ORGANIZATIONAL STRUCTURE IMPACTS ON PROJECT PERFORMANCE AMONG WORKER AT OIL AND GAS INDUSTRY

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Report submitted in partial fulfilment of the requirement for the award of the Degree of Bachelor of Project Management (Hons)

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SUPERVISORS'S DECLARATION

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in terms of scope and quality of the award of the degree of Bachelor of Project Management (honour).

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of another degree.

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DEDICATION

These thesis dedicated to especially to my parents, my siblings and friends who support me all the way during my study.

I would like to dedicate this thesis to my supervisors, Mr. Mohamad Rozi Bin Hassan, who gives me a lot of advice and suggestion to this thesis.

Finally, I want to dedicate to the worker at oil and gas industry as well that help me and have a good response for my thesis.

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First of all, I would like to thanks and I acknowledge my sincere indebtedness and gratitude to my parents for the love, caring, dream and sacrifice throughout my life. I also acknowledge the time sacrificing by my lover who understands that it is inevitable to make this thesis possible. It is hard to express out all my appreciation for their devotion, faith and support in my ability to succeed my goals without them I don't think I can't finish my thesis.

My sincere thanks also go to my course mates who share their knowledge with me in writing and conducting my thesis. There are many obstacles I faced during this thesis, but I manage to keep this on until I manage to finish the thesis. This is because of the advices given by a precious course mate's friend in the UMP.

ABSTRACT

The aim of this research is to study organizational structure and project performance. For the organizational structure as the independent variable. Then, project performance of as the dependent variable. Eighty respondents from the oil and gas industry in Kuala Lumpur were surveyed by questionnaire. The collected data were analyzed by using SPSS software which used the method of Cronbach's Alpha (reliability analysis), correlation analysis, regression analysis and descriptive statistics. The objectives of this study is to determine the effectiveness of organization structure to project performance and to identify the relationship between organization structures with project performance. The results of study is show that there is a significant positive relationship between organizational structure and project performance.

Keywords: organizational structure, project performance, oil and gas industry

ABSTRAK

Tujuan kajian ini adalah untuk mengkaji struktur organisasi dan prestasi projek. Bagi struktur organisasi sebagai pembolehubah bebas. Kemudian, prestasi projek sebagai pembolehubah bersandar. Lapan puluh responden daripada industri minyak dan gas di Kuala Lumpur telah dikaji oleh soal selidik. Data yang diperolehi dianalisis dengan menggunakan perisian SPSS yang menggunakan kaedah Alpha (analisis kebolehpercayaan) Cronbach, analisis korelasi, analisis regresi dan statistik deskriptif. Objektif kajian ini adalah untuk menentukan keberkesanan struktur organisasi untuk menonjolkan prestasi dan untuk mengenal pasti hubungan antara struktur organisasi dengan prestasi projek. Keputusan kajian ini menunjukkan bahawa terdapat hubungan positif yang signifikan antara struktur organisasi dan prestasi projek.

Kata kunci: *struktur organisasi, prestasi projek, minyak dan gas*

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INTRODUCTION

1.1 INTRODUCTION

A suitable organization may achieve a good impact on project performance among worker. To achieve an effectiveness of high project performance, the project may set their objective that want to achieve in the end of each project. To achieve a better result the organization have their own goals. Then, there are few type of organizational structure that have been design to form at least two people make up an organization. Organization can be the group of people that been formed which with purpose to achieve effect and cannot be formed by one person to make it by their self without others. According to (Hatch, 1997), stated that organizational structure also refer as building's physical layout or the social relationships that presented among people, positions, and organizational units. Furthermore, (Hatch 1997) also argued that "structure refers to the relationships among the parts of an organized whole". Although, the organizational structure is normally describe as the way that have responsibilities and power that allocated and work procedures that are carried out by organizational member (Nahm et al, 2003). Organizations form the most efficient and rational social groupings in society. Therefore, modern society is dependent upon organizations. Organizations exist as social tools in that they coordinate human actions. While combining personnel, resources, and materials, the organization is able to evaluate its performance and adjust accordingly in order to be successful in reaching its goals (Etzioni, 1964). This study attempts to investigate some issues related to organizational structure and project performance in oil and gas industry

1.2 RESEARCH BACKGROUND

Malaysia is the country that have a larger area of natural resources on the agriculture, forestry and minerals. According to the Petronas, oil and gas asset that have by Malaysia equivalent to 20.18 billion and the government estimation on the production rate, the supply of the petroleum will last for 18 years, meanwhile that natural gasses will last for 35 years. This industry actually are big industry that provided the important substantial sources to Malaysia. Generally, oil and gas industry is a biggest industry with larger people that work in the organization. The huge number of worker in the organization that can generate much ability in the organization and no organization today's competitive world can be perform at peak level if unless each of the employee is giving the committing to their organization in order to achieve their objective and work as effectiveness team member in the organization.

Organization structure is how people in the organization distributed and control the line communication of people in the organization. According to the, (Mahmoudsalehi et al., 2012) the result show that the company can adopt flexible, increasing the level hierarchical of organization which allow everybody easily to interact among the staff with communication and teamwork. This makes employees take better advantages which can contributed their work in the organization and feel freedom of action that they are doing. In the organization structure, there are several type which can classified which organization structure that generate the most effective among worker in oil and gas industry.

In this study, by using the organization structure it will show that technical expertise and good support, type of flexibility, established the line communication among worker with clearly defined responsibility and authority within departments. Also can identifies relationships between various parties, lines and authority of people to communicate. It also considers as project team, project interfaces, matrix organization structure and responsibility matrix. According to the Miller, stated organization structure can influences the flows of information.

1.3 PROBLEM STATEMENT

Nowadays, organizing becoming continues issues because it is now very common in many type and sizes of organization structure. Organizational structure is a system of hierarchy that been used within an organization of the company. It is to use to identify of each job, its functions and where it have to report within of the organization. The project are performance by people and organizational structure reflect the people's needs, the team need's and the individual's need. (Bhagat,2002) stated that knowledge originates from the unique of the experience and organizational learning and not only from written documents but also in our routine, task, process, practice, rules and values of organizations. For the problem facing by the industry is on how they manage their structure in ways that contribute to the project performance and how far it is been effective to organizational structure and their impact. The ability of organization structure may be can give a good impact and effect to the project performance.

A company with a strong structure are benefits on their improvement of communication, a well-defined hierarchy, the flexibility and also the ability on how their managing their organizational structure. Actually, efficient organizational structure can be as well as the organization make a problem as lead the productivity also conflict. The company should need and able to identify the problems within an organization structure and deal with it. Mintzberg 1979 stated that organizational structure is combination of all the work that can be divide. The flexibility is need by people in the organization in which to become more innovation and also to seem appropriate. This organization structure also to establish on how an organization's operates and assists it in provide and maintaining its goals to allow for future growth. Furthermore, project failure always been a hot issues as in oil and gas industry itself which there are also some weakness in their organizational structure. According to (Dinsmore, 1993; Forsberg et al., 2005; Kerzner, 2003) when there are a two-boss syndrome and dual reporting, management co-operation is required, the balance of power between the functional and project organization, and a conflict of priorities amongst different projects. While (Duncan, 1979) stated dual to authority, which can be frustrating and confusing to employees. From the above statement, many of literature agree that the criteria or factors that

claim either the organizational structure considered to successful or failure in project performance. Even though the organizational structure is not critical factors to measure performance outcome but having a good organizational structure may bring a good performance of the project and also it will lead the project failure. So, organizational structure is importance in managing a good performance of organization.

1.4 RESEARCH OBJECTIVE

Objectives these study as following:

1.4.1 To determine the effectiveness of organization structure to project performance

1.4.2 To identify the relationship between organization structure with project performance

1.5 RESEACH QUESTION

This study is conduct delivery to answer the following research questions:

1.5.1 Which is organizational structure performance effectiveness to project performance?

1.5.2 What is relationship between organization structures with project performance?

1.6 RESEARCH SCOPE

In this study, the main purpose is to study organizational structure impact on project performance among worker at oil and gas industry. So, this study will conduct to people who work at oil and gas industry which from various company of oil and gas industry. For contributing to the further understanding of this related term, this study will be conducted at Kuala Lumpur. This study also will use small sample from the amount of workers to carry out the test.

1.7 SIGNIFICANCE OF STUDY

The significance of this study is to examine the effectiveness of organization structure on project performance among worker of oil and gas industry. This study contribute to the worker on the organization to know which level effectiveness of their performance based on their organization structure. This study will explore the component in organization structure that influences to the performances of the project. This study also to identify the relationship between organization structure and the project performances. It also will help the workers in the organization more understanding to basic need in organization structure like what people's need, organization's need and project's need to give the better performances. This study can be apply in any field that have an organization structure such as private sector, government sector, manufacturing, customer service, engineering, food industry, business and media

1.8 OPERATIONAL DEFINITION

1.8.1 Organization structure

According to Mintzberg, stated that an organization defined as the result of combination which wok are divided into difference tasks in all the ways. It also the Organizational structure of lines of authority, communication, right and duties between all the people in the organization. Organization structure are managed and performance by people. It also determined how the information is delivery through different levels of management.

1.8.1.1 Functional Organizational

The function is each member share the task or goal which is the structure is divide by it. According to (Hatch, 1997) all over the organization is control by top manager and the member of the organization see all the whole work toward department a common goal and making decision making.

1.8.1.2 Matrix Organizational

These structure is a combination of both structure which is functional and multi divisional. It also involved and assigned to project based between project manager and functional structure. Hatch, 1997 stated that to maintaining the balance of functional and project and it is the responsibility of CEO.

1.8.1.3 Pure Project Organizational Structure

According to the Hatch, 1997 the pure project is where the work is full time and contained the teamwork. Also, the work divided into geographically but all staff report to headquarters.

1.8.2 Project performance

The successful of a project will be achieves at the end of the project in the objective and goal. According (Gale, 1981) project performance can be categorized as project achievement which is the measure of ability of project is to effectively in way to achieve the result on the availability of resources.

1.9 EXPECTED RESULT

In this study has a goal to help the people in the organization to know their level effectiveness of performance based on organization structure. The organization structure also will determine which organization structure that will give positive impact toward the project performance. Then, the aim is also to help the people in the organization can improve their organization structure and to achieve the better result in project performance of the work or project that they are performance.

1.10 THESIS PLANNING

This study is separated into five chapter which is:

Chapter 1: Introduction

Firstly for chapter one of this study. This is about an introduction, then by a research background that describe background of the study, then problem statement that an issues that implementation of study. Also followed by research objectives, research framework, and research hypothesis, then scope of the study, significance of study, operational definition, expected results and research management of the study

Chapter 2: Literature review

This chapter discusses previous studies and focuses on the systematic process that require the information. From the reading and understanding in of chapter two is the related study that need to identify and find out the key concept in this study. This chapter two also, discusses the about the variables that related studied, conceptual framework, the development of hypotheses and chapter summaries.

Chapter 3: Research Methodology

Chapter three, explain in more about in way to collect the information with right way through research flow chart to ensure the right information with using the right instrument terms. Chapter three discusses the research design, population and sampling, research method, and method of data analysis. In this chapter, more to discuss about the population and sampling and design the questionnaire.

Chapter 4: Data collection and analysis

This chapter, researcher focusses on research design to elaborate about the process of flowchart forward to create the questionnaire and know the data analysis uses the SPSS and also discuss about the result from the output of SPSS.

Chapter 5: Conclusion and Recommendation

The final chapter outlines the conclusions of the study to discuss the findings, contributions and constraints and limitations of the study as a backup as information for further study. Finally, some recommendations for further study about organization structure impacts on project performance among worker are mention.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

According to this study these chapter review of the previous literature. This chapter present a literature review of the study which include a few elements that will explain through about the effect of organization and project performance among worker in oil and gas industry. So basically, the literature review for this study diving into a few element that can be seen more clearly.

2.2 IMPORTANCE OF OIL AND GAS INDUSTRY

As know, the oil and gas industry is the most importance resources in the world of resources. It also plays big role and critical which drive the economy's global. Then, it become important when the industry provide much of important jobs in that field. There a thousands of people work in these field. Then, also being as a larger industry which have a larger area of natural resources on the agriculture, forestry and minerals. According to the Petronas, oil and gas asset that have by Malaysia equivalent to 20.18 billion and the government estimation on the production rate, the supply of the petroleum will last for 18 years, meanwhile that natural gasses will last for 35 years. Where the oil and gas industry actually are biggest industry that provided the most important substantial sources to Malaysia. The most importance because the huge number of worker in the organization that can generate much ability in the organization and no organization today's competitive world

can be perform at peak level if unless each of the employee is giving the committing to their organization in order to achieve their objective and work as effectiveness team member in the organization.

Ganendra stated that Malaysia had a big market to tap into as Malaysian Oil and Gas engineers were highly regarded by local and foreign oil companies. He added that although Malaysia was not as cheap as India, it had several

Advantages:

i. Oil and Gas resources local and regional
ii. Established engineering industry
iii. Petronas is a global player
iv. Good infrastructure
v. Low operating cost base
vi. Politically stable
vii. Attractive for foreign companies to set up base Quality
viii. Technology knowledge

In Kuala Lumpur, there are about 1500 thousand of employee in the oil and gas industry and they come from various company such as Petronas, Shell, Exxon, Kencana Petroleum and many more. Base on monthly bulletin of the institutional of engineers on 2013 stated the total resources.

The figure below show, the institution of engineers' monthly bulletin on 2013 the total of resources.

