

**INFLUENCE OF PROJECT MANAGEMENT BEST PRACTICES
ON ORGANIZATIONAL PERFORMANCE: A SURVEY OF
CONSTRUCTION COMPANIES IN WESTLANDS DISTRICT,
NAIROBI COUNTY.**

By

Musinya Noreen Muhonja ✓

**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT FOR
THE AWARD THE OF DEGREE OF MASTERS OF ARTS IN PROJECT PLANNING
AND MANAGEMENT**

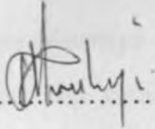
UNIVERSITY OF NAIROBI

2011

UNIVERSITY OF NAIROBI
KIKUYU LIBRARY
P. O. Box 5019
NAIROBI

DECLARATION

This research project report is my own original work and has never been presented for a degree in any other university.

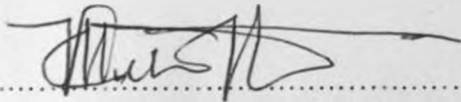


Date..... 13th October 2011

Musinya Noreen Muhonja

L50/61021/2009

This research project report has been submitted for examination with my approval as the University Supervisor.



Date..... 14-10-2011

Dr. Luketero Stephen Wanyonyi

Senior lecturer

School Of Mathematics,

University of Nairobi.

DEDICATION

I dedicate this project report to my dad Mr.Hannington Obiero Musinya and mum Mrs. Esther Mmbone Musinya whose faith in me has always been an invaluable source of inspiration not forgetting the financial, moral, and spiritual support. This extends to my siblings Howards, Nobert, Joshua, and sister in-law Rose for the continuous encouragement, support and well wishes throughout my study. Finally to lovely nephews Alvin and Alan and niece Angel who inspire me.

ACKNOWLEDGEMENT

My most gratitude and honour is to the almighty God who has given me the strength and good health to complete this work. May His name be praised forever and ever, Amen.

I am indebted to My supervisor Dr. Stephen Luketero for his keen interest in this work and always available for me and faithfully keeping all the appointments as scheduled. During the study he has offered constructive criticisms, advice and encouragement of which inspired a new concept and meaning to my study. I am privileged to work under his supervision.

My Gratitude also goes to Dr. Migosi who tirelessly edited my Project report. I am also grateful to my Friends Cecilian Chiaji, Margaret Nakinai, Evelyne Nderi and Calvin Emadau for constant assistance, support and encouragement. You are loved and appreciated more than you know.

I also give my heartfelt gratitude to Engineer Kahenya for his encouragement, support and advice not to forget all the construction companies that were sampled out for the study. This write up would not have been possible without you. God bless you all.

TABLE OF CONTENT

DECLARATION.....	II
DEDICATION.....	III
ACKNOWLEDGEMENT.....	IV
LIST OF FIGURES.....	IX
LIST OF TABLES.....	IX
LIST OF ABBREVIATIONS.....	XII
ABSTRACT.....	XIII
CHAPTER ONE:INTRODUCTION.....	1
1.1. Background of the study.....	1
1.2. Statement of the problem.....	2
1.3. Purpose of the study.....	3
1.4. Objectives of the study.....	3
1.5. Research questions of the study.....	4
1.6. Significance of the study.....	4
1.7.Delimitation of the study.....	5
1.8. Limitation of the study.....	5
1.9. Basic assumption of the study.....	5
1.10. Definition of significant terms.....	6
CHAPTER TWO:LITERATURE REVIEW.....	7
2.1 Introduction.....	7
2.2. Project Management Practices.....	7
2.3 Project Management Best Practices.....	9
2.4 Organization Performance.....	13
2.5 Measures of organization performance.....	14
2.6 Indicators of Organization Performance.....	15
2.6.1. Technology and Organization performance.....	15
2.6.2. Training and Organization Performance.....	17
2.6.3 Monitoring and Evaluation and Organization performance.....	18
2.6.4. Risk Management and organization performance.....	19
2.6.5 Leadership and Organization performance.....	20

2.7 Conceptual Framework.....	23
2.7.1 Discussion of conceptual Framework.....	24
2.8 Summary of Literature review.....	24
CHAPTER THREE:RESEARCH DESIGN AND METHODOLOGY	25
3.1 Introduction.....	25
3.2 Research Design.....	25
3.3 Target Population.....	25
3.4 Sample Size Selection and Sampling Procedures.....	26
3.4.1 Sample Size Selection.....	26
3.4.2 Sampling Procedure.....	26
3.5 Research Instruments.....	26
3.5.1 Questionnaires.....	26
3.5.2 Interview Guide.....	27
3.6 Validity of the Instrument.....	27
3.7 Reliability of the Instrument.....	27
3.8 Data Collection Procedure.....	28
3.9 Data Analysis Techniques.....	28
3.9.1 Quantitative Data Analysis.....	28
3.9.2 Qualitative Data Analysis.....	29
3.10 Operational Definition of Variables.....	29
CHAPTER FOUR:DATA ANALYSIS, PRESENTATION AND INTERPRETATION	32
4.1 Introduction.....	32
4.2 Questionnaire return rate.....	32
4.3 Background information.....	32
4.3.1 Distribution of respondents by Gender.....	32
4.3.2 Respondents age range.....	33
4.3.3 Education qualification.....	33
4.3.4 Years of service to the organization.....	34
4.3.5 Respondents experience in construction projects.....	35
4.4 Motivation for project management best practices.....	35
4.5 PMBP and organizational performance.....	36

4.5.1 Information Technology and organizational performance.....	36
4.5.2 Training and Organizational performance.	41
4.5.3 Risk Management and organizational performance.....	56
4.5.4 Training in OHSA and working environment.....	60
4.5.5 Leadership and organizational performance	63
4.6 Organizational Performance.....	67
CHAPTER FIVE:SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS.....	69
5.1 Introduction.....	69
5.2 Summary of findings.....	69
5.3 Discussion of the findings.....	71
5.3.1 Information Technology and performance.....	71
5.3.2 Training and Organizational performance	71
5.3.3 Monitoring and evaluation and organizational performance	72
5.3.4 Risk Management and organizational performance.....	72
5.3.5 Leadership and Organizational performance.	73
5.4 Conclusions of the study.....	74
5.5 Recommendations.....	75
5.6 Suggestion for further research.....	75
REFERENCES.....	76
APPENDICES	81
APPENDIX 1.....	81
Questionnaire introduction letter.....	80
APPENDIX 2.....	82
Interview Introduction letter.....	81
APPENDIX 3.....	83
Letter of Transmittal.....	82
APPENDIX 4.....	84
Questionnaire.....	84
APPENDIX 5.....	92
Interview Schedule/Guide.....	92

APPENDIX 6.....	93
Research Authorization Letter.....	93
APPENDIX 7.....	94
Research Permit.....	94

LIST OF FIGURES

Figure 2:1: Conceptual Framework	23
--	----

LIST OF TABLES

Table 3.1: Operational Definition of Variables	30
Table 4.1: Gender of the respondents	32
Table 4.2: Age range of the respondents.....	33
Table 4.3: Education qualifications of the respondents	34
Table 4.4: Respondents years of service to the organization	34
Table 4.5: Respondents experience in construction projects	35
Table 4.6: Motivation for implementation of PMBP	36
Table 4.7: Cross tabulation information systems available in the organization and effectiveness of the system/program used	37
Table 4.8: Information Management systems.....	38
Table 4.9: Cross tabulation of effectiveness of the system used and the respondent s views on the overall organizational performance	39
Table 4.10: Cross tabulation of information systems available in the organization and relevancy of the system used to the duties and roles.....	40
Table 4.11: Cross tabulation of relevancy of the system used and respondent s views on overall organizational performance	41
Table 4.12: Cross Tabulation of Training programme after employment and financier of training	42
Table 4.13: Cross tabulation of Performance Assessment of Training Programs is relevant to trainees need ,job and performance and respondent views on organizational performance.....	43
Table 4.14: Cross tabulation of effectiveness of the value of training in terms of returns and meeting expectations and organizational performance.....	44
Table 4.15: Crosstabulation of Impact of training success in enhancing self assessment and the ability to improve knowledge and Customer satisfaction.....	45
Table 4.16: Efficiency of training in terms of cost and time allocation.....	46
Table 4.17: Crosstabulation of sustainability in terms of the ability to motivate continued development and Product /service innovation	47
Table 4.18: Cross tabulation of respondents knowledge and skills required to effectively use monitoring and evaluation tools and techniques and effectiveness of the tools used.....	48
Table 4.19: Tools and techniques used to monitor and evaluate projects.....	49

Table 4.20: Crosstabulation of monitoring and evaluation Measurement Methods are accurate	50
Table 4.21: Crosstabulation Ordering variations given by means of verbal and written instructions from consultant.....	51
Table 4.22: Clients team in involvement during monitoring.....	53
Table 4.23: Monitoring progress in relation to payment delays.....	54
Table 4.24: Evaluation stages.....	55
Table 4.25: Evaluation information.....	55
Table 4.26: Project Life cycle.....	56
Table 4.27: Cross tabulation of respondents knowledge in risk management and their involvement in managing risks.....	57
Table 4.28: Crosstabulation respondents involvement in managing risks and respondent s knowledge of risk management.....	58
Table 4.29: Crosstabulation of respondents involvement in managing risks and their view on the importance of risk management on product/service quality.....	59
Table 4.30: Cross tabulation of respondent involvement in managing risks and respondent views on risk management practices in relation to Loss minimization.....	60
Table 4.31: Cross tabulation of respondent's training on occupation safety and health act and respondents view on their working environment.....	61
Table 4.32: Crosstabulation of respondents view on their working environment and organizational performance.....	62
Table 4.33: Crosstabulation of respondents views on delegation and authority and respondent s production out put.....	63
Table 4.34: Satisfaction of workers with present salary.....	64
Table 4.35: Motivation and level of motivation.....	64
Table 4.36: Crosstabulation of respondent s views on promotion policy in relation to the organizational performance.....	65
Table 4.37: shows promotion policy of the companies.....	66
Table 4.38: Leadership.....	67
Table 4.39: Organizational Performance.....	67
Table 4.40: Respondent s views on overall customer satisfaction.....	68

LIST OF ABBREVIATIONS

- PM**-Project Management
- PPM**-project Planning and Management
- PMBP**-Project Management Best Practice
- US**-United States
- PMO**-Project Management Office
- USAID**-Unites States Aid
- AMKENI**-American Kenyan Initiative
- UK**-United Kingdom
- DACF**-District Assemblies Common Funds
- ADB**-African Development Bank
- PBMOK**-Project Management Body of Knowledge
- IT**-Information Technology
- ICT**-Information Communication Technology
- HRM**-Human Resources Management
- UNDP**-United Nations Development Program
- M&E**-Monitoring and Evaluation
- OHSA**-Occupational health and Safety Act
- RM**-Risk Management

ABSTRACT

Global construction industry is constantly changing in response on new or improved systems of Management , new technologies and the need to expand and diversify activities to meet corporate aim and objectives .The industry has been impacted greatly by introduction of this sustainable project principles and practices hence Project management best practices now understood as a critical part of any successful, competitive business.Inspite of this many building and construction projects have delayed and suffered uncontrolled cost escalation and have precipitated poor functional qualities. This study was investigating the influence of Project management best practice (PMBP) on organizational performance. The study objectives were to: Determine the influence of information technology on organizational performance in construction companies; Determine the extent to which employee training influences organizational performance in construction companies; Assess the extent to which monitoring and evaluation techniques influences organizational performance in construction companies; Determine how risk management influences organizational performance in construction companies;Asses the extent to which leadership influences organizational performance in construction companies in Westlands district ,Nairobi County. The study employed descriptive design. The sample size was made up of 120 respondents drawn from 146 management employees in the 33 construction companies. The researcher used simple random sampling and purposive sampling to come up with the Companies and respondents. The total sample for the study was 120 respondents i.e. 30 Project Managers, 30 Technical Managers and 60 Project Supervisors forming a sizable representation. The research methodology included personal interviews and questionnaires. Descriptive statistics was used to analyze the data. After analysis, the results were summarized and presented in tables. The results show that construction companies classes A and B highly values PMBP and influences organizational performance positively. Further findings reveals that the best practices in project management are optimum ways of performing works to achieve higher performance. The goal of every project manager is to achieve satisfactory performance and it is for this purpose that Project Management offices (PMO) are created for PMBP to be implemented. The study recommends the practices because they accelerate achievement of set project objectives and also contributes positively to project success. Companies should see to it that they create project management office as division to manage independent projects. Finally other Professionals outside Project management should acknowledge and support it as a body of knowledge that is viable and very important in an organization.

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

Project management as a discipline grew out of the need during World War II for a system to manage the schedule, cost and specifications of large projects and developed in a limited number of Engineering based industries during the 1950s, 1960s and 1970s. More recently, the demand for project managers has mushroomed, as project works has increased dramatically in a broad range of industries. In the recent decade the use of project management techniques in general business methods (planning, scheduling, and controlling) have risen sharply. Project management is now understood as a critical part of any successful, competitive business (Hoboken 2010).

According to Parviz Rad and Ginger Levin (2002), benchmarking is necessary for continuous development of the project management processes providing enhancement of organizational maturity in project management. Project management (PM) has changed from an empirical practice to a knowledge-based area highly recognized and internationally accredited. The profession and the importance of the role of the project manager have been recognized more and more, around the world.

The link between projects and innovation is thus brought to the fore by the study of Japanese firms which, during the 1980's, were increasingly successful on the US and European markets. This resulted to strong influence over the project management practices of European and US firms thus constituted to a model of "best practices" which rapidly became synonymous with efficiency in project and innovation management. (Clark & Fujimoto, 1980)

In 1980, the need to develop better project management techniques became the subject of debate among professionals of the Kenyan construction industry (Mathu, et al). Participants share the view that many problems connected to building and construction projects could be overcome by effective project management incorporating cost control. Since 1987 only very small numbers of

firms were offering project management services in the country. The approach is still at its infancy and is taking different forms.

Over the past ten years (2001-2010), The USAID/AMKENI project generated a number of best project practices in programme implementation and service delivery which resulted to improved access to health services in Kenya(Best Practices series # 2.Report, 2007) In spite of different approaches on the best practices in the project management field, there is a general consensus about the increasing importance of their application in companies, especially those with high degree of innovation Rabechini Jr et al, (2005).

In the past organizations were practicing project management practices and still lost revenue due to inefficiency of production of their products and services hence the need to introduce and embrace Project Management Best Practices. Project management best practices currently the focus of much attention in the project management literature (Thomas & Mullaly, 2008). The current focus on PMBP seems to be driven by the belief that organizations will adopt project management only if it can be shown to generate value. Therefore the study critically looked at what Project Management Best Practices have contributed on Organizations Performance.

1.2 Statement of the Problem.

From Background Information it is clear that organizations practice Project Management either exclusively or as part of other units in the organizations. Interestingly, none of the aforementioned researchers have been able to convincingly demonstrate the economic value of investing in project management through project appraisal techniques or otherwise.

Thomas, Delisle, Jugdev, & Buckle, (2002) contend that organizations embrace project management although its contribution to organizations' performance is not acknowledged outside the group of professionals who believe in it. Project management professionals have the difficult task of making senior executives aware of the benefit that further investment into raising project management maturity of their organizations can generate.

Westlands District has proven to be a prime Location for the big construction companies in Nairobi mainly because of its closeness to Nairobi CBD. However, the complexity of PMBP maturity assessment is an obstacle to its application where senior executives are not yet fully convinced that it is worth. It is upon this background that this study endeavors to investigate the influence of project management best practices on organization's performance and make recommendations on how best to create divisions of project management in organizational structure.

