agreed basis.

This type of contract is suitable where there is no time to prepare even approximate quantities or where the quantity of work is very uncertain.

2.4.4 Cost reimbursement

Where the contract sum is arrived at on the basis of the actual costs of labour, plant and materials, to which is added a fee to cover overheads and profit.

2.5 When should traditional organizational system be used

- Project stakeholder wishes to nominate designers and project professional team separately;
- Contract price is require to be certain before construction begin

2.5.1 Design and manage organizational system

Mathonsi and Thwala, (2012) stated that design and build method is when the owner forms a contractual relationship with one firm, the design and built project team who either provides the design and contracting services with his own stakeholders or partners with professional subcontractors.

2.5.2 When should design and construct organizational system be used

- Suitable for where design is likely to change
- The construction can start early before design completes
- One firm is required for design and construction.

2.5.3 Management organizational system

Larmour (2011) stated that this system is used to describe organizational system which involves project team providing management services. The two main types of this are Management Contracting and Construction Management, which are both very different systems.

2.5.4 Management Contracting

In Management contracting system, project team provides management services to control and coordinate all site events, sub letting works to suitable project team on a competitive basis. The project stakeholder agrees to most of the risk because there is no certainty about costs and programme. Because of its flexibility, it allows the project stakeholder to make changes to the drawings during construction because design detail can be change and finalized as the project continues.

2.5.5 Construction Management

In Construction Management approach project stakeholder enters into separate contracts with the construction manager, architect and project professional team. Construction Management is generally part of programme savings, and control for the project stakeholder in terms of design quality, but less cost certainty. Construction Management approach is suitable for large and complex project.

2.5.6 Public private partnership delivery system

Larmour (2011) stated that this organizational system involves more than one project team working together to improve performance through agreeing mutual objectives, devising a way for resolving any disputes, and committing themselves to continuous improvement, measuring progress and sharing profit and lost. Under this organizational system, the project stakeholders lays down all procedures for the overall administration of the project within which he/she has the discretion to use the most appropriate of all the organizational systems

contained within the other three methods. Partnership forms are typically used for high complex projects.

2.6 Stakeholders influence on selection project professional team

Project Managers can use integrated approaches, such as Design and Construct organization system, Management organization system and Public Private Partnership delivery system to deliver the needs of the clients. Choosing the appropriate professional team for a given project is the problem. As decision as to what procurement system to adopt has to be made early and supported by the project stakeholder's team for the project. The uncertainties and influence that they will encounter on stakeholders must be considered. The performance of both organizations and project stakeholders representative can be monitored using pre-defined plans for each of the projects they are involved with and then compared with the actual. Once the project professional team for a project has been selected, then the following influential factors should be considered when evaluating the most appropriate project professional team (Rowlinson, 1999; Morledge et al. 2006).

➤ External factors:

Technological, political, economic, legal, social and commercial factors should be put into consideration when selecting project professional team for a project

➤ Client characteristics

Knowledge, culture, client involvement and experience of the clients and its team members undertaken the construction projects will influence the selection of project professional team.

➤ Project characteristics:

Complexity, size, location and uniqueness of the project should be considered as this will influence cost and time of the project.

➤ **Ability to make changes order:**

Changes orders in projects are not easily achieved. The desired level of flexibility for the project stakeholders to make changes during the project will influence the selection of a Project professional team

➤ **Cost issues**

An evaluation for the need for price certainty before start of construction project by the project stakeholder should be done early. If fixed price contract is required, then design must be complete before construction start and design changes will reduce.

➤ **Timing:**

Most of our construction projects required within a limited time frame. If early completion is a critical factor then an organizational system that encourage speedy completion may be suitable.

2.7 Stakeholder management

Tasmanian Government Project Management Guidelines (2011) provide an overview of the important aspect of project management methodology and pointed out eleven key elements that should be considered at all stages of the project Lifecycle, stakeholder management on the other hand is a very essential element for the success of every construction project.

For project management to work effectively, project managers need to identify key actors of the project system environment and determine their reaction towards project decisions (Cleland and Ireland, 2002). However, Jepsen and Eskerod (2009) gave a vivid explanation concerning project stakeholder management, this includes; deliberately influencing the stakeholders involve in the project in order to get their contribution, giving out limited resources in order for them to achieve the best output and spreading efforts across all stakeholders than concentrating on a few. Hence managing project stakeholders is absolutely necessary in order to have the negative impacts of stakeholders under control, maximize benefits and realize the targeted mission (El-Gohary et al., 2006).

According to Lim et al. (2005) stakeholder management is effectively managing the relationships that exist between stakeholders. Other authors like Karlsen (2002), Bourne and Walker (2006) define stakeholders in a different way, and their emphasis is on management activities of stakeholders. Stakeholder management as defined by Yang et al (2011) is a systematic way of identifying, analyzing, communicating, making decisions and all other activities that needs to be managed to realize a successful stakeholder management. The process of managing project stakeholders consist of all the management functions that is planning, organizing, motivating, directing and controlling.

2.8 Stakeholder management processes in construction

Many researches have been conducted to identify the various ways of applying stakeholder management in the construction industry. Olander (2006) adopted Cleland and Ireland, (2002) describe project stakeholder base on these fundamental premises that can guide project management processes. The process of managing project stakeholders consist of all

the management functions that is planning, organizing, motivating, directing and controlling. The steps for the process are as follows ; the first thing to do is to identify who the stakeholders are, information is then gathered, identifying the mission, pointing out strength and weaknesses, identifying strategy, making predictions of stakeholders behavior and the last step is to implement the stakeholder management strategy (Olander, 2007). According to Bourne and Walker (2006) stakeholder management can be realize based on following steps; identifying stakeholders; prioritizing stakeholders and developing a stakeholder engagement strategy.

2.9 Critical success factors (CSFs) for stakeholder management.

A number of researchers (Jefferies, 2002; Yu, 2007; Yang et al., 2009b) have considered critical success factor (CSFs) as way of enhancing the performance of stakeholder management. CSFs identify areas where if a successful stakeholder management is achieved, will promote the overall performance of stakeholder management across the entire organization (Yang et al, 2009 cited in Rockart 1979). Saraph et al. (1989) point out these critical areas as areas that need to be considered seriously in other actualize an effective stakeholder management. CSFs are considered as those activities when address will help promote an effective stakeholder management system. The six groups to consider in order to realize a successful stakeholder management are as follows;

2.9.1 Management support group

According to Yang et al. (2009b) for an effective stakeholder management, it very essential to consider management support from agencies implementing the project. In some projects,

the project managements are mandated to ensure an effective stakeholder management and to consider as a relevant aspect of every construction project. Managements of the project must be willing to aspect stakeholder management wholeheartedly and on the other hand stakeholder participants must be willing to share resource and power for the success of the organization as a whole (Brooke and Litwing, 1997).

2.9.1.1 Managing stakeholder with corporate social responsibilities

Othman and Abdellatif (2011) opined that the social economic development of both the developed and the developing nations depends largely on construction industries through the construction of public infrastructure and buildings for the function of communities. Moreover it aid government to realize it plans set for the overall development on its country. The actors affirm that for effective stakeholder management, stakeholders must have social responsibilities. AlWaer et al., 2008; Prager and Freese, 2009 in their definition of social responsibility indicate that economic responsibility is being able to produce goods, sell it at a reasonable price and earning profit on them whiles legal responsibilities is adhering to rules and regulations and ethical responsibilities is obeying rules and regulations set by the society itself which are not embodied in national laws. Currently environmental expectations are also being considered. The purpose of this is to ensure maximum protection of the environment. In other for project objectives to be achieved, projects managers should be able to consider all these kind or responsibilities.

2.9.1.2 Flexible project organization

One of the major objectives of stakeholder management is for stakeholders to gladly accept the project and use it for the intended purpose and for this to be achieved the project must be

flexible enough to suit the skills, the knowledge, the culture setting and the resource capacity of stakeholders.

2.9.1.3 Project manager competences

Project managers' role should not only be simply having knowledge in technical issues on board but rather he should be able to coordinate the environment, technology and the people as a whole. Every project is unique in terms of location and the cultural settings of people, therefore the project manager should have an in-depth knowledge about this uniqueness in order to develop a well-planned strategy as well as engaging the people for a successful execution of the project. Olander, (2006) opined if external stakeholders process are conducted properly, it can be used to enhance the project performance. Olander and Landin (2008) identified that project managers should be skillful enough to be able to engage in effective negotiations and communication in order to be able to manage stakeholders successfully. Construction firms are made up of numerous stakeholders each having his own idea, views, interest, strength and potentials. Project managers need to develop strategies to meet the expectations of all these stakeholders.

2.9.2 Information input group

Freeman et al. (2007) opined that it is very relevant to understand stakeholder information since it is the skeleton on which the success of every project rests. For management to be successful it is important to investigate deeply into stakeholders and the project. Interest and challenges of stakeholders should be identified and strategies should be developed to mitigate the challenge.

The information to be identified are explained below;

2.9.2.1 Setting common goals

This is to state clearly what the project seeks to achieve at every stage of the project. (Winch, 2002), with this the project team must be aware of the activities they have to undertake in order to achieve the objective set for each step. Jergeas et al. (2000) indicated that the purpose for which the project is being executed must be well understood and the suggestions stakeholders make must be feedback into the project in order for project team and stakeholders to be on one accord.

2.9.2.2 Stakeholder identification

The project managers must be able to identify which group or individuals qualify to be a stakeholder of the project to be executed either by their function or by internal external guidelines. After identifying this group or individuals, project managers need to interact with the key members in order to know their views and reactions towards the project and decisions made concerning the project (Olander, 2006). In identifying stakeholders, potential stakeholders who will support the project as well as those who are already involved in the project need to be identified. (Karlsen, 2002).