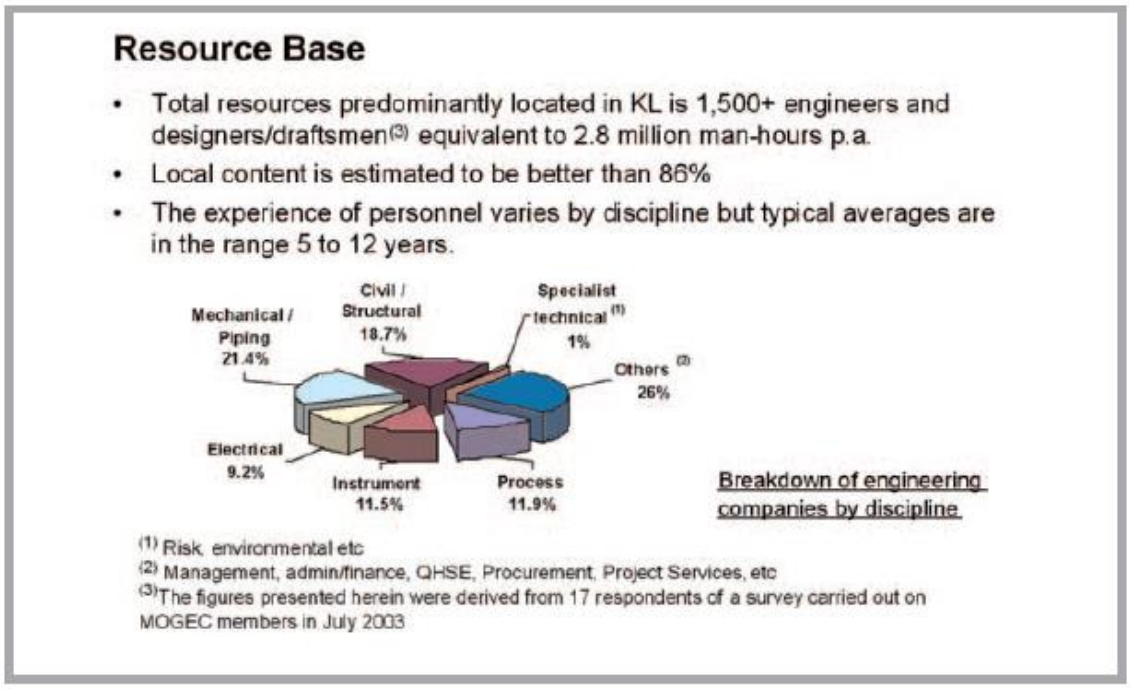


Figure 2.1: Percentage of the workers that works in Oil and Gas Company in Kuala Lumpur

Sources: The monthly Bulletin of the Institutional of Engineers, 2013.

2.3 RELATIONSHIP OIL AND GAS BETWEEN PROJECT MANAGEMENT

Project Management can be defines as the process of managing, allocating, and timing resources to achieve a given goal in an efficient and expeditious manner. PMBOK defines project management as the application of knowledge, skills, tools, and techniques to project activities to achieve project objectives. Other sources define project management as the collection of skills, tools, and management processes essential for executing a project successfully.

Project management for oil and gas projects comes with a unique set of challenges that include the management of science, technology, and engineering aspects. Underlining the specific issues involved in projects in this field, Project Management for the Oil and Gas

Industry which A World System Approach presents step-by-step application of project management techniques. Using the Project Management Body of Knowledge (PMBOK®) framework from the Project Management Institute (PMI) as the platform, the book provides an integrated approach that covers the concepts, tools, and techniques for managing oil and gas projects. The authors discuss specialized tools such as plan, do, check, act (PDCA); define, measure, analyze, improve, control (DMAIC); suppliers, inputs, process, outputs, customers (SIPOC); design, evaluate, justify, integrate (DEJI); quality function deployment (QFD); affinity diagrams; flowcharts; Pareto charts; and histograms. They also discuss the major activities in oil and gas risk assessment, such as feasibility studies, design, transportation, utility, survey works, construction, permanent structure works, mechanical and electrical installations, and maintenance.

Strongly advocating a world systems approach to managing oil and gas projects and programs, the book covers quantitative and qualitative techniques. It addresses technical and managerial aspects of projects and illustrates the concepts with case examples of applications of project management tools and techniques to real-life project scenarios that can serve as lessons learned for best practices. An in-depth examination of project management for oil and gas projects, the book is a handbook for professionals in the field, a guidebook for technical consultants, and a resource for students.

2.4 ORGANIZATION STRUCTURE

Organization structure can be defined as information flows among people in the organization and deliver the communication between the different levels of management. According by (Mintzberg, 1983) The organization formed by a group of people in order to achieve the effect of a one can not achieve individually or yourself. The organizational structure also means how individuals and groups are organized or how tasks are divided and adjusted. According to (Mintzberg, 1992) also stated that the organization can be distinguished on the first three dimensions are an integral part of the organization, which is part of an organization that plays a major role in determining success or failure. Then, the main coordinating mechanism, which is the main method used to coordinate the

organization's activities and, lastly, the type of evidence is applied, ie the extent to which the organizations involved subordinates in decision making. The organizational structure of term also refers to the formal configuration between individuals and groups about the distribution of tasks, responsibilities, and authority within the organization (Galbraith, 1987, Greenberg, 2011).

The project is unique and requires a suitable organization. The most common is the discipline of the organization, functions, and matrices. In a discipline-oriented organization, staff also share technical expertise were placed in the same position on the same skill of them. For example, all located in the department of electrical, mechanical and electrical, and so on. A functional body of lay people in the department that focuses on the specific process and according to skills

2.4.1 Model of Structure

The organization actually will select models of organization depending on their size, marketing strategy and industry. The organization hierarchical system actually helps the organization’s company to organize their resources and responsibilities. The companies will choose their model of organization structure based on which model of structure is better helps to their communication and project completion.

2.4.1.1 Mechanic Structure

These structure defines as when decision making is made by the upper levels which by authority and control in the organization. It also, mechanic can be defined the strictest and most formal of the structure

Table 2.1: Definition of mechanic structure

DEFINITION	AUTHOR
Work processes are usually very standardized and the employees working in such structure knows exactly their individual well-delimited task, what they are expected to do and how it should be done.	(Hatch, 2006; Granström, 1999)
Clear description and allocation of responsibilities. The structure also allows for a relatively exact forecast to be made in addition to that the work standardization can boost effectiveness.	(Jacobsen & Thorsvik, 1999).
Mechanical structure can be said to have an obsession for control. Where the aim is to reduce all possible 10 uncertainty to create a smooth going machine where informal communication between employees at lower levels preferably is avoided	(Mintzberg, 1983).
Mechanistic structure emphasizes the importance of achieving high level of production through the use of formal procedures, centralized authority, direct supervision and specialized labor.	Burns (1961)
Mechanical structure should preferably be used in a stable environment.	(Hatch, 2006).

Source: Winfred Aniagyei (2011)

2.4.1.2 Organic Structure

An organic structure is characterized by:

1. Flatness communications and interactions are horizontal
2. Low specialization which is knowledge resides wherever it is most useful
3. Decentralization which is great deal of formal and informal participation in decision making

Table 2.2: Definition of organic structure

DEFINITION	AUTHOR
The organic structure allows for innovation and is more suitable also beneficial when it used in a changing environment with high requirement on adapting to the surroundings.	(Hatch, 2006)
The drawback of this kind of organic structure is there a risk that the teams become too autonomous and creates their own goals deviating from the ones of the larger organization	(Granström, 1999)
An organic structure are it flexible with the authority and responsibility placed on the individual rather than on a position there can be many different combinations of how employees are put together to reach the wished outcome.	(Jacobsen & Thorsvik, 1999)
Acting more as peers than supervisors with their influence coming from their expertise and skills rather than from their formal position. such an extremely organic structure is not efficient but can still be found even though rarely	(Mintzberg, 1983).
Inflexible value systems are correlated with mechanistic structures and flexible value systems are correlated with organic structures.	Zimmuto and Krakower (1991)

This freedom under responsibility allows for better utilization of the different capabilities and knowledge of the employees. These teams should be created as a response to the occurrence of problems needing a solution rather than as a response to instructions and orders to carry out the work	(Adestam & Gunnmo 2008).

Source: Winfred Aniagyei (2011)

2.5 DIMENSION OF ORGANIZATION STRUCTURE

Organization structure have five dimension which include specialization, standardization, formalization, centralization and configuration (Pugh et al., 1968). First, specialization is concerned with the division of labor within number of positions then the standardization can be defined as procedures of a basic aspect of organizational structure and traditional organizations from charismatic ones. Formalization can be describe as denotes the extent to which rules, procedures, instructions and written communication. The concentration has to do with the locus of power to make decisions affecting the organization and last for configuration is to be part of the structure (Pugh et al., 1968).

(Mintzberg, 1979) distinguishes three main types of coordination is a direct control, with adjustments and standards. As mentioned, in broad terms, specialization and decentralization is about how tasks are distributed and the relevant authorities in the organization, for example the division of labor. Then the inauguration, then standards and coordination procedures regarding control and optimize the organization as an example of the coordination mechanism.

2.6 EFFECTIVENESS OF ORGANIZATION STRUCTURE

According to the (Akpan and Chizea, 2002) which stated that to make organizational structure effective, it must follow the following stated:

- Flexibility, which agreed to changes as the situation changed. It should give a reward such as allowance for optimum delegation and room for individual creativity.
- Simplicity which is easy to the points where no one is in doubt what is expected of him.
- Lean staff which the top level management should be as lean staffed as is needed for make quick decision.
- Optimal span of control when the middle level management, including the supervisors should not be cumbered with so many people under their direct control. At the same time, the span of control should not be too small to miniaturize their role and importance in the structure.
- Human-oriented is when the structure should be seen to improve humanity, job fulfilment and enhancement. It should be people-oriented.

2.7 PROJECT AND ORGANIZATION

The project is a temporary endeavor undertaken to create a unique product or service and results (PMI, 2004). According to (Smith and Dodds 1997), the result of teamwork, the project also provides a new alternative method or to seek the views of each member of the group has a distinctive perspective that can be shared with the entire team to find the best way to implement this project. Another success factor in projects is the need to efficiently manage their life cycle indeed, good management it is a real challenge for the organizations that implement various projects at the same time with the cycle of life and needs (Dooley et al, 2005) different. For more effectively manage their projects, the organization has been required to adopt a more flexible structure that allows them to respond to the environment has recently changed (Turner, 1999).

2.7.1 Project Management Structure

Organizations also need to specify the duties of the project manager, the level of power and autonomy, and the relationship with the two organizations and others. Then, the units in the organization. Top management should also define the communication channels between the project and the entire organization.

The organizational structure of the project also provides a framework to implement the project in all units of the organization. Project organizational structure is also to facilitate the integration of functions through cooperation and synergy. Project organizational structure is also used to achieve an integrated and cross-functional effort to carry out the tasks of the organization.

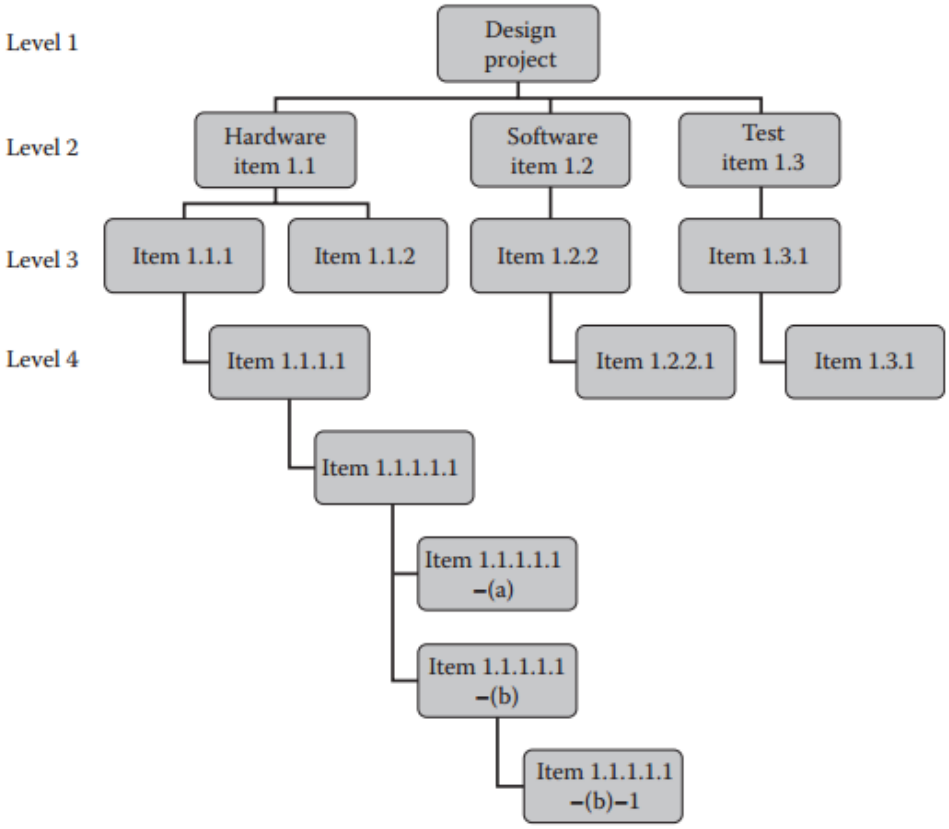


Figure 2.2: WBS structure.

There are three basic types of organizational structures for projects:

1. Functional organization structure
2. Pure Project organization structure
3. Matrix organization structure

However, some specialized or customized adaptations of the three basic structures are used in practice to meet unique project situations. Before selecting an organizational structure, the project team should assess the nature of the job to be performed and its requirements, as contained in the WBS. The structure may be defined in terms of functional specializations, departmental proximity, standard management boundaries, operational relationships, or product requirements.

2.8 PROJECT ORGANIZATIONAL STRUCTURES

To avoid or at least to minimize the number of potential conflicts related to project work, enterprises have established different types of organizations. The best known types are functional, matrix and pure project organizations. Each of them establishes different relations between project stakeholders, especially between project and line managers.

2.8.1 Organizing project: Functional Organization Structure

Functional organization structure an organization's reporting relationships are grouped based on specialty, or functional area. The most common type of formal organization is known as the functional organization, whereby people are organized into groups dedicated to particular functions. In a functional organization, personnel are grouped by job function. This helps to distinguish between business units and functional responsibilities. Depending on the size and the type of auxiliary activities involved, several minor, but supporting, functional units can be developed for a project.

