

**STAKEHOLDER MANAGEMENT PRACTICES: CASE STUDY OF MARINE
REHABILITATION PROJECT AT GHANA PORTS AND HARBOUR
AUTHORITY**

(TAKORADI SHIPYARD)

KNUST
BY

CHARLES ALAMPAH

B.Sc. MECHANICAL ENGINEERING

**A THESIS SUBMITTED TO THE DEPARTMENT OF CONSTRUCTION
TECHNOLOGY AND MANAGEMENT,**

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,
KUMASI IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF
MASTER OF SCIENCE IN PROJECT MANAGEMENT**

OCTOBER 2018

DECLARATION

I hereby declare that this study is my own original work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which is substantial extent has been accepted for the award of any other degree or diploma at Kwame Nkrumah University of Science and Technology, Kumasi or any other educational institution, except where due acknowledgement is made in the thesis.

CHARLES ALAMPAH

(PG1145817)

STUDENT NAME and ID

Signed:

Date:

APPROVED BY:

Dr. Alex Acheampong

SUPERVISOR

Signed:

Date:

CERTIFIED BY

PROF. Bernard K. Baiden

HEAD OF DEPARTMENT

Signed;

Date;

ABSTRACT

Stakeholder management is a vital activity, using simple procedures and investing a modest effort can make a big difference to the eventual success of the project simply by understanding the stakeholders and what they want. Communications with stakeholders who have high levels of interest and influence will be managed differently from those with stakeholder of low interest and influence. This study seeks to examine the stakeholder management practices implemented in marine rehabilitation projects activity in Ghana Ports and Harbours Authority – Takoradi shipyard, challenges of stakeholder management, causes of the identified challenges as well as to provide recommendations on strategies for effective stakeholder management. The research design for this study is of quantitative type, this study used descriptive statistics to achieve its objectives. The key findings of this study are: the critical challenges of stakeholder management practices at Ghana Ports and Harbours Authority, Takoradi shipyard in their order of ranking of occurrence include unclear stakeholders, negative community reactions to the project, Inadequate resources assigned to the project, changes in scope of work and lack of support from stakeholders. The study found several causes of the identified challenges which includes poor planning, lack of human personnel and lack of effective communication. The study also found several proposed strategies for effective stakeholder management including effective planning, effective communication and effective stakeholder engagement.

TABLE OF CONTENTS

DECLARATION.....	i
ABSTRACT	ii
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATION.....	viii
ACKNOWLEDGEMENT	ix
DEDICATION.....	x
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Introduction	1
1.2 Background of the study	2
1.2.1 Marine Rehabilitation Project	3
1.3 Problem statement	4
1.4 Aim of the study	4
1.5 Objectives of the Study	5

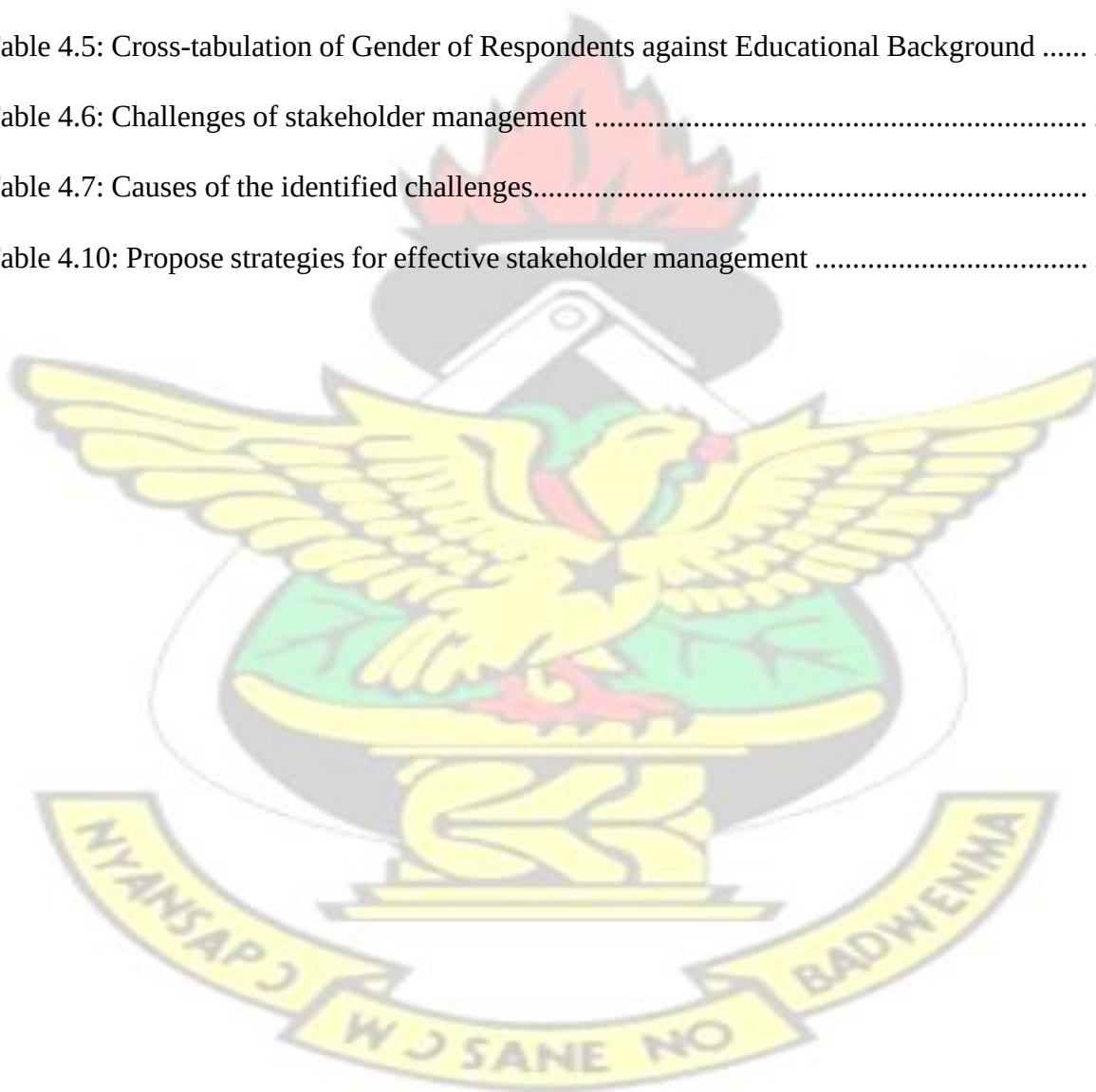
1.6 The Significance of the study	5
1.7 Scope of the Study.....	6
1.8 Organization of the Study	6
CHAPTER TWO	
7 LITERATURE REVIEW	
7	
2.1 Introduction	7
2.2 OVERVIEW OF THE MARINE INDUSTRY	7
2.3 OVERVIEW OF MARINE PROJECT MANAGEMENT	9
2.3.1 Stakeholder management principles and concepts	12
2.4 REHABILITATION project stakeholders AT TAKORADI SHIPYARD	13
2.5 challenges of stakeholders MANAGEMENT AT TAKORADI SHIPYARD	14
2.6 CAUSES OF THE CHALLENGES OF STAKEHOLDER MANAGEMENT AT TAKORADI SHIPYARD	16
2.7 STRATEGIES TO IMPROVE ON STAKEHOLDER MANAGEMENT	17
CHAPTER THREE	
19	

RESEARCH METHODOLOGY		
19		
3.1 Introduction		
19		
3.2 PHILOSOPHICAL POSITION OF THE RESEARCH	19	
3.3 RESEARCH PROCESS		
19		
3.4 Research Design		
20		
3.5 Study Population and sampling	20	
3.6 RESEARCH INSTRUMENT	21	
3.6.1 Questionnaire	22	
3.6.2 Procedure for data collection	22	
3.7 DATA ANALYSIS		
22		
CHAPTER		FOUR
DATA		
ANALYSIS AND RESULTS	23	DATA
23		
4.1 Introduction		
23		
4.2 Presentation and Sources of Data	23	
4.3 Descriptive Statistics of Respondents	23	
4.4 Challenges of stakeholder management	27	
4.5 Causes of the identified challenges	28	

4.6 Proposed strategies for effective stakeholder management	29
CHAPTER FIVE	31
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS	31
5.1 Introduction	31
5.2 Summary of Findings	31
5.2.1 Challenges of stakeholder management.	31
5.2.2 Causes of the identified challenges	31
5.2.3 Proposed strategies for effective stakeholder management	32
5.3 Conclusions	32
5.4 Recommendations	32
5.5 SUGGESTION FOR FURTHER RESEARCH	33
REFERENCES	34
Appendix 1	43
Appendix I.....	42
Questionnaire.....	43

LIST OF TABLES

Table 3.1: Selection of sample Size	21
Table 4.1: Descriptive statistics of Gender	23
Table 4.2: Descriptive statistics of Age of respondents	24
Table 4.3: Descriptive statistics of Educational Background of respondents	24
Table: 4.4: Employees profile	25
Table 4.5: Cross-tabulation of Gender of Respondents against Educational Background	26
Table 4.6: Challenges of stakeholder management	27
Table 4.7: Causes of the identified challenges.....	28
Table 4.10: Propose strategies for effective stakeholder management	29