2.9.3 Stakeholder assessment group

In general stakeholders can influence project in diverse ways. It is therefore necessary to analyse the level of influence stakeholders have on a project. For project managers to have an indepth knowledge of the stakeholders they are working with, their behavior, attributes and the potential influence they have need to be assessed. Yang et al, 2009b suggested that

the information managers have about stakeholders can be used to address stakeholder conflict. More over when information about stakeholders are gathered assessment can be done by prioritizing the level of interest each stakeholder have based on the information given.

2.9.3.1 Stakeholders' attitude

Savage et al. (1991) indicated that for stakeholder management to be successful the levels to which stakeholders are willing to cooperate with the project team need to be measured. This is because stakeholders will either have a positive impact or a negative impact on the project. According to McElroy and Mills (2000) stakeholders attitude can be define as the level to which stakeholders are in support of a project or not. The definition gives an indication that stakeholders can have a positive or negative impact on the outcome of a project. Freeman et al. (2007) further classify stakeholders' attitude into three categories that is cooperative potential, observed behavior and competitive threat. A project manager needs to understand all this and takes it into consideration in making decisions

2.9.3.2 Stakeholders' interests

According to Olander and Landin (2008) one major characteristics of every stakeholder is that he or she have an interest in a project and try to influence the project implementation to meet his or her interest and expectations. Yang et al. (2009b) indicated that the construction industry due to its complexity is characterized by numerous forms of stakeholder interest. For this reason Freeman et al. (2007) identify that there will be a need to identify the interest of all the various stakeholders in order to assess them. Karlsen (2002) on the other hand

indicated one way of evaluating stakeholder's interest. Many researchers have considered stakeholders interest as a component that affect the successful outcome of a project and therefore need to be considered critically.

2.9.3.3 Stakeholders' power

According to Broune (2010) power in construction refers to an individual or a group who have the ability to bring the execution of a project to a halt or make changes in the project execution process. This implies that power is a very important tool and project managers have to be considerate in dealing with stakeholders who hold the power of the project in their hands. This is because stakeholders with power have the ability to control resources which is very essential without which the project cannot be executed (Mitchell et al., 1997). Bourne and Walker (2005) affirm that for the success of every project, project managers should understand that there is “invisible power” among stakeholders.

2.9.3.4 Stakeholder' knowledge

Yang et al. (2007) pointed out in their study that coordinating technology with automation enhances performance of stakeholders. Yang indicated that technology can be used to access several information and with this stakeholders can have access to information from several source. As a matter of fact the more information a stakeholder has on the project the more interest he will develop. Walker et al. (2008) affirm that it is very necessary for a stakeholder to have knowledge in the project as much as possible. McElroy and Mills (2000) on the other hand pointed out that it is either a stakeholder have an in-depth knowledge of the ongoing project or is totally ignorant about the project. They then suggested that it will be very important for stakeholders to have a full knowledge about the project in order to offer their

contributions and more over achieve their objectives on the other hand when stakeholders are ignorant of the project they make assumptions and cannot base their contributions on facts. Moreover if stakeholders do not have knowledge about the project it will become very difficult for them to set their objectives and expectations. For this reason stakeholder knowledge is seen as a driver affecting stakeholders' impact on a project.

2.9.4.1 Evaluation of alternative solutions

Olander and Landin (2008) identified that when stakeholders understand clearly the alternative used and give their consent, it establishes trust between project managers and stakeholders for a successful management process. According to El Gohary et al. (2006) the first step to be adopted in incorporating stakeholders' views in the decision making process is to use the solution identification process. With this alternative solutions are developed based on the contributions stakeholders make and the concerns they raise this is further analysed and the best solution is selected and implemented.

2.9.4.2 Ensuring effective communication

Jergeas et al., (2000) indicated two methods that can be used to improve stakeholder management and one of them is effective communication. In order to ensure a successful project execution, in-depth information should be provided on the project. Information on the project's objectives, resources, and the overall goals of the project need to be pointed out to stakeholders through effective communication. The time limit and the various processes that will be used to execute the project also have to be communicated to stakeholders. To achieve a successful stakeholder management, project managers have to spend about 90% of their

time communicating the happenings of the project to stakeholders. Effective Communication Bridge the gap between the project team and stakeholders at all levels (Čulo and Skendrović, 2010).

2.9.4.3 Stakeholder involvement

Stakeholder participation is very essential for the successful implementation of every construction project. Participation should be done at all stages of project processes starting from planning to project completion and this can very beneficial (Li, &Skitmore, 2012). Stakeholder participation allows stakeholders to make the necessary corrections at the early stage of the project to prevent project failure (Atkin &Skitmore, 2008).

2.9.4.4 Promoting relationship with stakeholders

Savage et al. (1991) and Jergeas et al (2000) affirm that in order to meet stakeholders expectations and achieve successful project execution, project managers must ensure that a positive relationship is established. Karlsen (2008) opined that project managers will be at fault if they ignore stakeholders as this will put a strain on the relationship between them and the stakeholders. The stakeholders under no circumstances turn to overlook the concern of the beneficiaries since the project is meant for these stakeholders. Karlsen indicated some relevant factors that can be used to encourage relationships between the project team and stakeholders as building trust and reducing uncertainty.

2.9.4.5 Trust

Pinto et al. (2009) established that trust creates a positive relationship among organizations. Therefore project managers should ensure that they win the trust of stakeholders in order to develop a positive relationship that will facilitate the success of the project.

2.9.4.6 Reduce uncertainty

According to Turner and Müller, (2003) uncertainty forms an integral part of most projects and therefore a relevant way of eliminating or bringing this uncertainty to a minimum is to develop a positive relationship with stakeholders where the risk involved in uncertainty can be borne by the two parties that is the project team and the stakeholders.

2.10 Stakeholder assessment

Johnson and Scholes (1993) have identified that currently stakeholder assessment has become the tool that is used to analyze the level of interest and likely actions of stakeholders. One key aspect of every project strategy is analyzing stakeholders' expectations. Here three issues are considered. They are as follows;

- The manner in which stakeholders are to be classified
- Determining how to prioritize stakeholders
- Determining how each stakeholder engagement level will be selected

2.10.1 Classification stakeholder

Mitchell et al. (1997) identify seven kinds of stakeholders using their degree of attributes. Olander (2007) affirms that classifying stakeholders using their attributes gives a strong sense of impact on the project. Newcombe (2003) indicated that one major relevant aspect of

stakeholder management is knowing the various kinds of stakeholders, their importance and their level of influence this help to identify the interest and expectations of these stakeholders on a project. These stakeholders will want their interest and expectations to be enforced on the project, hence the project manager have to determine whether these stakeholders have the power and the means to do so and the impact this will have on the project strategy. Newcombe indicated two approaches to assess this using the „power matrix“ or „interest matrix“.Power /Interest matrix is techniques adopted to assist differentiate clients power and it interest in project

Nguyen et al. (2009) and Olander (2006) argue that this approach have issues because is either one has power or one has an interest it therefore becomes difficult to rank them on the same scale. They proposed that it will be more useful to assess the level of potential impact external stakeholders have and the probability level that this impact will happen. Olanders (2007) also affirm that impact\probability matrix could be used instead of power\interest matrix. Bourne and Walker (2005) adopted this approach.

impact\probability matrix is effective technique which stakeholders adopt to implement strategy into construction

2.10.2 Prioritizing stakeholders

According to Karlsen (2002) every stakeholder and their level of importance, some stakeholders are relevant because they have power and ability to withheld information and resources while others are important because they determine whether a project becomes successful or fail. Hence Karlsen opined that the most important stakeholders should be identify and their interest be addressed. A number of studies have been conducted and this

studies suggest that major attributes should be combined to determine the level of influence stakeholders have on a project (McElroy and Mills, 2000; Johnson et al., 2005; Mitchell et al., 1997; Olander, 2007; Bourne and Walker, 2005; Nguyen et al., 2009). Nguyen et al. (2009) deduced from the study above that the simple way to determine the level of stakeholder influence is the use of „impact index“ which prioritize stakeholders in order of influence.

2.10.3 Levels of stakeholder engagement

According to Chinyio and Olomolaiye (2010), there are numerous methods to stakeholder management and this is subdivided into four main categories that is stakeholder management is to be collaborative, it should be involving, it should inform and managers should consult when something is not clear these are the four levels of stakeholder management. For effective stakeholder management the four levels must be applied. The four levels have been explained below

- **Inform:** This explains that project managers should explain to stakeholders the issues at hand in order for them to give their views on alternative methods or provide solutions. External stakeholder with low level of impact as well as a lower probability impact must not be left out from the project. They must be informed about decisions that may affect them directly. These stakeholders may not be actively involved in taking the decisions, but they must be enlightened on the decisions that will directly affect them for them to air their views on it (Karlsen, 2002).

- Consult: this is getting feedback from stakeholders on analysis made or decision taking. Is a method of updating stakeholders on the project. This is done because secondary stakeholders have high level of impact and therefore their views must be taking on decisions making because this decisions is either going to affect them directly or indirectly. Decision taken is not necessarily going to change but consulting stakeholders ensure some level of commitment from stakeholders (Chinyio and Olomolaiye , 2010).

- Involve: this is involving stakeholders throughout the project execution in other to ensure that stakeholders' expectations are meet. Stakeholders who have high level of impact have the power to make decisions that will affect the project they must be therefore be involved in other to know their interest and considering it in the process of executing the project.

When the interest of these stakeholders are achieved they accept the project as their own and develop a passive interest for the project (Chinyio and Olomolaiye , 2010).