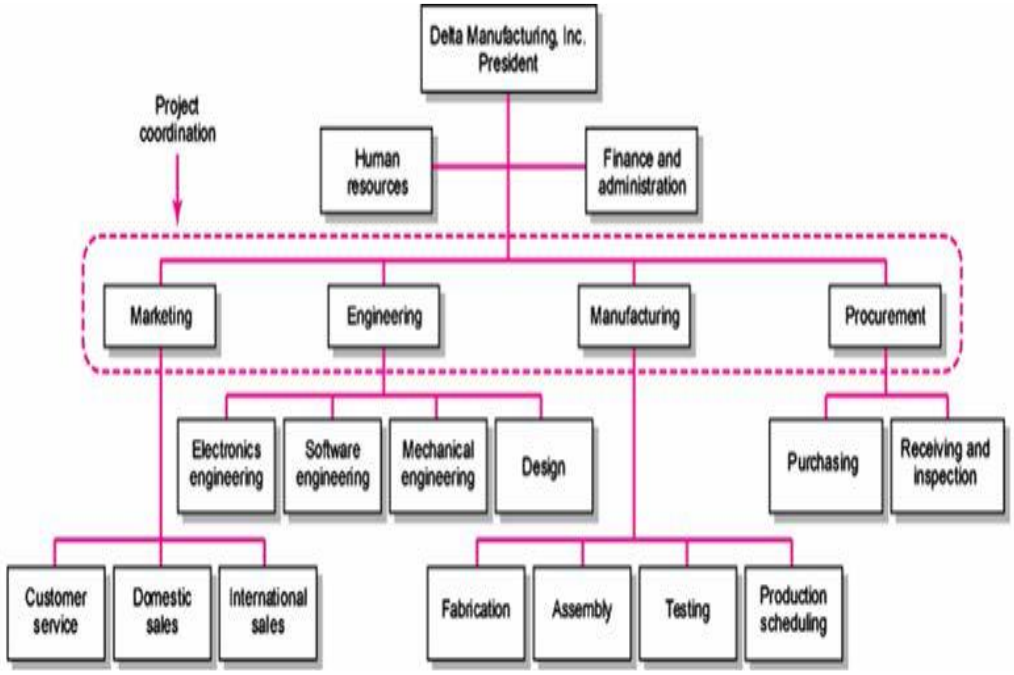


Figure 2.3: Functional Organization structure

Sources: Gray, Clifford, and Erik W. Larson, Project Management, 3rd Ed. McGraw-Hill, 2006

Table 2.3: Measure of functional organizational structure

Measure	Author and year
Identified the functional structure on division by specialization.	(Peters, 1993)
The head of the department represents the department to the highest authority in the company	(Peters, 1993)
Top manager may easily become overwhelmed by increased decision-making as the organization grows	(Hatch, 1997)
In the organization, the top manager has control over the managers of other team units	(Hatch, 1997)

Table 2.4: Advantages and disadvantages of functional organizational structure

Advantages	Disadvantages
there are clear lines of authority and there is no need to negotiate with other team units for resources	Communication barrier between different organizational units may be difficult due to the different goals, the customer may have difficulty getting what he wants.
All the team members are usually familiar with each other, since they all work in the same area.	Will difficult to manage due to different goals and different performance measures used by each organizational unit.

Sources: (Allison, 2005)

2.8.2 Organizing project: Matrix Organization Structure

The matrix organization structure is a blend of functional and projected structures. It is a frequently used organization structure in business and industry. It is used where there is multiple managerial accountability and responsibility for a project. The project matrix structure is usually defined as one where there are multiple reporting lines which is, people have more than one formal boss. Then, the matrix organization employs both functional managers and project managers. The responsibilities of the functional managers include assigning specialists to projects and ensuring them the acquisition and maintenance of necessary skills to complete the project.

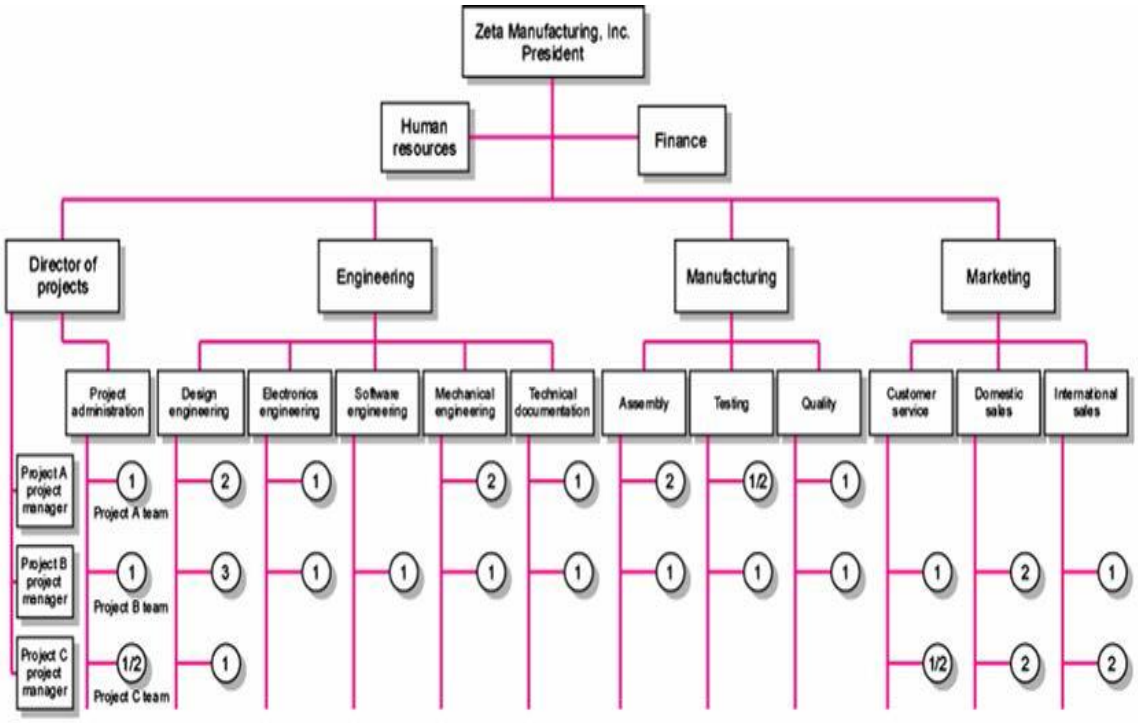


Figure 2.4: Matrix Organization structure

Sources: Gray, Clifford, and Erik W. Larson, Project Management, 3rd Ed. McGraw-Hill, 2006

Table 2.5: Measurement of matrix structure

Measures	Author and year
The organization used project teams consisting of employees from various departments to execute special projects	(Hatch, 1997)
In the workplace, employees often report to their direct supervisor as well as a supervisor who is leading a special project for the company	(Hatch, 1997).

Members of the organization are assigned to project teams based on their specialized abilities to complete the task at hand	(Hatch, 1997).
The top executive in the organization is responsible for the overall management of both organizational functions and special projects	(Hatch, 1997)

Sources: (Allison, 2005)

Table 2.6: Advantages and disadvantages of matrix organizational structure

Advantages	Disadvantages
There are more direct contact among different disciplines, people can work on a variety of work, a strong technical base can be developed	Unclear decision-making and accountability.
Much more time can be devoted to complex problem-solving, and shared authority and responsibility	Individuals unclear who they report to.

2.8.3 Organizing project: Pure Project Organization Structure

In the pure project structure, personnel are specifically assigned to the project and report directly to the project manager. It approach project managers are usually high in the hierarchy which having a direct control over organization. For larger projects this organizing is effective and efficient but for the small project it's often expensive to operate.

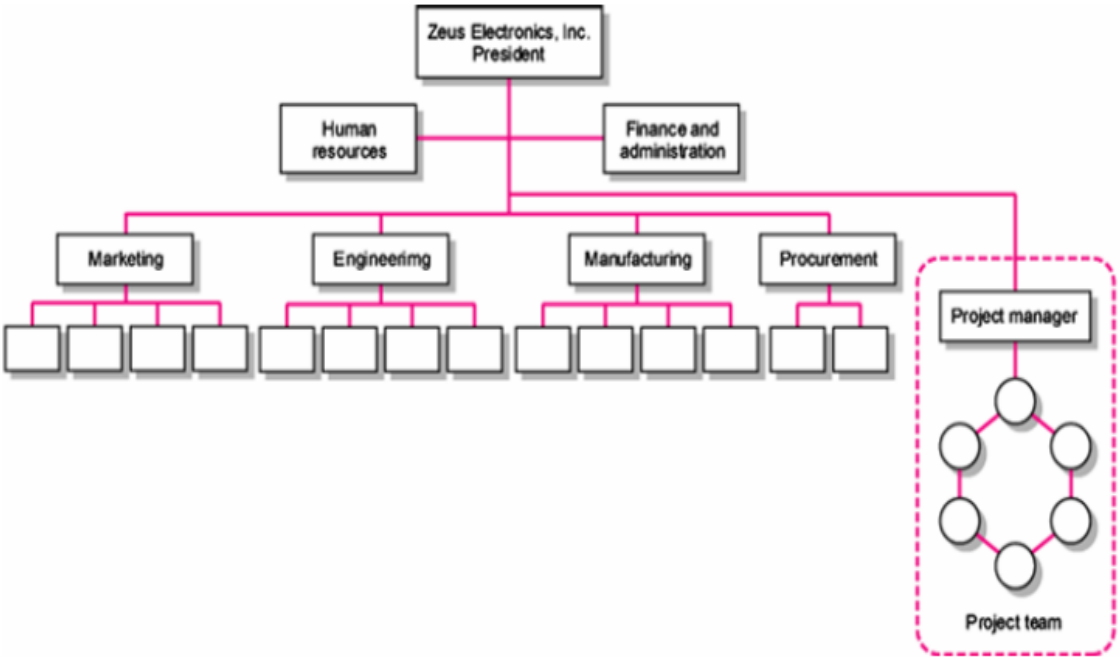


Figure 2.5: Pure Project Organizational Structure

Sources: Gray, Clifford, and Erik W. Larson, Project Management, 3rd Ed. McGraw-Hill, 2006

Table 2.7: Measures of Pure Project Organization Structure

Measures	Author and year
The organization is divided into divisions that are geographically dispersed but all report to a staff at corporate headquarters	(Hatch, 1997).
Each division in the organization is responsible for making daily decisions, while the headquarters staff monitors overall company performance and formulates strategy	(Hatch, 1997)

Sources: (Allison, 2005)

Table 2.8: Advantages and disadvantages of pure organizational structure

Advantages	Disadvantages
Project team pulled together temporarily from their own team and led by a project manager that does not report to a general manager	Duplication of resources, since scarce resources must be duplicated on different projects
The project manager has the full authority and supervision of the project team and dedicated to one project at a time.	Technical expertise is limited to the talents and experience of the specialists, assigned to the project.

2.9 DIMENSION OF PROJECT PERFORMANCE

Project performance has been considered to be tied to project success and this is also tied to project objectives (Chan & Chan, 2004). (Sadeh et al. 2000) measured project success based on the following five dimensions: Meeting design goals, Benefit to end users, Benefit to the developing organization, Benefit to the defense and national infrastructure, Overall success (a combined measure for project success), (Shenhar et al.1997) also proposed that project success is divided into four dimensions: Project efficiency, Impact on customer, Business success and preparing for the future. (Chan & Chan 2004) developed a consolidated framework for measuring project success.

2.10 PROJECT PERFORMANCE

The establishment of a management structure for the project management is one of the important activities necessary to achieve project goals. Among the matters of internal organization such as organizational learning practices to improve project success. The tendency to have increased by the success of the project lies in the ability of managers to develop a specific strategy within the organization (Kotnour, 2000)

2.10.1 Time Performance

Performance time is the performance of the project and its ability to complete the project in time. Also refers to the period of time to complete the project. Projects are often delayed and not completed. This situation reflects the actions to be taken. According by Kumaraswamy and Chan (1995) found in their investigation into the determinants of the performance period. In the investigation of execution time performance. Walker (1995) identified the following factors as the effectiveness of a broad affect performance execution time customer representative team, effective management of implementation, the scope of work as a kind of structure in place to influence decision-making and how the team performs.

2.10.2 Quality performance

According to the (Parfit and Sanvido, 1993; CIRIA, 1985) quality defined as the totality of required to satisfy a given need. How all these factors can be competently coordinated would be relevant to achieving satisfactory quality performance. The project team leader has the responsibility to ensure that these factors combine well to yield good quality performance. Quality performance has been considered as a function of the procedures adopted during the implementation process (Serpell and Alarcon, 1998). The emphasis here is on organizational structure having influence on quality of a project. Quality performance measurement has mostly been subjective. For instance a 5-point ranking of owner's satisfaction with the project's quality was employed by Chan & Chan (2004) for measurement of quality performance.

2.11 RELATIONSHIP BETWEEN VARIABLE

According to (underdown, 2003) stated that the formal system and reporting related relationship which control, coordinates and motivates employees in so that cooperate to achieve an organization's goals and objective. Then, according to (Akpan and Chizea, 2002), the major management function of the organizing. Organizational system should be needed

to setting up, and equipping of appropriate completed with operational procedures and guidelines with people together in other to aim the objectives of project.

2.11.1 The relationship between of functional organizational structure on project performance

To performance project task, there are must including effort and assigned it. With the overall of coordination's project it occur at the higher level of management. There also a practical effect when the individuals whose main task is to remain on their working groups as to provide to project staff; when workers owe their primary loyalty to their own position, their frame of reference can remain functional. Projects can be temporary interference in this regard, taking time away from "real work." This may explain some of the behavioral problems that occur in the projects undertaken as low motivation of the team members or the need for continued negotiations between the project manager and supervisor positions for employees to staff the project team.

H1: *Functional Organizational structure is positively related to project performance*

2.11.2 The relationship between of Matrix Organizational Structure on Project Performance

According to the (Levine, 2002) matrix organizational important because task of project is shared between the project manager and line manager. Firstly, both of manager are together fix with flexible for the successful completion of a project implement. Furthermore, if there problem within the line manager regarding a project, then the project manager must do everything possible to help the line manager develop alternative plans.

H2: *Matrix Organizational Structure is positively related to project performance*

2.11.3 The relationship between of Pure Project Organizational Structure on Project Performance

These structure is about type promotes an expertise of project management professionals. It also focus on the operations in the organizations. There also focus on what organization understands and operates to ensuring project management resources is maintaining with highly competent. Then, it also encourages flexibility and rapid response to environmental opportunities. Projects are created, managed, and disbanded routinely

H3: *Pure Project Organizational structure is positively related to project performance*

2.12 RESEARCH FRAMEWORK

The framework that are used these study is to explain about the relationship between an organization structure and project performance. Independent variable in this research is organization structure and dependent variable is project performance. The framework in this research consist as below:

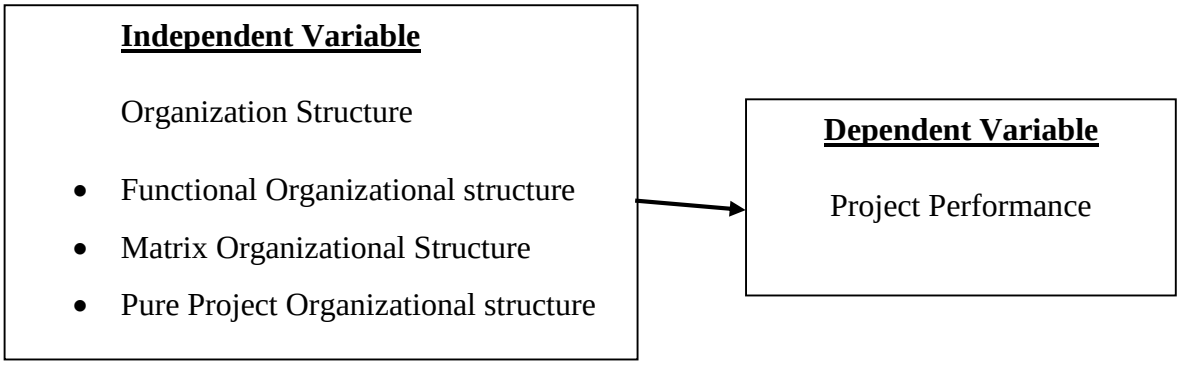


Figure 2.4: Research Framework

2.13 RESEARCH HYPOTHSIS

H1: Functional Organizational structure is positively related to project performance

H2: Matrix Organizational Structure is positively related to project performance

H3: Pure Project Organizational structure is positively related to project performance

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

These study design according to topic of research which is organization structure impacts on project performance among worker of oil and gas industry. For the previous chapter, we have discussed about the literature review of this research study. Then for this new chapter will discuss gather method of data collection in an order how the data are collected which where the data is to be source and design to implemented of the questionnaire. There two objective in this study. As the objective of this study. The study will be a cross-sectional study as data shall be gathered once over a period of time from individuals who work in oil and gas who adopted work in their organizations. The research design are different according to the different types of research. This study are need to design it structure first before conduct the experiment. This study will involve an oil and gas industry that is much related to the core of this study. Stratified sampling is the sampling method that will be used for this study and the sample will answer the questionnaire and all the data will be analyses using SPSS software. The collected data is by using questionnaire that be given to respondent.