LIST OF FIGURES

Figure 4.1: Employees Profile	25
-------------------------------------	----

LIST OF ABBREVIATION

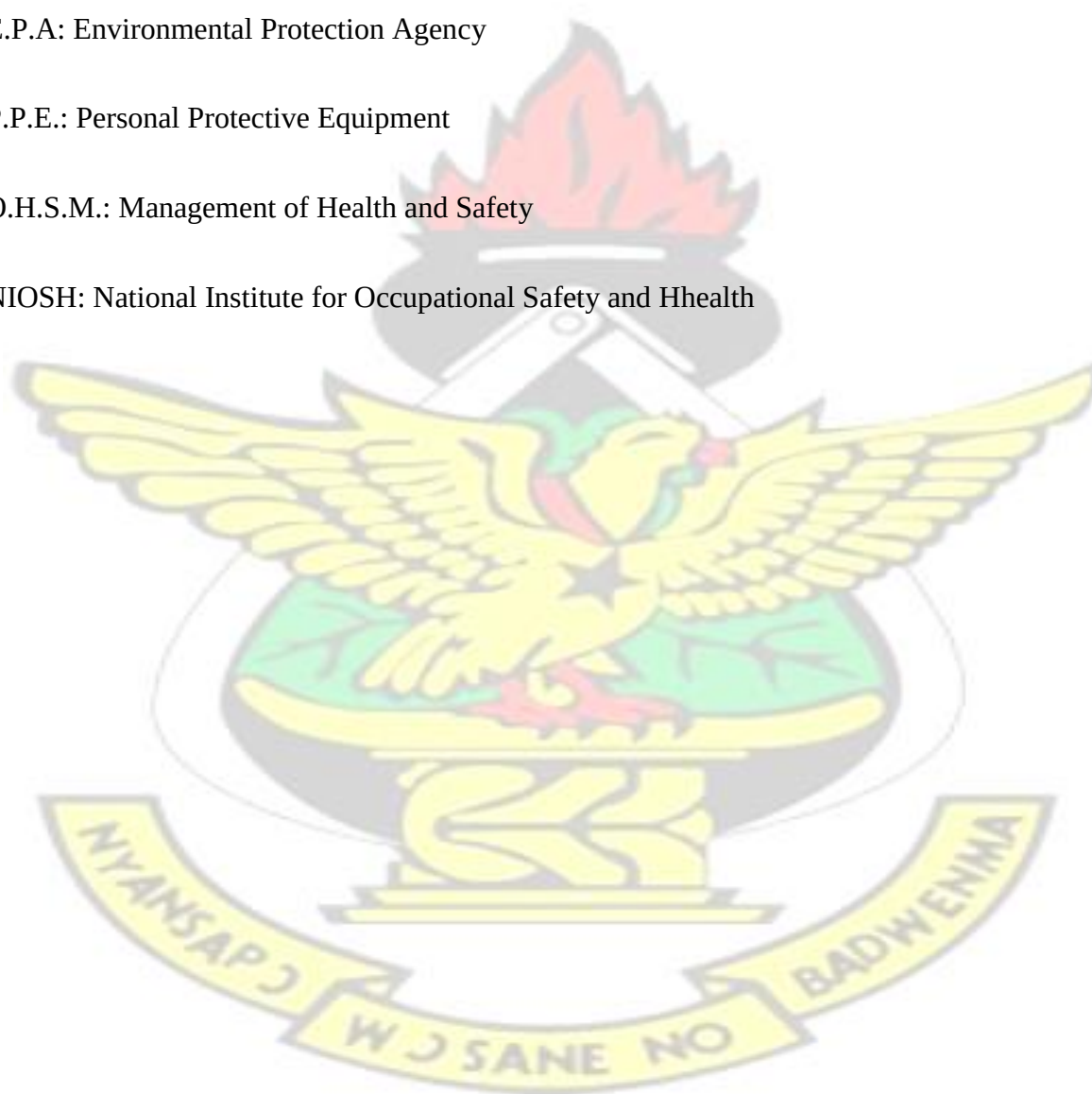
G.P.H.A: Ghana Ports and Harbours Authority

E.P.A: Environmental Protection Agency

P.P.E.: Personal Protective Equipment

O.H.S.M.: Management of Health and Safety

NIOSH: National Institute for Occupational Safety and Hhealth



ACKNOWLEDGEMENT

My foremost appreciation goes to the Lord. I want show my appreciation to Dr. Alex Acheampong, my supervisor. Also, I will like to thank my wife, Mrs. Mary Alampah and my family for her support and love during the entire process. Furthermore, to my boss at Ghana Ports and Harbours Authority, I say thank you for your support. Finally, I express my profound gratitude to Management, Staff and Lecturers of Kwame Nkrumah University of Science and Technology.



DEDICATION

I dedicate this work to the Almighty God and Alampah family.

KNUST



CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

Stakeholder management is the systematic identification, analysis, planning and implementation of actions designed to engage with stakeholders. In the marine rehabilitation projects, stakeholders are persons or group of persons with an interest in a project that they are involved in. In a typical project, stakeholders will have either varying or competing interests. However, it must be noted that, stakeholders might have a great impact on the outcome of a project. Stakeholder management is a term that describes the ability to tap into the positive influences of stakeholders and reduce their negative influences (www.apm.org.uk).

It is the responsibility of the head of marine services department to manage stakeholders and may be assisted by support function. Stakeholder management is very important tool in project management as properly executing stakeholder management can have a positive impact on the project just by acknowledging their needs. Communication with stakeholders who have high levels of interest and influence will be managed differently from those with stakeholder of low interest and influence. Also, communication with stakeholders who are inherently positive about the work will be different from those with stakeholders who are negative.

As a dynamic document, the communication management plan must link to other plans such as the risk management plan and key milestones within the schedule. Stakeholder management becomes more complex when stakeholder views, roles or allegiances, etc. change throughout the life cycle, for this reason, the stakeholder management steps must be repeated throughout the life cycle. G.P.H.A. Takoradi shipyard Brochure (2010). This study seeks to determine the stakeholder management practices implemented in marine rehabilitation projects activity in

Ghana Ports and Harbours Authority – Takoradi shipyard, as well as to provide recommendations on how best this pollutant would be curbed, the safety practices involved and the hazards associated with the major marine rehabilitation activity (sandblasting). The shipyards in Ghana are still using traditional silicate sand for abrasive blasting and the dust and noise from this process seems to be unbearable for the staff and other stakeholders. Recently, the Takoradi shipyard and the ports authority have come under strong criticism from stakeholders, for polluting the environment and not showing much concern of protecting the staff and other stakeholders from the dangers of inhaling dust during the rehabilitation activity on marine craft. One of the most critical aspects of project management is doing what's necessary to develop and control relationships with all stakeholders that this project activity impacts. By successfully managing these stakeholders, this project will be better able to keep a lid on scope creep, ensure project requirements are aligned, understand tolerance for risk and mitigate issues that would delay the project.

1.2 BACKGROUND OF THE STUDY

Sandblasting is the major engineering operation in the maritime rehabilitation project. Sandblasting is a method for cleaning or etching surfaces of metal plate, beams and rods with a high velocity abrasive. Pollutant from sandblasting has dire consequences on stakeholders as well as the environment. There are numerous materials used for blasting with some of the materials being outmoded due to the excessive pollutant it results during blasting operation. Sandblasting is a general term used to describe the act of propelling very fine bits of material at high-velocity to clean or etch a surface. The process is called abrasive blasting, and any small, relatively uniform particles can be used as abrasive material, such as silicate sand, steel grit, copper slag, walnut shells, powdered abrasives, even bits of coconut shell. The silicate

sand traditionally had been use as a media for abrasive blasting and that brought about the name sandblasting and it is one of the core activities in shipbuilding and ship repair industries.

Sandblasting was invented by Benjamin Chew Tilghman, an American soldier born in Philadelphia, Pennsylvania. The idea for sandblasting was discovered when Benjamin Chew discovered the effects of wind-blown sand on windows in the desert. In 1870 he filed a patent for the sandblasting process in the US listing many uses for it including sharpening files, engraving, cleaning boilers and enhancing wood grains. A patent was issued in the UK the following year.

1.2.1 Marine Rehabilitation Project

Rehabilitation project is a project where marine vessels enters into the dry dock or slipway for structural repair works. This project comprises of the following elements.

- Repair and re-equip vessels engaged in regular liner services and to assign them to routes and services in accordance with the maritime law.
- A program to retire over age vessels or those presently operating in liner services which it would be uneconomic to repair.
- The provision of consulting services and experts as required to improve the efficiency of shipyards to be engaged in repair work, to assist the ship classification agency, to improve the operations and accounts of shipping companies and to assist in a study by the government of the long term development of the regular liner services.

Due to the high risk involve in sandblasting; and difficult in controlling the toxic dust and noise level, the use of crystalline silica for blast cleaning operation was prohibited in Great Britain in 1950[Factories Act 1949]. Other European countries in 1966 [ILO 1972] banned the use of silica sand for abrasive blasting. In 1974, the National Institute for Occupational safety and

Health (NIOSH) recommended that silica sand (or other substances containing more than 1% free silica) be prohibited as abrasive blasting material and that less hazardous materials be used in blasting operations [NIOSH 1974b].