- Collaborate: this is to consider stakeholders as partners in every decision taking on the project, stakeholders with high level of impact also have the power to a successful execution of projects hence managers should be able to coordinate with them in other to successfully implement the project. When these stakeholders are treated as partners it increase their level of commitment towards the project. This is realized when project objectives and interest are in harmony with their interest and expectations (Savage et al., 1991).

2.11 Practical approaches for analyzing and engaging stakeholders

Olander, (2006) indicated that stakeholders analysis is very relevant for a successful stakeholder management. Reed (2008) explains stakeholder analysis as recognising the interest stakeholders have, assessing their influences and relationships. On the other hand stakeholder engagement is having a positive relationship through effective communication (Chinyio and Akintoye, 2008). For a successful stakeholder management, stakeholders must be engaged in the project as early as possible. Yang et al. (2011) indicated that project managers should choose approaches that are in line with the processes adopted for stakeholder management. He also stated that stand-alone approach must be avoided and all the approaches adopted should be coordinated with other approaches. Although selecting the group based on the social and cultural setting is very relevant, resource constrain and time limit should also be considered in the project execution.

According to Yang et al (2011b) the following approach can be adopted by construction firms in stakeholders analysis and engagement

➤ Writing formal memos

Formal memos are internal written communication within a team, to memory of its reader of any recommendations, directives, inquiries, instructions and requests for improve in future.

Its advantages as follows

- giving detail information about stakeholders
- Too much time can be wasted in documenting information

➤ Organizing meetings

Organizing meeting is essential means of interaction, relaying decisions, problem solving and brainstorming to discover new ideal between stakeholders and the project as well. The followings are some examples of merit of meetings

- It is easy and cost less
- It allows specific stakeholders to be targeted and make use of networks that are already existing
- Face- to- face interactions allow attendance to express their views on issues

➤ Organizing Interviews

An interview is way of discussions between one and others, it can be written, practical or orally. Its form of communication that help in gathering information, solve problem and determine behavioral changes. Its advantages as follows

- This provide deep understanding of issues
- It provides a flexible location point since individual are contacted at their locations
- Language barrier is minimize
- It cost less and easy to organize
- It can be time consuming
- Interviewers require special skills
- It does not provide more quantitative data

➤ Negotiations

Negotiations are win-win or lose-win or lose- lose skill organizations that help convince your customer on quality, scope, schedule and pricing. Its advantages as follows

- It is cheap and a faster way of solving issues
- The project team members must be well prepared

- The group should sometimes be in concession

- Professional services

Professional service are intangible occupations that architect, engineers, project management professionals sells to help a stakeholder to manage certain part of their project. Its advantages as follow

- It provide a definite strategy for stakeholder management
- Project managers can save time with this method

- Questionnaire and surveys

Is process of gathering a lot of information organizations on particular issue on non threatening ways. Its advantages as follows

- Anonymity gives sincere answers
- It can reach respondents who are even far away
- Information can be retrieve from individuals or group who are unlikely to attend meetings
- Respondent can fill the questionnaire at his own convenient time
- Less resource is use to cover large sample size
- The data collected can be superficial

- Social contacts

A social contact is an agreement between members of stakeholders in society and the guidelines that specify and limit the rights and responsibility of each member in the society.

Its advantages as follows

- It enhances stakeholders trust
- It builds relationships through communication

2.12 Formulating stakeholder management strategies

Stakeholders' pressure forces the construction team to explore various ways to deal with issues that arose. Aaltonen and Sivonen (2009) indicated that for a global project, stakeholder pressure forces companies to adopt different strategies to address issues that arise. Based on this five different approaches to stakeholder management were identified. This ranges from active to passive approaches. The stakeholder management strategies adopted were; avoidance strategy, influence strategy, dismissal strategy, adaptation strategy and compromising strategy.

Type of response strategy and their Description

- Adaptation strategy

This means acting on the demands that stakeholders present. It indicates that external stakeholder pressure needs to be adjusted in order to achieve the demands and objectives of the project.

- Compromising strategy

This is done by coming into agreement with stakeholders, paying attention to their claims and creating a platform for dialogues. Reconciling, compensating and opening up the project to stakeholders.

- Avoidance strategy

Detaching oneself from stakeholders in order to shield off their claims. It gives off the responsibilities of acting on stakeholders' demand to other actors for them to fulfill these demands.

- Dismissal strategy

This is where stakeholders demands are shrug off. That is is turning a blind a eye to stakeholders pressure in project execution.

➤ Influence strategy

This is building a positive relationship with stakeholders by opening up and sharing information with them.

Sivonen and Aaltonen opined that in other to formulate strategy types, these facts needs to be considered;

- The position which the focal company holds in the project;
- Stakeholders powers;
- How legitimate stakeholders claims are;
- The medium which stakeholders use to advance their claims;
- The focal company's experience;
- Other actors' responses to claims.

2.13 Construction Industry in Ghana

From the perspective of Ghanaian economy, four major actors were distinguished: these were the Government, who is the major actor or client, Real Estate Developers, Investors and Owner Occupiers. Ministry of Roads and Transport represent government as a client by providing road works more over Ministry of Water Resources works and Housing also represent government by giving out projects to contractors. The Real Estate Developers also comes in and commit their resources into the building projects. Most times these developers take loans, construct buildings and speculate sales. There are investors who are also part of the actors what these investors do is to invest their capitals into building construction an

example of such investors in Ghana is the Social Security and National Insurance Trust(SSNIT). Owner occupiers are persons or individuals who build their own houses. The government of Ghana between 2000 and 2008 recognized the construction sector as one of the major component that can accelerate it vision of encouraging growth of foreign and private ventures. The construction sector is considered to be the backbone of the Ghanaian economy. In 2010 and 2013 its contribution to the GDP was from 8.3% to 11.8% respectively and according to Ghana Statistical Service in 2010 indicated that on the average the sector add up to 8.9% of the GDP.Fugar and Agyakwa-Baah (2010) affirm that the construction sector is a major contributor to the development of every economy. Amoah et al, (2011) indicated that the construction industries also create jobs and as well expand rural areas and communities.

According to the World Bank in 2003 as Anvuur and Kumaraswamy (2006) indicated, the estimated yearly cost of public procurement amenities total US\$600 million. Representing about 10% of the country,,s GDP. Out of this, a bulk come from the outflow of all government agencies for instance the ministries, assemblies, departments, institutions and other agencies. Given chronological background of Ghana,,s economy coupled with challenges of limited financial resources as in other countries, majority of projects are funded through internal and external borrowing, grants from bilateral and multi-lateral sources and public private partnerships (MOFEP, 2010 p.5). The construction industry in Ghana is growing rapidly, with majority of construction projects being infrastructure development (Mustapha, 2013). In 2008, 9.73% of the country,,s Gross Domestic Product (GDP) was invested in the construction industry (Ren, Kwaw and Yang, 2012), from foreign and local investors in both private and public sectors.

2.14 Summary

This summary introduced the concept of stakeholders and their history in construction industry and continue to discuss organizational systems available for selection project team, stakeholder influence on selection project teams, critical success factors influence stakeholders management, approaches for engaging project teams and methods of managing stakeholders in construction industry.

After the review of the literature, client team, cost management, time management, change orders management, project characteristics and “external environment management has been identified as factors that influence stakeholders in Ghanaian construction industry. For critical success factors that influence stakeholders management in Ghana management group, continue support, stakeholders assessment, action and evaluation and information input have been recognize. The practical approaches for engaging project teams” professional services, interviews past experience and memos were identified in Ghana. For strategies of managing stakeholders in construction industry in Ghana adaptation strategy, influence strategy, dismissal strategy and avoidance strategy were identified in Ghana

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The chapter throws more light on the method adopted for the study and addresses issues on the type of research strategy adopted and the design processes used. Some specific areas considered were: data collection instruments, population of the study, sampling technique and sample size and data preparation and statistical tools.

3.1 Research strategy

The researcher adopted quantitative method for the study. According to Gerrish and Lacey (2006) quantitative approach is a broader term that collects evidence for a research by using techniques. Quantitative approach is used in researches that already have existing knowledge on the subject under study which will allow the use of standardized data method of collecting data for instance using surveys and questionnaires which aim at testing hypotheses (Bowling 2009). In using quantitative approach, numerical data is collected to explain into details, make predictions and control phenomenon. Statistics are used to analyse the data collected. For the purpose of this research, questionnaires were design and given out to the targeted group of contractors and other professionals in the industry to solicit their views on the topic. This was among the characteristics of the quantitative approach. Hence it is suitable for the research.

3.2 Data Collection and Instrumentation

3.2.1 Sampling Technique and Sample Size

The sampling population in this research includes the project managers, engineers, consultants who have experiences in construction professional team selection. Snowball sampling approach, a few potential respondents are contacted and asked whether they know anybody with the characteristics that you are looking for in your research (Fugar, 2010). The targeted population consists of 70 governmental agencies that have experience in project team selection in Ghana. The target population was derived by the collation of list of construction firms that have operated with or are operating with the following agencies that manage Ghana Government contracts in the Greater Accra region at the various communities in the district as at the end of the 2016; Tema Development Corporation, Tema metropolis assembly, Ashaiman municipal assembly Kpone katamanso District assembly and. Tema Development Corporation, were visited to collate the sampling population because these agencies also implement and manage projects in the in Greater Accra region

The following were the result of the collation: Tema Development Corporation D1 K1-12 and D2 K2-8, Ashaiman municipal assembly D1 K1-5 and D2 K2-5, Tema metropolis assembly D1 K1-10 and D2 K2-5 and Kpone Katamanso District assembly D1 K1-15 and D2 K2-10. This gave a study population of 70 firms in the category of D1 K1 and D2 K2 for building and civil engineering works respectively. This technique was adopted to help the researcher to reach hard- to-reach respondents. The firm which was observable and easy to trace and for that matter currently operating in the district was first contacted and this gave the lead to other firms with the same characteristics till a representative sample size of seventy (70) respondents was obtained.