1.3 Purpose of the study

The purpose of the study was to investigate the influence of project management best practices on organizational performance in construction companies in Westlands District, Nairobi County in Kenya.

1.4 Objectives of the study

This study was guided by the following objectives:

1. To establish the influence of information technology on organizational performance in construction companies in Westlands District Nairobi County.
2. To establish the extent to which employee training influences organizational performance in construction companies in Westlands District Nairobi Country.
3. To assess the extent to which monitoring and evaluation techniques influences organizational performance in construction companies in Westlands District Nairobi County.
4. To establish how risk management influences organizational performance in construction companies in Westlands District Nairobi County.
5. To asses the extent to which leadership influences organizational performance in construction companies in Westlands District Nairobi Country.

1.5 Research questions of the study.

1. What is the influence of information technology on organizational performance in construction companies in Westlands District Nairobi County?
2. To what extent does employee training influences organizational performance in construction companies in Westlands District Nairobi County?
3. To what extent does monitoring and evaluation influence organizational performance in Construction companies in Westlands District Nairobi County?
4. To what extent does risk management influence organizational performance in construction companies in Westlands District Nairobi County?
5. To what extent does a leadership influence organizational performance in construction companies in Westlands District Nairobi County?

1.6 Significance of the study

The findings of the study were useful to the policy makers in the following ministries; The Ministry of Roads and Public Works, Ministry of Water, Ministry of Lands, and Ministry of Housing.

The study also aims at finding out the relationship between Project Management best Practices and Project Performance; by having this knowledge Project team members would accordingly extricate themselves from Project Management practices that have negative relationship with Performance while engaging more in those that exhibit positive relationship. This would contribute to realizing improved performance of construction projects in the country.

Furthermore, the relevant bodies governing project management in the country were prompted to benchmark relevant practices that would improve the performance of the projects it manages. In the long run, organizations involved in project management in the country would have enhanced quality of PM best practices.

Finally, this study contributed to literature in the field of Project, Engineering and Construction management.

1.7 Delimitation of the study

The study focused only on the Influence of Project Management Best Practices in relation on Organization's Performance. The researcher targeted Westlands District because in the recent past Westlands District has proven to be a prime Location for the big construction companies in Nairobi. The sampled companies may be a representative of the other construction companies.

1.8 Limitation of the study

Due to limitation in terms of time and budget, the research was limited to construction companies in Westlands District only. More convincing results would have been obtained by taking samples from other Construction companies in other districts where the practice was being implemented. However this was overcome by methodological triangulations where the research adopted questionnaires and interview guide for collecting data.

1.9 Basic assumption of the study

The study was based on the assumption that all Construction companies in Westlands district embraces project management best practices. It also assumed that the respondents answered the all questions correctly and truthful.

1.10. Definition of significant terms

Project management - Ways of carrying out the day to day project practices management and administrative activities and decisions from the beginning to the end of a project.

Project Management best Practice- A process that has been proven through implementation and tested use to add specific and measurable benefits and long - term value in terms of increased project performance outcome like decreased project cost, increased employee Productivity, improved client experience (rate of retention), and an increased number of new projects.

Organizational performance – Meeting set objective of profit maximization, time, cost, quality output, customer satisfaction and product /service innovation.

Project Manager- A qualified individual or a firm authorized by the owner to be responsible for the day to-day management and administration and for coordinating time, equipment, money tasks and people for all or specified portions of a specific project.

Organizational Performance-

Class A company-Construction and Engineering Companies whose contract sum is infinity (Any amount)

Class B Company-Construction and Engineering companies whose maximum contract sum is 10 billion

Client-Someone who pays for the professional services rendered.

Risk Management -Refers to the culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects.

Quality performance-The degree to which a project's quality objective is attained which is subjectively measured on a ranking scale.

Organization-A social unit of people, systematically structured and managed to meet a need or to pursue collective goals on a continuing basis.

Leadership- learned skills and knowledge processed by a person and is influenced by his or her attributes or traits, such as beliefs, values, ethics, and character.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Little has been done in Kenya to ascertain the influence and effect of Project Management Best Practices on organizational performance. This section contains literature review that is related to project Management Best Practices in Organizations with respect to Performance.

2.2. Project Management Practices

Traditional project management skills were developed from the requirements of construction and defense industries to plan, control and manage large, complex “tangible” projects (Morris, 1994). From these industries arose the so-called “hard” concepts of project success criteria in the form of controlling and managing schedule, cost and scope. Project management can also be seen as being about managing change (Cleland, 1995), and therefore project managers should consider themselves as change agents adding to the PM role an additional focus on the so-called “soft” aspects of relationship management.

Past research in Kenya has also shown that many building and construction projects have delayed have suffered uncontrolled cost escalation and have precipitated poor functional qualities Mwangi (1989). In 1983 Khadanda, et al carried out an investigation of project failures in Kenya and concluded that time and cost overruns are the rule rather than the exceptions. The main course of these failures has been expressed as lack of ways of handling contracts which ensures the planning, control and coordination of projects from inception to completion on time within cost and to require standards (Mbaya, 1991) Hence the need for PMBP to quality.

Organizations that have Project Management Offices (PMO) have centralized several aspects of project management in and around these organizational entities, making project management more visible in the organization and easier to study. Studying the influence of Project

Management Offices is therefore a practical means for studying project management as it is practiced in these organizations. Project Management Offices are small units that are often located outside the major organizational units. They are thus in a position to be appraised by stakeholders in many other units hence increasing the likelihood of producing good results for many reasons.

Several research works have identified certain practices and attributes within an organization, specifically project management firms and teams. These practices were carried out for the purpose of successfully managing projects. In a research conducted into the organizational learning practices in project management environment, it was concluded that project organizations should focus on building knowledge because increased knowledge is associated with increased project performance (Kotnour, 2000). Increased knowledge implies not encountering the same problems over and over again and not reinventing solutions to problems.

Khoo, et al (2000) undertook a study to identify the best practice in information technology in projects management in India. They identified key skills which they grouped into three categories namely organizational, team and Industry. Their study only focused on technological part of project management on performance and not all the factors that lead to organizations' performance hence worth studying the other factors. Gowan and Mathieu (2005) on the empirical study of 449 system managers found out that the good Information Systems (IS) project performance depends on greater degree on the intervention of specific project management practices (formal project methodologies and outsourcing). The project performance was however in the context of meeting project target dates only.

Project Management practices vary from one organization to the other and the performance of the outcomes is what makes a practice optimum (Bryde, 2003). The cause of variation in the PM practices may not be only due to the kind of organization but also the type and purpose of project and most importantly the level of performance desired. This observation falls in line with the finding made by Sharma and Gadenne (2002), in an investigation into the effect of quality management practices on performance. They identified through an inter-industry survey that quality management practices differed somewhat from industry to industry and organization to organization. The focus, though, was on quality performance and not overall project performance.

Still on quality Sharma and Gadenne (2002), in their investigation into an inter industry comparison of quality management practices and performance found out that there is a strong association between quality management practices and performance. This finding provides strong evidence concerning the effect that project management practices have on project performance. An investigation into this relationship is therefore necessary.

These findings gives an indication that the kind of project management practices engaged in for the management of a project depends on the kind of organization. This will hence have a subsequent relation to the project management team composition too. The practices present within different organizations therefore require identification and further examination. Subsequently, the influence of such practices on the performance of the corresponding projects executed becomes highly necessary to determine. The performance must also not be looked at with a highlight on time only or quality only. The effect will have to incorporate both time and quality not leaving out cost too. These three basic project objectives are fundamental to the totality of project performance.

2.3 Project Management Best Practices

Project management has evolved over time, becoming the principal mean of dealing with change in modern organizations. Best practices have occurred as a result of business evolution and of practicing project management at a global level. When practices vary from organization to organization or from project team to project team the question of which practices are the best subsequently arises. Ramabadron et al (1997) describes best practices in project management as optimum ways of performing works to achieve higher performance. The goal of every project manager is to achieve satisfactory performance and it is for this purpose that certain practices are undertaken. In determining whether certain practices are best or not, the need to measure the performance of the projects executed under such set of practices is highly imperative.

Harold (2010) pointed out that, companies had begun to realize that implementing project management was a necessity, not a choice by the 1990s. By 2010, project management had spread to virtually every industry and best practices were being capture. As project management evolved,

best practices became important. Best practices were learned from both successes and failures. In the early years of project management, private industry focused on learning best practices from successes. The government, however, focused on learning about best practices from failures. When the government finally focused on learning from successes, the knowledge of best practices came from their relationships with both their prime contractors and the subcontractors. Some of these best practices that came out of the government included:

- Use of life - cycle phases
- Standardization and consistency by use of Project Management systems
- Use of templates (e.g., for statement of work (SOW), work breakdown structure (WBS), and risk management]
- Transformational Leadership Styles
- Use of Trained integrated project teams (IPTs)
- Control of contractor - generated scope changes
- Use of earned - value measurement (Monitoring and Evaluation)

Best practices in project management, if followed, increase the chances of success in achieving goals when dealing with projects Museran e al (2000). In their article they presented the concept of best practice, the advantages of using best practices in project management, which are the best practices used today and also a comparison between two of the mostly used best practices methodologies in project management, Project Management Body of Knowledge (PMBOK) and Project Cycle Management Guidelines.

This knowledge helps the organization to better plan a project and meet cost, schedule, and performance requirements. The learning process must be made to include the practice of taking feed backs for executed projects. In support of this practice loo (2003) stresses that taking feedbacks from projects and learning from experiences have a significant influence on project performance. The presence of encountering the same problems over and over again is an indication of how often low significance is placed on knowledge building, which should include organizational learning and taking feedbacks from projects.

Having certain identified best project management practices within a particular project management organization enhances successful project management. Jawaharnesan and Price (1997) studied project management best practices in the United Kingdom (UK) construction industry and found that “preparing and organizing” and “developing project definition” were among the highest ranked tasks or activities. However, taking a look at Bryde’s (2003) assertion, that: “it is the performance that makes a practice optimum”, measurement of project performance is required for determination of optimum practices within a given organization.

The function of project definition is highly important. This is made evident in the numerous requirements outlined to be fulfilled at this stage of project development. According to “The Project Definition Rating Index (PDRI) for Building and Construction Projects” a project definition, which comes at the pre-project stage, must be adequate and cater for the type of building project too (PDRI, 1999). The PDRI also provides a checklist of recommended activities and milestones to define a project scope, which is intended to promote best practices in the building and construction industry. Harris and McCaffer (2005) stresses that during the project definition stage, safety measures must be established. The ability of a project manager to carry out the project definition function comprehensively therefore undoubtedly results in best practices. This function is however frequently overlooked in the construction industry.

For the project definition function, a good definition of scope must allow all the parties in the project to understand what is needed and to work towards meeting those needs. The frequency and the extent, to which construction professionals from the parties of consultant and contractors are usually involved in this project development stage, if present, are therefore necessary to know as a PM practice. This will give way to further investigation about how each party regards the importance of the project definition function to the project performance.

The establishment of management structures for the management of a project is one of the important activities required for accomplishing goals. Peter Drucker (1996) argues that management is the function, which involves getting things done through other people. Basically this involves the following, which are all aspects of setting organization matters:

- Getting Managers with leadership capabilities
- Getting staff with competence and appropriate skills
- Placing responsibilities on people for successful completion of the project
- Establishing clear delegated authorities
- Defining proper communication lines

Since these outlined duties relate to the matters concerned with internal organizational running, it may be argued that they are solely for the purpose of improving only organizational performance. Kotnour (2000) asserts that some of the internal organizational matters such as organizational learning practices increase project success too.

The tendency to have the project success increased therefore lies in the ability of the manager to develop certain strategies within the organization. The activity of setting a project organizational structure is, for instance, one of the major organizational matters whose influence on project performance may be significant. It is not only construction companies that are required to set up organizational structure for the management of a project. The nature and functions of organizational structures set up by client organizations especially structures meant to execute payments to contractors therefore require critical examination in order to determine their effect on project success.

The process of managing building projects requires development and monitoring and Evaluation of the programme for the works involved in order to attain success. Harris and McCaffer (2005) argues that both establishing a challenging but achievable programme and driving the Project to that programme are important activities to carry out as far as achievement of project success is concerned. Whilst establishing of works programme at the initial stage of the project is usually carried out promptly, the monitoring and evaluation of the programme to achieve project's objectives often experience bottlenecks. The method of monitoring and evaluating progress of works may have a link with how a project's programme is driven to achieve project objectives. How works progress of monitoring and evaluating is carried out is therefore worth investigating.

2.4 Organization Performance.

The word "performance" in the context of doing anything, is defined in advanced learners English dictionary as "How well or badly a person does a particular job or activity" In organization context where there is a tendency to narrow the term to what is applicable in the discipline concerned.

Performance is often identified as the ultimate dependent variable in the literature on organizations. The concept of organizational performance is not new. At the end of the 1950s and in the early 1960s, sustained efforts were made notably to understand the success of organizations. This literature developed in the 1960s and 1970s, and after 1980 narrowed down to concepts like quality (Boyne, 2003). Several words are used almost as synonyms to organizational performance for example, efficiency, output, productivity, effectiveness, health, success, accomplishment, and organizational excellence (Savoie & Morin, 2002). The concept of organizational performance has been adopted in this research because it is more appropriate in the context of organizational project management.

Armstrong (2006) argued that performance does not only relate to what has been achieved but also how it was achieved. The argument is that performance should be considered in both output and input. In input terms, performance refers to the behaviors' emanating from performers and relates to the level of effectiveness in using skills, competencies and knowledge, while in output terms, it is the achievement of quantified outputs. This thinking is consistent with the definition of performance as how well or badly an activity is done and points to the short comings of restricting the consideration of performance to the narrow quantified outputs only.

The broad treatment of performance as a concept can be seen in Kaplan and Norton (1992)'s balance scorecard, which extends consideration of organizational performance beyond the outputs and includes the related input behavior aspects. The framework sets out to present performance in terms of four perspectives. In addition to the financial perspectives, indicated by range of financial measures, how the customers, the source of financial gains, sees the organization is accorded equal importance. Other aspects of balance score card framework considers equally

important are what the organization must excel in and whether it is built with capability to continue the internal business operations, innovations and learning perspectives respectively.

2.5 Measures of organization performance.

The practice of management emphasizes efficient provision of relevant products/services in order to meet the needs of customers as a means of achieving the stated goals of the organization. The importance of organizational performance arises from the only fact by which an organization can be evaluated compared to its rivals

Targen (2003) emphasized the importance of matching the type of measures used to the situations and objectives of measurement. He argues that the situational effects on nature and type of measures arise from the effect on the source of data measurement, type of data measurement, the reference point and the organization being studied. Lack of benchmarking of the measurement to other organizations leads a lot to be desired.

Ailawadi et al (2003) points out the objective of measures applicable across organizations operating in diverse fields and also difficult to obtain. Their results pointed out a lot of assurances that comes with potential biases due to the use of self reported perpetual measures. They found out that objective data is itself not always the ideal and therefore should not necessarily form the validation reference for the self perpetual measures. They suggest that while subjective judgment of performances may take into account longer term view and organizational strategy, it may be difficult for a single objective measures to encompass the facets that need to be covered. This study will endeavor the researcher to find out how performance is measured in different organizations.

Richard et al (2008) pointed out the pervasive use of organizational performance in management research as the dependable variable attesting to this importance. However, it becomes very challenging to determine the methods and aspects of organizational performance.