In August 1992, Centre for Disease control and prevention in USA, published an article from the National Institute for Occupational Safety and Health (NIOSH) on a topic “Preventing Silicosis and Deaths from Sandblasting”. The beginning of the article **warns!** Abrasive blasting with sands containing crystalline silica can cause serious or fatal respiratory disease. Moreover, according to the World Health Organization (WHO) silicosis is one of the oldest occupational diseases and still kills thousands of people every year, everywhere in the world.

1.3 PROBLEM STATEMENT

The Takoradi shipyard, which is located inside the Takoradi port is still using traditional silicate sand for abrasive blasting in the marine rehabilitation project, and the dust and noise from this process seems to be unbearable for the staffs and other stakeholders. G.P.H.A. Takoradi Shipyard Brochure (2010). Recently, the shipyard and the Port authority have come under strong criticism from stakeholders, for polluting the environment and not showing much concern of protecting the staffs and port users from the dangers of inhaling dust during the sand blasting process. This study examines the stakeholder management practices implemented in marine rehabilitation project in Ghana.

1.4 AIM OF THE STUDY

The aim of the study is to determine the stakeholder management practices implemented in marine rehabilitation project in Ghana.

1.5 OBJECTIVES OF THE STUDY

Upon the completion of this study, it is intended to achieve the following objectives:

1. To identify the challenges of stakeholder management
2. To identify causes of the identified challenges.
3. To propose strategies for effective stakeholder management.

Both primary and secondary data were used to the stakeholder management practices marine rehabilitation in the Takoradi port. This included information gathered from the shipyard staffs being the direct participant of this activity; the staff of marine operation department and other port users who experience the dust and noise from sand blasting activity in the shipyard; the medical department of the port was contact for how often the related silicosis cases are diagnosed; Environmental Protection Agency (EPA) - Ghana for allowable industrial dust pollution; and finally the publications on effects of the major marine rehabilitation activity(sand blasting).

1.6 THE SIGNIFICANCE OF THE STUDY

This study will help address the stakeholder management practices. The study identified the causes of the stakeholder challenges in the Takoradi port. and recommended propose strategies for effective stakeholder management practices necessary to make abrasive blasting environmentally friendly in the Takoradi Port.

1.7 SCOPE OF THE STUDY

The study will focus on the stakeholder management practices in marine rehabilitation at Takoradi port shipyard. This study concentrated on heads of departments, staff at Takoradi port shipyard and also some selected stakeholder employees.

1.8 ORGANIZATION OF THE STUDY

This study is divided into five (5) different chapters. The chapter was basically concentrated on the general introduction to the study which include the background of the study, problem statement, aim, objectives, significance of the study, scope of the study and methodology. The chapter two reviews literature pertaining to the subject area of study. The chapter three concentrated on the research methodology. The chapter four was about the analytical tools used for the study and the chapter five discusses, the summary of findings, conclusions and recommendations.



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This section reviews the literature relating to the topic. It concentrates on the history of sandblasting activity and empirical as well. Among other issues discussed in this chapter

include Identify project stakeholders, Organizational Profile, Sandblasting process, Methods of sandblasting, Identified Challenges of stakeholders. All these are geared towards stakeholder management practices in marine rehabilitation project in Ghana.

2.2 OVERVIEW OF THE MARINE INDUSTRY

The economy of Ghana, a Sub-Saharan country in Africa is rapidly developing at a great pace (Ahmed et al., 2014). The marine industry is a key player in the growth of any economy as its activities are prime importance to the achievement of the socio-economic development goals in the provision of infrastructure and also as a source of employment (Kutir, 2016; Osei, 2013). The marine industry is huge and a very vital sector in economic development as in other parts of the world. According to Osei (2013), in the improvement of the socio-economic circumstances and development of every country, the marine sector plays a vital and critical role in achieving such success. Sangur (2014) also came to an understanding that the marine industry is a key sector in the economy of almost every country. In the Ghanaian society, the marine sector contributes foremost to the economy potently by the helping to alleviate the unemployment canker in the country by providing jobs for both the educated and the uneducated as well.

Efficient performance measurement is of immense importance to the successful implantation of a project (Ofori-Kuragu et al., 2016). Sanganyi (2016) also noted in agreement that projects like the marine rehabilitation works in Ghana, undertakings to attain a certain set target within a particular duration and a pre-determined cost. Otieno (2000) also asserts that in the third world countries, many projects fail to be successful as a result of many varied reasons. Asamoah and Decardi-Nelson (2014) conjectured that even though the marine sector in Ghana aids the progress of the economy particularly social development, it is crippled with practices that are alien to the industry which are highly unprofessional. Ofori-Kuragu et al. (2016)

distinguished that the Ghanaian marine sector does not reflect the great strides in the execution of marine projects as it's the case in many developing countries. It is for these reasons that Callistus and Clinton (2016) posits that to achieve the set targets and aims of a marine project, there is the need for monitoring and evaluation in the project delivery process. It is then that the prevalent ideology of bad performance and performing below accepted norms and practices amidst the Ghanaian marine professionals leading high rate of delayed maintenance works, deserted as well as stopped projects due to contractor non-performance (Ofori-Kuragu et al., 2016) can be stopped. However, it is an undisputed fact that the marine sector has colossal future benefits as it stands a great capacity to employ a wide range of craft, increase the country's capital base and technological enhancement (Nhabinde et al., 2012). Kutir (2016) postulates that it becomes of a prime significance to know the probable causes of unsuccessful projects which includes failure to monitor and evaluate marine activities and the strategies embraced by the fast-developing ones. If such acts of failure are not checked, Rohoim et al. (2015) through their investigation revealed that these activities lead to long standing and perilous problems to the marine industry inclusive time and cost overrun, waste generation, conspicuous negative impact on the environment and colossal intake of resources. It is also observed that issues of litigation and time overruns leading to projects absolute abandoned are some of the delays in marine (Fugar, 2010). Ofori-Kuragu et al. (2016) finally affirms that in Ghana, the full achievement of project targets and objectives are alien to most marine clients.

2.3 OVERVIEW OF MARINE PROJECT MANAGEMENT

Project management is the art of directing and coordinating human and material resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time, quality and participation satisfaction (ASCE Quality Manual, 1987). However, there are different meanings to project and management in project management (PMI, 2008; Irefin, 2013). For a product or service to be created or

achieved which is known as a project, a temporal endeavour is undertaken (PMI, 2008). The process by which the main objective of an individual or a group in realizing an optimum profit by planning, directing, controlling and coordinating is known as management (Nwachukwu and Emoh (2011). The process by which the requirements of a project are being met through the application of skills, tools, knowledge and techniques to the activities of a project is described as project management as affirm by PMI (2008).

The marine rehabilitation project process can be grouped into three (3) major phases. These are the docking phase, rehabilitation phase and operation phase. Irefer (2013) attest that, one of the honourable mankind achievements that have existed for long is the management of projects from inputs of ship-owners, port management, craftsmen and environmental protection agency.

Professionals of mariners within team of project management are mostly part of one of the building project parties. For any marine contract, there are three main parties constituting of vessel-owners, contractor and consultant. The vessel owners can be a public entity or a private entity. The financing of the project is being instigated by the vessel owners. The general contractor is the shipyards that is in prime contract with the owner of a project, either in its entirety or as a sub-contract. The consultant is responsible for the project and ensures that the project meet specifications. Isa et al. (2013), indicated that, the marine industry in both developed and developing countries is the sector of the economy that transforms various resources into constructed facilities.

The Ghanaian marine industry has grown significantly and has become more sophisticated with the introduction of wide range of stakeholders involved in the process (Dadzie et al., 2012). Contractors are one of the most significant stakeholders in the marine industry. In Ghana, contractors are categorized with their financial capability. The classification D1K1 being the

highest financial class, D2K2, D3K3 and D4K4 being the lowest financial class (Frimpong and Kwasi, 2013).

In the Ghanaian marine industry, the government is considered as the mature client as affirmed by G.P.H.A. Takoradi Brochure (2010), and thus has a direct bearing on the Ghanaian economy. Also, for sectors such as mining, manufacturing, water and electricity, the marine industry has a huge effect on. The Ghanaian marine industry has realized steady growth over recent years. According G.P.H.A Takoradi Brochure (2010), the Ghanaian marine industry is regarded as one of the quickest.

There are numerous stakeholders involved in a marine project. According to Moloney (2006), some benefits of an organization are being derived by an individual or a group known as stakeholder. However, stakeholders of an organization can be harmed or affected. According to Gibson (2000), stakeholders are only beneficial when they aid in the achievement of the goals of an organization. This implies that, stakeholders have the capability to negatively affect the functioning and goals of the organization. In other organizations, stakeholders initiate project schemes (Orndoff, 2005). Continuing projects can be distracted or massively supported by stakeholders (Vogwell, 2002). No matter how small or huge the controlling power of stakeholder is, it can be deliberately or incidentally applied.

Owners and users of project facilities are part of stakeholders in marine project and this number is often large comprising of employees, subcontractors, suppliers, process and service providers, competitors, banks, insurance companies, media, community representatives, neighbors, general public, government agencies, visitors, customers, the press, pressure groups, civic institutions, etc. (Newcombe, 2003; Smith and Love, 2004). Due to the huge diversity of stakeholders in the construction industry, they have been categorized into internal and external stakeholders. The categorization of stakeholder's aids in the effective management of the

stakeholders. People who provide financial needs for a project are known as internal stakeholders while external stakeholders are members outside the project but are affected in a substantial way. As already described, stakeholders can have good or bad effects on an organization and that is very necessary to manage stakeholders to reduce their bad effects and see to it that the goals of the firm are not impeded. Also, due to fact that, stakeholders in a marine project could be a long list of individuals or groups with differing stakes, it becomes necessary to manage them effectively. In view of this, the concept of stakeholder management has catch the eye of many researchers. According to Logsdon and Wood (2000), stakeholder management is the situation whereby an organization involves constituent groups to keep up the support of those constituent groups by balancing and taking their relevant interest into account.