3.2.2 Questionnaire design

The strategy adopted for the questionnaire design was to first conduct a literature review which is relevant to the study with much emphasis on the objectives of the research. The questionnaire was designed making sure that, the privacy of the respondents were also taken in to consideration in order to allow the respondents to answer the questions without fear or intimidation. Enough instructions, guides and keys were provided to aid the respondents in answering the questions. The questionnaires were closed-ended and provided options for respondents to choose, rank and react to issues that were investigated. The Likert scales with scores in the range of 1 to 5 were used to reflect the attitude, opinions, expectations, perception, and behavior of the respondents. The questions addressed issues on the status of firms, years of experience, work acquisition rate, factors influence stakeholders on selection project professional team, critical success factors that influence stakeholders' managements, strategy of engaging stakeholders, approaches for managing stakeholders and sub factor under critical success factors. In all there were twelve (10) questions in which tables were used to profile the variables to make it easy for respondents to answer. A period of one week was allowed for the respondents to answer questionnaires.

3.2.3 Instrument Administration

The questionnaires were self-administered by the researchers by hand delivery to technical personnel like consultants, engineers, architect or designer and project managers within the sample firms to answer the questions. On some occasions, the questionnaires were administered and collected on the same day. The researcher used two (2) weeks in collecting

all the answered questionnaires. In all seventy (70) questionnaires were sent out for data collection.

3.3 Data analysis

The individual responses were aggregated to give larger units for analysis. The aggregated units were packaged and entered into Statistical Packages for Social Sciences (SPSS Version 16) and later transferred to Microsoft Excel 2007 for analysis. The statistical tools used to run the analysis was descriptive statistics specifically Relative index of importance (RII) and tables, pie charts and bar graphs were use for graphical representation of the data collected.



CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.0 Introduction

This sections discussions is about how data that was obtained from the survey as a result of the administering of the questionnaires. The instrument that adopted was (SPSS) Statistical Package for Social Science and Microsoft excel. Pie charts, tables and bar graph were used to represent the data graphically.

4.1. Background information

This section presents background information on respondents such as how long the firm or company has been in existence, the number of projects that the firm has been involved in and education background of various workers on the job, main types of contract

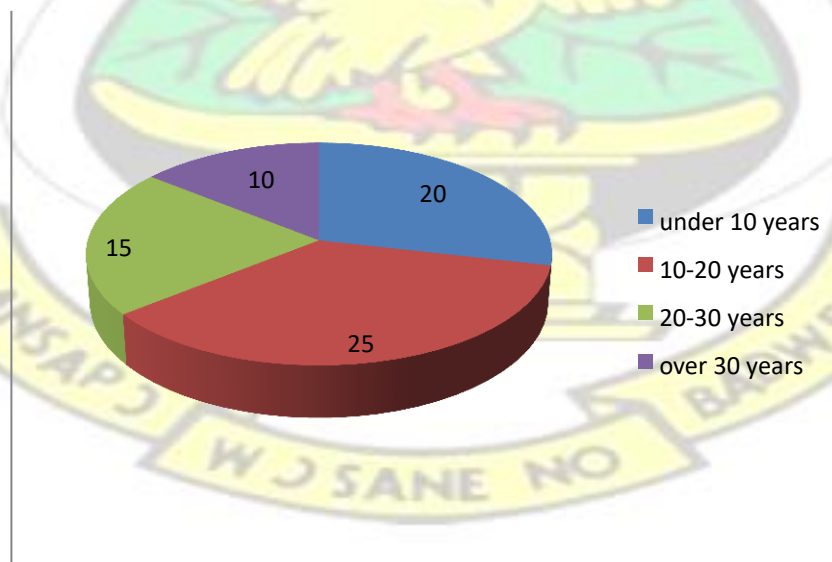


Figure 4:1 Period of Firm's Existence

Source: Field survey, 2017

Table 4:1. The percentage distribution of the considered respondents in this research. Up to 37 percent of the firms have been in existence for fewer 20 years with 28.6 percent under 10 years and the majority of the firms representing 21.4 percent having been in existence for between 11 to 20 years. The rest of the firms considered represent 14.3 percent have been in existence for more than 30 years.

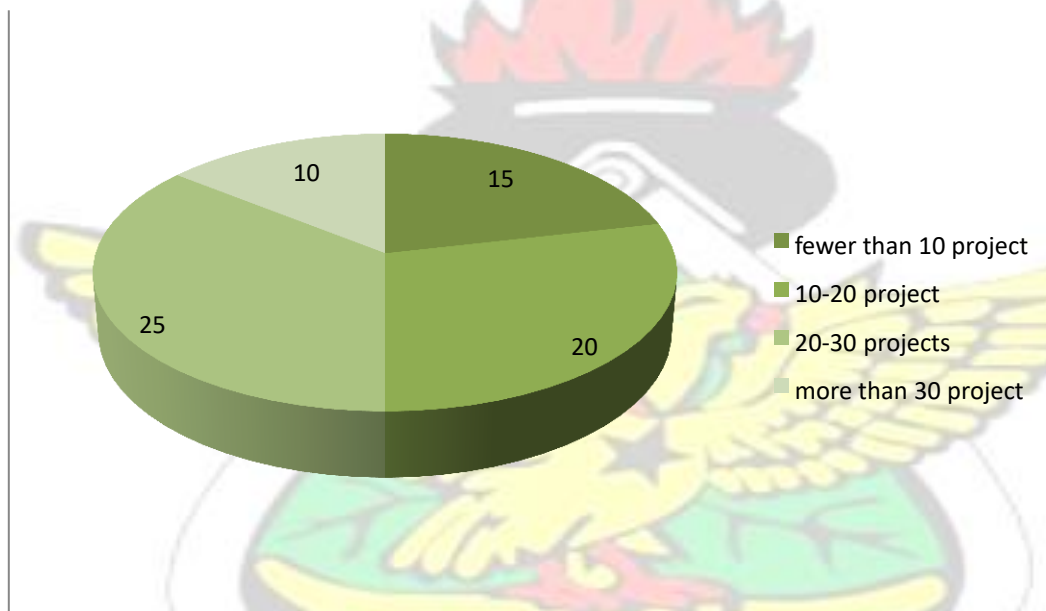


Figure 4:2 Number of projects firm has been involved in

Source: Field survey, 2017

Most of the firms have had 10-20 projects representing 37 percent with 28.6 percent of the firms having involved in fewer than 10 projects. A total percentage of 21.4 of the firms have been involved in more than 20 different projects with 14.3 percent of the firms having recorded more than 30 projects.

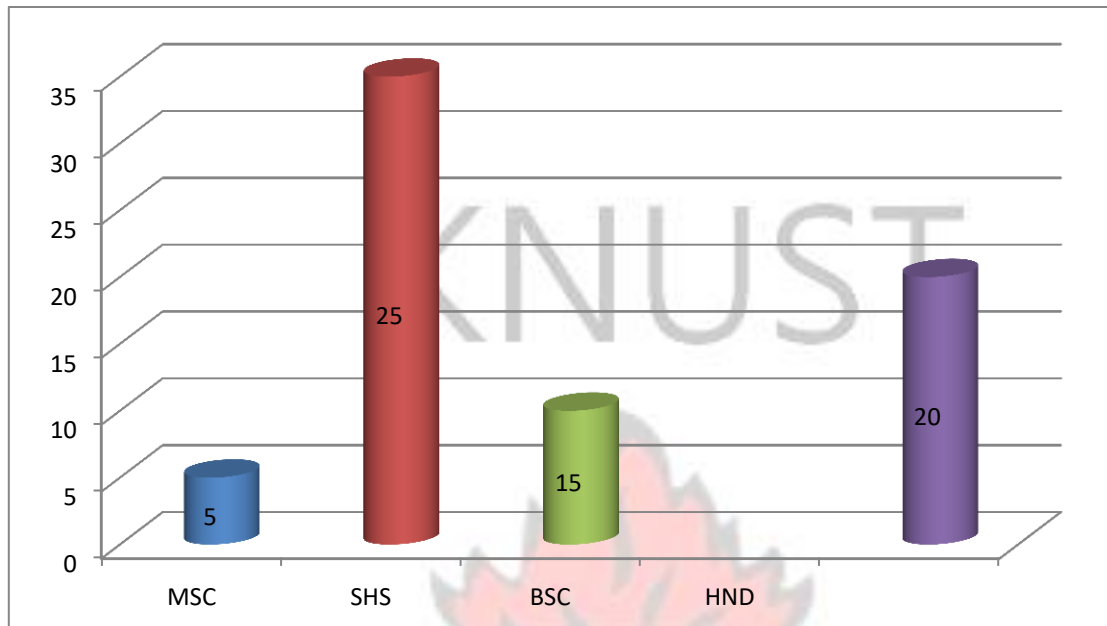


Figure 4:3 Educational Background of the respondents

Source: Field survey, 2017

A summary of the educational background of respondents in the various firms is provided in a percentage distribution as given in figure. The average percentage scores indicate that the industry has more individuals with SHS qualification than any other qualification. This is followed by building HND, BSC and MSC and other qualifications. Those with SHS are foreman and HND holders are clerk works. Graduates are Engineers and post graduates are managers

Based on the background information, it can be justified that the source of the data collected are good with number of years of existence and having experience with a significant number of projects and very importantly having a workforce with a wellstructured education background. They are therefore in good position to provide information on issues relating the construction industry especially regarding planning and controlling of projects.