2.6 Indicators of Organization Performance.

Indicators can be defined as being data or information that quantify the inputs, outputs and the process, products and the entire organization performance (FNPQ, 2002) performance indicators are essential for enterprises in which decision-making has to be based on performance analysis to obtain risk minimization related to equivocated decisions, judgment mistakes and re-work. The new models of quality, inspired on performance indicators, in order to allow qualifications and certifications, strengthen this opinion. Recent theories as the balanced scorecard one, from Kaplan (1992) and Norton (1997), have been applied and gathering adepts for all over the business world. It's commonplace that performance indicators are basic information tools.

A key performance indicator (KPI) is a business metric used to evaluate factors that may be vital to the success of an organization. KPIs differ per organization; business KPIs may be net revenue or a customer loyalty metric, while government might consider unemployment rates. On the contrary an educational organization may have a key performance indicator like the graduation rate and success in finding employment after graduation. Further to this the key performance indicators can trigger tasks related to the department in the college or university. During the process of the design of KPIs, all the employees in the organization play a crucial role. It is important to see that all employees understand the KPIs of the organization and have the ability to relate to the KPIs set for the department or the organization as a whole. Some of the key performance indicators may be reporting while some may be core to the business. Further some may be additional indicators to performance in an organization.

2.6.1. Technology and Organization performance

Information Technology is the key stone of progress all over the world now a day's.

Mousavi et al (2008) carried out study on the role of Information technology in organization procedures of the Iranian Taxation Affairs Organization. He found out that the country's taxation affairs organization fulfills targets such as increasing the portion of the taxation incomes in public budgets, increasing the taxpayer's satisfaction and decreasing expenses, established general project and plan under the title of taxation comprehensive plan. According to the specification of this plan and its influences on country's taxation affairs organization function, His article only

concentrated on the influence of the information technology on the improvement of country's taxation affairs organization with knowledge orientation approach hence worth to research on general organizations performance.

Nigel et al (2005) conducted a research on examining the association between Information technology and organization performance and how they conceptualize the key construct and their relationship. Their study revealed that Information Technology is Valuable to any Organization but the extent and dimensions are dependent upon internal and external factors including the complimentary organizational resource of the firm and the trading partners as well as the competitors and the macro environment. However they did not clearly indicate how Information Technology Impacts Performance of an organization.

Research by Surendra et al (2004) examined the issue of whether investment in information and communication technology (ICT), combined with organizational changes and worker skills contribute to better performance in Canadian firms. They found that Canadian firms have actively engaged in organizational changes in the areas of production and efficiency practices, human resource management (HRM) practices, and product/service quality-related practices. These practices along with ICT use are found to be related to better firm performance. They also found out that while ICT is productive on its own, it is more productive in firms that combine high levels of ICT with high levels of organizational change. The firms that combine ICT with organizational changes have a high incidence of productivity improvement and have high rates of innovation. These findings seem to suggest that to be successful, firms typically need to adopt ICT as part of a "system" or "cluster" of mutually-reinforcing organizational approaches. They also found that ICT and human capital are complements in the service sectors. The firms that combine high levels of ICT and high levels of worker skills have better firm performance.

Muhammad (2009) examined the impact of IT on organizational performance with respect to increase/decrease in income and in no of employees Vs IT expenses of Pakistani manufacturing and banking sectors over period of 1994-2005. His conclusion of research is that IT has positive impact on organizational performance of all the organizations but the banking sector performance

outstrips the performance of manufacturing sector. In the banking sector local companies are taking the lead, while in manufacturing companies multinationals are at the top.

2.6.2. Training and Organization Performance

The knowledge and skills of an organization's workforce has become increasingly important to its performance, competitiveness, and innovation (Lawler, et al, (1997). Workplace learning and continuous improvement are now considered essential for an organization to remain competitive (Salas, 2001). Thus, it is not surprising that employee training is a multi-billion dollar industry worldwide (Haccoun, 1998).

Phyllis, et al (2007) undertook a study aimed to advance understanding of the effects of training on organizational level outcomes by reviewing the results of previous studies that have investigated the relationship between training and human resource, performance, and financial outcomes. The results of meta-analysis from 67 studies suggest that training is positively related to human resource outcomes and organizational performance but is only very weakly related to financial outcomes. The relationship between training and firm performance may be mediated by employee attitudes and human capital. Furthermore, training appears to be more strongly related to organizational outcomes when it is matched with key contextual factors such as organization capital intensity and business strategy, in support of the contingency perspective. Further, training is related independently to organizational outcomes in support of the universalistic perspective of strategic human resource management rather than a configurationally perspective.

Irene et al (2008) conducted a research on the relationship between training and development and performance they expanded existing research on the subject by combining national and organizational factors through a hierarchical linear model to explore the training and development and performance relationship in 14 European countries. The main findings pointed out the importance of cultural, institutional and organizational factors in analyzing the relationship between training and development and performance. Their study did not clearly point out the impact of Training on Organizational performance.

Olaniyan et al (2008) also undertook a research on Staff Training and Development: A Vital Tool for Organizational Effectiveness. It has further become necessary in view of advancement in modern world to invest in training. They found out that new entrants into organizations have various skills, though not all are relevant to organizational needs. Training and development are required for staff to enable them work towards taking the organization to its expected destination. It is against the backdrop of the relative importance of staff training and development in relation to organization effectiveness that their paper addressed. Thus the role played by staff training and development can no longer be over-emphasized.

2.6.3 Monitoring and Evaluation and Organization performance

UNDP (2009) currently provides the most comprehensive guide to measuring public administration performance. The first part of the guide consists of guidance based on feedback from users of assessments tools and a distillation of good practices. The second part provides detailed information on public administration assessment tools, with nine assessment tools provided for assessing Public Human Resource Management. Many of these tools derive their indicators from private sector practice. The World Bank's Actionable Governance Indicators Instrument is arguably the most comprehensive in terms of breadth of indicators. There are a number of determinants of performance in public administration, including socioeconomic constraints and management. The use of M&E would be one factor affecting performance, but not necessarily the most influential (Boyne and Walker, 2005). Due to the above criticism on Monitoring and evaluation tools a thorough research on what to measure, the best indicators to use, whether such a framework is appropriate and how best to implement a chosen framework is wanting.

Hume and Wright (2010) criticizes that the system of evaluation with targets and goals is not always the best to ensure performance progress. Their paper suggests that an organization's teams or units should be provided with information on how they compare to others and what processes work best – that providing the resources with which to make changes and develop staff is sufficient to promote progress in performance. This approach would empower teams to drive their own progress on performance.

Ronald et al (2002) conducted a study on the conceptual frameworks and methods used to evaluate a multisite, regional capacity-development project in Latin America and the Caribbean undertaken to strengthen planning, monitoring, and evaluation in agricultural research organizations. The article discusses some of the challenges facing capacity development and its evaluation, outlines the procedure employed, and illustrates these with some consolidated findings in response to four evaluation questions. Their research revealed that few capacity development initiatives have been systematically and thoroughly evaluated. While substantial sums are being invested in the development of organizational and institutional capacities, the design and management of capacity development efforts leave much to be desired.

2.6.4. Risk Management and organization performance

Risk management is a rapidly developing discipline and there are many and varied views and descriptions of what risk management involves, how it should be conducted and what it is for. An effective risk management capability cannot only help prevent the next crisis, it can also serve as a competitive differentiator or by helping organizations achieve high performance.

Risk management is one of the key project management processes. Raz, et al (1999) carried out a study on the numerous tools that are available to support the various phases of the risk management process. They presented the results of a study designed to identify the tools that are most widely used and those that are associated with successful project management in general, and with effective project risk management in particular. The study was based on a questionnaire administered to a sample of project managers from the software and high-tech industries. The results analyzed which tools are more likely to be used in those organizations that report better project management performance and in those that value the contribution of risk management processes. Their study suggested that more extensive use of risk analysis tools is associated with better project management practice hence high performance.

Wasim Ullah (2009) carried out a study that examines the effect of risk management (R.M) practices on the organizational performance of Pakistan's Telecom sector companies; specifically the cellular mobile operators. The cellular mobile segment of the industry is considered an engine of growth for the telecom sector in Pakistan. The entire populations of five firms were selected and the

results were informative about the significance of R.M practices. The findings revealed the fact that organizations with R.M have significant control over uncertainties or rather crisis management and this predictive ability helps in timely development of contingency plans to stop erosion of organizational income; thereby improving their organizational performance. Organizations that have formally embedded these with organizational goals have a competitive edge over those organizations that have informal risk practices in place or absolutely no R.M practices. The findings, therefore, supported that the integration of RM practices and organizational objectives facilitates the achievement of optimal organizational performance. The evidence also suggested that regulators should proactively implement formal risk management regulations in telecom industry.

2.6.5 Leadership and Organization performance

Peter Drucker (quoted in Ulrich, Zenger & Smallwood, 1999: xii) captures this notion by simply stating: "Leadership is all about results". Leadership has existed for as long as people have interacted, and it is present in all cultures. Rukmani (2010) carried out a study aiming to know the effect of transformational and transactional leadership style on organizational effectiveness. The researcher used multifactor leadership questionnaire for evaluating leadership style of managers, who are working in public sector organization, Tamil Nadu, India. 300 managers are approached to collect the information. This research addressed, how important is transformational leadership compared to transactional leadership in public sector organization. He found out that managers have perceived both transformational and transactional leadership style as important in the public sector organizations, although transformational leadership is considered slightly more important in organizational effectiveness. His study put more effort on efficiency and not performance of an organization.

Ganesh (2009) conducted a study to find the Leadership styles and Organizational Effectiveness in Multinational firms in selected Organizations in India. Her study aimed at investigating the relationship between various dimensions of behavioral styles to the phenomenon of Organizational Effectiveness. She found out that Organizational Effectiveness is not a direct function of the Leadership style only, rather it is moderated by the factors of task characteristics,

such as need satisfaction and specific background variables, including age, education and length of experience.

Olowabu (2007) also carried out a research on Evaluation of leadership and Organizational Performance in Small-Scale industries in Nigeria. He concluded that to attain the objectives of small-scale industries in Aba, Abia state Nigeria, it was necessary that leadership recognizes the needs of the workers, employ appropriate motivational tool such as promotion of staff based on merit and skills, provide suitable working environment and provide an appropriate leadership style that will encourage free flow of information among employer, superior officers and other employees.

Daren (2005) conducted a research to examine the relationship between transformational leadership and organizational Performance in the top 100 public companies in Canada as measured by total revenue. He found out that transformational leadership is a common style practiced by leaders of the best performing public companies in Canada, the poorer performing companies tended to have lower survey ratings of transformational leadership than leaders of other companies and leader tenure in the organization correlated positively with ratings of transformational leadership. While the results are positive with demonstrated statistical significance in some constructs and provide some interesting insights, they may not be a catalyst for increased leadership training and development.

Several reasons indicate that there should be a relationship between leadership and performance. The first reason relates to practice. Today's intensive, dynamic markets feature innovation-based competition, price/performance rivalry, decreasing returns, and the creative destruction of existing competencies (Santora et al., 1999; Venkataraman, 1997). Scholars and practitioners suggest that effective leadership behaviors can facilitate the improvement of performance when organizations face these new challenges (McGrath and MacMillan, 2000; Teece, Pisano and Shuen, 1997). Understanding the effects of leadership on performance is also important because leadership is viewed by some researchers (e.g. Zhu et al., 2005) as one of the key driving forces for improving a firm's performance. Effective leadership is seen as a potent source of management development and sustained competitive advantage for organizational performance

improvement. Despite leadership-performance relationship suggested by some researchers, current findings are inconclusive and difficult to interpret. There is a need to re-examine leadership-performance relationship.

2.7 Conceptual Framework

In this section we discuss the PMBP and how they influence organization performance and the Summary is shown the figure 2:1.

Independent Variables

Project Management Best Practices

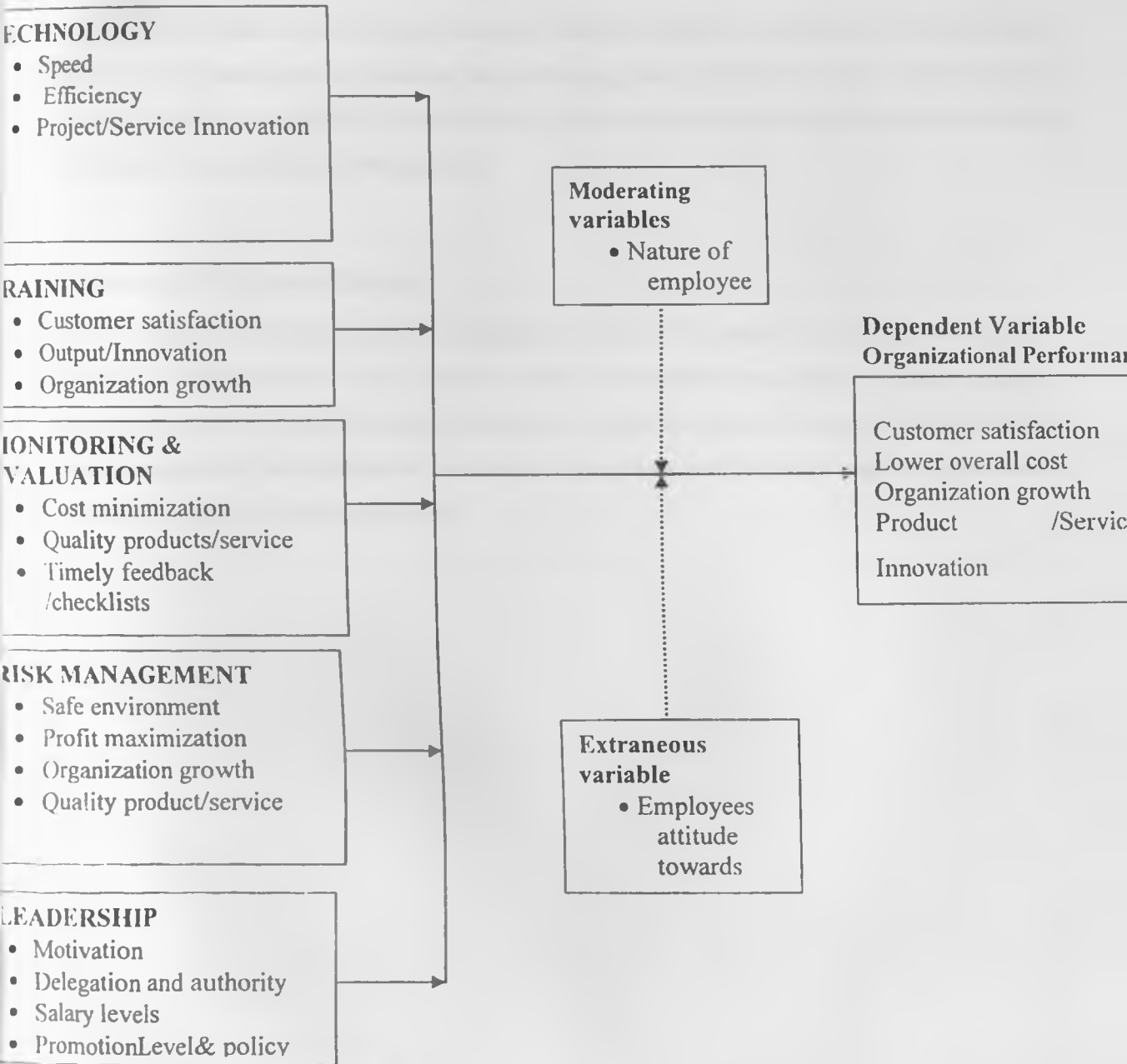


Figure2:1: Conceptual Framework

2.7.1 Discussion of conceptual Framework.

The conceptual framework indicates how the five independent variables which include information technology, training, monitoring and evaluations, risk management and leadership are related to organizational Performance being the dependable variable. This framework assumes that once the independent variables are implemented and adhered too, they establish positive effects on organizational performance thus the indicators under the variables. The moderating variable is time management. However the intervening and extraneous variable which include employees attitude towards work and nature of employee respectively might affect organizational performance either positively or negatively.