According to Carroll and Buchholtz (2006), stakeholders and their associated stakes will manifest the attributes of legitimacy and power. For a claim to be perceived valid to a stake, it has to be legitimate. According to Johnson et al., (2005) the ability of a one party to entice, convince or compel the actions of others is described as power. This enticement is evident when one party's will have been forced on the other. Expectations, rights and claims of stakeholders that could have influence on a project need to be directed or controlled so as to avoid contradiction in relation to the objective of the firm. Conversely, stakeholders get affected by endeavors of business as well marine projects. In other for business to avoid contradictions with their stakeholders, measures have to be put in place to put their stakeholders on check and vice versa. This is the ideal means of optimizing retrievable benefits of the organization to the stakeholders and mitigating the potential negative influence of the stakeholders.

2.3.1 Stakeholder management principles and concepts

The principles of management are the activities that plan, organize, and control the operations of the basic elements of people, materials, machines, methods, money, and markets, providing direction and co-ordination and giving leadership to human efforts so as to achieve the sought objectives. (Boston; Harvard Business School press, 1995). The concept of stakeholder management strategy is a mix of policies that depends on factors such as the interest of stakeholders, the kind of stakeholders, the working condition and environment and the work flow patterns (Alsyouf, 2007). The interest of stakeholders will determine how to relate to them, the human personnel to manage these stakeholders. The working condition may include workers safety and environmental preservation. The work flow patterns may include averting work interruption through the system (Salonen, 2011; McAllister et al.,1999)

Stakeholder engagement is an umbrella term encompassing a range of activities and interactions over the life of a project. These can be divided into components.

- Stakeholder identification and analysis.
- Information Disclosure.
- Stakeholder consultation.
- Reporting to stakeholders.
- Management functions.

2.4 REHABILITATION PROJECT STAKEHOLDERS AT TAKORADI SHIPYARD

According to Bonnie Cooper (www.corpedgroup.com) A stakeholder is the person or organization that is actively involved in the project, or whose interests may be positively or negatively affected by execution or completion of the project. A stakeholder may also exert influence over the project and its deliverables. Below is a list of stakeholders that can be affected by the marine rehabilitation project activity.

- Marine Services Department
- Fire / Safety Department
- Medical Department
- Marine Operations Department
- Environmental Protection Agency
- Ship owners
- Marine Police

Moloney (2006) described stakeholder as an individual or a group that benefit from an organization. However, stakeholders can be harmed or affected by an organization. Gibson (2000) postulated that stakeholders are only beneficial to an organization if they aid in the achievement of their goals. This implies that, stakeholders have the capability to negatively affect the functioning and goals of the organization. In some cases, stakeholders initiate project schemes in an organization (Orndoff, 2005). Also, Vogwell (2002) stated that they may support or hinder the progress of a current project. Stakeholders may have a massive or little influence that may be intentionally or incidentally exerted.

2.5 CHALLENGES OF STAKEHOLDERS MANAGEMENT AT TAKORADI SHIPYARD

Sand blasting is a process whereby compressed air is used to direct a high velocity stream of sand to remove paint, other coatings, or corrosion such as rust from a surface, or to prepare a surface for a new coating. The process is actually called abrasive blasting, and any small, relatively uniform particles can be used as abrasive material. Materials such as silicate sand, steel grit, copper slag, walnut shells, powdered abrasives, even bits of coconut shell, all can be used as abrasive medium. The silica sand had traditionally been the media for abrasive blasting and that brought about the name sandblasting.

Poor project stakeholder management can significantly affect the outcome of the project as numerous risks evolving from the stakeholders will have a huge impact on the project success (Gilbert 1983). According to Meredith and Mantel, (2000) if stakeholder goals and objectives are not identified and the project manager strive to reach objectives and goals that is not from the stakeholders, the project might be considered a failure. Project stakeholder management involves the identification and the understanding of the social and political surroundings of your project.

This section talks about the various challenges associated with stakeholder management practices; Various researchers have identified challenges associated with the stakeholder management in their work. For instance, Pinto and Slevin, (2001), stated that, ignoring the scrutiny of the information processed by the stakeholders is a major challenge to stakeholder management. Also, Nutt and Backoff (1992), indicated that, project managers fail to implement or partially implement the views and concerns of stakeholders and therefore achieve poor or partial results. Another challenge identified was the problem of unreliable stakeholders. He stated that, this can lead to project failure. Other challenges included poor communication, inadequate resources, and negative community reactions (Kalsern, 2002). Ensuring adequate communication with all benefactor of a construction project including all members of the project team is a very significant key in the success of project (Pinto and Slevin, 2001). Communication as applied in construction projects can be defined as the exchange of projectspecific comprehension between the sender and the receiver thus providing accurate information to all stakeholders (Project Management Process Improvement 2017). According to Higgin and Jessop (2001), difficulties in communication on construction projects can lead to a significant increase in the quantity of unnecessary expenditure which also affects the progress of the work and cause unnecessary delays. Hartman and Ashrafi (2002), in his study came out with four vital factors essential to meeting construction project targets.

According to Karlsen, (1998) other challenges of stakeholder management are the lack of planning and method to stakeholder management.

Unclear stakeholders are the stakeholders who do not have sincere and honest interest and expectations while unidentified stakeholders are the stakeholders who were not identified at the beginning of the project. Unreasonable stakeholders are those who do not accept any form of logical reasoning.

Base on this study, the following stakeholder management challenges were adopted;

- Lack of stakeholder support;
- Poor relationship among stakeholders;
- Unfavorable news about the project in the press;
- Unclear stakeholders;
- Unidentified stakeholders;
- Unreasonable stakeholders;
- Insufficient resources allocated to the project;
- Change in scope of work; and
- Negative reactions from community towards the project.

2.6 CAUSES OF THE CHALLENGES OF STAKEHOLDER MANAGEMENT AT TAKORADI SHIPYARD

There are numerous situations that might hinder the effective management of stakeholders. According to Smyth et al. (2010), the availability of resources (human and capital) is a major case of the challenges associated with stakeholder management. If resources needed for managing stakeholders and not available or inadequate, it affects the effective management of stakeholders. Furthermore, the time allowance for the project also poses difficulty in effectively

managing stakeholders in projects. Also, the potential conflict of interest among stakeholders can be a significant cause of the barriers associated with stakeholder management processes (Bourne, 2008). Another major cause to the barriers of effective stakeholder management are the various barriers to communication like cultural differences and personal preferences. Other causes of the challenges are;

- Lack of effective communication: Poor communication can cause a huge problem in the management of stakeholders. Various barriers to communication can impede the successful transfer of information and getting a feedback.
- The problem of cultural differences among stakeholders: Variances in cultural heritage can lead to various misunderstandings among stakeholders and project managers. This can impede the successful management of project's stakeholders and subsequently lead to project failure.
- The degree of which stakeholders agree or disagree to issues; If stakeholders normally disagree to issues, it slows down the project and can cause delays in the project causing it to end as a failure in terms of time
- Unexpected changes in specifications; Sudden change of specifications or scope and ignite resistance from stakeholders impeding the successful management of stakeholders.
- The problem of having interest of several stakeholders in a project; If the number of stakeholders to manage are numerous, it will affect the successful management of the stakeholders.

2.7 STRATEGIES TO IMPROVE ON STAKEHOLDER MANAGEMENT

Project management demands strategies in handling and managing the several stakeholders.

Knowledge about stakeholder's interest is vital in the establishment of stakeholder management strategies. According to Jawahar and McLaughlin (2001) the construction industry demands different strategies so as to manage the several types stakeholder. This requires a project manager to analyze and focus on only one stakeholder at each stage of the project's lifecycle. A construction project should in actual sense engage and inform stakeholders who are in active support of the project's objectives and outcomes.

The early stage of the project calls definition calls for the active participation of all stakeholders who can be influenced and influence the project. Also, legitimize the project manager's action in the realization of the project's benefits and outcomes. Creditability and trust should be stimulated by establishing good personal relationships, illustrating that project actions are being seriously driven by the stakeholders' needs, using consultant's recommendations or the established formal methodologies to support the project and involving senior executives as project champions in lending the project authority. Furthermore, implement early communication and persuasion. The communication strategy should appreciate stakeholders' differences and cater for their requirements.

According to Manowong and Ogunlana (2006), adequate communication about the project to external stakeholders creates a level of satisfaction for them. There should be effort by project managers to acknowledge the essence of the project to all related stakeholders through every means so as to ensure satisfaction of all parties. Early acknowledgement of Stakeholders' expectations helps in fulfillment and satisfaction. Keeping key stakeholders updated on project information and in decision-making is useful approach in satisfying project stakeholders especially project that has an influence on the public. Olander and Landin (2005) stated that the use of open and effective communication with the use of media with the affected stakeholders is also a vital strategic in satisfying the people with necessary information. The

right management techniques helps in managing and preventing conflict so as to help encourage the commitment and to ensure the satisfaction of stakeholders.