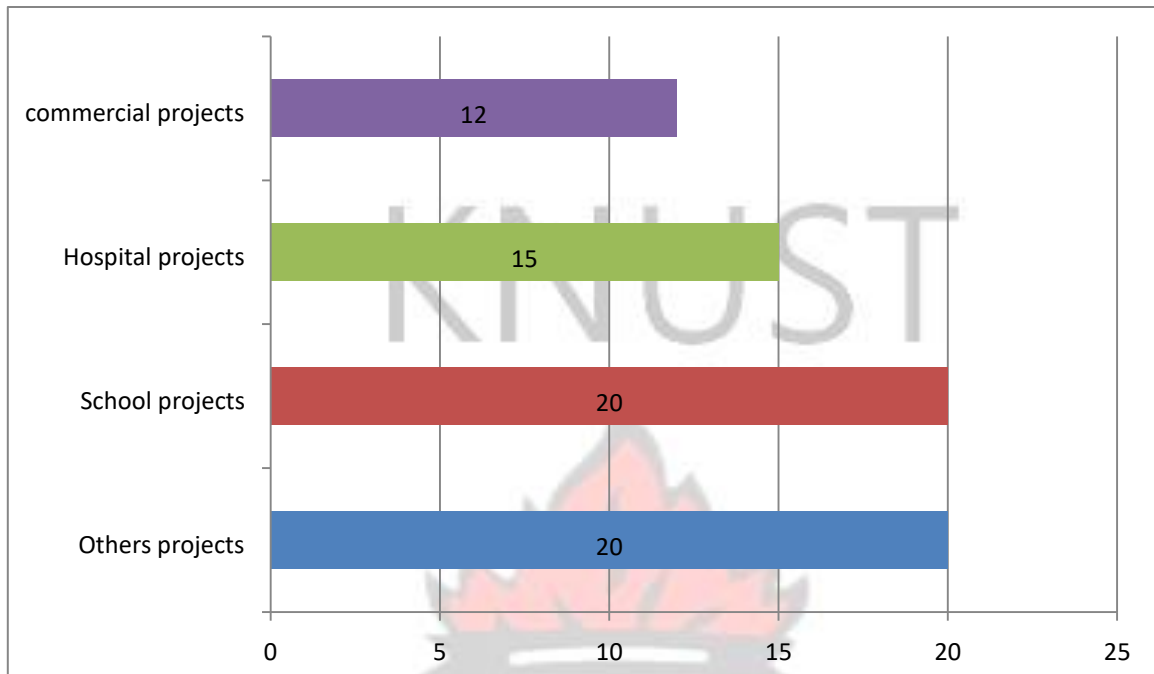


Figure 4:4 Types of project their firms engage in

Source: Field survey, 2017

Most of their respective firms have been engage in other projects. They were represented 28.6 percent and percent 21.4 of respondents said that their organization engage in commercial projects. 28.6 percent of respondents indicated that their firms engages in school projects and percent 21.4 also undertakes Hospital projects.

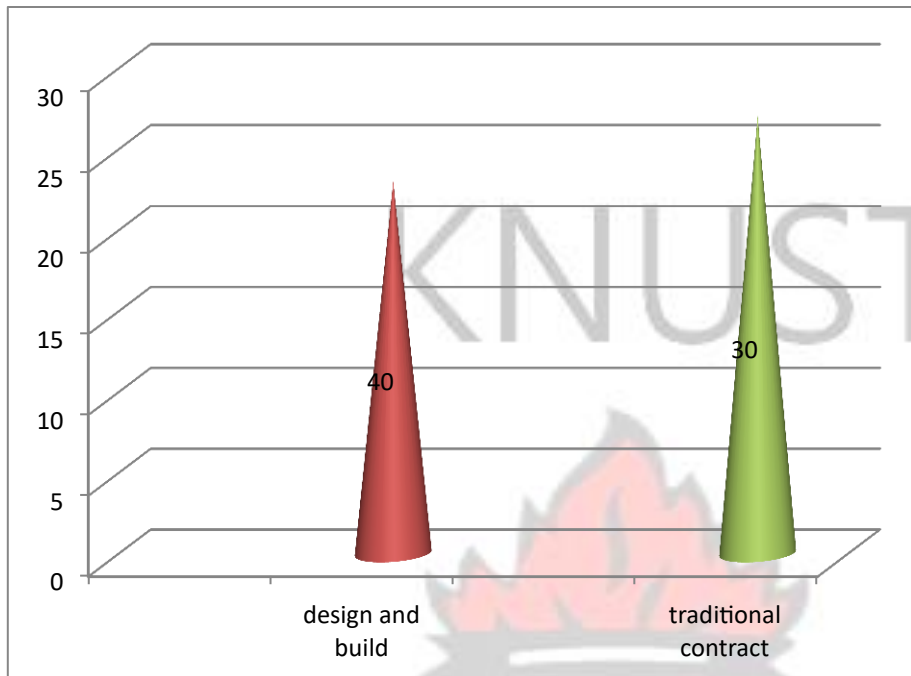


Figure 4:5 Main types of contracts

Source: Field survey, 2017

The respondent indicated that most of their respective firms have been engage in traditional types of contract which represent fifty four percent (54) of respondents and forty six (46) percent respondents indicated design and build types of contract.

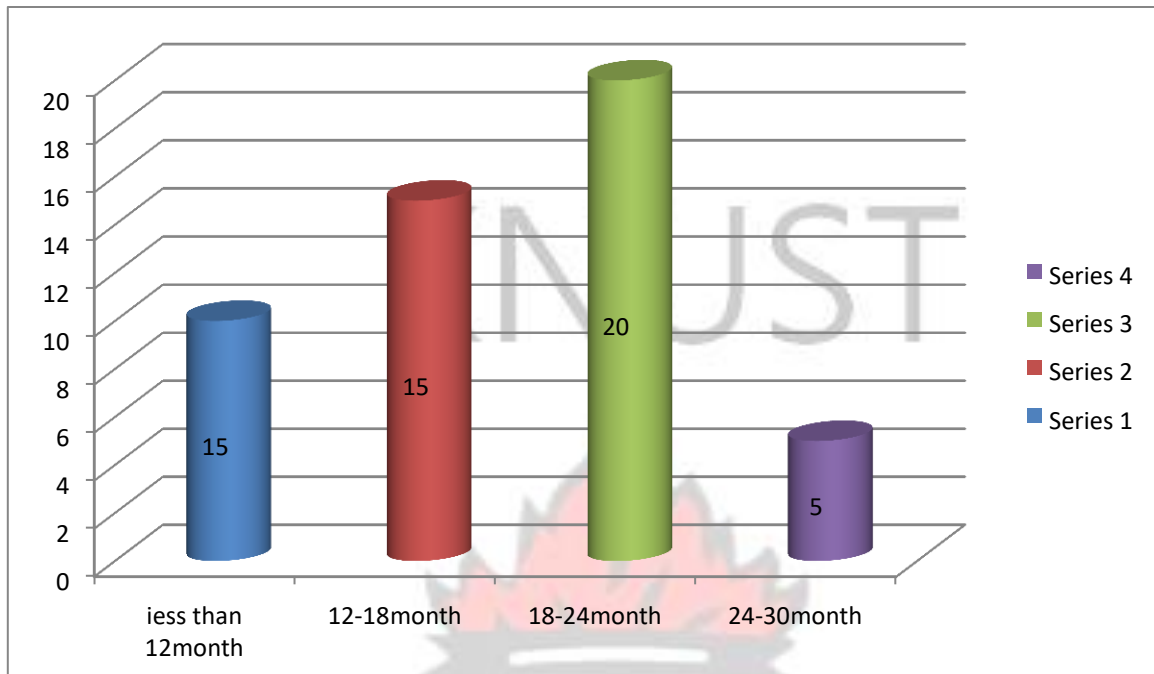


Figure 4:6 Average duration of projects

Source: Field survey, 2017

The respondent indicated that most of their respective firms have been engage in have 1824 months as highest frequency of 20 percent of the respondents and 15 percent said that the average duration of projects are between 12-18 month. Frequencies of 10 have indicated that average project duration are less than 12 month while 5 percent of respondents said that the average duration of their projects last between 24- 30months.

4.2 To identify stakeholders influence on selection project professional team

Six (6) factors were identified during the literature review such as external factors, project stakeholders teams, Project characteristics, Ability to make changes, Cost issues and

Timing. Likert scale of 1-5 points which ranges from Not Important to Very Important and the relative importance index (RII) was used to rank the factor. During the result discussion, only those factors that rank first and second will be discussion.

4.2.1 Stakeholders Influence on Selection Project Professional Team

The concept of relative importance index and likert 1-5 scale was used to rank these factors and the results of our respondent are summarized in Table 4:11. From the result, external factors were first ranked with RII 75.21% and 189 scores as most important factor in procurement management. Project stakeholder's teams were second ranked important with RII 74% and 185 scores. Followed by Project characteristics, Ability to make changes, Cost issues and Timing. Occurring in that order of precedence as key organizational strategy that influence stakeholders on construction projects professional team selection.

The result depicts that;. Consideration should be given to the potential effects of economic, Commercial, technological, political, social and legal factors which influence the stakeholders and their objectives, and the organizations during project's lifecycle. The finding of this research is in line with Morledge et al. 2006.

Table 4:1 Stakeholders influence on selection project team

Stakeholders influence	scores	RII	Ranking
External factors	189	75,21	1
project stakeholders teams	185	74.00	2
Project characteristics	184	73.60	3
Ability to make changes	178	71.20	4
Cost issues	178	71.20	5
Timing	171	68.40	6

Field survey, 2017

4.3 Critical success factors that influence stakeholders' management

Thirty (30) factors were identified during the literature review which was divided into six main groups such as information input, decision making, continue support, management support stakeholders assessment and action and evaluation. Likert scale of 1-5 points which ranges from Not Important to Very Important and the relative importance index (RII) was used to rank the factor. During the result discussion, only those factors that rank first and second will be discussed.