2.8 Summary of Literature Review.

From this chapter it is evident that the independent factor of this study is the influence of project management best practices. The Literature review also studies the depend variable which is organizational performance. The study discusses in detail the factors that may have influenced project management best practices in construction companies and their influence in organizational performance based on the five objectives.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This section described the research methodology to be adopted for this study under the following subtopics; research design, target population, sample population, sample size and sampling procedures, research instruments, validity and reliability of the research instruments, data collection procedures and data analysis techniques.

3.2 Research Design

The research used the descriptive survey research method. According to Mugenda and Mugenda (1999) descriptive research involves the description, recording, analysis and interpretation of conditions that now exist. It also involves some type of comparison and contrast and may attempt to discover relationships that exist between non manipulated variables. Describe descriptive survey as an attempt to collect data from members of the population in order to determine the current status of the population with respect to one or more variables. Descriptive design was selected for this study to find out the influence of project management best practices on organizational performance. It enabled the researcher obtain the current status of the information regarding phenomena and described what existed with respect to variables in the study and ensured collection on large amount of data. This method was suitable because detailed description of existing situations will be required with an intention of justifying current best practices of project management in the respective construction companies.

3.3 Target Population.

Arasian, (2000) defined target population as the population that the researcher would ideally like to generalize to. It also refers to any group of institution, people or object that has at least one characteristic in common. For this study, the researcher sampled construction companies in Westlands district, Nairobi County. The target population for this study consisted of 33 registered Construction Companies of Classes A and B, 33 Project Managers, 33 Technical Managers and 80 Project Supervisors. Source: www.website.co.ke/Directory/Building Engineers/Engineers

3.4 Sample Size Selection and Sampling Procedures.

This section discusses the Sample Size Selection and Sampling Procedures used in the study.

3.4.1 Sample Size and Selection

The sample was obtained using Yamane (1967:886) formulae as shown below to come up with appropriate samples.

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

For the case of the Construction Companies there were 33 companies which were sampled at a precision level of 5% as outlined below;

Where N is the target population i.e. (33 companies)

e is the precision rate (error to make at 0.05)

n is the sample size thus 30 Construction Companies

The sample consisted of 91 % of the construction companies which resulted to 30 companies.

3.4.2 Sampling Procedure

The study adopted simple random sampling to sample 30 companies out of 33 Companies in Westlands District to ensure that each Company got an equal chance of being selected. The researcher assigned numbers to the list of the 33 companies and used the formula Randbetween from an excel sheet and sampled the 30 companies. Initial investigation show that 9 companies belong to Class A and 24 belong to class B. The researcher used proportional allocation and selected 8 companies from Class A and 22 Companies from class B totaling to 30. Of the 30 randomly selected Companies above, the researcher purposively selected 1 Project Manager, 1 Technical Manager and 2 Project Supervisors from each company resulting into a total of 30 Project managers, 30 Technical Managers and 60 Project Supervisors. The total sample was 120 respondents.

3.5 Research Instruments.

The researcher used the following instruments: Questionnaire and Interview guide.

3.5.1 Questionnaires

The data was collected using questionnaires which consisted of parts (i), (ii) and (iii) which was filled by the Technical Managers and Project Supervisors. The questionnaire had open ended

questions, closed ended questions and statements. Part (i) sought the background information e.g. the level of Education. Part (ii) had structured questions meant to elicit close and open ended responses from the project supervisors and Technical Managers. Part (iii) gathered information on the opinions on the influence of project management best practices on organizational performance

3.5.2 Interview Guide

The researcher used one interview guide to obtain information on the influence of project Management Best Practices on Organizational performance. Both closed ended and open ended questions were used to obtain in-depth information from the project Managers.

3.6 Validity of the Instrument.

To ensure validity of the research instrument and data collection, the researcher used source triangulation. According to Ogula (1998), methodological triangulation is applied when the researcher uses more than one data collection methods to measure variables. Consultation with the supervisor was made to ensure the validity of the instruments besides the pre-test.

3.7 Reliability of the Instrument.

The split half method during the pre-test was used to establish the internal consistency of the instrument (Roscoe, 1989). This involves splitting the instruments into two: one half of even numbered items and the other of odd numbered items. This is to obtain the reliability of the instrument. The correlated result values provide the internal consistency of the instrument that is; the degree to which the two halves of the test are equivalent or consistent in terms of items. The Pre-Test was carried out in one facility which did not participate in the final study. The coefficient (r) is obtained through the Pearson product formula. To obtain the full reliability of the instruments, the Spearman-Brown prophecy formula was used.

Reliability of entire test = $\frac{2(\text{reliability of 0.5 test})}{1 + \text{reliability of 0.5 test}}$

That is: $\frac{2r}{1+r}$ Where $2r$ = correlated reliability

$1+r$ = uncorrelated reliability

N = number of parts ($n=2$)

(Tuckman, 1978)

3.8 Data Collection Procedure

The researcher collected data from the field through questionnaires and interview guides. The administration of the research instrument was done by the researcher both at the pilot and the main study. A Research permit was obtained from the National Council of Science and Technology; a copy was resented to the company managers of the respective organizations. The researcher intends train one researcher assistant who helped her administer and collect the questionnaires following day from the department. This ensured that respondents did not have too much time discuss and modify their responses. All respondents were assured of confidentiality and anonymity. The researcher also intends to go though the documents and face to face interviews with the general Managers and project managers within that week. This was done after booking for an appointment with the respective respondents of the companies to confirm their availability. Telephone interviews were conducted if the respondents are not available at the premises.

3.9 Data Analysis Techniques

This is breaking down of raw data from the field into simpler and manageable information for easy understanding .The analysis of data was started with editing and inspection of data pieces in order to identify spelling mistakes and any other wrongly answered or unresponded to items. This helped the researcher to compute and analyze the data collected, interpret the findings and lastly generate conclusions and recommendations.

3.9.1 Quantitative Data Analysis

Qualitative Data are numerical values or number. The researcher categorized quantitative data and analyzed those using descriptive statistics such as frequency distribution and percentages. Items ranked on the likert scale shall be analyzed using descriptive statistics while the non-ranked items was arranged to identify frequencies or opinions and views that shall assist in explaining and grounding further findings of the study especially with regard to research questions. The data shall then be computed using the Statistical Package for Social Sciences. (SPSS)

3.9.2 Qualitative Data Analysis.

Qualitative Data was presented in words form. Such data was generated form the open ended questions and interviews. Therefore the researcher analyzed qualitative respondents own words. Emerging themes were presented in form of narrative.

3.10 Operational Definition of Variables

Table 3.1- Operational Definition of Variables

Research Objectives	Type Of Variable	Indicator	How To Measure The Indicator	Data Collection Methods	Level Of Scale
To establish the influence of Technology on Organizational Performance	Independent	Speed Efficiency Project management information systems increased number of new projects.	Adequacy of the equipment Relevancy of the systems used Improved client experience (rate of retention) Availability of resources and facilities.	Questionnaire Interview Guide	Ordinal mode
To establish the extent to which Employee Training influences Organizational Performance.	Independent	Customer satisfaction Output/Innovation Efficiency and reliability	Effective service delivery Quantity of outputs Quality of the work done		Ordinal
To assess the extent to which Monitoring and Evaluation techniques influences Organizational Performance.	Independent	Cost minimization Quality products/service Timely feedback /checklists	Effective service delivery Quantity of outputs Quality of the work done Less customer	Questionnaire Interview Guide Document analysis	Ordinal

			complaints		
To determine how Risk Management Influences Organizational Performance	Independent	Safe environment Profit maximization Organization growth Quality product/service	Awareness of organizational regulations. Compliance to organizational Regulations No. of accidents	Questionnaire Interview Guide Document analysis	Ordinal
To asses the extent to which Leadership influences Organizational Performance.	Independent	Motivation Delegation Customer satisfaction Improved staff performance	Completion of assigned tasks on time Fairness by Management Favorable working environment. Good social life	Questionnaire Interview Guide	Ordinal

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the analysis of the data collected, presentation and its interpretation in relation to the objectives and aim of the study.

4.2 Questionnaire return rate

The researcher administered questionnaires to 120 respondents purposively sampled to participate in the study. A return rate of 96 (80%) was recorded which was deemed adequate for the study based on De Vaus (1986) who suggests that eighty percent is good and adequate for the study.

4.3 Background information

The study sought to establish demographic characteristics based on respondent's gender, age, and work experience and education qualification since all these have a bearing on organizational performance and the findings are presented as follows.

4.3.1 Distribution of respondents by Gender

The study sought to know distribution of respondents by gender in construction companies. The results are shown in Table 4.1.

Table 4.1: Gender of the respondents

Gender	Frequency	Percent
Male	68	70.8
Female	28	29.2
Total	96	100.0

The results on Table 4.1 show that 68(70.8%) of the total respondents were males while 28(29.2 %) were females hence an indication that male staff dominate the field of construction. However 29.2 % is almost 30% which makes it have a valid gender representation as per the master builders' manuals in the construction world.

4.3.2 Respondents age range

The research sought to find out the age bracket of the respondents in order to ascertain their performance levels. The results are listed in table 4.2.

Table 4.2: Age range of the respondents

Age	Frequency	Percent
18-25 years	20	20.8
26-35 years	43	44.8
36-45 years	18	18.8
45 years and above	15	15.6
Total	96	100.0

According to Table 4.2, majority of the respondents were between ages 26-35. These are young energetic men and women who are capable of performing their respective duties with large output. With 43 (44%) of the respondents within the age range of 26-35 years shows that the bulk of the work force is still young and energetic. Therefore most members of the work force are within the productive age. This encourages effective performance.

4.3.3 Education qualification

The study sought to know education qualifications of the respondents since this will assist in relating educational levels of the respondents to organizational performance and the findings are summarized in table 4.3.

Table 4.3: Education qualifications of the respondents

Education Qualification	Frequency	Percent
O-level	4	4.2
Certificate	4	4.2
Diploma	16	16.7
Undergraduate	52	54.2
Post graduate	20	20.8
Total	96	100.0

The findings on table 4.3 indicate 52 (54%) have undergraduate degrees while O-Levels and certificate holders had the lowest (4.2%). This is an indication that the majority of the managers are highly qualified with relevant knowledge and skills to handle challenges at work indicated in the staff appraisal forms. Further 20 (20.8%) had postgraduate degrees. This is an indication that companies are employing more educated people. These are highly skilled man power to compliment the lower cadre and also to blend the academic qualifications of the managers.

4.3.4 Years of service to the organization

The study sought to find out the period the respondent has been with the organization to ascertain the rate of retention. Table 4.4 shows the results.

Table 4.4: Respondents years of service to the organization

Years of service to the organization	Frequency	Percent
Below 2 years	25	26.0
2-5 years	35	36.5
5-10 years	23	24.0
10 years and above	13	13.5
Total	96	100.0

According to table 4.4., majority of respondents had served for more than 2 years i.e. between 2-5 years representing 36.5%, while those who had served for 5-10 years represented 24.0% and

13.5% had served for 10 years. This shows that most of the staff have been with the Companies consistently and are more likely to know about the company(s) performance hence high rate of retention.

4.3.5 Respondents experience in construction projects.

The research sought to know the respondents experience in construction projects. The data is tabulated in table 4.5.

Table 4.5: Respondent’s experience in construction projects

No of year in experience	Frequency	Percent
Under 5 years	7	7.3
6-10 years	30	31.3
11-15 years	37	38.5
16-20 years	15	15.6
above 21 years	7	7.3
Total	96	100.0

Table 4.5 above illustrates that 37(38.5%)of respondents have between 11 to 15 years work experience, followed by 30(31.3%) of respondents having between 6to 10 years work experience while 15(15.6%) of them have between 16 to 20 years work experience which is slightly more than those who have work experience above 21 years. However, 7(7%) of respondents have less than 5 years of practical experience. Therefore, the results show that they are qualified enough in case of experience to offer reliable opinions in the questionnaire. The results in regard to number of years in reference to experiences show that those with 11 to 15 years are many (37) and therefore provided representative information about the construction projects.

4.4 Motivation for project management best practices

The study posed a question to respondents on factors that motivated the implementation of PMBP such as demanding customers, environmental issues/considerations, need to minimize cost and improve performance and pressure form competitors and the findings are summarized in table 4.6.

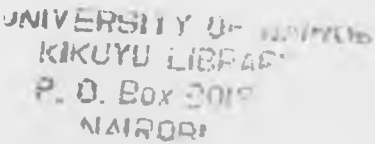


Table 4.6: Motivation for implementation of PMBP

Motivation factors	Frequency	Percent
Demanding customers	8	8.3
Environmental issues/considerations	18	18.8
Need to minimize costs and improve performance	68	70.8
Your company's Chief Executive decision	0	0.0
Pressure from competitors	2	2.1
Total	96	100.0

Table 4.6 show that majority of respondents 68(70.8%)were of the opinion that organizations were motivated to implement project management best practices with the aim of minimizing costs and improve performance. Nevertheless 18(18.8%) were of the opinion that environmental issues/consideration was the main reason why implementation of the practice was introduced. Demanding customers and pressure form competitor was represented by 8(8.3%) respondents .No respondent was of the opinion that the practice was implemented as a result of chief executive decision. This results is an indication that implementation of project management best practices yields better performance hence worth practicing.

4.5 PMBP and organizational performance

In this section the research analyses the influence of project management best practices in construction companies.

4.5.1 Information Technology and organizational performance

The study used information technology themes where respondents were required to rate various indicators such as the type of systems used, effectiveness of the systems and their relevancy on organizational performance and the findings are as follows.

Information systems available in the organization and their effectiveness

The study sought to find out the availability of information system and their effectiveness shown in table 4.7

Table 4.7: Cross tabulation information systems available in the organization and effectiveness of the system/program used.

		Effectiveness of the system/program used					
		Very Ineffective	Neither effective nor ineffective	effective	very effective	Total	
Information systems available in the organization	yes	Count	3	7	61	25	96
		% of Total	3.1%	7.3%	63.5%	26.0%	100.0%
		Total					
Total		Count	3	7	61	25	96
		% of Total	3.1%	7.3%	63.5%	26.0%	100.0%

In reference to table 4.7 all the respondents representing 100% confirmed the availability of Project Management Information systems in their respective organization. Majority of the respondents 61(63.6%) were of the opinion that the information system used is effective while 25(26.0%) very effective. Further, 7 (7.3%) were not certain whether the information system is effective or not while 3(3.1%) were of the opinion that the information systems were ineffective. The results indicate that all projects operate to their full capacity because of the information system support hence production speed enhanced with high output which has a positive influence in organizational performance.

Information Management systems used in construction companies

The study sought to find out the type of Information management systems used in construction companies. The results are indicated in table 4.8.

Table 4.8: Information Management systems

Information management systems	Frequency	Percent
Ms Project	36	37.5
Power project	9	9.4
Ms Excel, internet and Ms outlook	12	12.5
Custom made ERP	9	9.4
Primavera	3	3.1
Spss and Epidata	6	6.3
Build soft and intersoft	5	5.2
Sage Accounting and quick books	5	5.2
Maximo	3	3.1
Archicad, Autocad and Radiocity Z	8	8.3
Total	96	100

From the survey results in Table 4.8 above, 36(37.5%) of the organizations use Microsoft Project for project planning and scheduling while 12(12.5%) of the organizations use Microsoft Excel, internet and Ms Outlook. Custom made ERP, Primavera, SPSS and Epidata, Sage accounting and quickbooks, Power project, Archicard, AutoCAD and Radiocity Z and Maximo information management systems were represented by less than 10%. Overall, the percentage of the use of computer software for planning, estimating and finance in the respective construction companies is quite satisfactory. With Ms Project represented by the largest percentage is a clear indication that it is efficient and relevant to almost all their projects and yield results as per the organizations expectation.