KNUST



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The chapter three concentrates on the methodological approaches adopted for the study. The methodology is very significant in the realization of the objectives of the study. This chapter begins with the philosophical position followed by the research process, research design and the study population.

3.2 PHILOSOPHICAL POSITION OF THE RESEARCH

There are two (2) basic philosophical positions in research. These are positivism and constructivism (Crotty, 1998). According to Ramenyi and Williams (1998), the research phenomenon under study and its objectives depicts the type of philosophical position to adopt. In this study, the positivist stance was adopted on the ontological level. The objectives indicated in chapter one of this report lends themselves for measurement therefore, it makes sense to adopt positivist position as the realities can be observed through the use of appropriate measurement instruments. The positivist philosophical position relies on precise measures and it usually involves quantitative data collection.

3.3 RESEARCH PROCESS

Fellows and Liu (2008), indicated that, there is no rigid process for conducting research as the processes are mostly dynamic. The research process adopted for this research involved an indepth review of literature on marine industry and schedule performance. The review of literature begun with a review of stakeholder management followed by a review of the marine project management. Subsequently, literature was reviewed. After the literature review, a structured questionnaire was developed to aid in the collection of data from the respondents.

The data was subsequently analyzed using appropriate statistical tools to draw conclusions and make recommendations.

3.4 RESEARCH DESIGN

The research design for this study is of quantitative type. The research assessed the stakeholder management practices implemented in marine rehabilitation at the Takoradi Shipyard. It evaluated the impact of sandblasting on stakeholders in the Takoradi Port; and on the environment. It further more identified current safety and preventive measures in place for sandblasting process in the Takoradi shipyard; and recommended to Takoradi Port where

necessary, the state of the act safety measures for sand blasting process. The study used descriptive statistics to achieve its objectives.

3.5 STUDY POPULATION AND SAMPLING

The study determined the stakeholder management practices implemented in Takoradi shipyard. The Ghana Ports and Harbours have total staff strength of eight hundred and fortyseven (847). The study only concentrated on the main stakeholders from Safety Department,

Marine Services Department, Marine Operation Department, Medical Department and Environmental Protection Agency Officials (Western region). The population size for this study is one hundred and fifteen (115)

The study essentially targeted Marine Services Department, Safety Department, Marine Operations Department, Heads of Department and some selected lower level staff. In all eightyone (81) respondents were selected for the study based on Creswell's sampling technique. These are made up of 34 Marine Services Department, 29 from Marine Operation Department, 18 from Safety Department. The researcher used purposive sampling techniques to select respondents from various department and heads of department while simple random technique was employed to select lower respondents. The study assumed a margin of error of 10% according to Yamane (1967) determines the sample size as shown below.

Table 3.1: Selection of sample Size

Department	Population	$N = \frac{N}{1 + N(a)^2}$
Marine Services	52	34
Marine Operation	41	29
Fire and Safety	22	18

Total	115	81
--------------	------------	-----------

Source: Field survey, 2018

$$n = \frac{N}{1 + N(a)^2}$$

Where n = sample size, N= population universe and 'a' is the confidence level

Table 1.2: Selection of the Sample Size

Sample classification	Sample size
Marine Services Department	34
Marine Operations	29
Safety Department	18
Total	81

Source: Field survey, 2018

3.6 RESEARCH INSTRUMENT

Structured interview and survey questionnaire were used in the collection and data for the study. The questionnaire has both open-ended and close-ended questions.

3.6.1 Questionnaire

The questionnaire was purposely used in obtaining information on stakeholder management practices of Ghana ports and Harbours Authority, Takoradi shipyard. The questionnaire was designed based on the objectives of the study.

3.6.2 Procedure for data collection

The questionnaires were self-administered to the respondents at GPHA. The respondents were basically staff of the organization. With the distribution, 81 respondents were selected at GPHA. However, only 68 respondents answered and returned the questionnaire representing a response rate of 83%

3.7 DATA ANALYSIS

The findings were presented in Figures and Tables to determine the stakeholder management practices implemented in marine rehabilitation project at the Takoradi shipyard. Frequency distribution tables and pie charts would be used to present the data. To achieve this objective, the study employs the Relative Importance Index (RII) to examine how the surveyed respondents perceive the five (5) listed items of Table 4.6 as potential challenges of stakeholder management.

Table 4.6 therefore presents the responses of the surveyed respondents, the weight, RII values and by extension their relative ranks. The task of each respondent was to rank the challenges using the scale 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree. This ranking is in terms of their contribution to the challenges of stakeholder management practices.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.1 INTRODUCTION

This chapter describes the data employed in the analysis of this research and also discusses the results obtained from the analysis of the data collected.

4.2 PRESENTATION AND SOURCES OF DATA

The data for this study is a primary data obtained by administering of questionnaires. The questionnaires were administered to personnel's in the Safety and Medical Department of Takoradi Port, Environmental Protection Agency; questionnaires filled by selected stakeholders; and personal observations of sand blasting process. This research took into consideration responses from eighty- one (81) employees from different departments of the Takoradi Ports Shipyard. A total of sixty -eight (68) responses were received. This section gives a background on the respondents from which the data was collected from.

4.3 DESCRIPTIVE STATISTICS OF RESPONDENTS

In this section, the data is been explored and some descriptive summaries of the study variables are presented. The descriptive summaries of the study variables are gender of respondents, age of respondents, educational background and rank of the respondents.

Table 4.1: Descriptive statistics of Gender

	Frequency	Percent	Cumulative Percent
Male	61	89.7	89.7
Female	7	10.3	10.3
Total	68	100.0	

Source: **Researcher's fieldwork, 2018**

From Table 4.1, majority of the respondents were male employees constituting 89.7% of the total number of individuals whilst 10.3% constitute females. The summary of this information is shown in Table 4.1. There were 61 male employees and 7 female employees.

Table 4.2: Descriptive statistics of Age of respondents

	Frequency	Percent	Cumulative Percent
26-30 years	10	14.7	14.7
31-35 years	7	10.3	25.0
36 years and above	51	75.0	100.0
Total	68	100.0	

Source: **Researcher's fieldwork, 2018**

Table 4.2 shows the frequency distribution of the age of the respondents. Most of the respondents were 36 years and above years (51) representing 75.0%. From Table 4.2, employees who are between the ages 26 to 30 years are 10 representing 14.7% and employees who are 31 to 35 years are 7 representing 10.3%.

Table 4.3: Descriptive statistics of Educational Background of respondents

	Frequency	Percent	Cumulative Percent
Diploma	25	36.8	36.8
Degree	12	17.6	56.9
Masters	1	1.5	58.5
Professional	27	39.7	100.0
Total	65	95.6	
Missing 999	3	4.4	
Total	68	100.0	

Source: **Researcher's fieldwork, 2018**

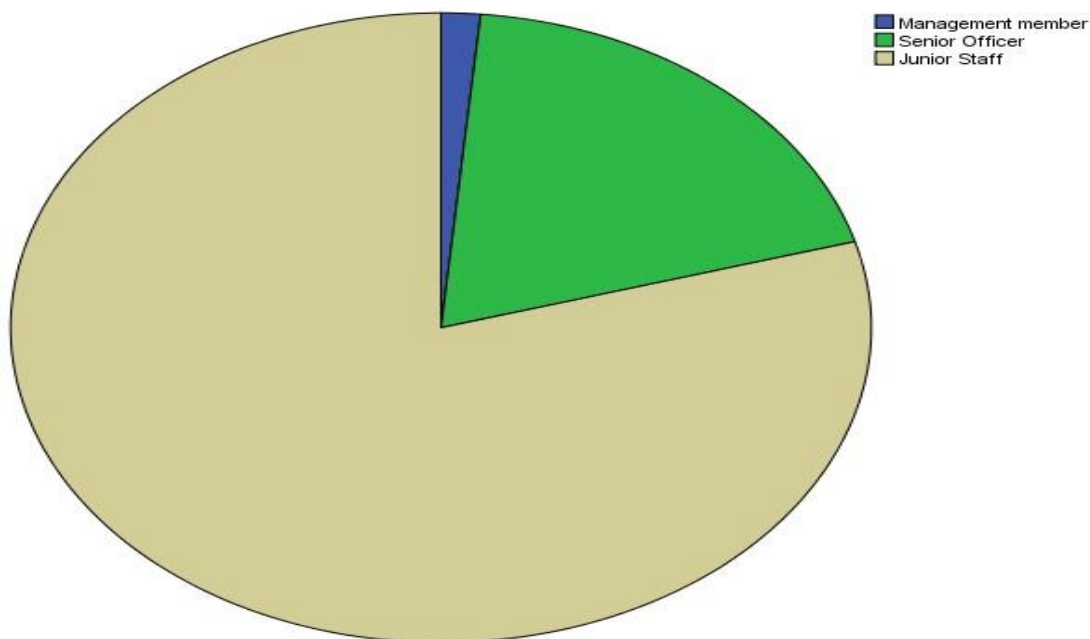


Figure 4.1: Employees Profile

In Table 4.3, Out of the total number of 68 respondents, 25 of the respondents representing 16.0% were employees with Diploma certificate, 12 of the respondents representing 17.6% were employees with First Degree, 1 out of the total of 68 respondents representing 1.5% were employees with Masters Degrees and 27 out of the total of 68 respondents representing 39.7% were employees with Professional certificates. Three (3) of the respondents did not answer.