3.2 RESEARCH DESIGN

This study is being designed according to the sequences of steps. Firstly, identified the problem. The problem to be identified in this study is organized, selected about organizational structure and project performance. Second, step is to identify the resources for this study, such as literature review, data and other resources which are applicable for this research. Then, next step is population and sampling. The population and sampling in this research has been identified, it is at oil and gas industry at Kuala Lumpur.

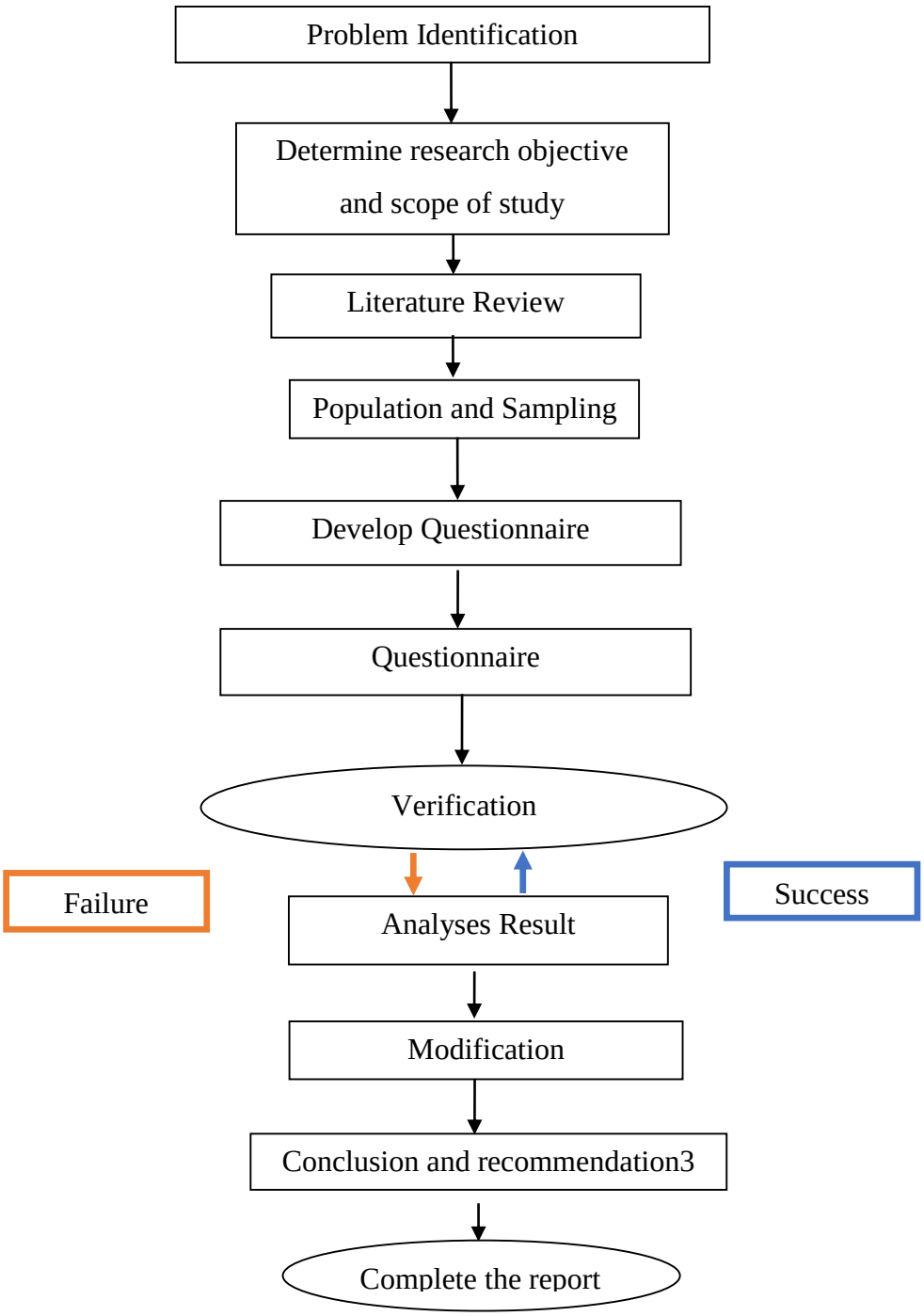
The proposed method will help to find and answer of research question and before the questionnaires are distributed, the questionnaire has been modified twice and verified by a supervisor before hand over to respondents. When it had been verified, the questionnaire will be distributed to the respondents.

After that, the questionnaire will be collected and be analyzed. From the analysis that been collected and analyze the data will be obtained to make some modified to become a correct result.

Last process, which involve develop question for testing. Figure 3.1 below show the research flow chart:

3.2.1 Research Flow

Figure 3.1: Research flow chart



Source: Book Research Methodology for Social Sciences UMP (2008)

3.2.2 Research Framework

The framework that are used in this study explain relationship between an organization structure and project performance. The independent variable in this study is organization structure and dependent variable is project performance. The framework in this research consist as below:

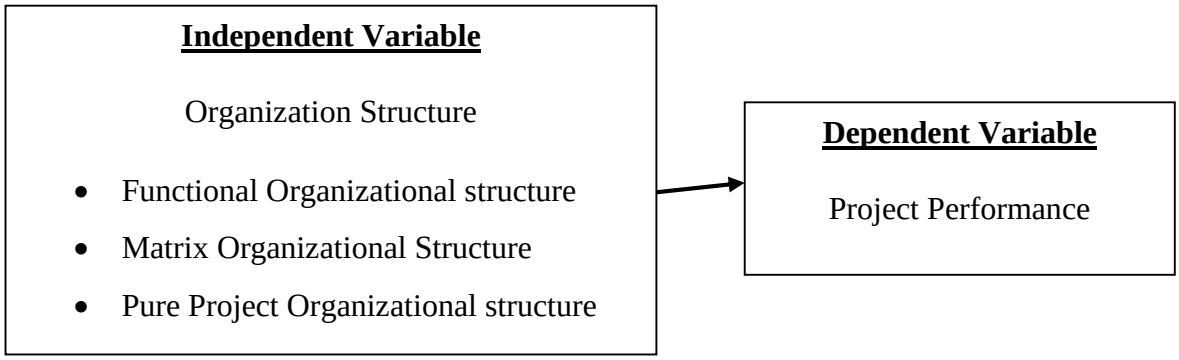


Figure 3.2: Research Framework

3.3 RESEARCH METHOD

The respondent or population targeted is worker from oil and gas industry in Malaysia. This is due to the relevant on respondent from oil and gas field. The target must work with organization that performance in any related work to the oil this field. Suitable for getting data is the sample that must have enough requirement level. (Margon, 1970) stated that a very efficient method is requiring to determining of the sample size to represent the population. Conclusion, in this study the total sample number of worker represent and perform the statistical.

3.3.1 Population and sampling

The focus of population in this study is the respondent that of oil and gas industry. The population for the study in oil and gas industry at Kuala Lumpur which based from website www.mogsc.com, Malaysian Oil & Gas Services Council (MOGSC) there are 40 companies in Kuala Lumpur. Based on, table (krejcie and Margon 1970) it refer N=40 and the sample size is S=36.

According to (Morgan, 1970) a very efficient method is requiring to determining the sample size to represent the population. Sampling method can be divide two which is simple random sampling and complex probability sampling. To increasing need for a representative of sample, the method have been created for determine the effectiveness of sample size. Below show the table of (Krejcie and Morgan, 1970) for the sample size. It easily to determine the sample size for population.

Table 3.1: Source for determining sample size for a given population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Source: Krejcie and Morgan, 1970

3.3.2 Questionnaires Design

In order to identify the organization structure impacts on project performance among worker, the structured questionnaire has been used to gather primary data. It would design to capture and identify factors.

3.3.3 Development of Measurement

Design of Questionnaire

To design the questionnaire in this study, there are 3 parts that included which consist of Sections A, B, and C.

Table 3.2: Source of design questionnaire

Section	Adapted	Name & Year
Section A: Demography This part it about respondent's information. Section A was developing to get developing the information on the demographic profile of the respondent.	A thesis of The Effect Of Organizational Structure On Project Performance: The Case Of Aga Ltd.	(Winfred,2011)
Section B: Effectiveness of organization structure In the section will develop to get the information on the organization structure. These parts have a few questions will be provide to respond and this	A thesis of Relationship between organization structure and public relation practitioner role, University of South Florida	(Allison , 2005)

part will ask about the organization structure of the respondents organization.		
Section C: Project Performance In this section the question looking and more focused on the project performance. The aim of this part which to identify the performance of the worker in the respondent organization. The characteristic of project performance divide into two which on time performance and quality performance.	A thesis of Relationship between organization structure and public relation practitioner role, University of South Florida	(Allison , 2005)

3.4 DATA ANALYSIS

This study techniques, after do the collection data the data will be analyze by using a software based from windows based program. The software is Statistical Package for the Social Science (SPSS). This software are used to conduct data entry and analysis and produce the tables and graphs. It advantage is can handle bigger amount and analysis the data in text.

This software are use commonly use in social science and business world. From this software the data outcome will translate the data to get the result. The data output can prove the reliability of the data and may use for the next research study

After finish collects the data, the data need to analyse. To analysis the data, it used into the SPSS software. This software is to determine and calculate the answer of respondents from questionnaire form. From the questionnaire, in Section A is about the respondent demography that include age, gender, region, position, and so on. Meanwhile, for Section A and Section B use Likert Scale that has five levels which is 1 ‘strong disagree’, 2 ‘disagree’, 3 ‘neutral, 4 ‘agree’ and 5 ‘strongly agree’.

3.4.1 Descriptive analysis

Descriptive statistics are the most frequently used procedures in SPSS can be used to summarize the data such as age, gender, position and so on.

For question in section A which is demography used this, which is to check valid values of the variables and generate it. It also, can obtained from other procedures which is mean analysis, frequencies and standard deviation.

3.4.2 Reliability analysis

This function is to identify the variables that reliable or otherwise and offers consistent measurement (Cavana et.al.,2001). For determine the reliability of all instrument, it used is the Cronbach's Alpha. As generally, when Cronbach's Alpha value is 0.70 and above means the variables are reliable and acceptable. And when the value of Cornbach’s Alpa below than 0.5, the item will be delete to ensure the value achieve the higher reliability.

3.4.3 Likert Scale analysis

This research used this analysis when the questionnaire is completed. On each item may be total or sum to make a score for each group. Which responses is: Strong agree, agree, neutral, disagree, and strong disagree. In this example, we'll code the responses accordingly: Strong disagree = 1, disagree = 2, neutral = 3, agree = 4, strong agree = 5 (Shane Hall, 2014).

3.4.4 Mean analysis

Mean analysis is to compare group means to the overall mean. Mean analysis also used to determine the higher or lowest meant from the overall average of the entire group means combined. This analysis used for objective 1, determine which factor that most influence to employee performance.

3.4.5 Validity

Validity is research conclusion, inferences, or proposition stability and can define the truth and false of inference, proposition and conclusion that given. Mohd Ghani, 2012 stated that it is the best approximation.

According (Joppe, 2000) the validity means the measures of the research are intended and how reliable the research result are. (Weiner & Braun, 1998) describe that validity is development of the beginning to create a concept to identify which data is and how data been collected and the definitions of reliability and validity, reliability is about the result replicable or not and the validity the accuracy of measurement whether they are measure the real objectives.

CHAPTER 4

DATA ANALYSIS

4.1 INTRODUCTION

Discussion on this chapter based on the result and findings from data collection. Result from the analysis of data which collected from online and SPSS outcome. The process of getting the result and analysis are by distributed by the mail and online survey. The data was collected from the survey sent to oil and gas industry company area Kuala Lumpur. The feedback from the data collected for each question asked will be analyzed in details in the following sections which is part a covers the demographic and personal details of the respondents, part B focuses on major of organizational structure and part C focuses on project performance and the result from the data analyses will be used for the recommendation.

4.2 DATA COLLECTION PROCESS

Out of 100 were given questionnaire on measurement for examining the project's questionnaire and 80 respondent get collected. The table 4.1 shown that number of respondent that answer all the question in the questionnaire. Number of respondents are obtained as need and meets requirement of the data to been analysis. Respondent are all from and belonging to the oil and gas industry field.

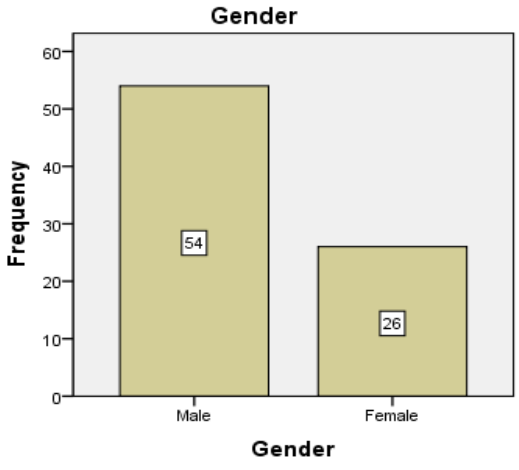
Table 4.2.1: Number of Questionnaire

Item	Number
Number of questionnaire distributed by mail	100
Number of questionnaire respond	80
Number questionnaire useful in the result	80

4.3 RESPONDENT DEMOGRAPHIC

For the demographic information the instrument that involved is gender, position, education, age and years of involvement in organization. All data is drawn by using SPSS software. Section A are been analyzed and all the outcome is illustrated by following figures and table as shown as well with the explanation. For the first instrument been interpreted as below and following by other instruments.