Effectiveness of systems used and organizational performance

On whether effectiveness of system used influences organizational performance, the responses were as shown in table 4.9.

Table 4.9 Cross tabulation of effectiveness of the system used and the respondent s views on the overall organizational performance

			Respondents views on the overall comment of organizational performance			Total
			As Expected	Better than Expected	Much Better than Expected	
Effectiveness of the system/program used	Very Ineffective	Count	2	1	0	3
		% of Total	2.1%	1.0%	.0%	3.1%
	Neither effective nor ineffective	Count	3	2	2	7
		% of Total	3.1%	2.1%	2.1%	7.3%
	effective	Count	25	25	11	61
		% of Total	26.0%	26.0%	11.5%	63.5%
	very effective	Count	9	12	4	25
		% of Total	9.4%	12.5%	4.2%	26.0%
Total	Count		39	40	17	96
	% of Total		40.6%	41.7%	17.7%	100.0%

Based on the information in table 4.9, majority of the respondents 37(38.8%) were of the opinion that the effectiveness of the system used is better than expected while 34(35.4) as expected. Among those whose opinions was much better than expected were 15(15.1).It is evident enough that there is a strong relationship between system effectiveness and overall performance.

Relevancy of system used

The study sought to find out information on the relevancy of system used .Table 4.10 explores the same.

Table 4.10: Cross tabulation of information systems available in the organization and relevancy of the system used to the duties and roles.

		Relevancy of the system used to the duties and roles			Total	
		neutral	agree	strongly agree		
Information systems available in the organization	yes	Count	4	56	36	96
			4.1%	58.3%	36.5%	100%
Total		Count	4	56	36	96
			4.1%	58.3%	36.5%	100%

The results in Table 4.10 indicates that 96(100%) were in agreement that information systems are available on their organizations with 56(58.3%) of the respondents agreeing with the relevancy of the system used. Further 35 (36.5%) strongly agreed with the relevancy of the systems while Less than 5% were not in agreement with the relevancy of the systems used. With the majority agreeing to the statement is a clear indication that there is innovation of new products and services which allow projects to be well managed thus organizational performance.

Relevancy of the system used and organizational performance.

The study went further to asses whether relevancy of the system used have an influence on organizational performance and through cross tabulation the results were indicated in table 4.11.

Table 4.11: Cross tabulation of relevancy of the system used and respondent s views on overall organizational performance

			Respondents views on the overall comment of organizational staff performance			Total
			As Expected	Better than Expected	Much Better than Expected	
Relevancy of the system used to the duties and roles	neutral	Count	3	1	0	4
		% of Total	3.1%	1.0%	.0%	4.2%
	agree	Count	26	23	7	56
		% of Total	27.1%	24.0%	7.3%	58.3%
	strongly agree	Count	10	16	10	36
		% of Total	10.4%	16.7%	10.4%	37.5%
Total		Count	39	40	17	96
		% of Total	40.6%	41.7%	17.7%	100.0%

According to table 4.11, 39(40.6%) of the respondents agreed with the relevancy of the system used and were of the opinion that the organizational performance is better than expected,36(37.5%) as expected and 27(28.1%) much better than expected .This is an indication that system used are relevant and contributes positively to organizational performance.

4.5.2 Training and Organizational performance.

The study sought to assess whether training as a measure of PMBP influences organizational performance based on the five indicators of relevancy, effectiveness, efficiency, impact and sustainability.

Training programme after employment and the financier of the program.

The research sought to find out if there is any training programme offered to the employees after employment and who finances the training. The results are shown in table 4.12.

Table 4.12: Cross Tabulation of Training programme after employment and financier of training.

			Financier of training				Total	
			Fully Sponsored	Self Sponsored	Partially Sponsored by the organization	Fully Sponsored by the organization		Other Sponsor
Respondent type of training	On the Job Training	Count % within Financier of training	19 79.2%	3	3 60.0%	55 87.3%	3 75.0%	80 83.3%
	Off the Job Training.	Count % within Financier of training	5 20.8%	2 40.0%	8 12.7%	1 25.0%	16 16.7%	
Total		Count	24	5	63	4	96	

Findings in table 4.12 show that all 96 (100%) of the respondents were enrolled in a training programme after employment and they had completed the programme with 80(83.3) on job training and 16(16.7%) off the job training. Further finding also revealed that 24 (25%) were fully self sponsored, 5(5.2) partially sponsored by the organization, 63(65.6%) fully sponsored by the organization and finally 4(4.2%) were financed by other sponsors. With the all the respondents having enrolled for a training program after employment and majority fully financed by the organization is an indication that the respective companies encourage training for continuous growth and development hence high performing organization.

Relevancy of Training programs

In order to find out Performance assessment of training programs, the question; 'To what extent is the training program relevant to trainees need, job and performance?' was posed. The results were as tabulated in table 4.13.

Table 4.13: Cross tabulation of Performance Assessment of Training Programs is relevant to trainees need, job and performance and respondent views on organizational performance

			Respondents views on the overall comment of organizational performance			Total
			As Expected	Better than Expected	Much Better than Expected	
Performance Assessment of Training Programs is relevant to trainees need	Weak	Count	1	0	0	1
		% of Total	1.0%	.0%	.0%	1.0%
	Acceptable	Count	2	1	0	3
		% of Total	2.1%	1.0%	.0%	3.1%
	Good	Count	24	24	10	58
		% of Total	25.0%	25.0%	10.4%	60.4%
Very good	Count	12	15	7	34	
	% of Total	12.5%	15.6%	7.3%	35.4%	
Total	Count	39	40	17	96	
	% of Total	40.6%	41.7%	17.7%	100.0%	

Findings on table 4.13 show that 39(40.6%) were of the opinion that Assessment of Training Programs is relevant to trainees need thus yielding better than expected results. Further 36(37.5%) were also in agreement on the relevancy of training with organization performance as expected while 17(17.7%) were of the opinion that organization performance is with much better than expected. This is a clear indication that relevancy of training yields high organizational performance.

Effectiveness of Training

As an indicator of training, the study sought to establish the effectiveness of the value of training in terms of returns and meeting expectation shown in table 4.14.

Table 4.14: Cross tabulation of effectiveness of the value of training in terms of returns and meeting expectations and organizational performance.

			Respondents views on the overall comment of production out put and returns			Total
			As Expected	Better than Expected	Much Better than Expected	
Effectiveness of the value of training in terms of returns and meeting expectations	Weak	Count	1	0	0	1
		% of Total	1.0%	.0%	.0%	1.0%
	Acceptabl e	Count	1	5	1	7
		% of Total	1.0%	5.2%	1.0%	7.3%
	Good	Count	25	22	11	58
		% of Total	26.0%	22.9%	11.5%	60.4%
	Very good	Count	12	13	5	30
		% of Total	12.5%	13.5%	5.2%	31.3%
Total		Count	39	40	17	96
		% of Total	40.6%	41.7%	17.7%	100.0%

Table 4.14 show that majority of respondent 37(38.5%) were in agreement that effectiveness of the value of training in terms of returns and meeting expectations is as expected followed by 35(36%) better than expected and finally 15(15.5%) much better than expected. This is an indication that there is a strong relationship between the two variable hence high production output and returns.

Impact of training success in enhancing self assessment and the ability to improve knowledge

In order to find out the impact training success in enhancing self assessment and the ability to improve knowledge on Customer satisfaction, the variables were cross tabulated the results are shown in table 4.15.

Table 4.15: Crosstabulation of Impact of training success in enhancing self assessment and the ability to improve knowledge and Customer satisfaction

			Respondents views on the overall comment on customer satisfaction			Total
			Better than Expected	Much Better than Expected	Total	
Impact of training success in enhancing self assessment and the ability to improve knowledge.	Weak	Count	1	0	0	1
		% of Total	1.0%	.0%	.0%	1.0%
	Acceptabl e	Count	5	8	4	17
		% of Total	5.2%	8.3%	4.2%	17.7%
	Good	Count	27	20	7	54
		% of Total	28.1%	20.8%	7.3%	56.3%
	Very good	Count	6	12	6	24
		% of Total	6.3%	12.5%	6.3%	25.0%
Total		Count	39	40	17	96
		% of Total	40.6%	41.7%	17.7%	100.0%

Table 4.15 show that majority 33(34.3%) were of the opinion that Impact of training success in enhancing self assessment and the ability to improve knowledge and yield expected results. A good number 32(33.3%) were in agreement that product and service innovation was better than expected and finally 13(13.5%) much better than expected. The finding signifies a strong

relationship Training and customer satisfaction hence high rate of retention for both the external and internal customers.

Efficiency of training in terms of cost and time allocation.

The question 'How efficient is the training program in terms of cost and time allocation'? Was posed and the results for this question are as in table 4.16.

Table 4.16: Efficiency of training in terms of cost and time allocation

Efficiency of training	Frequency	Percent
Very Weak	0	0.0
Weak	3	3.1
Acceptable	47	47.6
Good	37	37.1
Very good	13	13.2
Total	96	100.0

Results in table 4.16 show that 47 respondents represented by 47.6% moderately accepted the efficiency of the training. 37 (37.1%) was of the opinion that the efficiency of training is good while 13(13.2%) said it was very good. This is an indication that the speed of service delivery and customer satisfaction was still not to the expected standards due to cost and time allocation of the training.

Training sustainability in terms of the ability to motivate continued development

The student went further to asses the extent to Training sustainability in terms of the ability to motivate continued development influences Product /service innovation. Through cross tabulation, the results are indicated in table 4.17.

Table 4.17: Crosstabulation of sustainability in terms of the ability to motivate continued development and Product /service innovation

		Respondents views on the overall comment on product/service innovation			Total	
		As Expected	Better than Expected	Much Better than Expected		
Sustainability in terms of the ability to motivate continued development	Count	1	0	0	1	
	% of Total	1.0%	.0%	.0%	1.0%	
	Acceptabl e	Count	0	1	1	2
	% of Total	.0%	1.0%	1.0%	2.1%	
	Good	Count	28	26	12	66
	% of Total	29.2%	27.1%	12.5%	68.8%	
Very good	Count	10	13	4	27	
	% of Total	10.4%	13.5%	4.2%	28.1%	
Total	Count	39	40	17	96	
	% of Total	40.6%	41.7%	17.7%	100.0%	

Table 4.17 show that close to half 39(40.6%) were of the opinion that Impact of training success in enhancing self assessment and the ability to improve knowledge and yield better results than expected. A good number 38(39.5%) were in agreement that product and service innovation was as expected and finally 16(16.6%) much better than expected. The finding signifies positive significance between Training and product/service innovation hence continuous improvement.

4.5.3 Monitoring and Evaluation and organizational performance.

Questions seeking respondent’s views about monitoring and evaluation as a best practice aimed at improving project outcome were posed. The indicators under M& E were knowledge and skills required to effectively use M&E tools and techniques, accuracy of methods used, ordering variation, Evaluation stages, Stake holders involved and project life cycle.

Knowledge and skill in monitoring and evaluation of project

Table 4.18 contains results through cross tabulation of respondent’s knowledge and skills required to effectively use monitoring and evaluation tools and techniques and effectiveness of the tools used.

Table 4.18: Cross tabulation of respondents knowledge and skills required to effectively use monitoring and evaluation tools and techniques and effectiveness of the tools used

		Effectiveness of the tools used						Total
		very ineffective	ineffective	neither effective nor ineffective	effective	very effective		
Respondents knowledge and skills required to effectively use monitoring and evaluation tools and techniques	Yes	Count	1	0	9	63	21	94
			1.0%	0.0%	9.4%	65.6%	21.9%	97.9%
	no	Count	0	1	0	0	1	2
			0.0%	1.0%	0.0%	0.0%	1.0%	2.1%
Total		Count	1	1	9	63	22	96
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Findings in table 4.18 indicate that 94 respondents represented by 97.9% had knowledge and skills to effectively use monitoring and evaluation tools available in their respective companies and only 2(2.1%) had no knowledge to use. Further findings in relation to effectiveness from the respondents who had knowledge revealed that 63(65.6%) were of the opinion that the tools are

effective, 21(21.9%) very effective while 1(1%) very ineffective. With the majority of the respondents having knowledge and agreeing to the effectiveness of the tools used is an indication that project scope and life cycle is adhered too thus no unnecessary delays. This encourages performance.

Tools and techniques used to monitor and evaluate projects

Table 4.19 contains results from the question on the tools and techniques used to monitor and evaluate projects.

Table 4.19: Tools and techniques used to monitor and evaluate projects

Tools and techniques	Frequency	Percentage
Attendance register and survey and logical framework	3	3.1
Case Studies and control sheets	6	6.3
Check/Tally sheets and questionnaires	3	3.1
Company standards and clients quality requirement and contract time frames	3	3.1
Custom made tools for specific project	17	17.7
duration/timing of project, site visits and proper planning techniques	15	15.6
distribution logs and participatory framework	3	3.1
Site meetings, progress reports, project evaluations check list	20	20.8
Progress against planning schedules and site progress trackers	8	8.4
Progress reports, program of works, measurement of works and joint inspection of works	8	8.4
Project performance and Audit reports	10	10.4
project reports, site photographs and site meetings		
Total	96	100.0

From survey in table 4.19 above, tools for monitoring and evaluation of projects varied from company to company though some and had similar tools used spread out. Examples of the tools

used are used were Project performance and Audit reports, progress against planning schedules and site progress trackers distribution logs and participatory framework, custom made tools for specific project and company standards and clients quality requirement and contract time frames Site meetings, progress reports, project evaluations check list was represented by majority of the companies at 20%.The remaining tools and techniques had less than 20%.This is an indication that monitoring and evaluation procedures are carried out to ascertain accurate and timely procedures to ascertain accurate and effective completion on time and key performance indicators in every project. This ensures that project precipitate good functional quality and operates to its full capacity.

Monitoring and evaluation Measurement Methods

Accuracy of Monitoring and evaluation Measurement Methods was also sought using the frequency table and the results were as in table 4.20.

4.20: Crosstabulation of monitoring and evaluation Measurement Methods are accurate

			Respondents views on the overall comment of organizational staff performance			
			As Expected	Better than Expected	Much Better than Expected	Total
Monitoring and evaluation	disagree	Count	0	3	0	3
		% of Total	.0%	3.1%	.0%	3.1%
Measurement Methods are accurate	uncertain	Count	2	0	0	2
		% of Total	2.1%	.0%	.0%	2.1%
	agree	Count	27	24	13	64
		% of Total	28.1%	25.0%	13.5%	66.7%
	strongly agree	Count	10	13	4	27
		% of Total	10.4%	13.5%	4.2%	28.1%
Total		Count	39	40	17	96
		% of Total	40.6%	41.7%	17.7%	100.0%

According to table 4.20, 37(38.5%) were in agreement accuracy of monitoring and evaluation methods yields expected results and better than expected results respectively. Further 17(17.7%) also strongly agreed which much better than expected results .This is an indication of accurate monitoring and evaluation tools are used which contributes positively to organizational performance.

Ordering Variations

The research study sought to find out how variation and instructions are ordered. The response to this question was as presented in table 4.21.