Table: 4.4: Employees profile

	Frequency	Percent	Cumulative Percent
Management member	1	1.5	1.5
Valid Senior Officer	13	19.1	20.6
Junior Staff	54	79.4	100.0
Total	68	100.0	

Source: **Researcher's fieldwork, 2018**

Table 4.4 represents the frequency distribution of respondents in the company, 1 of the respondents representing 1.5% were Management members, 13 of the respondents representing

19.1% were Senior Officers and majority (54) of the respondents representing 79.4% were Junior Officers.

Figure 4.4 displays the graphical representation of the rank of respondents in the company.

Figure 4.4: A pie chart representing the Ranks of respondents in the company

In Figure 4.4, it can be observed that majority of the respondents are Junior Officers whilst one respondent represents a Management member.

Table 4.5: Cross-tabulation of Gender of Respondents against Educational Background

		Educational Background				Total
		Diploma	Degree	Masters	Professional	
Gender	of Male	22	11	0	25	58
Respondents	Female	3	4	1	2	10
Total		25	15	1	27	68

From Table 4.5, it can be seen that, 22 of the respondents are males with Diploma certificates, 3 of the respondents are males with First Degree certificate, none of the respondents are males and have Masters certificate and 25 of the respondents are males and have Professional backgrounds.

Also, 3 of the respondents are females with Diploma certificates, 1 of the respondents are females with First Degree certificate, 1 of the respondents are females and have Masters certificate and 2 of the respondents are females and have Professional backgrounds.

4.4 CHALLENGES OF STAKEHOLDER MANAGEMENT

This section of the study identifies the possible challenges of stakeholder management practices implemented in marine rehabilitation project in Ghana by focusing on Ghana Ports and Harbours Authority, Takoradi shipyard.

Table 4.6: Challenges of stakeholder management

Challenges of stakeholder management	Responses					Mean Scores		
	1	2	3	4	5	Weight	Mean Scores	Rank
Unclear stakeholders	6	0	1	19	42	295	8.68	1
Negative community reactions to the project	2	4	4	31	27	281	8.26	2
Inadequate resources assigned to the project	3	7	14	29	15	250	7.35	3
Changes in scope of work	19	25	9	11	4	160	4.71	4
Lack of support from stakeholders	21	26	7	8	6	156	4.59	5

The result indicates that the three (3) most perceived potential challenges of stakeholder management practices at the Ghana Ports and Harbours Authority, Takoradi shipyard include: (1) Unclear stakeholders (Mean score = 8.68); (2) Negative community reactions to the project (Mean score = 8.26) and (3) Inadequate resources assigned to the project (Mean score = 7.35). Unclear stakeholders are the stakeholders who do not have sincere and honest interest and expectations (Karlsen, 1998). This poses a significant challenge to stakeholder management in the Ghana Ports and Harbours Authority, Takoradi shipyard. Also, Kalsern, (2002) identified negative community reactions as a significant challenge to stakeholder management. This can lead to a halt in the progress of a construction project as communication may protest to the implementation of the project. Nutt and Backcoff (1992), indicated that, inadequate financial capabilities in managing stakeholders may hinder the effectiveness of stakeholder management in Ghana Ports and Harbours Authority

4.5 CAUSES OF THE IDENTIFIED CHALLENGES

This section of the study identifies the possible causative factors of the identified challenges at the Ghana Ports and Harbours Authority, Takoradi shipyard. To achieve this objective the respondents were presented with a list of four (4) constraints. The task of each respondent was to rank the causes using the scale 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

Table 4.7: Causes of the identified challenges.

Possible Causes of the identified challenges.	Mean Scores	Rank
Poor planning	3.10	1
Lack of human personnel to manage stakeholders	2.83	2
Lack of effective communication	2.25	3
Cultural differences	1.82	4

The result of the table (4.7) was obtained following the non-parametric test for k-related samples in SPSS version 20. The level of agreement between the 4 surveyed variables from sixty- eight (68) respondents from the Ghana Ports and Harbours Authority, Takoradi shipyard was tested using the Kendall's coefficient of concordance since there are three or more judges.

The result of the table (4.7) shows that the four most pressing possible causes of the identified challenges included: (1) Poor planning (Mean Rank = 3.10); (2) Lack of human personnel to manage stakeholders (Mean Rank = 2.83); (3) Lack of effective communication (4) Cultural differences (Mean Rank = 1.82).

Poor communication can cause a huge problem in the management of stakeholders. Various barriers to communication can impede the successful transfer of information and getting a feedback. Also, variances in cultural heritage can lead to various misunderstandings among stakeholders and project managers. This can impede the successful management of project's stakeholders and subsequently lead to project failure.

Ensuring adequate communication with all benefactor of a construction project including all members of the project team is a very significant key in the success of project (Pinto and Slevin, 2001). Communication as applied in construction projects can be defined as the exchange of project-specific comprehension between the sender and the receiver thus providing accurate information to all stakeholders (Project Management Process Improvement 2007).

4.6 PROPOSED STRATEGIES FOR EFFECTIVE STAKEHOLDER MANAGEMENT

This section of the study discusses the proposed strategies for effective stakeholder management. The outcome of the section is descriptively represented in Table 4.5

Table 4.10: Propose strategies for effective stakeholder management

S/No.	Propose strategies for effective stakeholder management	Min	Max	Mean Scores	Rank
1	Effective stakeholder engagement	1	5	4.66	1
2	Effective communication	1	5	4.52	2
3	Effective planning	1	5	4.16	3
4	Acknowledgment of stakeholder expectation	1	5	4.00	4

The results in table 4.10 depicts the strategies that can be adopted to improve on stakeholder management in Ghana Ports and Harbours Authority. They are discussed as follows.

The early stage of the project calls definition calls for the active participation of all stakeholders who can be influenced and influence the project. Also, legitimize the project manager's action in the realization of the project's benefits and outcomes.

According to Manowong and Ogunlana (2006), adequate communication about the project to external stakeholders creates a level of satisfaction for them. There should be effort by project managers to acknowledge the essence of the project to all related stakeholders through every means so as to ensure satisfaction of all parties. Also, early acknowledgement of Stakeholders' expectations helps in fulfillment and satisfaction. Keeping key stakeholders updated on project information and in decision-making is useful approach in satisfying project stakeholders especially project that has an influence on the public.



CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter represents a summation of the outcome of the study, draws inference based on the key findings and also make recommendations of the study.

5.2 SUMMARY OF FINDINGS

The research sought to explore and to determine the stakeholder management practices implemented in marine rehabilitation projects in Ghana at Ghana Ports and Harbours Authority, Takoradi shipyard through the achievement of several objectives including: (1) Determine challenges of stakeholder management; (2) Determine the causes of the identified challenges; and (3) Propose strategies for effective stakeholder management.

5.2.1 Challenges of stakeholder management.

The critical challenges of stakeholder management practices at the Ghana Ports and Harbours Authority, Takoradi shipyard in their order of ranking or magnitude of occurrence include 1) Unclear stakeholders (Mean score = 8.68); (2) Negative community reactions to the project (Mean score = 8.26) and (3) Inadequate resources assigned to the project (Mean score= 7.35).

5.2.2 Causes of the identified challenges

The study found several causes of the identified challenges of the Ghana Ports and Harbours Authority, Takoradi shipyard including (1) Poor planning (Mean Rank = 3.10); (2) Lack of human personnel to manage stakeholders (Mean Rank = 2.83); (3) Lack of effective communication (4) Cultural differences (Mean Rank = 1.82).

5.2.3 Proposed strategies for effective stakeholder management

The study found several proposed strategies for effective stakeholder management or control measures that could be employed to effectively manage stakeholder practices at the Ghana Ports and Harbours Authority, Takoradi shipyard. These proposed strategies included effective planning, acknowledgment of stakeholder expectation and effective communication.

5.3 CONCLUSIONS

The challenges of stakeholder management practices at the Ghana Ports and Harbours Authority, Takoradi shipyard are perceived to be caused by poor planning, lack of human personnel, lack of effective communication and cultural differences. Thus, these challenges hinder the effective implementation of stakeholder management.

There are several causes of the identified challenges of the Ghana Ports and Harbours Authority, Takoradi shipyard. Poor planning was a very significant cause of the challenges to stakeholder management. Project managers should therefore endeavor to adequately plan the stakeholder management process

The proposed strategies for effective stakeholder management practices at the Ghana Ports and Harbours Authority are effective planning, effective communication and effective stakeholder engagement. These strategies, if adequately implemented will improve on the abilities of the project manager to adequately manage stakeholders.