4.3.1 Factors affecting stakeholder management

The concept of relative importance index and likert 1-5 scale was used to rank these factors and the results of our respondent are summarized in Table 4:11. From the result, management support was first ranked with RII 75.2% and 188 scores as most important factor in stakeholder's management. Stakeholders' assessment was second ranked important with RII 74% and 185 scores. Followed by management support, Action and evaluation, decision making, Continue support and information input. Occurring in that order of precedence as critical success factors that influence stakeholders management on construction projects

The result depicts that; decision making, continue support, management support stakeholders assessment and action and evaluation will ensure effective stakeholder management if stakeholders are willing to share their power for the success of the project

Table 4:2 Factors that affecting stakeholder's management

Main factor	scores	RII	Ranking
Management support	188	75,20	1
Stakeholders assessment	185	74.00	2
Decision making	184	73.60	3

Action and evaluation	178	71.20	4
Continue support	178	71.20	5
Information input	171	68.40	6

Field survey, 2017

4.3.2 Factors affecting decision making

The concept of relative importance index and likert 1-5 scales was adopted in study to rank these decision making factors and the results of our respondent are summarized in table 4:11. From the result, Formulate appreciate strategies was ranked first with RII 73.60% and 184 score as most important factor that influenced decision making in building industry. evaluation of alternative solution with RII 72% and 180 scores ranked second. Follows by Ensuring effective communication. Occurring in that order of precedence as factor that influenced decision making in construction projects.

The result depicts that; other actors have affirm the relevance of formulating appropriate policies to deal with stakeholders. The outcome of this study was in line with Yang et al. (2011a)

Table 4:3 factors affecting decision making

factors	scores	RII	Rank
Formulate appreciate strategies	185	73.60	1
evaluation of alternative solution	170	68.00	2
Ensuring effective communication	169	67.90	3

Field survey 2017

4.3.3 Factors affecting Management support

The concept of relative importance index and likert 1-5 scales was adopted in study to rank these management support factors and the results of our respondent are summarized in table

4:11. From the result, Project manager competencies was ranked first with RII 73.60% and 184 score as most important influenced factor in management supportin . Managing stakeholder with social responsibilities with RII 72% and 180 scores ranked second.Follows by Flexible project organization. Occurring in that order of precedence as factor that influenced management support in construction projects.

Table 4:4 Factors affecting Management support

Factor	scores	RII	Rank
Project manager competencies	184	73.60	1
Managing stakeholder with social responsibilities	170	68.00	2
Flexible project organization	170	60.00	3

Field survey, 2017

4.3.4 Factors affecting information input

The concept of relative importance index and likert 1-5 scales was adopted in study to rank these information input factors and the results of our respondent are summarized in table 4:11. From the result,Identifying stakeholders was ranked first with RII 73.60% and 184 score as most important factor that influenced information input in building industry.

Stakeholder need and expectation with RII 68% and 170 scores ranked second.Followed by setting common goal. Occurring in that order of precedence as factor that influenced information input in construction projects.

The result depict that, identification should be based on common interests and needs of the project. The outcome of this study was in line with (Ye et al., 2009b).

Table 4:5 factors affecting information input

factor	Scores	RII	rank
Identifying stakeholders	184	73.60	
stakeholder need and expectation	170	68.00	
Setting common goal	170	68.00	

Field survey, 2017

4.3.5 Factors affecting stakeholder assessment group

The concept of relative importance index and likert 1-5 scales was adopted in study to rank these stakeholder assessment factors and the results of our respondent are summarized in table 4:11. From the result, influence of stakeholders was ranked first with RII 74.00% and 185 score as most important factor that influenced stakeholder assessment in building industry. Stakeholder legitimacy with RII 73.60% and 184 scores ranked second. Follow by stakeholder interests, stakeholder power, the stakeholder's knowledge, stakeholders' knowledge, stakeholder urgency, Analyzing conflicts among stakeholders and stakeholder proximity. Occurring in that order of precedence as factor that influenced stakeholder assessment in construction projects. The result depict that recognizing the stakeholder' influence is an important factor to "plan and execute a sufficiently rigorous stakeholder management process. The outcome of this study was in line with (Olander and Landin, 2005).

Table 4:6 Factors affecting stakeholder assessment.

Sub factor Stakeholders assessment	Scores	RII	rank
influence of stakeholders	185	74.00	1
stakeholder legitimacy	184	73.60	2
stakeholder interests	177	70.80	3
stakeholder power	172	68.80	4

stakeholders knowledge	165	66.00	5
stakeholder urgency	161	64.40	6
stakeholder conflicts and coalitions	158	63.20	7
stakeholder proximity	155	60.20	8

Field survey, 2017

4.3.6 Factors affecting Action and evaluation

The relative importance index and likert 1-5 scales was adopted in study to rank these action and evaluation factors and the results of our respondent are summarized in table 4:11. From the result, Evaluation of stakeholder satisfaction was ranked first with RII 73.60% and 184 score as most important factor that influenced action and evaluation in building industry. Implementing the strategy with RII 68% and 170 scores were ranked second. The next thing is predicting stakeholders" reaction. Occurring in that order of precedence as factor that influenced action and evaluation in construction projects. The result depict that, if the project out comes does not yield the expected outcome that meet stakeholders expectations then the project team have to forfeit time, resources as well as adjust scope of the project until it meet stakeholders expectations.

Table 4.6 factors affecting Action and evaluation

Sub factor (Action and evaluation	scores	RII	Rank
implementing the strategy	184	73.60	
Evaluation of stakeholder satisfaction	170	68.00	
Predicting stakeholders" reaction.	170	68.00	

Field survey, 2017

4.3.7 Factors affecting continue support

The relative importance index and likert 1-5 scales was adopted in study to rank these action and evaluation factors and the results of our respondent are summarized in table 4:11. From

the result, Reduce uncertainty was ranked first with RII 73.60% and 184 score as most important factor that influenced Reduce uncertainty in building industry. Assess the resource and knowledge with RII 68% and 170 scores were ranked second. Follows by Mutual trust of stakeholders, frequently communication with stakeholders, Realizing change of stakeholders Occurring in that order of precedence as factor that influenced action and continue support in construction projects.

The result depict that, a relevant way of reducing uncertainty is to choose a strategy where risk are shared among the operator and the contractors.

Table 4.8 factors affecting continue support

Sub factor (continue support)	scores	RII	rank
Reduce uncertainty	204	81.60	1
Assess the resource and knowledge	193	77.20	2
Mutual trust of stakeholders	190	76.00	3
Frequently communication with stakeholders	182	72.80	4
Realizing change of stakeholders	180	72.00	5
promoting relationship with stakeholder	177	70.80	6
higher authorities support	174	69.60	7
Stakeholders involvement	171	68.40	8
Maintain alignment	170	68.10	9

Field survey, 2017

4.4 Analyze approaches for engaging stakeholders

The concept of relative importance index and likert 1-5 scales was adopted in study to rank these methods and the results of our respondent are summarized in table 4:11. From the result, professional servicewas ranked first with RII 74.4% and 187 score as most important method that frequently adopted by the stakeholders in building industry. Personal past experience with RII 72% and 180 scores ranked second. Follows by social contract

negotiations, workshops, interview, questionnaire and survey, meeting and formal memos. Occurring in that order of precedence as methods that adopted to engage stakeholders in construction projects.

The result depicts that, these method provides a definite strategy for stakeholder management which allow managers to save time. The outcome of this study was in line with yang et al., 2011b.

Table 4.9. Effective methods of selection project professional teams

strategies	scores	RII	ranking
Professional service	187	74.80	1
Personal past experience	180	72.0	2
Social contract	177	70.80	3
Negotiations	170	68.00	4
Workshops	170	68.00	5
Interview	162	64.80	6
Questionnaire and survey	151	60.40	7

Field survey, 2017

4.5. To formulate strategies for managing stakeholders

The concept of relative importance index and likert 1-5 scales was adopted in study to rank these stakeholder management strategies and the result of our respondents are summarized in table 4:11. From the result,