4:21: Crosstabulation Ordering variations given by means of verbal and written instructions from consultant

			Respondents views on the overall comment of product /service quality			Total
			As Expected	Better than Expected	Much Better than Expected	
Ordering variations given by means of verbal and written instructions from consultant	strongly disagree	Count	5	13	1	19
		% of Total	5.2%	13.5%	1.0%	19.8%
	disagree	Count	11	9	9	29
		% of Total	11.5%	9.4%	9.4%	30.2%
	uncertain	Count	3	5	2	10
		% of Total	3.1%	5.2%	2.1%	10.4%
	agree	Count	18	12	3	33
		% of Total	18.8%	12.5%	3.1%	34.4%
	strongly agree	Count	2	1	2	5
		% of Total	2.1%	1.0%	2.1%	5.2%
Total		Count	39	40	17	96

4.21: Crosstabulation Ordering variations given by means of verbal and written instructions from consultant

			Respondents views on the overall comment of product /service quality			
			As Expected	Better than Expected	Much Better than Expected	Total
Ordering variations given by means of verbal and written instructions from consultant	strongly disagree	Count	5	13	1	19
		% of Total	5.2%	13.5%	1.0%	19.8%
	disagree	Count	11	9	9	29
		% of Total	11.5%	9.4%	9.4%	30.2%
	uncertain	Count	3	5	2	10
		% of Total	3.1%	5.2%	2.1%	10.4%
	agree	Count	18	12	3	33
		% of Total	18.8%	12.5%	3.1%	34.4%
	strongly agree	Count	2	1	2	5
		% of Total	2.1%	1.0%	2.1%	5.2%
Count			39	40	17	96
% of Total			40.6%	41.7%	17.7%	100.0%

According to table 4.21, there is mixed reaction on respondents views about variation instruction. However majority 27(28.1%) of the respondents disagreed on the statement that variations are given by means of verbal and written instructions from consultant with better than expected results. This is an indication that there is no standard procedure followed when variation instructions are given which can result to poor product/ service hence precipitating poor functional qualities.

Monitoring progress of works is carried out with occasional involvement during monitoring

A question on if client team are involved during monitoring was asked Table 4.22 gives these results.

Table 4.22: Clients team in involvement during monitoring

Clients team involvement during monitoring	Frequency	Percent
Strongly disagree	0	0.0
Disagree	0	0.0
Uncertain	6	6.4
Agree	45	46.8
Strongly agree	45	46.8
Total	96	100.0

From table 4.22 above, 45 of the respondents (47 %) agreed with the statement that Monitoring progress of works is carried out with occasional involvement of client's project team. This is an indication that project scope, time, cost and quality is adhered to since the client is able to oversee the work done. Involvement of client's team during monitoring also encourages performance.

Site meeting schedule

Further analysis on the question regarding site meeting schedule are indicated in table 4.23.

Table 4.23 Site meeting Schedule

Site meeting schedule	Frequency	Percent
Strongly disagree	96	100.0
Disagree	0	0.0
Uncertain	0	0.0
Agree	0	0.0
Strongly agree	0	0.0
Total	96	100.0

From findings on table 4.23, 96(100%) of the respondents strongly disagreed with the statement that carrying out progress site meetings is done only in response to peculiar problems at site. This shows that client's specifications, rules and regulations are followed strictly for proper evaluation.

Monitoring progress is carried out to follow works programme irrespective of irregularity in payment to consultant

The study sought to find out if monitoring progress is carried out irrespective of irregularity in payment to consultant. Findings are shown in table 4.24.

Table 4.24: Monitoring progress in relation to payment delays.

Monitoring progress in relation to payment delays	Frequency	Percent
Strongly disagree	0	0.0
Disagree	0	0.0
Uncertain	5	5.2
Agree	67	69.8
Strongly agree	24	25.0
Total	96	100.0

From table 4.24, 67(69%) respondents agreed that evaluations are done even if there are delays in payment to the consultant. Further 24 (25%) also agreed while 5(5.2%) were uncertain with the statement. This means that there is no cost escalation due to unnecessary monitoring and evaluation delays. This also means that project completion is within the expected parameters thus a product of performance.

Evaluation stages.

Table 4.25 represents results on respondents' views on how evaluations are carried out and if all the stages are adhered to.

Table 4.25: Evaluation stages

Evaluation stages	Frequency	Percent
Strongly disagree	0	0.0
Disagree	0	0.0
Uncertain	0	0.0
Agree	49	51.1
Strongly agree	47	48.9
Total	96	100.0

The results on the table 4.25 indicate that majority of the respondent 96(98%) agreed to the statement that evaluation are carried out after completion of every stage. None of the respondent disagreed to the above statement. This is an indication that all the stages and processes of evaluations are adhered to hence good track record in managing projects as per specifications.

All information gathered after evaluation is useful for project performance.

The research sought to find out if information gathered after evaluation is useful for project performance. Table 4.26 shows the results.

Table 4.26: Evaluation information

Evaluation information	Frequency	Percent
Strongly disagree	3	3.1
Disagree	2	2.1
Uncertain	19	19.8
Agree	41	42.8
Strongly agree	31	32.2
Total	96	100.0

From table 4.26 above show that 72(75%) agreed that information gathered after evaluation is useful for project performance.19(19.8 %) were uncertain while those who disagreed were less than 10%.This means that the contractors can have a quantifiable process to try to improve. If

these steps are repeated throughout the life of a project, a system of continuous improvement and customer satisfaction through measurement of construction processes will have been developed.

Respondents view on how project life cycle is strictly adhered too

A question on if project life cycle is adhered too was asked. Table 4.26 gives these results.

Table 4.26: Project Life cycle

Project Life cycle	Frequency	Percent
Strongly disagree	20	20.8
Disagree	23	23.9
Uncertain	43	44.8
Agree	10	10.5
Strongly agree	0	0.0
Total	96	100.0

From the findings on table 4.26 most of the respondents had mixed reaction on if the project life cycle is adhered too. Those who strong disagreed were 20(20.8%), 23(23.9%) disagreed while only 10(10.5%) agreed. Respondents who were uncertain were the majority hence 45%. This bears an inverse relationship to the effectiveness of the monitoring and evaluation tools. The interviews with the respondents further revealed that this situation leads to low productivity, poor quality and project delays

4.5.4 Risk Management and organizational performance

In this section the study analyses four indicators under risk management namely respondents training on OHSA, Risk management knowledge and involvement in relation to loss minimization, product/service quality and safety of working environment.

Respondent's risk Management knowledge and involvement

The research sought to find out respondent involvement in managing risks and respondent's knowledge of risk management. The results were as in Table 4.27

Table 4.27: Cross tabulation of respondents knowledge in risk management and their involvement in managing risks

			Respondent's knowledge of risk management.					
			low	fair	good	very good	advanced	Total
Respondents involvement in managing risks	yes	Count	9	29	19	14	10	81
		%.	45.0%	87.9%	100.0%	100.0%	100.0%	84.4%
	no	Count	11	4	0	0	0	15
		%.	55.0%	12.1%	.0%	.0%	.0%	15.6%
Total		Count	20	33	19	14	10	96
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.27 above illustrates respondent knowledge in risk management and the extent to which the respondents had involvement in risk management. The table shows 81(84%) of respondents had knowledge in risk management and were involved in the implementation process while 15(15.6%) had no knowledge in risk management not involved directly or indirectly in managing risks in construction projects. Majority of the respondent having and implementing risk management and mitigation measures an indication that projects precipitate their full functioning capacity due to quality hence a function of performance.

Knowledge in risk management and their involvement.

In search for information about respondent's knowledge in risk management and their involvement in managing risks, the student obtained the following results are cross tabulated in table 4.28.

Table 4.28: Crosstabulation respondents involvement in managing risks and respondent s knowledge of risk management

			Respondent's knowledge of risk management.					Total
			low	fair	good	very good	Advanced	
Respondents involvement in managing risks	yes	Count	9	29	19	14	10	81
		% of Total	9.4%	30.2%	19.8%	14.6%	10.4%	84.4%
	no	Count	11	4	0	0	0	15
		% of Total	11.5%	4.2%	.0%	.0%	.0%	15.6%
Total		Count	20	33	19	14	10	96
		% of Total	20.8	34.4	19.8	14.6	10.4%	100.0
			%	%	%	%		%

Table 4.28 illustrates respondent knowledge in risk management and the extent to which the respondents had involvement in risk management. The table shows 81(84.4%) of respondents had knowledge in risk management and were involved in the implementation process while 15(15.6%) had no knowledge in risk management not involved directly or indirectly in managing risks in construction projects. Among those who had knowledge in risk management, majority 29(30.2%) had fair knowledge and 9(9.4%) had lo knowledge. However a combination of good, very good and advance knowledge on risk management was represented by 43(44.4%).This is an indication that majority of the respondents have knowledge to implementing risk management and mitigation measures hence organizational performance.

Respondent's involvement in risk management and the importance.

Results for the question whether respondent is involved in risk management and the importance is cross tabulated in table 4.29.

Table 4.29: Crosstabulation of respondents involvement in managing risks and their view on the importance of risk management on product/service quality

			Respondents view on the importance of risk management on product/service quality				Total
			not at all important	somewhat important	important	very important	
Respondents involvement in managing risks	yes	Count	0	0	37	44	81
		% of Total	.0%	.0%	38.5%	45.8%	84.4%
	no	Count	1	3	5	6	15
		% of Total	1.0%	3.1%	5.2%	6.3%	15.6%
Total		Count	1	3	42	50	96
		% of Total	1.0%	3.1%	43.8%	52.1%	100.0%

According to table 4.29, findings show that 81(84.4%) are involved in managing risks majority 44(45.8%) of the opinion that the practice is very important and 37(38.5%) very important. However only 15(15.6%) are not involved but still agrees to the importance of the practice. With the majority in practice and fully agreeing to the important signifies that there is a very strong relationship between risk management practices to product/service quality hence a function of organizational performance.

Involvement in risk management in relation to loss minimization.

Under this section, views of respondent involvement in managing risks in relation to Loss minimization are cross tabulated in table 4.30.

Table 4.30: Cross tabulation of respondent involvement in managing risks and respondent views on risk management practices in relation to Loss minimization

			Respondent's knowledge of risk management.					Total
			low	fair	good	very good	advanced	
Respondents views on risks management practices in relation to loss minimization	yes	Count	17	28	16	13	7	81
		% of Total	17.7%	29.2%	16.7%	13.5%	7.3%	84.4%
no	Count	0	1	0	0	0	1	
	% of Total	.0%	1.0%	.0%	.0%	.0%	1.0%	
Uncertain	Count	3	4	3	1	3	14	
	% of Total	3.1%	4.2%	3.1%	1.0%	3.1%	14.6%	
Total	Count	20	33	19	14	10	96	
	% of Total	20.8	34.4	19.8	14.6	10.4%	100.0	
		%	%	%	%		%	

Findings on table 4 30 show that 81(84.4%) were in agreement that risk management practices minimizes loss with their knowledge of risk management spread out at 17(17.7%) low,28(29.2%) fair,16(16.7%) good,13(13.5%) very good and finally 7(7.3%) advanced. This is an indication that respondent s embrace the practice only that the organization need to train more on the same for everyone to have at least good knowledge.

Training in OHSA and working environment.

Have you received any training on Occupation health and safety and what is its contribution to the working environment? This was the question the researcher posed in an effort to establish the contribution OHSA training to working environment. The findings are presented in table 4.31.

Table 4.31: Cross tabulation of respondent's training on occupation safety and health act and respondents view on their working environment

			Respondents view on their working environment			
			Uncertain	Safe and healthy	Very Safe and healthy	Total
Respondent s having received training on occupation safety and health act	ye	Count	4	55	23	82
	s	% of Total	4.2%	57.3%	24.0%	85.4%
no	Count	10	4	0	14	
	% of Total	10.4%	4.2%	.0%	14.6%	
Total	Count	14	59	23	96	
	% of Total	14.6%	61.5%	24.0%	100.0%	

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.129 ^a	2	.000

According to table 4.31 results indicate that 82(85.4%) have received training on occupational safety and health act. Among them, majority 55(57.3%) were of the opinion that the training provides a safe and healthy working environment while 23(24.0%) very safe and healthy. Among those who have no training o the same 10(10.4%) were uncertain whether the working environment is safe and healthy or not. Further analysis on the chi-square test, the result signifies a very strong correlation between the training on occupational safe and heath and the working environment at (sig= 0.000, p=0.05) thus conducive working environment that enable organization staff to be more productive

Working environment and organizational performance.

On whether safe working environment influences organizational performance, the response was shown in table 4.32.

Table 4.32: Crosstabulation of respondents view on their working environment and organizational performance

			Respondents views on the overall comment of organizational staff performance			Total
			As Expected	Better than Expected	Much Better than Expected	
Respondents view on their working environment	Uncertain	Count	6	6	2	14
		% of Total	6.3%	6.3%	2.1%	14.6%
	Safe and healthy	Count	26	27	6	59
		% of Total	27.1%	28.1%	6.3%	61.5%
	Very Safe and healthy	Count	7	7	9	23
		% of Total	7.3%	7.3%	9.4%	24.0%
Total		Count	39	40	17	96
		% of Total	40.6%	41.7%	17.7%	100.0%

Findings in table 4.32 shows that majority of respondents 34(35.4%) were of the opinion that working under safe and healthy environment yields better than expected results while were (34.3%) expected .A number 15(15.6%) were of the opinion that their performance is much better than expected. This signifies that safe and healthy environment has a positive contribution towards employee motivation and organizational performance.

4.5.5 Leadership and organizational performance

The study sought to assess whether leadership influences organizational performance based on four indicators namely delegation and authority, salary levels, motivation, promotion policy and leadership.

Delegation and authority in relation to production output.

The research sought to find out respondents views on delegation and authority in relation to respondent's production out put. The results are shown in table 4.33.

Table 4.33: Crosstabulation of respondents views on delegation and authority and respondent's production out put

			Respondents views on the overall comment production output			Total
			As Expected	Better than Expected	Much Better than Expected	
Respondents views on delegation and authority	ye	Count	13	12	7	32
	s	% of Total	13.5%	12.5%	7.3%	33.3%
no	Count	26	28	10	64	
	% of Total	27.1%	29.2%	10.4%	66.7%	
Total	Count	39	40	17	96	
	% of Total	40.6%	41.7%	17.7%	100.0%	

Results on table show that 32(33.3%) of the respondents are in agreement that there is delegation duties and authority thus 13(13.5%), 12(12.5%) and 7(7.3%) thus represented by as expected, better than expected and much better than expected. However majority were not in agreement that they are delegated thus 64(66.7).Nevertheless we 28(29.2%), 26.(27.1%) and 10(10.4) still agreed that production out put is better tan expected, as expected and much better than expected respectively. This is an indication that there might be other factors that contributes to high production output other than delegating duties with responsibilities and authority.

Salary satisfaction level

Respondents were asked if they are satisfied with their present salary and the findings are illustrated table 4.34.

Table 4.34: Satisfaction of workers with present salary

Salary satisfaction	Frequency	Percent
Yes	26	27.1
No	70	72.9
Total	96	100.0

The results in table 4.34 show that 70(72%) of the respondents are not satisfied with his or her present salary. This means that 26(27.1%) respondents are satisfied with his or her salary. Based on non satisfaction, the unsatisfied workers may not have performed their work creditably well and these no doubt would affect the performance of the organization.

Motivation and level of motivation

The study sought to know the motivation and motivation levels in construction companies. The results are illustrated in table 4.35.

Table 4.35: Motivation and level of motivation

Motivation and level of motivation	Frequency	Percent
Highly Demotivated	4	4.2
Demotivated	48	50.0
Uncertain	29	30.2
Motivated	10	10.4
Highly Motivated	5	5.2
Total	96	100.0

According to table 4.35, 48 representing 50% of the total population were demotivated and 4(4.2%) highly demotivated. 5 respondents representing 5% are highly motivated while 10

respondents representing 10% are motivated in their jobs. However about 29(30.2%) believe they are neither motivated not demotivated. This result supports the findings from question on salary dissatisfaction at which negatively affects organizational performance. This can also lead to complaisant in the workers and affect efficiency and performance in the organization.