5.4 RECOMMENDATIONS

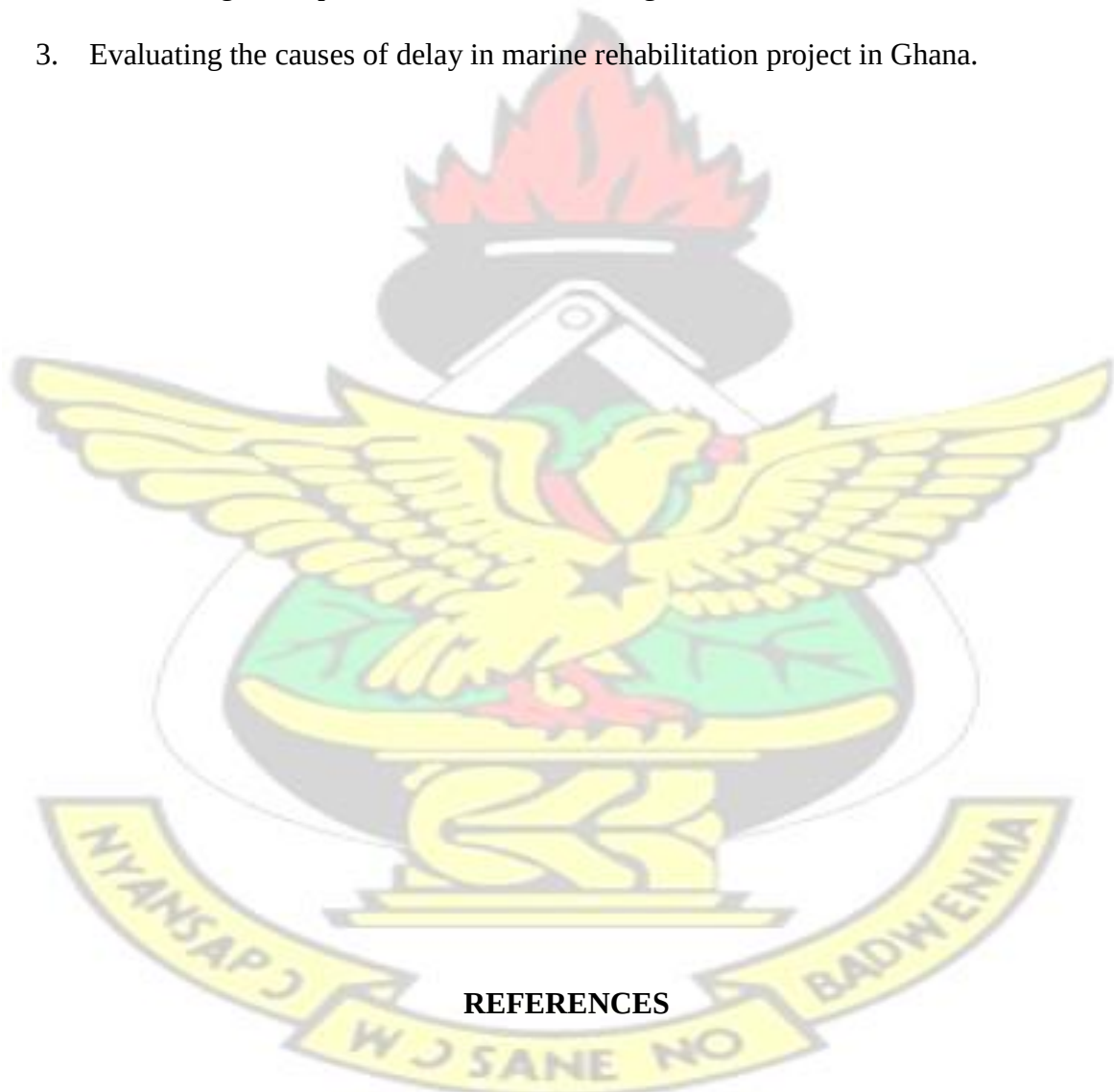
Based on the summary of findings and conclusions it is recommended that,

1. The proposed strategies for effective stakeholder management practices at the Ghana Ports and Harbours Authority, Takoradi shipyard adequately ensured and attended to.
2. Also, project managers should adequately plan the stakeholder management practices to improve on the abilities of the project manager to adequately manage stakeholders.
3. Lastly, project managers should enhance effective communication at Ghana Ports and Harbours Authority, Takoradi shipyard to improve on stakeholder management practices.

5.5 SUGGESTION FOR FURTHER RESEARCH

This research exposes a number of areas which need research attention. The following recommendations are therefore proposed for further research work.

1. Monitoring and evaluation of stakeholder management practices in marine rehabilitation project in Ghana.
2. Risk management practices in marine docking activities.
3. Evaluating the causes of delay in marine rehabilitation project in Ghana.



REFERENCES

Abrasive Blasting Operations (2001), Engineering Control and Work Practices, Washington DC.

Acemoglu, D., Johnson, S. and Robinson, J.A., (2005), Institutions as a fundamental cause of long-run growth. *Handbook of economic growth*, 1, pp.385-472.

Act, F., (1949), (castings and other articles) special regulations,[1949]. *London, England: Ministry of Labour and National Service, Factory Department, SI, (2225), pp.43314335.*

Ahmed D. C., Mohammed F, C., and Dean A. D. (2014), Economy of Ghana and it development, “Economic Management Journal”, Vol. 10 pp 12.

Akpakpavi M. (20015), *Used Oil Storage and Disposal Practices in Automobile Garages in Ghana*. International Journal of Science Technology and Society. Vol.3, No.4, , pp.191201.

Alsyouf, I., (2007). The role of maintenance in improving companies’ productivity and profitability. *International Journal of production economics*, 105(1), pp.70-78.

Asamoah, R.O. and Decardi-Nelson, I., (2014). Promoting Trust and Confidence in the Construction industry in Ghana through the Development and Enforcement of Ethics. *Information and knowledge*, 3(4), pp.63-68.

Bonnie C., identify project stakeholders from <http://www.corpedgroup.com/resources/pm>

Callistus C.C and Clinton E. R (2016), Monitoring and evaluation in the marine project delivery process, pp 34-45

Callistus, T. and Clinton, A., (2016), Evaluating barriers to effective implementation of project monitoring and evaluation in the Ghanaian construction industry. *Procedia engineering*, 164, pp.389-394.

Carroll, A., and Buchholtz C.(2006), *Business and society. Ethics and stakeholder management. Cincinnati: South Western Cengage Learning.*

Clemco Industries, Identifying Potential Hazards in Abrasive Blasting. Available from:

http://www.clemcoindustries.com/safety_showitem.php?item_id=11112[Accessed on 15th September 2015]

Dadzie, C.A., Winston, E.M. and Dadzie, K.Q., (2012), Organizational culture, competitive strategy, and performance in Ghana. *Journal of African Business*, 13(3), pp.172-182.

Fernandez, N., Mani, R., Rinaldi, D., Kadau, D., Mosquet, M., Lombois-Burger, H., CayerBarrioz, J., Herrmann, H.J., Spencer, N.D. and Isa, L., (2013), Microscopic mechanism for shear thickening of non-Brownian suspensions. *Physical review letters*, 111(10), p.108-301.

Fugar, F.D. and Agyakwah-Baah, A.B., (2010). Delays in building construction projects in Ghana. *Construction Economics and Building*, 10(1-2), pp.103-116.

Fundamental truth that serves as the foundation for a system of reasoning from <http://en.oxforddictionaries.com/principle>.

Ghana Legal- Oil in Navigable waters ACT- 1965(ACT 235).
<http://laws.ghanalegal.com/acts/id/50/oil-in-navigable-water-act> , accessed August 2017
Environmental Resources Management, Tullow Ghana Limited, 2012

Ghana Ports and Harbours Authority GPHA, (2010), Takoradi shipyard Brochure, Valuation of fixed assets, Takoradi harbor. “Management Review Reports” pp 20.

Gibson, E., (2000), The dependency locality theory: A distance-based theory of linguistic complexity. *Image, language, brain*, pp.95-126.

- Gómez de León Hijes, F.C. and Cartagena, J.J.R. (2006), Maintenance strategy based on multicriterion classification of equipments. *Reliability Engineering and Systems Safety*, 91, Vol. 4: pp. 444 – 451.
- Gulati, R. and Smith, R. (2009), Maintenance and Reliability Best Practices. [Electronic] New York: Industrial Press.
- Gupta A.K. (2009) *Reliability, Maintenance and Safety Engineering*. Laxmi Publications.
- Hontlez, J. (1996), Heavy equipment maintenance plan for improving safety and efficiency, University of Wisconsin–Stout
- International Labour Office, (1972), *ILO U/C International Classification of Radiographs of Pneumoco* ioses 1971*. ILO.
- Irefin, I.A., (2013), Effects of project management on the performance of a construction firm in Nigeria. *American international journals of contemporary research*, 3(6), pp.54-58.
- Jawahar, I.M. and McLaughlin, G.L. (2001), Toward a descriptive stakeholder theory: An organizational life cycle approach, “*Academy of Management Review*”, Vol. 26, No.3, pp.:397-414.
- Johnson H, (2013), Be aware of Respiratory Hazards during Abrasive Blasting and How to stay safe.
- Karlsen, J.T. (2002), Project stakeholder management, “*Engineering Management Journal*”, Vol. 14, No.4, pp. 19–24.
- Kutir, A., (2016), *Assessing growth strategies of rapid developing construction firms in Ghana* (Doctoral dissertation).
- Lieberman, Jay R., Aaron Daluiski, Sharon Stevenson, Lily Wu, P. A. U. L. A. McALLISTER,

- Yu Po Lee, J. Michael Kabo, Gerald AM Finerman, Arnold J. Berk, and Owen N. Witte (1999), "The effect of regional gene therapy with bone morphogenetic protein-2producing bone-marrow cells on the repair of segmental femoral defects in rats." *JBJS* 81, no. 7 (1999): 905-917
- Liker, J.K. (2004), *The Toyota way: 14 Management principles from the world's greatest manufacturer*. New York: McGraw-hill, cop.
- Löfsten, H. (1999), Management of industrial maintenance-economic evaluation of maintenance policies. *International Journal of Production Research*, 19 (7): 716-737
- Mahoney, M., and Nguyen, N. (2003), Big Success in a Small City: Implementing a New Maintenance Management Approach. Retrieved March, 2015, from [www.MaintenanceResources.com:http://www.maintenanceresources.com/referencelibrary/ezone/lacemry2.htm](http://www.maintenanceresources.com/referencelibrary/ezone/lacemry2.htm)
- Mahoney, M., and Nguyen, N. (2003), Big Success in a Small City: Implementing a New Maintenance Management Approach. Retrieved March, 2015, from [www.MaintenanceResources.com:http://www.maintenanceresources.com/referencelibrary/ezone/lacemry2.htm](http://www.maintenanceresources.com/referencelibrary/ezone/lacemry2.htm)
- Manowong, E. and Ogunlana, S.O. (2006), Public hearings in Thailand's infrastructure projects: Effective participations? "*Engineering, Construction and Architectural Management*", Vol.13, No. 4, pp. 343 -363.
- McAllister K., Armstrong, J. and Wilson, A. (1999), *Asset Maintenance Management, a Guide to Developing Strategy and Improving Performance*. Wilson, A. Farnham, Surrey: Conference Communication.