Table 4.3.1: Table of Gender

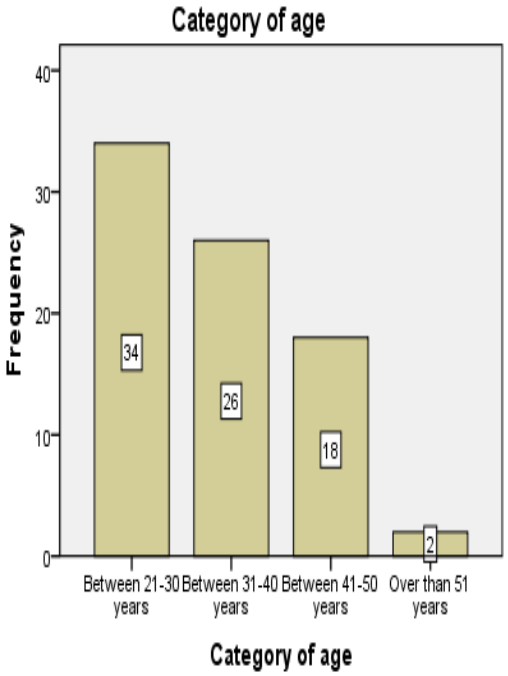


	Frequency	Percent
Male	54	67.5
Female	26	32.5
Total	**80**	**100.0**

Source: Output of SPSS

The above bar chart and table above shows the frequency of male respondent is higher than the female respondent where the value is 54 persons and female 26 persons respectively. These values correspond to the percentage for both genders where 54 male respondents equal 67.5%, while for 26 female respondents' percentage is 32.5%.

Table 4.3.2: Table of Age

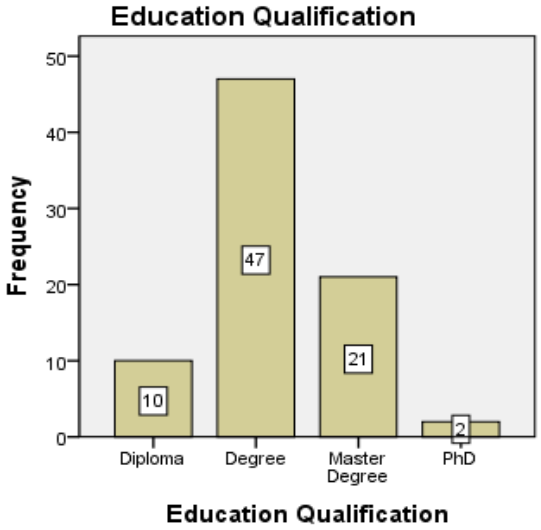


	Frequency	Percent
Between 21-30 year	34	42.5
Between 31-40 year	26	32.5
Between 41-50 year	18	22.5
Over than 51 year	2	2.5
Total	**80**	**100.0**

Source: Output of SPSS

Based on the age bar chart and table above, the age range is from twenty-one to over than fifty-one years. Among the age range, the most dominant are those who their age 21-30 years with the highest respondent. Then, the least of respondent is 16 who his/her age 41-50 years and over than 51 years

Table 4.3.3: Table of Education Qualification

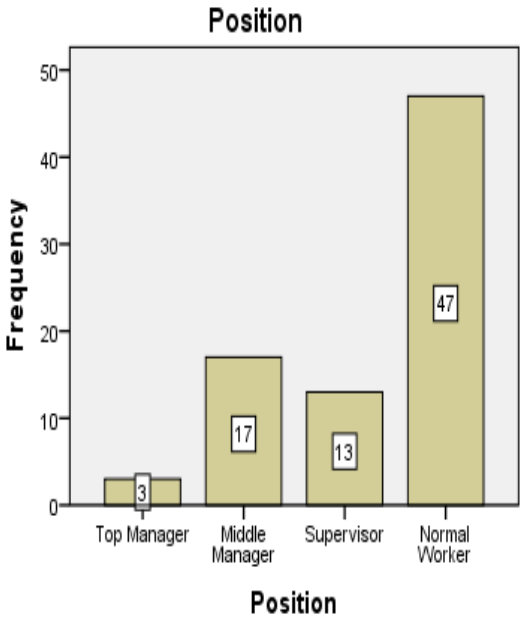


	Frequency	Percent
PMR	0	0
SPM	0	0
Diploma	10	12.5
Degree	47	58.8
Master Degree	21	26.3
PhD	2	2.5
Total	**80**	**100.0**

Source: Output of SPSS

Both bar chart and table above illustrate the educational level of the respondents. If referring to the survey questionnaire, there are SIX (6) choices for this item that are PMR, SPM, Diploma, Degree, Master Degree and PhD. However, based on the feedback from respondents degree holder is the highest respondent among others. The total respondent for degree holders is 47 respondents while the other balance is others respondent with the highest percentage is 58.8% while following by the others.

Table 4.3.4: Table of Position

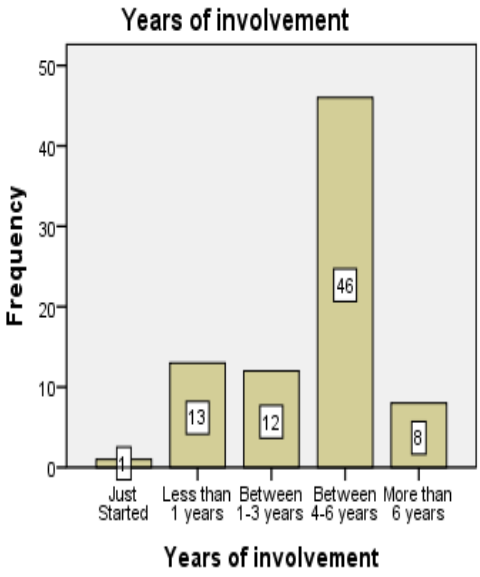


	Frequency	Percent
Top manager	3	3.8
Middle manager	17	21.3
Supervisor	13	16.3
Normal worker	47	58.8
Total	**80**	**100.0**

Source: Output of SPSS

From that bar chart and table above show the position in the company of oil and gas industry. In this research was stating four (4) positions which are top manager, middle manager, supervisor and normal worker. The highest position in this company refers to a top manager which is 3 (3.8%). Then the rest refer to middle manager which is 17 (21.3%) respondents, follow by supervisor 13 (16.3%) and the highest total number of respondent is normal worker which is 47 (58.8%)

Table 4.3.5: Table of Organizational Involvement



	Frequency	Percent
Just started	1	1.3
Less than 1 years	13	16.3
Between 1-3 years	12	15.0
Between 4-6 years	46	57.5
More than 6 years	8	10.0
Total	**80**	**100.0**

Source: Output of SPSS

From the bar chart and table above show that the most of the respondent organization is between 4-6 years involve in the organization's oil and gas field, the highest percentage with 57.5%. Next following by the respondent less than 1 years with 16.3%, then between 1-3 years of organization involve with 15% and more than 6 years with 10%. The least respondent from respondent that just started working experience with 1.3%

4.4 RELIABILITY ANALYSIS

In this study the reliability analysis is to measure a consistency and stability. Show that reliability is Cronbach's alpha that indicated if the item correlated positively with other one. It also used to measure the reliable or not of question in questionnaire. The acceptance of value is mean 0.50 and above but to be considered as no unacceptable is below 0.50.

In this subtopic, all items under the independent and dependent variable will be analyzed. There are 26 items in the variable. The table shows the reliability statistic for independent variable and dependent variable which the topic is organizational structure and project performance. The independent variable that include 3 type which is functional organizational structure, matrix organizational structure and pure project organizational structure. The dependent which include the project performance.

Table 4.4.1: Cronbach's Alpha

Variable	**Test reliability**	**n**	**Cronbach's Alpha (Value)**
(Independent variable) Functional organizational	Pilot test	80	0.713
	Retest	80	0.788
Matrix organizational	Pilot test	80	0.628
	Retest	80	0.701
Pure organizational	Pilot test	80	0.785
	Retest	80	0.818
(Dependent Variable) Project Performance	Pilot test	80	0.633
	Retest	80	0.762

From the table 4.4.1 above show that the value of the item show that the Cronbach's alpha for independent variable firstly for functional organizational structure is 0.713, matrix organizational structure is 0.628 and lastly for pure project organizational structure is 0.785. The dependent which of 0.633.

The table also show that there is more than 0.7 which determine as the question are reliable to the topic and that the items have relatively higher the internal consistency reliability. In this subtopic, all items under the independent variable will be analyzed. There are 16 items in this variable.

The reliability statistic for independent variable that is the organizational structure and the value of Cronbach's Alpha for dependent variable which is generally considered sufficient and acceptable.

4.5 DESCRIPTIVE STATISTICS

For the measure of level the organizational structure and project performance, descriptive statistics were used. This section, discussed about the mean for all variables. Generally, items are variable that reflected in the organization of the perspectives and perceptions of the respondents. Based on the interpretation of the mean level of agreement is divided into three as table below

Table 4.5.1: Interpretation of the Level of Mean

Mean	Level of Agree
3.81 to 5.00	Agree
2.41 to 3.80	Average Against
1.00 to 2.40	Disagree

Sources: Wiersma (1995)

Table 4.5.2: Level of Mean

Level organizational structure	N	Mean	Std. Deviation	The level of agree
The head of my department represents my department to the highest authority in the company	80	3.60	0.88	Average Against
CEO, or top manager, has control over the managers of other teams units.	80	3.41	1.03	Average Against
Projects, programs, and portfolios are managed by a specialized organizational unit	80	3.85	0.99	Agree
Project Managers within the company hold senior and /or top management roles and have direct control on business functions, personnel and other resources	80	3.51	0.86	Average Against
In my workplace, organizational control is centralized to one person.	80	3.41	0.76	Average Against
The top executive in my organization is responsible for the overall management of both organizational functions and special projects.	80	3.48	0.76	Average Against

The organization in which I work is divided into groups of people that share common tasks and goals	80	3.81	0.86	Average Against
In my workplace, employees often report to their direct supervisor as well as a supervisor who is leading a special project for the company	80	3.41	0.86	Agree
My organization uses project teams consisting of employees from various departments to execute special projects	80	3.83	0.76	Average Against
The production process is organized using temporary teams	80	3.51	0.86	Agree
My organization increases profits and productivity by grouping together people who perform specialized tasks.	80	3.86	0.88	Agree
My organization is grouped into divisions according to products, customer type or geographical region.	80	3.80	0.93	Average Against
My organization is divided into divisions that are geographically dispersed	80	3.78	0.84	Average Against

but all report to a staff at corporate headquarters.				
Each division in my organization is responsible for making daily decisions, while the headquarters staff monitors overall company performance and formulates strategy.	80	3.30	1.24	Average Against
The organization in which I work does not appear to have a formal organizational structure	80	3.44	1.21	Average Against
It is responsibility to ensure that organization have the necessary information to effectively interact with one another	80	3.74	0.81	Average Against

Source: Adjusted from SPSS

Based on the information on the mean on organizational structure, the table show that represent the overall of level agree for organizational structure. The mean score for level of organizational structure are stated from 3.30 until 3.86. The highest mean score for business performance, which are 3.86. Then, the lowest mean score which is 3.30.

Table 4.5.3: Descriptive Statistics measure of level project performance.

Level of project performance	**N**	**Mean**	**Std. Deviation**	**The level of agree**
No Clear Lines of Authority And Accountability	80	3.39	0.79	Average Against
Easy Flow of communication and access to information	80	3.65	0.89	Average Against
High centralized decision making	80	3.89	0.94	Agree
Poorly defined roles and responsibilities	80	3.20	0.96	Average Against
Team weaknesses and poor communication	80	3.35	0.84	Average Against
Projects meet their operational performance goals	80	3.65	0.68	Average Against
Before schedule	80	3.88	0.72	Agree
On schedule	80	4.04	0.70	Agree
Over schedule	80	4.03	0.78	Agree
Delay	80	3.95	0.59	Agree

Source: Adjusted from SPSS

Based on the statistics table above, represent the overall of level agree for project performance. The mean score for level of project performance are stated from 3.20 until 4.03. The highest mean score for project performance, which are 4.03. Then, the lowest mean score which is 3.

4.6 PEARSON CORRELATION ANALYSIS

Pearson Correlation Analysis is run to verify the relationship between dependent variable and independent variable. From that it also determine either the variable is positively or negatively. The table output from SPSS is tabulated for the Pearson Correlation with P-Value and number of pairs of data. In the research Pearson Correlation is used to measure the strength of the relationship between variable. If the values show positive, it is called the positive correlation and if one of the variables is increasing so the variable will increase. Then, if the values show is negative, it can call the negative correlation and it can decrease the value of another variable when one of variable increase. The table below shows the Pearson Correlation values for each the variable mentioned.

In Pearson relation has a value close to 1 that men have strong relationship between two variables and if the values close to 0, it mean that there has weak relationship between variable. One tailed test is referred to implement in the since the hypothesis and make about the positive relationship between the two variable.

In that research, method Pearson Correlation was used to identify the relationship between independent variable and Dependent Variable. The independent variable is referred to entrepreneurial orientation and dependent variable refers to business performance.

A correlation exists between two variables when one of them is related to the other in some way. While the linear correlation coefficient r, measure the strength of the linear relationship between independent and dependent variable. Karl Pearson also discovers this r value is sometimes referred to as Pearson product moment correlation.

r = 1 indicates perfect positive linear correlation
r = -1 indicates perfect negative linear correlation
r = 0 indicates no correlation

Table 4.6.1 Strength of Correlation Coefficient Value

Size Correlation Coefficient (r)	**Correlation Strength**
1.00	Perfect
0.80 to 0.90	Very Strong
0.50 to 0.80	Strong
0.30 to 0.50	Moderate
0.10 to 0.30 > 0.10	Modest Weak
0.0	No correlation

Sources: Dancey and Reidy's (2004)

Table 4.6.2: Table of correlation

		Project performance	**Functional**	**Matrix**	**Pure project**
Project performance	Pearson Correlation	1	.221*	.243*	.281**
	Sig. (2-tailed)		.049	.030	.000
	N	80	80	80	80
Functional	Pearson Correlation	.221*	1	.267*	.271*
	Sig. (2-tailed)	.049		.016	.015
	N	80	80	80	80
Matrix	Pearson Correlation	.243*	.267*	1	.286*
	Sig. (2-tailed)	.030	.016		.010
	N	80	80	80	80
Pure project	Pearson Correlation	.281**	.271*	.286*	1
	Sig. (2-tailed)	.000	.015	.010	
	N	80	80	80	80

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.6.2 shows that the three independent variable is functional, matrix and pure project organizational structure. The functional (r=0.221) positively correlates with project performance at 1% significance level (2tailed). Thus, it verifies hypothesis 1 that is functional organizational structure positively related to project performance. The second hypothesis is matrix organizational structure positively correlation with project performance (r=0.243). Thus, it verifies hypothesis 2 that is matrix organizational structure is positively related to project performance. Then, pure project organizational structure have a positive correlation with project performance (r=0.281) at the 1 % significance level (2tailed). Thus, it verifies hypothesis 3 that is pure project organizational structure is positively related to project performance.