Promotion policy and organizational performance

The research sought information on the organizations promotion policy affects organizational performance .The response to this question was as summarized in table 4.36.

Table 4.36: Crosstabulation of respondent s views on promotion policy in relation to the organizational performance

			Respondents views on the overall comment of organizational staff performance			Total
			As Expected	Better than Expected	Much Better than	
Respondents view on promotion policy	Ye	Count	15	5	3	23
	s	% of Total	15.6%	5.2%	3.1%	24.0%
	No	Count	24	35	14	73
		% of Total	25.0%	36.5%	14.6%	76.0%
Total		Count	39	40	17	96
		% of Total	40.6%	41.7%	17.7%	100.0%

Results on table 4.36 show that only 23(24.0%) respondents were in agreement that their organization have promotion policies with 15(15.6%) of the opinion that it affects organizational performance as expected, 5(5.2%) better that expected while 3(3.1%) much better than expected. However a larger percentage 73(76.0%) were not in agreement that their organization has promotion policy. However their performance is much higher that those in agreement. This

signifies that their must be another factor that influences organizational performance other than staff being promoted.

Factors deciding whom to promote in the company

The student asked the respondents to state the factors that are considered to decide whom to promote. The result to this question is shown in table 4.37.

Table 4.37: shows promotion policy of the companies

Promotion policy	Frequency	Percent
Input to the company	48	50
Years of service	37	38.5
Favoritism	6	6.3
M.D's Discretion	5	5.2
Others	0	0
Total	96	100.0

Results on the table 4.37 above show that 48 workers representing 50% of the staff population were of the opinion that promotion of staff was based on Input to the company, 37 respondents, which accounted for 39% a were of the opinion that promotions takes place with the employees years of service to the company while 6% and 5% were of the opinion that favoritism and M.D's opinion respectively were factors used when deciding who gets promoted. Being construction industry input to the company and years of service are important to consider during promotions activities in relation to performance hence 50% and 39 % a reasonable percentage.

Leadership Styles

The study sought to know what leadership styles are mostly practiced in construction companies. The findings are shown in table 4.38.

Table 4.38: Leadership Styles

Leadership styles	Frequency	Percent
Autocratic	49	51
Laizze Faire	23	22
Participative	21	20
Authoritative	2	2
uncertain	1	1
Total	96	100.0

From finding on table 4.38, it can be seen that 49 respondents representing 51% described the management style of their company as autocratic, while those that choose laizze faire were 23 representing 22%. 21 respondents choose participative leadership style representing 20%. 2 respondents chose authoritative while 1 respondent was uncertain of the leadership style that exists in the company. This is an indication that there are no formal controls mechanisms employed in these companies and level of expertise of the manager in all areas of the business in questionable.

4.6 Organizational Performance.

In this section the research analyses how organizational performance is perceived in different companies after implementation of PMBP.

4.6.1 Respondents views on the overall comment of organizational performance

The study sought to know respondents views on the overall comment of organizational performance shown in table 4.39.

Table 4.39: Organizational Performance

Organizational performance	Frequency	Percent
Much Worse than Expected	0	0.0
Worse than Expected	0	0.0
As Expected	46	47.9
Better than Expected	33	34.4
Much Better than Expected	17	17.7
Total	96	100.0

According to table 4.39, 46(47.9) were of the opinion that organizational staff performance is as expected, 33(34.3) better than expected, 17(17.7) much better that expected. Much worst that expected and worse than expected were not options of any respondents. This is an indication that employees work to best of their ability to ensure performance.

4.6.2 Customer satisfaction

The study sought to find out their views on customer satisfaction shown in table 4.40.

Table 4.40: Respondent s views on overall customer satisfaction.

Customer satisfaction	Frequency	Percent
Much Worse than Expected	0	0.0
Worse than Expected	0	0.0
As Expected	40	41.7
Better than Expected	37	38.6
Much Better than Expected	19	19.7
Total	96	100.0

Finding on Table 4.40 show that all the respondent were in agreement customers are satisfied with their services with close to half 40(41.7%) as expected,37(38.6%) better than expected and 19(19.7%) much better than expected. With the above findings signifies that the rate of retention is high because of return customers who enjoy better services.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the main findings. It also presents the conclusions and recommendations drawn from the findings of the study. Implications for further research are also discussed here.

5.2 Summary of findings

The role of this study was to investigate the influence of project management best practices in construction companies in westlands District. First the findings must be evaluated based on the specific objectives the research sought to achieve. In particular the study was guided by objectives derived from PMBP i.e., Information Technology, Training, Monitoring and evaluation, Risk Management and Leadership.

The study found out that all projects operate to its full capacity because of the support of project management information systems hence speed enhanced. Ms Project is used in almost all the companies. Overall, the percentage of the use of computer software for planning, estimating and finance in the respective construction companies is quite satisfactory. The study also found out that the Information systems used are relevant to the projects and also very effective hence organizational performance.

Despite limited time allocated for training, the study found out that majority employees have completed the training programme after employment and just a few still on going. Most of them (65%) were fully sponsored by the organization. Performance Assessment of Training Programs is relevant to trainees' job, need and performance. The value of training in terms of returns and meeting expectations is effective and the impact of training success in enhancing self assessment and the ability to improve knowledge is sustainable. Training also meets expectations in terms of returns, customer satisfaction and continuous improvement.

The study found out that that M&E tools are reliable and majority of the respondents use site visits and proper planning techniques Site meetings, progress reports, project check list and custom made tools for specific project to monitor and evaluate project specifications, rules and regulations are followed strictly during monitoring and activities. This is an indication that project scope is adhered to ensure quality assurance unnecessary delays thus no cost escalations. Overall there was a shift from individual monitoring and evaluating their own project to joint inspection by all the stakeholders information gathered for future reference. However there was mixed reactions on work life cycle is adhered to. This situation might lead to low production, poor quality unnecessary delays which negatively affects organizational performance.

From the study, results indicate that knowledge in risk management is very important for a construction company thus represented by majority respondents having the knowledge of being involved during risk management procedures. However very few employees follow the procedures hence less mitigating measures put in place to prevent occurrences. Costs are reduced greatly and organization performance and growth are enhanced due to the technical supporting and effective control planning to prevent risk from occurrence. This is presented by a very strong correlation between training and working environment. The construction companies working environment were rated as safe and healthy thus reducing related accidents thus improving employee performance.

Though there seem to be an overall higher output and generally organizational performance, majority of the employees were not satisfied with the present salary package which has an inverse relationship to the working environment responses observed among the respondents. Lack of spread of executive skills and delegation of power: Power is poorly delegated among employees results to inability to take decisions when the manager is not available. Also, use of authority by the staff is hampered. Thus, most work is monotonous and lack innovation: since employees have to carry out their duties according to laid down rules. Majority of the employees were promoted in recent years. Thus, they are dissatisfied and this affects their attitude. The study gave type of leadership styles (Autocratic) as the cause which represented 51% of the

5.3 Discussion of the findings

This section presents the key findings from the study. It is organized according to the research objectives namely Information technology and organizational performance, Training and organizational performance, monitoring and evaluation and organizational performance, risk management and organizational performance and lastly leadership and organizational performance.

5.3.1 Information Technology and performance

From the study findings, it was noted information technology systems used in the construction companies were very relevant for the projects since they had a positive impact on organizational performance. It was also noted that use of the above enhances projects to operate to their full capacity hence speed enhanced. Information technology has played a very important role in product /service innovation hence high output, quality products thus profit maximization. Research by Surenda et al (2004) and Muhammad (2009) reported similar findings although their scope was Canadian firms and Manufacturing and Banking sectors respectively. Their Research examined the issue of whether investment in information and communication technology (ICT), combined with organizational changes and worker skills contribute to better performance in firms. They found that Canadian firms have actively engaged in organizational changes in the areas of production and efficiency practices, human resource management (HRM) practices, and product/service quality-related practices. These practices along with ICT use are found to be related to better firm performance.

5.3.2 Training and Organizational performance

According to the study, it is clear that training is important to organizational performance, competitiveness and innovation. Performance Assessment of Training Programs is relevant to trainees' job, need and performance. The value of training in terms of returns and meeting expectations is effective and the impact of training success in enhancing self assessment and the ability to improve knowledge is sustainable. Training also meets expectations in terms of returns. This concurs with earlier studies by Phyllis et al (2007) whose results suggests that training is positively related to human resource outcomes and organizational performance but only weakly related to financial outcomes .Irene et al (2008) pointed out the importance of cultural,

institutional and organizational factors in analyzing the relationship between training, development and performance. However their study did not clearly point out the impact of training in organizational performance.

5.3.3 Monitoring and evaluation and organizational performance

From the study, most specifications, rules and regulations in regard to monitoring and evaluation are followed strictly during monitoring and evaluation activities. This is an indication that project scope is adhered to ensure quality assurance with no unnecessary delays thus no cost escalations. Overall there was a shift from individual contractor monitoring and evaluating their own projects to joint inspection by all the stake holders and useful information gathered for future reference. The findings concurs with (Boyne and Walker, 2005) found out that use of M&E would be one factor affecting performance, but not necessarily the most influential. However the above finding contradicts with the critics by Hume and Wright (2010) which reports that evaluation with targets are not always the best to ensure performance progress. Their paper suggests that an organization's teams or units should be provided with information on how they compare to others and what processes work best – that providing the resources with which to make changes and develop staff is sufficient to promote progress in performance. This approach would empower teams to drive their own progress on performance.

5.3.4 Risk Management and organizational performance

Findings on knowledge in risk management and organizational performance indicate that Risk management practice is very important for any construction company as this was represented by majority of respondents (84.4%) who were knowledgeable and thus practice risk management procedures. Costs escalations are reduced greatly and organization performance and growth are enhanced due to implementing technical supporting and effective control planning to prevent risk from occurrence. From ratings, presented by a very strong correlation between training and working environment, most construction companies working environment were rated as safe and healthy thus fewer work related accidents and employee performance. The above finding is inline with Raz et al (1999) and Wasim Ullah(2009) who advocates the use of risk Managing practices for high performance. The findings revealed the fact that organizations with R.M have significant control over uncertainties or rather crisis management and this predictive ability helps in timely

development of contingency plans to stop erosion of organizational income; thereby improving their organizational performance. Organizations that have formally embedded these with organizational goals have a competitive edge over those organizations that have informal risk practices in place or absolutely no R.M practices. The findings, therefore, supported that the integration of RM practices and organizational objectives facilitates the achievement of optimal organizational performance. The evidence also suggested that regulators should proactively implement formal risk management regulations in telecom industry.

5.3.5 Leadership and Organizational performance.

In this study, most leaders were viewed as being autocratic. This also denotes that they are exploitative as most respondents are underpaid and not comfortable with their present salary. In that effect, the work environment is unfriendly and with this attitude managerial issues are not done justly and with much of employee's involvement. It was instrumental in understanding the attitudes, needs and expectations of employees in any company. Therefore, the role of motivation in employees' performance can not be underestimated. Hence, we were able to understand that performance of employee is driven by appropriate compensation, which can meet the employee's personal need and goal. Based on this, employees will contribute substantially to the company's bottom line if their individual expectations and goals are met by the employer. This finding concurred with Olowabu (2007) who carried out a research on Evaluation of leadership and Organizational Performance in Small-Scale industries in Nigeria. He concluded that to attain the objectives of small-scale industries in Aba, Abia state Nigeria, it was necessary that leadership recognizes the needs of the workers, employ appropriate motivational tool such as promotion of staff based on merit and skills, provide suitable working environment and provide an appropriate leadership style that will encourage free flow of information among employer, superior officers and other employees.

5.4 Conclusions of the study

From the study it is very evident that project management positively influences organizational performance. The study concluded that;

Use of Information Systems and tools is the key stone of progress all over the world today .The study revealed that information technology is valuable to construction companies . The findings show that all projects operate to its full capacity because of the support hence speed enhanced and also of good quality thus positively influencing organizational performance.

The findings also revealed that organizations invest more in training of its employees. According to table 4.12, majority of the respondent were fully sponsored by their respective organizations .This indicates that the respective companies encourage training for continuous growth and development hence high performing organization. This has also led to improved customer satisfaction, innovation and greater output hence growth and development and increase in number of customers and new projects in that matter.

From the study monitoring and evaluation provides most comprehensive guide to measure project performance. The use of monitoring and evaluation tools clearly ensures Timely feedback /checklists of project progress hence no unnecessary delays thus minimizing overall project costs.

Risk in project management has limitedly been described as a probable incident or situation having negative impacts on the project. Its effects could be on resources, scope, quality, or schedule. In project management, when a risk increases, it turns to a liability, being a negative incident or condition slowing down the project. From findings mitigating risks ensures Safe environment Profit maximization Organization growth Quality product/service .However companies involved few employees during the implementation process which can have a negative effect on project performance and increases the likelihood of occurrences.

Finding on leadership styles reveals that efficiency is a function of perceived reward. Good motivation is critical for achieving organizational objectives. Therefore recognizing workers

needs is an essential step to planning and motivational efforts. Hence, every action taken by a leader stimulates a reaction in the employees.

5.5 Recommendations

Based on the findings it was recommended that Project management best Practices be implemented in all construction companies.

1. The practices accelerate achievement of set project objectives and also positive contributions to project success.
2. Companies should see to it that they create project management office as division to manage independent projects
3. Other Professionals outside Project management should acknowledge and support it as a body of knowledge that is viable and very important in an organization.
4. Project life cycle must be followed strictly to attain the desired product/service as per the specifications.
5. Organizations must see to it that there is more extensive use of risk analysis tools which is associated with better project management practice hence high performance.
6. Delegation of duties and responsibilities must be backed up by adequate authority, so that in carrying out the delegated duty, the person performing it will have the authority to make certain decisions that will affect that duty.

5.6 Suggestion for further research

This study was restricted mainly to building and construction companies Class A and B. For further studies, I also suggest that related studies can be carried out in other construction companies with lower grades and use the practice as a framework in other types of projects as well.

REFERENCES.

- Airasian, P.W. (2000) Education research: Contingencies for analysis and application 6th Edition. Englewood Prentice hall.
- Armstrong, M., (2006) a Handbook of Human Resource Management Practice, 10th Ed, Kogan Page. London. Article Source: <http://EzineArticles.com/4813135>
- Best, R. and Valence, G. (1999) "Building in Value- pre-design issues", Arnold: London.
- Bryde, D.J. (2003) "Project Management Concepts, Methods and Applications" The International Journal of Operations and Production Management, 23 (7), 775-793. (ISSN 0144-3577)
- Bryde, D. J. (2003). "Modeling project management performance." International Journal of Quality and Reliability Management 20(2/3): 229-254.
- Boyne, G. A. (2003). What is public service improvement? Public Administration, 81, 211-227.
- Choudhury, I. and Phatak, O. (2003) Correlates of Time overrun in Commercial Construction. ASCE Proceedings of the 40th Annual Conference: Texas A&M University CIRIA (1985), CIRIA Report 109, CIRIA, London.
- Clark K, Fujimoto T. 1991. Product development performance. Strategy, organization and Management in the world auto industry. Harvard Business School Press: Boston, MA.
- Cleland, D.I. (1995), "Leadership and the project management body of knowledge", International Journal of Project Management, Vol. 13 No. 2, pp. 82-8.
- De Vaus D.A. (1986) Survey in social research, London George.