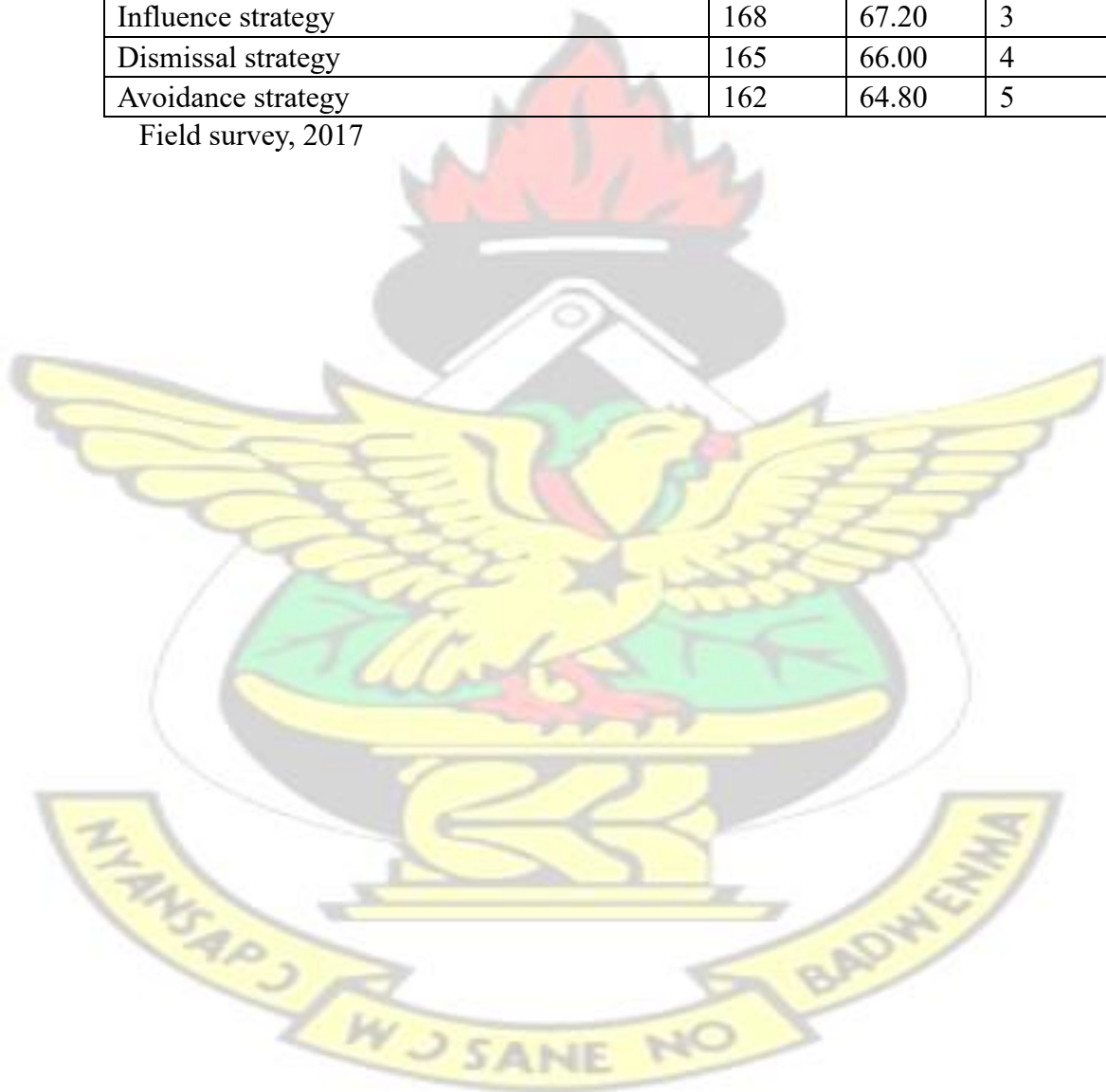
Adaptation strategy was the first ranked with score of (195) and RII of (78%) as most important method that frequently adopted by the stakeholder. Compromising strategy with RII (62.2%) and scores (168) ranked second. Follow by Influence strategy, dismissal strategy and avoidance strategy.

The result depict that, to achieve the project objectives, project stakeholders should be effectively managed.

Table. 4.10 effective response strategies for managing stakeholders

Strategy	scores	RII	Rank
Adaptation strategy	195	78.00	1
Compromising strategy	168	67.20	2
Influence strategy	168	67.20	3
Dismissal strategy	165	66.00	4
Avoidance strategy	162	64.80	5

Field survey, 2017



CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The chapter summarizes the entire research, conclude the report as well as recommend some solutions that can solve the problem stated in research to help construction industry and related industries to determine influences of stakeholders on selection project team, roles in the selection of the project's professional team, procurement path on project success and other related issues especially factors that affect project performances in Ghana.

5.1 Review of Objectives

As stated above, the research aimed at determine the stakeholder's influence/roles in selecting of the project's professional team/ procurement path on project success To achieve this aim, a number of objectives were stipulated. To be specific, three objectives were specified. These were to identify critical success factors influencing stakeholder's management in construction industry, to analyze approaches for engaging stakeholders in construction industry and to formulate strategies for stakeholder management. These objectives have been reviewed in the sub-sections below.

5.1.1 ToIdentify Stakeholders Influence on Selection Project Professional Team

Extensive literature review was conducted to acquire information on this particular objective. Based on information gathered, six organizational strategies were identified such as external factors, project stakeholders teams, project characteristics, ability to make changes, cost

issues and timing. Specifically, respondents were asked to express their opinion on the various programs undertaken under each of the six major factors.

- With respect to programs under external factors, consideration should be given to the potential impact of economic, commercial, technological, political, social and legal factors which influence the client and their business, and the project team during project's lifecycle.
- With respect to project characteristics, the size, complexity, location and uniqueness of the project should be considered as this will influence time, cost and risk.
- With respect to timing, planning approvals can influence the progress of the project
- With respect to change orders, procedure in which changes being introduced to a project
- With respect to cost issues, the extent to which design is complete will influence the cost at the time of tender.
- With respect to client resources, a client's knowledge, the experience of the organization with procuring building projects and the environment within which it operates will influence the procurement strategy adopted.

5.1.2 Objective two: To identify critical success factors that influenced stakeholder management in building industry

Extensive literature review was conducted to acquire information on this particular objective. Based on information gathered, thirty factors were identified and divided into six main groups. These included information input group, management support group, stakeholder's assessment group, continue support group, action and evaluation group and decision making

group. Specifically, respondents were asked to express their opinion on the various programs undertaken under each of the six major factors.

- With respect to programs under information input in the management of stakeholder on construction projects, setting common goals, Stakeholder identification, and Stakeholder needs and expectations were considered as the crucial factors.
- With respect to Decision making group; Evaluation of alternative solutions, Ensuring effective communication and Formulating appropriate strategies were considered as the crucial factors.
- With respect to Action & evaluation group; Implementing the strategies, Predicting stakeholders' reactions and evaluating stakeholder' satisfaction were considered as the crucial factors
- With respect to Managing the support group; Managing stakeholder with corporate social responsibilities, Flexible project organization and Project manager competences were considered as the crucial factors
- With respect to Stakeholder assessment group; Stakeholders' attitude, Stakeholders' interests, Stakeholders' influence, Stakeholders' conflicts and coalitions, Stakeholders' power, Stakeholders' legitimacy, Stakeholders' urgency, Stakeholders' proximity and Stakeholder' knowledge were identified as the most crucial factors.

There is therefore the need to pay rapt attention to these areas because it is very relevant to have a definite knowledge of all the attribute of stakeholders in order to categorize the various stakeholders according to their attribute.

5.1.3 Objective three: To analyze approaches for engaging stakeholders in building industry

Extensive literature review was conducted to acquire information on this particular objective. From the literature obtained, it was identified that a number of approaches are there for analyze and engagement of stakeholders for construction projects. These are Meetings, Interviews

Negotiations, Personal past experience, Professional services, Questionnaire and surveys, Workshops, Social contacts and formal memos

. Respondents were made to express their views on the various approaches. The results were analyzed using RII.

The conclusion drawn from the analysis was that the respondents were of the opinion that all Meetings, Interviews, Negotiations, Personal past experience, Professional services, Questionnaire and surveys, Workshops, Social contacts and formal memos this approaches all are high but Professional services was very high compare to others for engaging stakeholder on construction project.

5.1.4 To formulate strategies for managing stakeholders in building industry

Extensive literature review was conducted to acquire information on this particular objective. From the literature obtained, i identified number of response strategies that adopted for managing stakeholders in construction projects. These strategies are Adaptation strategy, Compromising strategy Avoidance strategy, Dismissal strategy and Influence strategy.

Respondents were made to express their views on various response strategies. The results were analyzed using RII. The conclusion drawn from the analysis was that the of respondents

were of opinion that Adaptation strategy was very high follow by Influence strategy high, Avoidance strategy high, Dismissal strategy high.

5.2 Summary of Findings

This research was to explore the influences of stakeholders on selection of project professional team in Ghana. Questionnaire and interviewed were use in collecting data for the interview. Frequency and percentages were used to analyse the data collected. The researchers also used the Relative Importance Index (RII) in rankings factors that were responded on levels of Importance and intensity. These are the findings that were identified in the study. It has been presented according to the objective the research seeks to achieve;

1. To identify stakeholders influence on selection project professional team

Six (6) factors were identified during the literature review such as external factors, project stakeholders teams, Project characteristics, Ability to make changes, Cost issues and Timing. According to the respondents' stakeholder external factors were most important factor. Consideration should be given to the potential effects of economic, Commercial, technological, political, social and legal factors which influence the stakeholders and their objectives, and the organizations during project's lifecycle

2. To identify critical success factors that influence stakeholders' management in building industry

Six factors were identified through the literature review such as information input group, management support group, stakeholder's assessment group; continue support group, action and evaluation group and decision making group.

According to the respondents' stakeholder's assessment was most important factor In stakeholders' management. It is very relevant to have a definite knowledge of all the attribute of stakeholders in other to categorize the various stakeholders according their attribute

3. To analyze approaches for engaging stakeholders in building industry

Nine approaches were identified through literature review such as Meetings, Interviews Negotiations, and Personal past experience, Professional services, Questionnaire and surveys, Workshops, Social contacts and formal memos

After ranking using RII with likert 5 point scale the results were rank as follows;

- 1st Professional services
- 2nd Personal past experience
- 3rd Meetings
- 4th Workshops
- 5th Social contacts
- 6th formal memos
- 7th Questionnaire and surveys
- 8th Interviews
- 9th negotiations

Lesson learnt, professional service method Provide complete plans for stakeholder management before start of the project, these will save time for project managers during contract stages

4. To formulate strategies for managing stakeholders in building industry

Five Strategies were identified through the literature review such as adapting to the strategy, making compromise on the strategy, avoiding some kind of strategy, dismissing the strategy and influencing the strategy.