4.7 REGRESSION ANALYSIS

Multiple regression analysis was used to assess the relationship between independent variable and dependent variable. It is common use in much of social sciences research and hypothesis can be determined to be accepted or rejected. A standard multiple regressions have been implemented in this study to test for the 3 hypothesis as stated in chapter 1. This analysis will examine the relationship between organizational structures with project performance (Objective number 2).

In this study, there are 3 important tables to be analyzed which are modelled summary, ANOVA and Coefficients. For the model summary, R values are used to access overall fit of the model and show independent variable and dependent variable. Through ANOVA table, we can find a value of F and significance in this case. Next, t-value, significance, Tolerance and VIF can find inside Coefficient table. It is used to identify to indicate the presence of collinearity. To test a hypothesis, t-value must exceed 2.0 and significance must be less than 0.10.

According the table of Modal Summary below:

4.7.1 Hypothesis 1: Functional organizational structure is positively related to project performance

Table 4.7.1.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.221[a]	.049	.037	.39147	.816

a. Predictors: (Constant), Functional

b. Dependent Variable: Project performance

Table 4.7.1.2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.614	1	.614	4.005	.049[a]
	Residual	11.954	78	.153		
	Total	12.567	79			

a. Predictors: (Constant), Functional

b. Dependent Variable: Project performance

Table 4.7.1.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.274	.409		8.013	.000
	Functional	.195	.098	.221	2.001	.049

a. Dependent Variable: Project performance

From three tables above, first table about model summary to show the value of the Adjusted R square in this case is 0.037. We can say that 3.7% of independent variable explaining to the dependent variable. The value of F is 4.005 and significance in this case

was found 0.049 at 0.01 significant levels. Based coefficient, the t-value for the independent is 2.001 and significant is 0.049 .since t-value greater than 2.0 and significantly less than 0.05, these hypotheses 1 were accepted

4.7.2 Hypothesis 2: Matrix organizational structure is positively related to project performance

Table 4.7.2.1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.243[a]	.059	.047	.38941	.878

a. Predictors: (Constant), Matrix

b. Dependent Variable: Project performance

Table 4.7.2.2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.739	1	.739	4.876	.030[a]
	Residual	11.828	78	.152		
	Total	12.567	79			

a. Predictors: (Constant), Matrix

b. Dependent Variable: Project performance

Table 4.7.2.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.217	.397		8.107	.000
	Matrix	.225	.102	.243	2.208	.030

a. Dependent Variable: Project performance

From table above, the value of Adjusted R Square in this case is 0.047 show that 4.7% of Independent Variables explains to Dependent Variable. The value of F is 4.876 and significance in this case was found 0.030 at 0.01 significance level. From 4.6.6, t-value for matrix is 2.208 significance is 0.030. Since t-value less than 2.0 and significantly less than 0.05, this hypothesis H2 accepted. There is sufficient statistical evidence to support the matrix organizational structure positively relate to project performance.

4.7.3 Hypothesis 3: Pure Project organizational structure is positively related to project performance

Table 4.7.3.1: Model Summary

Model	R	R Square	Adjusted R Square
1	.213[a]	.045	.033

a. Predictors: (Constant), Pure Project

b. Dependent Variable: Project Performance

Table 4.7.3.2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.486	1	.486	3.707	.040[a]
	Residual	10.224	78	.131		
	Total	10.710	79			

a. Predictors: (Constant), Pure Project

b. Dependent Variable: Project Performance

Table 4.7.3.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.305	.210		15.743	.000
	Pure Project	.108	.056	.213	1.925	.040

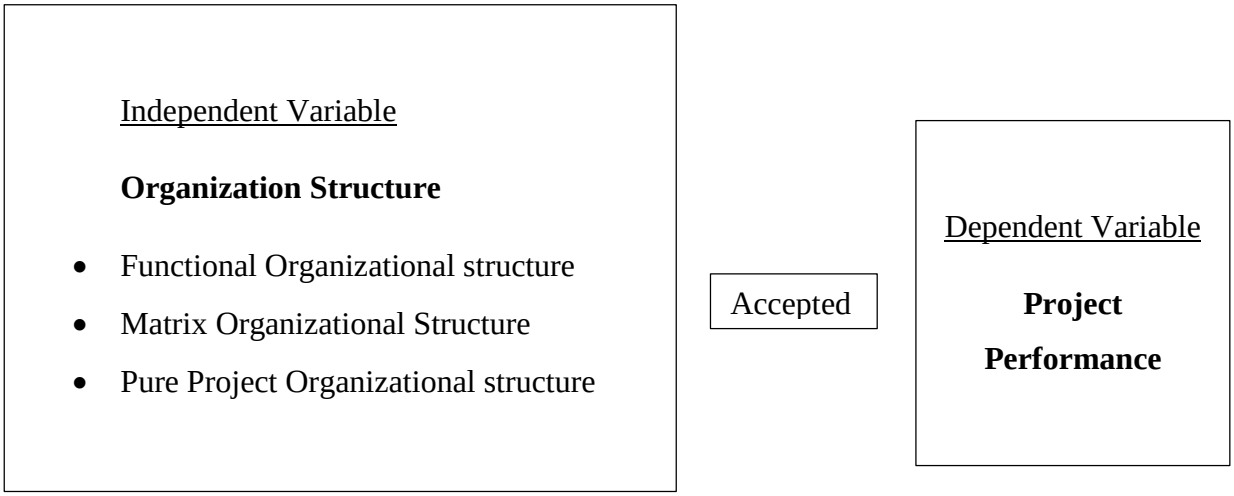
a. Dependent Variable: Project Performance

From Table above, the value R Square is 0.045 and Adjusted R Square in this case is 0.033. We say that 3.3% of independent variables explains to dependent Variable. The value of F is 3.707 and significance in this case was found 0.040 at 0.01 significance level. Based on the coefficient, t-value for pure project is 1.925 significance is 0.040. Since t-value less than 2.0 and significantly less than 0.05, this hypothesis H3 accepted. There is sufficient statistical evidence to support the pure project organization structure positively relate to project performance.

4.8 CONCLUSION

By using the SPSS 19, the result have been answer the research objective and research question that be put in Chapter 1. The result show as table below.

Hypothesis	**R Square**	**F**	**t**	**Sig**	**Result**
H1 (Functional Organizational Structure)	0.49	4.005	2.001	0.49	Accepted
H2 (Matrix Organizational Structure)	0.59	4.876	2.208	0.30	Accepted
H3 (Pure Project Organizational Structure)	0.45	3.707	1.925	0.40	Accepted



CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

For the last chapter of this study, this chapter used to be answer research question and research objective that stated in chapter 1. Also, this chapter about to discuss the limitation, recommendation and contribution of this study for future research study's development. For this chapter, most important is about the implication and conclusion of this study and then discuss by the limitation for future study. This chapter also discuss about the contribution and recommendation that should be taken for improvement for future study. This focus on organizational structure that been used to the organization and how far the impact on it. But all, the most focusing is how far effectiveness of organizational structure to project performance and it relationship between these three types of organizational structure. At the end, this chapter also recommendation for worker at oil and gas industry about organizational structure that been an effective to create a successful project performance in future. This also may show, organizational structure also being a part to make project success.

5.2 MAJOR FINDING

The output of this research study shows that functional, matrix and pure project organizational structure have a positive impact to the project performance. Generally, this research is aimed to measure the two objective which to determine the effectiveness of organization structure to project performance and to identify the relationship between organization structures with project performance at oil and gas industry area Kuala Lumpur.

The mean score organizational structure at oil and gas industry for the three dimension of organizational structure is functional, matrix and pure project are between 3.8 and 4.1 it concluded that the overall mean score for the organizational structure dimension of oil and gas industry area Kuala Lumpur was 4.05. We can conclude that the level of organizational structure of oil and gas industry area Kuala Lumpur is high.

5.2.1 Discussion on Research Objective

The main purpose is to study organizational structure impact on project performance among worker at oil and gas industry at Kuala Lumpur. The organizational structure have three type which is functional, matrix and pure project organizational structure to the project performance.

The objective stated as below:

1. To determine the effectiveness of organization structure to project performance
2. To identify the relationship between organization structure with project performance

This first objective is about to determine the effectiveness of organization structure to project performance. At this first objective, the result is to interpret which the most effective organizational structure to the project performance. Based on the structure, thee employee in the companies can be measure the type of structure that may be used. Some project may become unsuccessful because of time and cost, project delay will make project unsuccessful. So, if the effective organizational structure use the identifying are skip huge loss might be happen that caused by the problem.

For the second objective in this study is about relationship for independent and dependent variable which is organizational structure and project performance. This study wants to identify the organization structure either the have positive relationship with project performance.

5.2.2 Discussion on Research Question

The research question in this research are following:

1. Which is organizational structure performance effectiveness to project performance?
2. What is relationship between organization structures with project performance?

In the questionnaire, there some part of the question asked on the characteristic and functions of organizational structure toward project performance and also the effectiveness. Basically this method are more to find the effective organizational structure.

H1: There is significant positive relationship between functional organizational structures to the project performance

According to the first hypothesis, which is to find the relationship between functional organizational structure to the project performance, there is insignificant relationship between functional organizational structure and the project performance at $t=2.001$, $p<0.01$.

This shows that the hypothesis support because p>0.01 which is p=0.049 and is therefore rejected.

H2: There is significant positive relationship between matrix organizational structures to the project performance

According to the second hypothesis, which is to find the relationship between matrix organizational structure to the project performance, there is insignificant relationship between organizational structure and project performance at t=2.105, p<0.01. This shows that the hypothesis does not support because p>0.01 which is p=0.030 and is therefore rejected.

H3: There is significant positive relationship between pure project organizational structures to the project performance

According to the third hypothesis, which is to find the relationship between matrix organizational structure to the project performance, there is insignificant relationship between pure project organizational structure and project performance at t=1.925.This shows that the hypothesis does not support because p>0.01 which is p=0.058 and is therefore rejected.

5.3 LIMITATIONS

Based on the result of the research in previous chapter, there is limitation to this research study. The outcome shows the positive relationship between two variable that have been listed in this research. Organizational structure only have a small contribution to the project performance and this is because maybe the project performance more affected by other factor that have an major impact that contribute to the project performance.

Most critical issues faced in this research are the method of collecting data. Mail questionnaire was chosen as the method used in this research because it is found inexpensive method to conduct questionnaire. In reality, mail questionnaire was found lacking

effectiveness in data collection. Data collection extremely slow, which average only 10 respondents per week and this delay period to complete analysis and finding.

Secondly, the limitation in this research is respondent did not answer properly which they just answer as they want. Sometimes, the result seem not accurate. As they did not answer properly by that.

Next, some of questionnaire that distribute by email but the feedback is very weak because they did not respond on it. Sometime, the email that given was wrong. Other than that, because in terms of our research to get feedback from the mail rather difficult, partly because they do not respond and seen the email. Maybe some email come as spam email and trash. This can be seen that email is not an effectively method.

Third limitation is the respondents do not give cooperation during data collection section. Most of the respondents are not free and are not interested to fill in the questionnaire. As a result, the researcher needs to convince and negotiate with the respondents so the respondents will take part in the survey questionnaire. Besides, inappropriate estimation sample size chosen in this research is 100. However, the actual number of respondents unable to achieve estimate respondents. Compare to sample size estimated 100 respondents, but there are only 80 respondents taking part in this research. The percentage of sample size achieved is only 80 %.

Lastly, challenge is when you want to find building companies found to these questions are hard to find because the address given proper poultry as well as problems in the new buildings moved to other buildings and buildings that are not strategic as too deep and difficult to see. The example is signs and the small size of the company.

5.4 CONTRIBUTIONS

For this research, there some contribution which the contribution will divide to three issues. These three issues is about to giving a good knowledgeable, a good managerial practice and also to human theoretical implication.

5.4.1 Knowledge.

This research also provide the contribution theory and knowledge for the future generation to refer and can apply to education. This research will give new knowledge about organizational structure in industry. They also can gain new knowledge and new information by this study and they can apply for future study as well. Then, also this knowledge will improve future research and provide new experience to be implement. Also, as referring they will know the knowledge and skill of the organizational structure use to get the better performance in the project performance.

5.4.2 Managerial practice.

Contribution can give impact the management practice which the contribution give a practical implication about organizational structure to performance to project performance. Also included all aspects of managing knowledge, organizational learning and how the people manage organizational structure. Since the study has clearly shown that it will be beneficial to institute project structure it is recommended that further research could be done to ascertain the impact of implementing project structure in oil and gas industry. This managerial practice just not focused on the organizational level, but all levels from that of the highest authority in the organizational. Mostly in the organization to know how they manage their structure of organizational that give a good quality in delivery the project performance.

5.4.3 Human theoretical Implications

This research determined to achieving goal and objective by the organization which the importance thing when employee can apply as human theoretical. It can help employee to work better in the organization when they have an effective skill, attitude, knowledge and obtain to achieve their objective and goal of the management. In the theoretical perspective which is indicated the importance of theoretical in organizational. Besides, by doing the research it will give the alternative for the top management to improve the structure of work to the organization which employee will be more responsible on their work and effective to manage and handling the work. Then, the organization also can found the weakness of on the organizational structure, thus can make the employee be more alert and improving their work. With that, it will help to create the effective teamwork between workers in the organization.

5.5 RECOMMENDATIONS

The recommendations to this research study is the process of choosing most effective organizational structure. The variable of the each organizational structure must be suitable with the main point and it can contribute to the understanding of the respondent to the main purpose of each question. This suggestion might can help to improve and become more productive toward project performance in future.

Next is the number of question that asked in the questionnaire need to be reduced because if research question so many it can affect the result of the reliability of the questionnaire and also can get more accurate feedback from respondent. The method of spreading the questionnaire also need to be improve. In this research study the questionnaire sent to the respondent by mail and the questionnaire in form of online questionnaire. This technique have a small disadvantage and it lead to the irrelevant answer from the respondent. The result of this study also can increased by make live interview to the respondent and make explanation to the respondent about each question. Half of the result can come from online questionnaire and the other half from the live interview.