MedPartnership Project. Guidelines for environmentally sound management of used oils in the Mediterranean, pp. 205

Miller C. (2014) Silica a Pollutant. Available from [http\\www.clausen.com](http://www.clausen.com). [Accessed on 22ND September 2015]

Newcombe, R., (2003), From client to project stakeholders: a stakeholder mapping approach. *Construction Management and Economics*, 21(8), pp.841-848.

Nhabinde, V., Marrengula, C.P. and Ubisse, A., (2012), The Challenges and the Way Forward for the Construction Industry in Mozambique. *Report to the International Growth Centre in Mozambique*.

Nwachukwu, C.C. and Emoh, F.I., (2011), Building construction project management success as a critical issue in real estate development and investment. *American Journal of Social and Management Sciences*, 2(1), pp.56-75.

Ofori-Kuragu, J.K., Baiden, B.K. and Badu, E., (2016),. Key performance indicators for project success in Ghanaian contractors. *International Journal of Construction Engineering and Management*, 5(1), pp.1-10.

Orndoff, C.J., (2005), Promising new tool for stakeholder interaction. *Journal of architectural engineering*, 11(4), pp.139-146.

Osei, V., (2013), The construction industry and its linkages to the Ghanaian economy--policies to improve the sector's performance. *International Journal of Development and Economic Sustainability*, 1(1), pp.56-72.

Otieno, R., 2000. The role of garment sizing in creation of customer satisfaction: Indications from focus group responses. *Journal of Fashion Marketing and Management: An International Journal*, 4(4), pp.325-335.

Paton, K.R., Varrla, E., Backes, C., Smith, R.J., Khan, U., O'Neill, A., Boland, C., Lotya, M., Istrate, O.M., King, P. and Higgins, T., 2014. Scalable production of large quantities of defect-free few-layer graphene by shear exfoliation in liquids. *Nature materials*, 13(6), p.624.

Pinto, J. K., Slevin, and D. P. (2001), Successful utility project management from lessons learned.' A lead paper presented at the international conference of Project Management professionals.

Prabir Ganguly. Environmental Pollution Regulation- Environmental Regulations and Standard Setting. <http://www.eloss.net/sample-chapters/C09/E4-22-01-00.pdf>

Protecting workers from the hazards of abrasive blasting from [http://www. Osha.gov](http://www.Osha.gov)>OSHA3697 Safe Work Australia, (2011)

Abrasive blasting: draft code of practice Safi Corporation, (2008) Abrasive blasting.

Rafael Vazquez-Duhalt. Environmental Impact of Used Motor Oil, Research Gate publication, March 1989.

Sa'diah Binti Salim. *A Lab Scale Study on The Effect of Waste Lubricating Oil to Red Tilapia*,

University Malaysia Sarawak: Faculty of Resource Science and Technology, 2013.

Salonen, 2011;McAllister et al, (1999) . workers safety and environment preservation.

- Salonen, A. (2011). Strategic Maintenance Development in Manufacturing Industry. School of Innovation, Design and Engineering. Västerås: Mälardalen University Dissertations No. 99.
- Salonen, A., 2011. Service transition strategies of industrial manufacturers. *Industrial Marketing Management*, 40(5), pp.683-690.
- Scollan, N., Hocquette, J.F., Nuernberg, K., Dannenberger, D., Richardson, I. and Moloney, A., 2006. Innovations in beef production systems that enhance the nutritional and health value of beef lipids and their relationship with meat quality. *Meat science*, 74(1), pp.17-33.
- Scottish Environmental Protection Agency. Pollution Prevention Guidelines, PPG8, February 2004.
- Sheu, C. (1994). A decision model for corrective maintenance management. *International Journal of Production Research*, 32 (6) 1365-1382)
- Sheu, C., and Krajewski, L. (1994). A Decision Model for Corrective Maintenance Management. *Int J Prod Res*, 1365-1382.
- Sheu, C., and Krajewski, L. (1994). A Decision Model for Corrective Maintenance Management. *Int J Prod Res*, 1365-1382.
- Smith, J. and Love, P.E., 2004. Stakeholder management during project inception: Strategic needs analysis. *Journal of architectural engineering*, 10(1), pp.22-33.
- Sullivan, G. P., Pugh, R., Melendez, A. P., and Hunt, W. D. (2004). Operations and Maintenance Best Practices: A Guide to Achieving Operational Efficiency. Federal Energy Management Program, US Department of Energy.

Swanson L. (2001). Linking maintenance strategies to performance. *International Journal of Production Economics*, 70 (3): 237-244.

Swanson L. (2001). Linking maintenance strategies to performance. *International Journal of Production Economics*, 70 (3): 237-244.

The NIOSH, 1974. detector tube certification program. *American Industrial Hygiene Association Journal*, 35(7), pp.438-442.

UK Trade Association to the Oil Recycling Industry- Impact of Oil Spills, 2015 Oil Care Campaign <http://oilcare.org.uk/what-we-do/impacts-of-oil/> ,accessed November 2017.

United Nations Commission. 18th Session of the United Nations Commission on Sustainable development, National report for Ghana: *Waste Management in Ghana*, accessed May, 2017

United Nations Conference on Trade and Development (UNCTAD). *Future Challenges to Port*, Geneva: Train For Trade, Modern Port Management, 2016

United States Department of Labour, (2006) Maritime Guidance document, Abrasive Blasting Hazards in Shipyard Employment.

Vogwell, D., 2002. How game theory can help you handle the politics that go with large projects. *BUILDING-LONDON-BUILDING-*, pp.50-52.

What is stakeholder management? From <http://www.apm.org.uk>. Maintenance Best Practices: A Guide to Achieving Operational Efficiency. Federal Energy Management Program, US Department of Energy.

Wood, D.J., Logsdon, J.M. and Benson, L.E. eds., 2000. *Research in Stakeholder Theory*,

1997-1998: *The Sloan Foundation Minigrant Project*. Clarkson Centre for Business Ethics, Joseph L. Rotman School of Management, University of Toronto.

KNUST



Appendix 1 Questionnaire

TO BE FILLED BY ALL RESPONDENTS

Dear Respondent,

I am a student of Kwame Nkrumah University Of Science And Technology, Kumasi and currently carrying out a study for the purpose of writing a thesis as a requirement for the award of Masters in Project management at the Kwame Nkrumah University Of Science And Technology, Kumasi and conducting a study on stakeholder management practices implemented in marine rehabilitation project in Ghana by focusing on Ghana Ports and Harbours Authority, Takoradi shipyard It is purely academic and the information obtained shall not be used for any other purpose other than for its intended use and will be treated with utmost confidentiality. Your assistance in this research shall be highly appreciated. Thanking you for your co-operation and invaluable contribution(s)

Section A: Respondent's Background

Please tick answers as applicable to you

1. Gender: a. Male () b. Female ()

2. Age of respondents: ()

a. Less than 25 years b. 26-30 years () c. 31- 35 years d. 36 and above ()

3. Education Background

a. Diploma () b. Degree () c. Masters () d. Professional ()

4. What is your rank in the company?

a. Management member () b. Senior Officer () c. Junior Officer ()

Section B

Instructions: Please respond to the following statements by circling the answer that most accurately represents your opinion concerning your experience using the following scale;

1	2	3	4	5
Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree

Objective One

S/No	Challenges of stakeholder management	1	2	3	4	5
1.	Changes in scope of work					
2.	Lack of support from stakeholders					
3.	Negative community reactions to the project					
4.	Inadequate resources assigned to the project					
5.	Poor relationship among stakeholders					

Objective Two

S/No	Causes of the identified challenges.	1	2	3	4	5
1.	Poor planning					
2.	Lack of human personnel to manage stakeholders					
3.	Lack of effective communication					
4.	Cultural differences					

Objective Three

S/No	Propose strategies for effective stakeholder management.	1	2	3	4	5
1.	Effective communication					
2	Acknowledgment of stakeholder expectation					
3	Effective planning					
4	Effective stakeholder engagement					

Thank you for your time.