After ranking using RII with likert5 point scale the results were rank as follows;

- 1st Adaptation strategy
- 2nd Compromising strategy
- 3rd Avoidance strategy
- 4th Dismissal strategy
- 5th Avoidance strategy

According to the respondents' adaptation strategy was very high approach for managing stakeholders' on projects. The result, to achieve the project objectives, project stakeholders should be effectively managed

5.3 Recommendations

The following recommendations are therefore prescribed for construction project stakeholders' managers and project performance indicators of contractors in Ghana:

- Project managers should pay much attention to the stakeholders' assessment group since it is the most important to stakeholder management. Managements should viewed these areas as area when well-planned and appropriate actions taking will help realize an effective project outcomes
- Managements of projects should ensure that the stakeholders' engagement they choose corresponds to the stakeholder management process adopted, more over

“stand-alone approach” must be discouraged, and all the approaches adopted should be coordinated with other approaches. Although selecting the group based on the social and cultural setting is very relevant, resource constrain and time limit should also be considered in the project execution.

- They are some factor to consider when formulating strategy for types of stakeholder management such as what interest the focal company have in the project, the power the stakeholder have, how legitimate the claims of the stakeholders are.

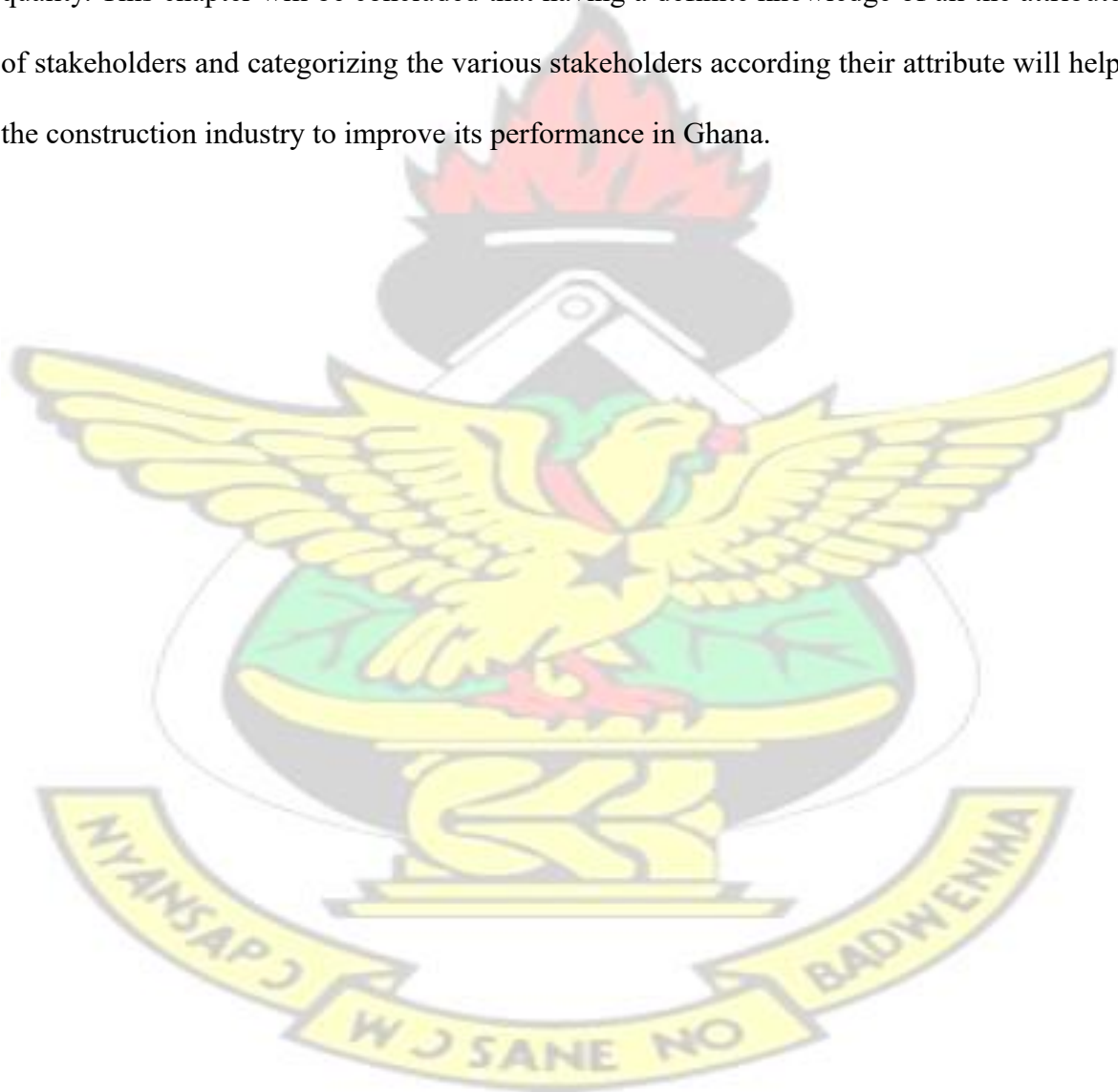
5.4 Recommendation for Further Studies

Further research should be conducted on ways in which construction stakeholder management could be improved. Also, intensive research should be conducted to explore the challenges contractor faced during construction project procurement.

5.5 Conclusion

This research aimed to determine the stakeholders’ influence/roles in selecting of the project’s professional team/ procurement path on project success. In order to achieve the aim, a number of objectives were set and literature review was conducted on each of the objectives. Questionnaires were prepared and distributed to target respondents to obtain their opinion on the information gathered from the literature review. It was deduced that 53 percent of respondents agreed that stakeholder’s assessment group was most important in their respective firms. Also, among the various approaches for engaging stakeholder on construction projects, professional services was the most important approach in the engaging stakeholder on project and stakeholder influence external factor were identify as most

important. Finally, it was deduced that among the response strategies involved in the stakeholders' management, adaptation strategy was the most important response strategies in stakeholders' management. Therefore, if these stakeholder's assessment group, professional services and adaptation strategy are well manage by the stakeholder and improve on, construction projects would be delivered successfully within time, budget and quality. This chapter will be concluded that having a definite knowledge of all the attribute of stakeholders and categorizing the various stakeholders according their attribute will help the construction industry to improve its performance in Ghana.



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APPENDIX QUESTIONNAIRE

This study entitled “the influences of stakeholders on project professional team selection; a study of their influences on project performance in Ghana. Aim is to determine stakeholders” influences/roles of selecting the project professional teams and procurement path on project success and the ways through which these challenges can be addressed. Please, respond to the questions by ticking the appropriate box for each item. Please note that all information provided will be strictly treated as confidential

1. How long has the firm been in existence?

Under 10 years [] 11-20 years [] 21-30 years [] Over 30 years []

2. How many project has the firm been involved in?

Under 10 projects [] 11-20 projects [] 21-30 projects [] Over 30 projects [] 3.

Educational Background Of Workers

Personnel	Middle School	SSS/SHS	Technical School	Polytechnic	University	Others
Project Manager						
Services engineers						
Electrical engineers						
Civil engineer						
Project managers						
Client						
Architect						
Chief Estimator						

consultant						
Quantity Surveyor						

Table .1

4. How does your firm consider influential factor of stakeholder?

Not important [] Less important [] moderately Important [] Important [] Very Important []

5. Which of the following personnel(s) carries out stakeholder activities?

- a. Site engineer []
- b. Project manager []
- c. Planner []
- d. Design team []

How would you rank influence procurement system factors?

Not important [] Less important [] moderately Important [] Important [] Very

Important

Main factor	1	2	3	4	5
External factors					
Timing					
Cost issues					
Clint resource					
Project characteristic					
Ability to make change					

Table.2

How would you rank critical success factors?

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

Main factor	1	2	3	4	5
Management support					
Stakeholders assessment					
Decision making					
Action and evaluation					
Continue support					
Information input					

Table.3

How would you rank Action and evaluation factors?

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

Sub factor (Action and evaluation implementing the strategy	1	2	3	4	5
Evaluation of stakeholder satisfaction					
Predicting stakeholders" reaction.					

.Table. 4

How would you rank decision making factors?

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

decision making factors	1	2	3	4	5
Formulate appreciate strategies					
evaluation of alternative solution					
Ensuring effective communication					

.Table. 5

How would you rank information input factors?

.Table.6

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

information input factor	1	2	3	4	5
Identifying stakeholders					
stakeholder need and expectation					
Setting common goal					

How would you rank Stakeholders assessmentfactors

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

Sub factor (Stakeholders assessment)	1	2	3	4	5
influence of stakeholders					
stakeholder legitimacy					
stakeholder interests					
stakeholder power					
stakeholders knowledge					
stakeholder urgency					
stakeholder conflicts and coalitions					

. Table 7

How would you rank **Management support** Factors?

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

Management supportFactor	1	2	3	4	5
Project manager competencies					
Managing stakeholder with social responsibilities					
Flexible project organization					

. Table 8

How would you rank continue support factors?

Sub factor (continue support)	1	2	3	4	5
Reduce uncertainty					

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

Assess the resource and knowledge					
Mutual trust of stakeholders					
Frequently communication with stakeholders					
Realizing change of stakeholders					
promoting relationship with stakeholder					
higher authorities support					
Stakeholders involvement					
Maintain alignment					

. Table; 9

How would you rank stakeholder engagement approaches?

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

strategies	1	2	3	4	5
Professional service					
Personal past experience					
Social contract					
Negotiations					
Workshops					
Interview					
Questionnaire and survey					

. Table; 10

How would you rank responses Strategy approaches?

Notimportant [] Less important [] moderately Important [] Important [] Very

Important

responses Strategy	1	2	3	4	5
Adaptation strategy					
Compromising strategy					
Influence strategy					
Dismissal strategy					
Avoidance strategy					

. Table; 11