5.6 CONCLUSION

As the conclusion for the last section on this research organizational structure also being an important part to make project success, to achieve the objective and goal the company should use a suitable and comply structure of the organization. In order to make organization become effective. Firstly, the important is to improve the future research and should be implement the recommendation. Then, should be taking more about advantages of the research to contribute to human and organization. It will become more experience in conducting a research in future. The output of this research study shows that organizational structure (functional, matrix and pure project) have a positive impact to the project performance. This means that, the organizational structure cannot influence on the projects performance and if effect it might be in a small amount which is seem that only a small group of oil and gas companies use these three type of organizational. Other that, use the other method and their system guiding their companies. This may be due to parallel lines of authority which may exist but they may be virtually or people assuming power to influence due to its projects matrix structure, which contribute greatly to projects performance.

This study has been able to show that the structure in oil and gas industry has inverse effect on the key performance indicators of projects due to the mechanistic structure in place and relating to projects in a very weak organizational structure. The study also shown that even though the bases of the organizational structure in place was due to the strategy employed, the environment in which it operates, the size of the work force and the technology used in order to optimized production and maximized profit and ensure the sustainability of the mine this objective is not being achieved due to the project organizational structural problems impacting negatively on the time and the quality performance of the capital project which are medium and long term strategic investment for the company to meet its target.

REFERENCES

Adedeji B. Badin And Samuel O. Osisanya, (2013):
Project Management For Oil And Gas Industry, A World System Approach.

Adestam, C. And Gunno, S. (2008), CSR Structure For Responsibility.
Master's Thesis, School Of Business Administration, Jonkopin

Akpan E.O.P. And Chizea E.F. (2002) Project Management:
Theory And Practice FUTO Press Ltd. Owerri Nigeria.

Chan, A. P. C. And Chan, A. P. L. (2004) Key Performance Indicators For Measuring

Chan, A. P. C. And Tam, C. M. (2000), "Factors Affecting The Building Quality Of Building Project In Hong Kong", International Journal Of Quality & Reliability Management, Vol. 17 Nos. 4/5, Pp. 423-441.

Chan, A.P.C. (1995) Towards An Expert System On Project Procurement. Journal Of
Clifford F.G And Erik W.L., (2008) "Project Management Managerial Process"**,**

Mcgraw-Hill, 4th Edition, London UK. Construction Success. Benchmarking:

An International Journal, **11**(2), 203-221 Construction Procurement, **1**(2), 111-23.

Dooley, L.; Lupton, G. And O"Sullivan, D. (2005) "Multiple Project Management: A Environment. International Journal Of Quality & Reliability Management, **17** (4/5), 393-406.

Granström, K. (1999). Arbetsgruppens Beroende Av Organisationens Struktur. FOG

Hatch, M. J. (1997). Organizational Social Structure. In Organization Theory (Pp. 161),

Hatch, M.J., & Cunliffe, A.L. (2006).Organization Theory – Modern, Symbolic And Postmodern Perspective. Oxford University Press; New York.

J. Hollenbeck, "A Structure Approach To External And Internal Person-Team Fit, Applied Psychology," An In-Ternational Review, Vol. 49, No. 3, 2000, Pp. 534-549.

Katz, R.L. (1955). Skills Of An Effective Administrator. Harvard Business Review, 33 (1), 33-42.

Kotnour, T. (2000) Organisational Learning Practices In The Project Management

Larson, E. W., And Gobeli, D. H., (1987):
"Matrix Management: Contradictions And Insights,"

Kerzner, H. (2001). Strategic Planning For Project Management: Using A Project Management Maturity Model. New York: John Wiley & Sons. 17.

Kerzner, H. (2003). Advanced Project Management: Best Practices On Implementation. (2nd Ed.) Hoboken: John Wiley & Sons. 18.

Kerzner, H. (2009). Project Management. (10th Ed.) Hoboken: John Wiley & Sons. 19.
Kerzner, H., Saladis, F. P. (2009). What Functional Managers Need To Know About Project Management. Hoboken: John Wiley & Sons.

Levine, H. A. (2002). Practical Project Management: Tips, Tactics, And Tools. New York: John Wiley & Sons, California Management Review, Vol. 29, No. 4 P. 137.

Lawrence P.R And Lorsch J.W (1967) 'Organisation And Environment: Managing Differentiation And Integration', Boston, Division Of Research, Graduate of School Of Business Administration, Harvard University.

Lawrence, P.R., & Lorsch, J.W. (1986): Organisation And Environment. Harvard Business School Press; Boston London, UK, P.2, 7, 50, 59, 71-72,

Mintzberg H (1989) Mintzberg On Management: Inside Our Strange World Of Organisations. Collier Macmillan, Canada.

Mintzberg, H. (1983). Designing Effective Organisations. Prentice-Hall, Inc.
New Jersey Modern Competitive Necessity", Journal Of Manufacturing Technology Management,

Morgan, R. V. (1970). Determining Sample Size For Research Activitites. Educational And Pscychological Measurement, 607-610.

Müller, R. (2009) "Project Governance", Gower Publishing Limited, First Edition

Nahm, A., Vonderembse, M. And Koufteros, X. (2003), "The Impact Of Organizational Structure Onorganisation" International Journal Of Project Management, Vol. 21, No. 1, P. 1-8 Organisation", Journal Of European Industrial Training, Vol. 21, No. 5, P. 165–170

PMI (2004) A Guide To The Project Management Body Of Knowledge (PMBOK® Guide), Project Management Institute, Inc. P.5 Project Management Journal, 28 (2), 5-13.

Sadeh, A, Dvir, D, And Shenhar, A (2000):
The Role Of Contract Type In The Success of R&Defence Projects Under Increasing Uncertainty. Project Management Journal, **31** (3), 1421.

Shenhar, A J, Levy, O, And Dvir, D (1997) Mapping The Dimension Of Project Success.

Smith B. And Dodds, B. (1997) “Developing Managers In The Project-Oriented

Surrey, England, P. 2-4, 6, 9, 15, 18-21time-Based Manufacturing And Plant Performance”, Journal Of Operations Management.

Turner, J. R. (1999) “The Handbook Of Project-Based Management” Mcgraw-Hill, Turner, J. R. And Müller, R. (2003) “On The Nature Of The Project As Temporary Vol. 16, No. 5, P. 466-482 Vol. 21 No. 3, Pp. 281-306.

Lunenburg, Fred C. Organizational Structure Mintzberg Framework IJSAID V14 N1 2012.Pdf>.

Gale, B. 1981. Petronas: Malaysia's National Oil Corporation. Asian Survey**,** 1129-1144.

Mahmoudsalehi, M., Moradkhannejad, R. & Safari, K. 2012. How Knowledge Management Is Affected By Organizational Structure. The Learning Organization, 19**,** 518-528.

Pugh, D. S., Hickson, D. J., Hinings, C. R. & Turner, C. 1968. Dimensions Of Organization Structure. Administrative Science Quarterly**,** 65-105.

(<1284-1296.Pdf>.

Pugh, D. S., Hickson, D. J., Hinings, C. R. & Turner, C. 1968. Dimensions Of Organization Structure. Administrative Science Quarterly**,** 65-105.

PMI (2004). A Guide to the Project Management Body of Knowledge (PMBOK® Guide)

Project Management Institute, Inc. P.

APPENDIX A: GANTT CHART

A WORK PROGRESS OF UNDERGRADUATE RESEARCH PROJECT 1

PROGRESS	WEEK													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Identify research issues														
Deciding the topic of research objectives														
Approval of topic and research objectives														
Preparation of project research proposal														
CHAPTER 1														
Introduction														
Research background														
Problem statement														
Research objective														
Research framework														
Research question														
Research scope														
Significance of study														
Operational definition														
Expected result														
Thesis Planning														
CHAPTER 2														
Literature review														
CHAPTER 3														
Research methodology														
Design questionnaire														
Presentation														
Do correction on fyp1														
Submit correct fyp1														

A WORK PROGRESS OF UNDERGRADUATE RESEARCH PROJECT

PROGRESS	WEEK													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Data collect during July and August														
CHAPTER 4														
Introduction														
Respondent demographic														
Descriptive statistic														
Reliability analysis														
Correlation analysis														
Regression analysis														
CHAPTER 5														
Introduction														
Main finding														
Contribution														
Limitation														
Recommendation for future research														
Conclusion														
Presentation														
Do correction on fyp2														
Submit correct fyp2														

APPENDIX B: QUESTIONNAIRE

Researcher

NUR AQILAH BINTI JAMALUDIN

FACULTY OF INDUSTRIAL MANAGEMENT

Bachelor of Degree in Project Management (Hones.)

University Malaysia Pahang

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Section A: Demographic Profile

On this part we seeks the general information about yourself as respondent.
We would like you to give cooperation on your general information about your profile. Please note that all the data that collected for the purpose of this study and will be strictly confidential. Please mark (√) at the box that suit to your profil

1. Gender

   Male ( )

   Female ( )

2. What is category of your age?

   Less than 20 years ( )

   Between 21-30 years ( )

   Between 31-40 years ( )

   Between 41-50 years ( )

   Over than 51 years ( )

3. What is your educational qualification?

   PMR ( )

   SPM ( )

   Diploma ( )

   Degree ( )

   Master Degree ( )

   PhD ( )

4. What is your position in the organization?

   Top manager ( )

   Middle manager ( )

   Supervisor ( )

   Normal worker ( )

5. How many years your involvements in the oil and gas industry?

   Just started ( )

   Less than 1 years ( )

   Between 1-3 years ( )

   Between 4-6 years ( )

   More than 6 years ( )

Section B: Organizational Structure

In this organization, the project performance depends as follows:

1. Strongly Disagree
2. Disagree
3. Neutral
4. Agree
5. Strongly Agree

No.	Question	1	2	3	4	5
	Functional Organization Structure					
1.	The head of my department represents my department to the highest authority in the company					
2.	CEO, or top manager, has control over the managers of other teams units.					
3.	Projects, programs, and portfolios are managed by a specialized organizational unit					
4.	Project Managers within the company hold senior and /or top management roles and have direct control on business functions, personnel and other resources					
5.	In my workplace, organizational control is centralized to one person.					
	Matrix Organizational Structure					
1.	The top executive in my organization is responsible for the overall management of both organizational functions and special projects.					

2.	The organization in which I work is divided into groups of people that share common tasks and goals					
3.	In my workplace, employees often report to their direct supervisor as well as a supervisor who is leading a special project for the company					
4.	My organization uses project teams consisting of employees from various departments to execute special projects					
5.	The production process is organized using temporary teams					
6.	My organization increases profits and productivity by grouping together people who perform specialized tasks.					
	Pure Project Organizational Structure					
1.	My organization is grouped into divisions according to products, customer type or geographical region.					
2.	My organization is divided into divisions that are geographically dispersed but all report to a staff at corporate headquarters.					
3.	Each division in my organization is responsible for making daily decisions, while the headquarters staff monitors overall company performance and formulates strategy.					
4.	The organization in which I work does not appear to have a formal organizational structure					
5.	It is responsibility to ensure that organization have the necessary information to effectively interact with one another					

Section C: Project Performance

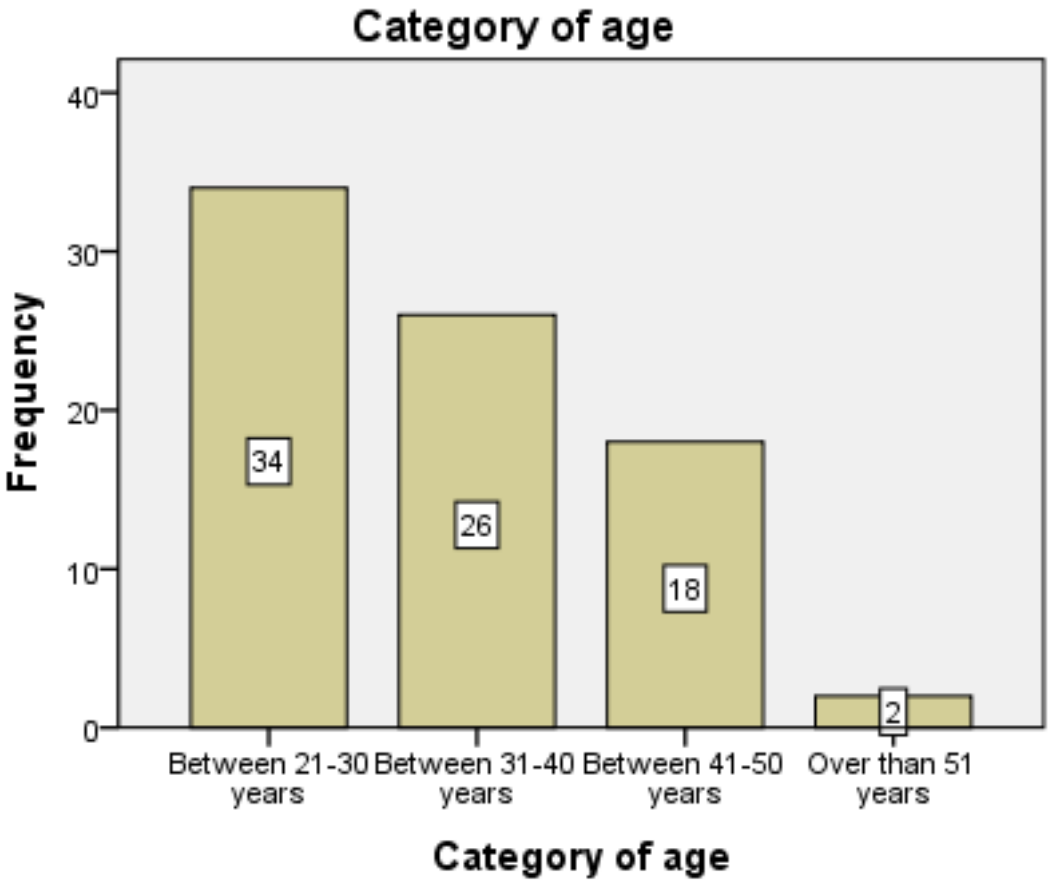
No.	Question	1	2	3	4	5
	Quality Performance					
1	Authorization residing in high chain of command or hierarchy of authority					
2.	Work Processes Not Clear And Inadequately Structured					
3.	No Clear Lines of Authority And Accountability					
4.	Easy Flow of communication and access to information					
5.	Having To Co-Ordinate With Many Departments					
6.	Competing Priorities And Loss Of Focus Due To Many Project Being Handle					
7.	High centralized decision making					
8.	Scramble for resource with other department					
9.	Poorly defined roles and responsibilities					
10.	Team weaknesses					
11.	Poor communication					
12.	Projects meet their operational performance goals					
	Time Performance					
13.	Before schedule					
14.	On schedule					
15.	Over schedule					
16.	Delay					

APPENDIX C: OUTPUT SPSS

DEMOGRAPHY

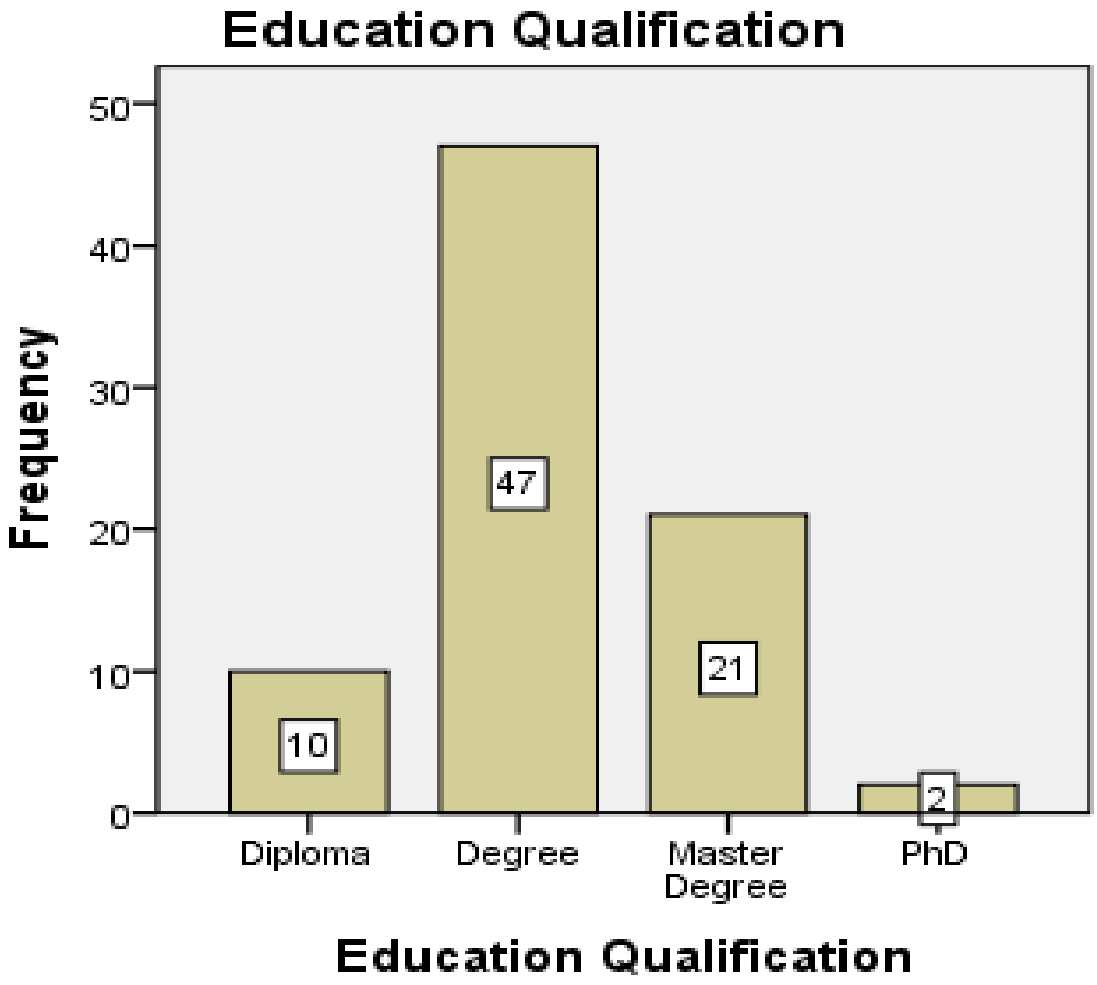
Gender

		Frequency	Valid Percent
Valid	Male	54	67.5
	Female	26	32.5
	Total	80	100.0



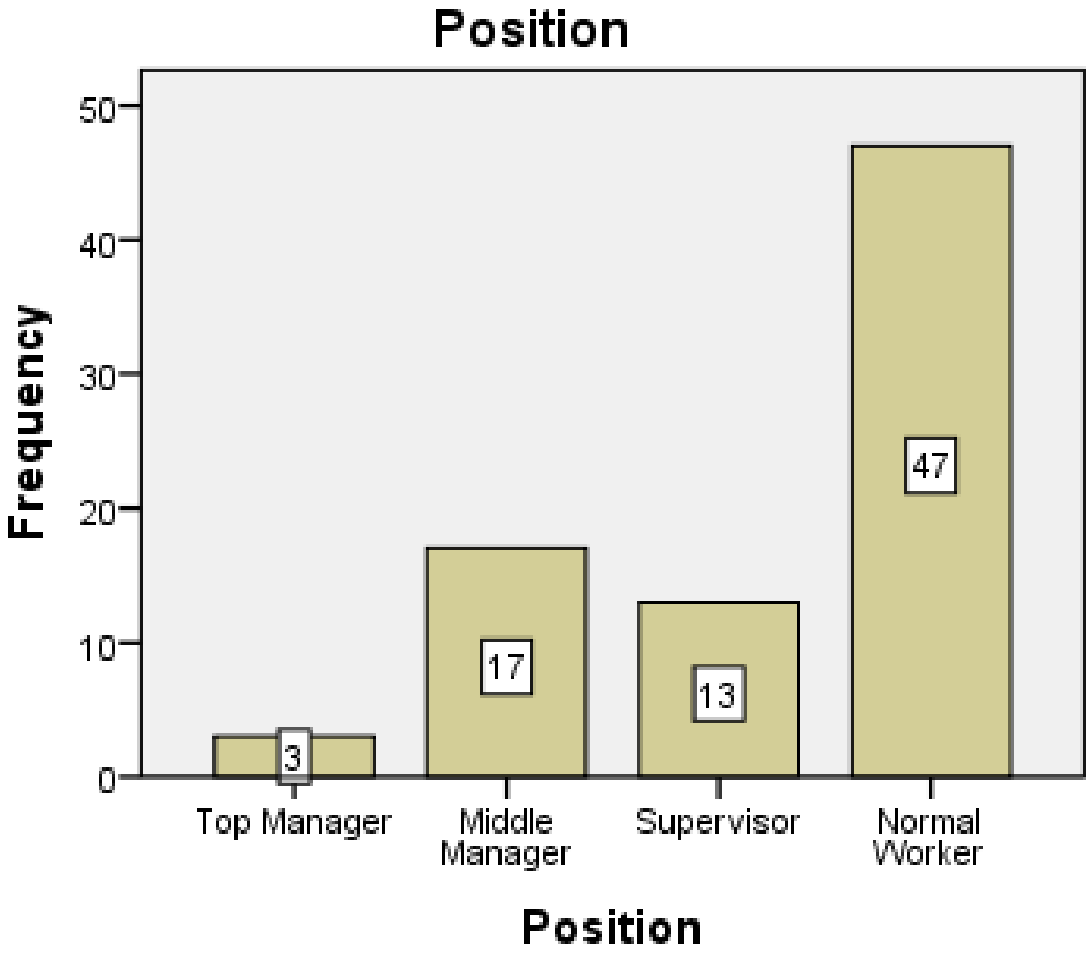
Category of age

		Frequency	Valid Percent
Valid	Between 21-30 years	34	42.5
	Between 31-40 years	26	32.5
	Between 41-50 years	18	22.5
	Over than 51 years	2	2.5
	Total	80	100.0



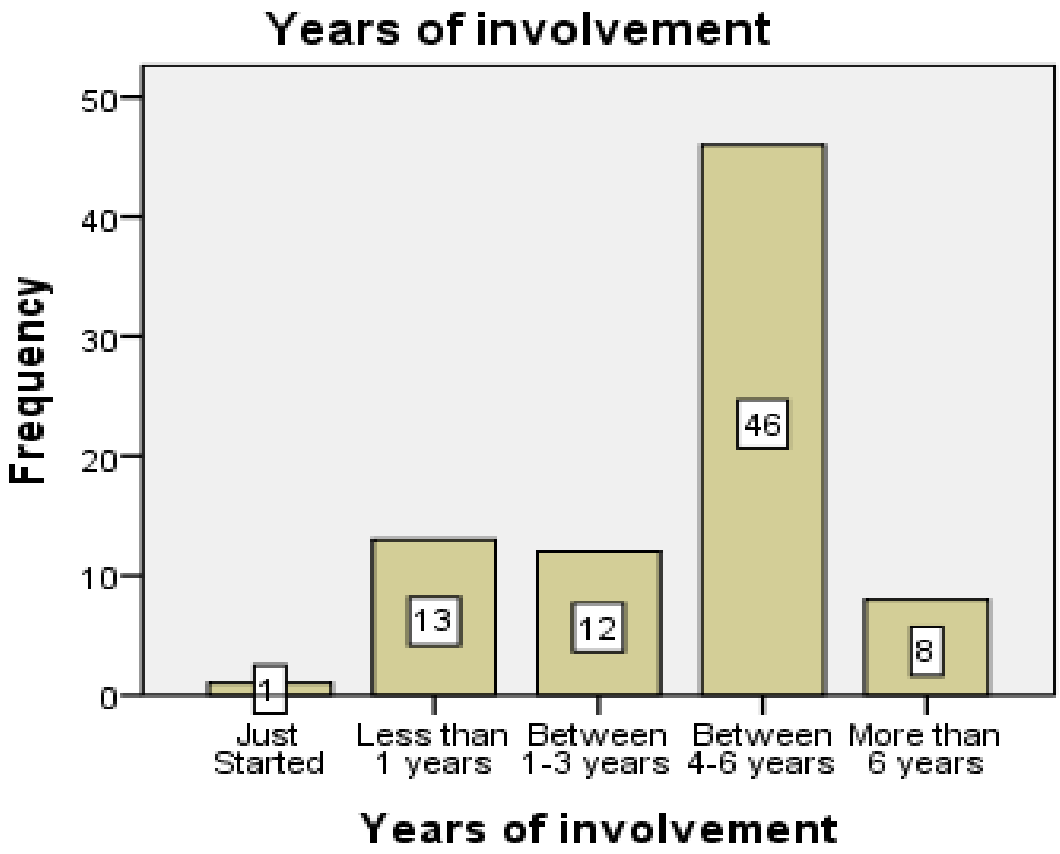
Education Qualification

		Frequency	Valid Percent
Valid	Diploma	10	12.5
	Degree	47	58.8
	Master Degree	21	26.3
	PhD	2	2.5
	Total	80	100.0



Position

		Frequency	Valid Percent
Valid	Top Manager	3	3.8
	Middle Manager	17	21.3
	Supervisor	13	16.3
	Normal Worker	47	58.8
	Total	80	100.0



Years of involvement

		Frequency	Valid Percent
Valid	Just Started	1	1.3
	Less than 1 years	13	16.3
	Between 1-3 years	12	15.0
	Between 4-6 years	46	57.5
	More than 6 years	8	10.0
	Total	80	100.0

RELIABILITY TEST

Independence variable

(Functional Organization Structure)

Reliability Statistics

Cronbach's Alpha	N of Items
.713	5

(Matrix Organization Structure)

Reliability Statistics

Cronbach's Alpha	N of Items
.628	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BF2Q1	18.6250	4.839	.301	.609
BF2Q2	18.3750	3.696	.814	.386
BF2Q3	18.3750	5.125	.511	.557
BF2Q3	18.3750	4.268	.562	.502
BF2Q4	18.2500	4.500	.343	.595
BF2Q5	18.6250	6.268	-.113	.755

(Pure Project Organizational Structure)

Reliability Statistics

Cronbach's Alpha	N of Items
.785	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BF3Q1	15.0000	7.429	.251	.840
BF3Q2	15.1250	7.268	.393	.793
BF3Q3	14.8750	5.554	.882	.643
BF3Q4	15.2500	5.643	.640	.717
BF3Q5	15.2500	5.357	.724	.684

Dependence Variable (Project Performance)

Reliability Statistics

Cronbach's Alpha	N of Items
.643	10

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
No Clear Lines of Authority And Accountability	32.8750	7.554	.439	.596
Easy Flow of communication and access to information	32.8750	7.839	.163	.656
High centralized decision making	33.2500	5.929	.699	.508
Poorly defined roles and responsibilities	33.6250	7.982	.281	.624
Team weaknesses and poor communication	33.1250	7.554	.314	.617
Projects meet their operational performance goals	32.8750	8.411	.025	.688
Before schedule	34.1250	8.125	.408	.613
On schedule	34.2500	7.357	.493	.584
Over schedule	34.2500	8.214	.066	.680
Delay	34.0000	7.429	.566	.579

CORRELATIONS

		Project performance	Functional	Matrix	Pure project
Project performance	Pearson Correlation	1	.221*	.243*	.281**
	Sig. (2-tailed)		.049	.030	.000
	N	80	80	80	80
Functional	Pearson Correlation	.221*	1	.267*	.271*
	Sig. (2-tailed)	.049		.016	.015
	N	80	80	80	80
Matrix	Pearson Correlation	.243*	.267*	1	.286*
	Sig. (2-tailed)	.030	.016		.010
	N	80	80	80	80
Pure project	Pearson Correlation	.281**	.271*	.286*	1
	Sig. (2-tailed)	.000	.015	.010	
	N	80	80	80	80

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

REGRESSION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.221[a]	.049	.037	.39147	.816

a. Predictors: (Constant), Functional

b. Dependent Variable: Project performance

Table 4.7.1.2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.614	1	.614	4.005	.049[a]
	Residual	11.954	78	.153		
	Total	12.567	79			

a. Predictors: (Constant), Functional

b. Dependent Variable: Project performance

Table 4.7.1.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.274	.409		8.013	.000
	Functional	.195	.098	.221	2.001	.049

a. Dependent Variable: Project performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.243[a]	.059	.047	.38941	.878

a. Predictors: (Constant), Matrix

b. Dependent Variable: Project performance

Table 4.7.2.2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.739	1	.739	4.876	.030[a]
	Residual	11.828	78	.152		
	Total	12.567	79			

a. Predictors: (Constant), Matrix

b. Dependent Variable: Project performance

Table 4.7.2.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.217	.397		8.107	.000
	Matrix	.225	.102	.243	2.208	.030

a. Dependent Variable: Project performance

Model	R	R Square	Adjusted R Square
1	.213[a]	.045	.033

a. Predictors: (Constant), Pure Project

b. Dependent Variable: Project Performance

Table 4.7.3.2: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.486	1	.486	3.707	.040[a]
	Residual	10.224	78	.131		
	Total	10.710	79			

a. Predictors: (Constant), Pure Project

b. Dependent Variable: Project Performance

Table 4.7.3.3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.305	.210		15.743	.000
	Pure Project	.108	.056	.213	1.925	.040

a. Dependent Variable: Project Performance