- Ellison D, Clark K, Fujimoto T, Hyun Y. 1995. Product Development Performance in the Auto Industry: 1990s Update. Harvard Business School Working Paper 95-066.
- Gowan Jr, J A, and Mathieu, R G, (2005) the importance of management practices in IS project Performance. *The Journal of Enterprise Information Management Systems*, 18(3), 235 – 255
- Harold Kezner; *Project Management Best Practices, Achieving Global Excellence*; 2nd Edition.
- Harris, F., Mc Caffer, R., Edum-Fotwe, F., 2006. *Modern Construction Management*, sixth ed. Blackwell Publishing, Oxford.
- Kaplan RS and D. P. Norton (1992). "The Balanced Scorecard-Measures That Drive Performance". *Harvard Business Review* 70:1 71-9.
- Khabanda O.P, Stallworthy (1983) *East Africa Total Project Management*.
- Khoo, et al (2000) Identifying best Practices in information project management
www.platform.org/library/papers/2004/ITpractices.pdf Downloaded on 16th February 2011.
- Kotnour, T. (2000) Organizational Learning practices in the project management environment. *International Journal of Quality & Reliability Management*, 17 (4/5), 393-406.
- Lim, B. (1995). Examining the organizational culture and organizational performance link. *Leadership and Organizational Development Journal*, 16(5), 16-21.
- Loo R. (2003) A multi-level causal model for Best Practices in Project Management. *Benchmarking: An International Journal* 10 (1), 29-36.

- Mathu .A and Mbaya J.S; Effective project Management and Cost Control of Construction and Building Projects in Kenya.
- Mbaya J.S (1999); Construction Project Management and its implication. Master of Arts Thesis University of Nairobi.
- Mbatha C.M (1986) Contract Performance: A case of government projects in Kenya; Master of Arts Thesis University of Nairobi.
- Mwangi C.M (1989); A study of Construction Safety Administration on Building site in Nairobi Area.
- Morris, P.W.G. (1994), the Management of Projects A New Model, Thomas Telford, and London.
- Morris, P.W.G. and Hough, G.H. (1993), The Anatomy of Major Projects – A Study of the Reality of Project Management, Wiley, London.
- Monique, A. (2010) A Fresh Look at the Contribution of Project Management to Organizational Performance .Project management Journal, Vol.42 No.1, 3-16
- Morin, E. M., Savoie, A., & Beaudin, G. (1994). L'efficacité de l'organisation: Théories, Représentations et mesures[Effectiveness of the organization: Theories, representation and measures.Montreal, Québec: Gaëtan Morin éditeur.
- Mugenda O, Mugenda A.(1999) Research Methods quantitative and qualitative Act Press-Nairobi
- Muresan,IN;Crisant,E;&Ilies,LA(2010) best Practices in Project Management, Review of International Comparative Management.Vol11, Issue 1, March 2010.
- Ngom P, Impact of AMKENI on family planning and reproductive health behavior, 2001-2004.

Olaniya, D; Lucas, B.Ojo (2008) Staff Training Development. A Vital Tool for Organizational Effectiveness. European Journal of Scientific Research Vol.24 No.3 (2008) Pp 326-337

Project Definition Rating Index (PDRI) (1999). The Construction Industry Institute “– Building Projects”. Implementation Resource 155-2.

Peter F. Drucker 1996; Managing the Non-Profit Organization: Practices and ... Management System,” Harvard Business Review 74 (January/February 1996): 75–85.

Rad, Parviz F. And Ginger Levin,(2002). The Advanced Project Management Office. CRC Press. Boca Raton – US.

S.S. Mousavi and M. Habiby BadrAbady (2008) The Role of Information Technology in Organizational Procedures ' Improvement with Knowledge Based Approach-A Study of the Iranian Taxation Affairs Organization. World Applied Sciences Journal 3 (Supple 2): 55-66, 2008.

Talukhaba A.A (1989); Time and Cost performance of Construction projects. Master of Arts Thesis University of Nairobi.

Thomas, J. L.,Delisle, C., Jugdev, K.,& Buckle, P. (2002). Selling project management to senior Executives: Framing the moves that matter. Newtown Square, A: Project Management Institute.

Thomas, J. L., & Mullaly,M. E. (Eds.).(2008). Researching the value of project management. Newtown Square, PA: Project Management Institute.

The AMKENI Project 2001-2006; Western Province Data Summary.

T. Raz, E. Michael 1999 Faculty of Management, Tel Aviv University, Faculty of Management, Ramat Aviv, 69978 Tel Aviv, Israel Converse Network Systems, Tel Aviv, Israel

- Jawaharnesan, L. and Price, A.D.F. (1997) Assessment of the role of the client's representative for quality improvement. *Total Quality Management*, Vol. 8, pp. 375-89.
- Ramabadron, R., Dean, J.W. Jr. and Evans, J.R. (1997) Benchmarking and project management: a review and organizational model. *Benchmarking for Quality Management & Technology*, 4, 47-58.
- Rukmani, K (2010) Effect of Leadership styles on Organizational effectiveness. *European Journal of Social Sciences*-Volume 1
- Walker, D. H. T. (1995) An investigation into construction time performance. *Construction Management and Economics*, 13, 263 – 274.
- Wateridge, J. (1995) IT Projects: a basis for success. *International Journal of Project Management*, 13 (3), 169 – 172.
- Xiao, H & Proverbs, D (2003) Factors influencing contractor performance: an international Investigation. *Engineering, Construction and Architectural Management*, 10 (5), 322 – 332.
- Yamane Taro (1967), *Statistics An introductory analysis*, 2nd Edition New York Harper Row.

APPENDICES

APPENDIX 1

Questionnaire Introduction letter.

Dear Respondent,

RE: Influence of Project Management Best Practices on Organizational Performance; A survey of Construction Companies in Westlands District, Nairobi County.

I am a postgraduate student at the University of Nairobi pursuing a Master degree in Project Planning and Management. I am conducting a study on the Influence of Project Management Best Practices on Organizational Performance; A survey of construction companies in Westlands District Nairobi County.

The questionnaire attached here-in is meant to gather information for this study from you. I hereby request for your contribution by responding as honestly as possible and to the best of your knowledge. All responses will be absolutely confidential and are just for purpose of this study. Do not write your name.

Thank you.



Musinya Noreen Muhonja
University Of Nairobi,
Nairobi.

APPENDIX 2

Interview Introduction Letter

Dear Sir/Madam,

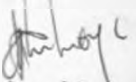
RE: Influence of Project Management Best Practices on Organizational Performance; A survey of Construction Companies in Westlands District, Nairobi County

I am a postgraduate student at the University of Nairobi pursuing a Master degree in Project Planning and Management. I am conducting a study on the Influence of Project Management Best Practices on Organizational Performance; A survey of construction companies in Westlands District Nairobi County.

You have experience that would be of value in this research and I wish to know your views on the practices currently in use in your organization. I hope you will take a few minutes to answer some questions.

I am aware of the need to treat the responses with utmost confidentiality. No source, individual or organization will be identified on the report. The output will be in form of summarized ratings from all participants.

Yours Faithfully,



Musinya Noreen Muhonja

University Of Nairobi

Nairobi.

APPENDIX 3

LETTER OF TRANSMITAL

The General/Personnel Manager,

.....
.....

Nairobi.

Dear Sir/Madam,

RE: REQUEST TO CARRY OUT RESEARCH IN YOUR ORGANIZATION.

I am a postgraduate student at the University of Nairobi pursuing a Master degree in Project Planning and Management.

It is part is the requirement for the fulfillment of this course that I am required to carry out a research on the Influence of Project Management Best Practices on Organizational Performance; A survey of construction companies in Westlands District Nairobi County.

I kindly request you to allow me interview the Project Manager, Technical Managers and project supervisors.

Attached are copies of my National and College Identity cards, Copies of questionnaires, research abstract and Permit to carry out the study.

Thank you in advance for your cooperation.

Yours Faithfully



Musinya Norcen Muhonja

- e) Need to reduce costs and improve performance.

TECHNOLOGY

7. Do you have Project information management system in your organization?

Yes ()

No ()

8. (i)What information systems does the organization use to manage projects processes and procedures?

.....
.....
.....

(ii)How effective is the program/System?

- a) Very Effective
- b) Effective
- c) Neither effective nor Ineffective
- d) Ineffective
- e) Very ineffective

9. The type of systems used is relevant to the duties and roles played by individuals in the Organization. Do you agree with this statement?

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly Disagree

TRAINING

10. (i) Did you enroll for a training or development programme after employment?

Yes - ongoing () b) Yes - Completed () c) No ()

(ii) Which type of training?

- a) On the Job
- b) Off the Job Training

(iii) Who finances your post employment training? (Tick all that Apply)

- a) Fully Self Sponsored
- b) Partially Sponsored by the organization
- c) Fully Sponsored by the organization

Please indicate the extent to which you agree with the following statements on relevancy, effectiveness, Efficiency, Impact and sustainability training programme using a five point likert scale of 1-5

Very Good (VG) =5, Good (G) =4, Acceptable (A) =3, Weak (W) =2, Very Weak (VW) =1

	Performance Assessment of Training Programs	Very Good	Good	Acceptable	Weak	Very Weak
11	Relevance					
a	To trainees needs					
b	To trainees job					
c	To trainees performance					
12	Effectiveness					
a	In terms of returns					
b	The value of training					
c	In meeting expectations					
d	Effectiveness of trainers					
13	Efficiency					
a	In terms of time allocations					
b	Was it worthy in terms of costs?					

14	Impact					
a	Success in enhancing self assessment					
b	The ability to improve knowledge					
c	The ability to effect behavior of trainees					
d	Using training materials as future reference					
15	Sustainability					
a	The ability to inspire continued learning					
b	The ability to motivate continued develop					
c	The ability in simulating interest in Training program.					

MONITORING AND EVALUATION

16. (i) Do you have the knowledge and skills required to effectively use monitoring and evaluation tools and techniques?

Yes ()

No ()

(ii) If yes, what tools and techniques does your organization use to monitor and evaluate project progress?

.....

.....

.....

.....

17. How effective are the tools used?

- a) Very Effective
- b) Effective
- c) Neither effective nor Ineffective
- d) Ineffective
- e) Very ineffective

Please indicate the extent to which you agree with the following statements on Monitoring and evaluation of project progress .Using a five point likert scale of 1-5

Strongly Agree (SA) =5, Agree (A) =4, Uncertain (U) =3, Disagree (D) =2, Strongly Disagree (SD) =1

18. Monitoring progress of works						
Item		SA	A	U	D	SD
a	Measurement Methods are accurate					
b	Monitoring progress of works is done solely by consultant's routine visits					
c	Monitoring progress of works is carried out with occasional involvement of client's project team					
e	Carrying out progress site meetings is done only in response to peculiar problems at site					
f	Monitoring progress is carried out to follow works programme irrespective of irregularity in payment to consultant					
19. Instructions and variation						
a	Ordering work variations is done only through written instructions from consultant					
b	Ordering variations given by means of verbal and written instructions from consultant					
c	Considering consent of client before carrying					

	out any variation					
20. Evaluation						
a	Evaluation are carried out after completion of every stage					
b	All information gathered after evaluation is useful for project performance					
c	The project life cycle is strictly adhered too					
d	Provide project progress reports and feed back for decision making					

RISK MANAGEMENT.

21. Describe your knowledge of risk management.

- a) Low
- b) Fair
- c) good
- d) very good
- e) advanced

22. Have you directly or indirectly been involved in managing risks?

- a) Yes
- b) No

23. Does your organization use any procedures to identify and manage project risks?

- a) Yes
- b) No

If yes, please mention the method briefly.

.....

.....

.....

24. How would you rate the importance of risk management in relation product/service quality?

- a) Very important
- b) Important
- c) Somewhat important
- d) Can't say

25. How would you rate the importance of risk management in relation to project cost?

- a) Very important
- b) Important
- c) Somewhat important
- d) Can't say

26. Have you received any training on Occupation health and safety on how to prevent accidents?

Yes ()

No ()

27. How do you rate your working environment?

- a) Very Safe and healthy
- b) Safe and healthy
- c) Uncertain
- d) Unsafe and unhealthy
- e) Very Unsafe and Unhealthy.

LEADERSHIP

Instructions:

Kindly read through the following questions and indicate the effectiveness of your project managers leadership to relation to how your job performance. Show your response by ticking in one of the boxes () provided to the right of each task. One response is required for each and every question. See key below

29. Is the working environment Conducive for you? Rank the level of conduciveness using a scale of 1 – 5

1-Very uncondusive (), 2-uncondusive (), 3-uncertain (), 4-conducive (), 5-very conducive ()

30. Are you satisfied with your Present Salary level? Rank your level of satisfaction using a Scale of 1 – 5

1-very unsatisfied (), 2-unsatisfied (), 3-uncertain (), 4-satisfied (), 5-very satisfied ()

31. Were you recently promoted?

Yes ()

No ()

32. What decides who is to be promoted?

a) Year of Service ()

b) Input to the Company ()

c) Favoritism ()

d) Managing Director's Discretion ()

e) Other:

33. Are you motivated in the Organization? Rank your level of motivation using a scale of 1 – 5

1-highly demotivated, 2-demotivated, 3-uncertain, 4-motivated, and 5-highly motivated

34. Do managers delegate duties to subordinates?

Yes ()

No ()

35. If Yes, is responsibilities backed up by adequate authority?

Yes ()

No ()

36. From the experience with the company, how do you describe the Leadership style?

a) Autocratic

b) Participative

c) Democratic

d) Dictatorship

37. What is your overall comment of organizational performance?

a) Much Better than Expected

b) Better than Expected

c) As Expected

d) Worse than Expected

e) Much Worse than Expected

38. How do you rate customer satisfaction?

- a) Much Better than Expected
- b) Better than Expected
- c) As Expected
- d) Worse than Expected
- e) Much Worse than Expected

39. Within your organization why would PM best practice affect the performance of a given project more significantly than PM practice would? (Please tick as many as are applicable)

- (a) Due to ability of PM best practice to accelerate achievement of set project objectives
- (b) Due to the ease of carrying out the PM best practice
- (c) Due to contractor being commonly familiar with the PM best practice
- (d) Due to the trainings given on PM best practice to facilitate achievement of goals
- (e) All the above.

40. Why would you recommend that the PM best practices carried out for management of a given project executed within your organization be generally adopted for management of projects of similar nature within other organizations? (Please tick as many as are applicable)

- (a) Due to ability of practice contribution to project success
- (b) Due to ease with which the practice can be implemented
- (c) Carrying out the practice paves way for winning subsequent jobs from client
- (d) All the above

Thank you for your cooperation

APPENDIX 5

PROJECT MANAGER INTERVIEW SCHEDULE

1. How long have you worked for the organization?
2. What kind of Project management information system does your organization use?
3. How effective is the program or system?
4. Are training programmers in your organization relevant to the employees' job descriptions?
5. What do you expect to achieve after completion of your training?
6. Do you think performance appraisals serve the intended purpose of identifying training needs?
7. Are the employees rewarded after completion of post employment training?
8. What Monitoring and evaluation tools & techniques does your organization use for the projects?
9. Are the tools effective?
10. How do you handle deviations?
11. Does your organization have a Safety policy?
12. Which leadership characteristics best promotes motivation of employees?
13. What is your overall comment of your organization staff performance?
14. Why would you recommend that the PM best practices carried out for management of a given project?



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegrams: "SCIENCETECH", Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

P.O. Box 30623-00100
NAIROBI-KENYA
Website: www.ncst.go.ke

Our Ref: **NCST/RRI/12/1/SS-011/550/5**

Date: **4th May, 2011**

Noreen Muhonja Musinya
University of Nairobi
P.O Box 30197
NAIROBI



RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on **"Influence of project management best practices on organizational performance: A survey of construction companies in Westlands District, Nairobi County"** I am pleased to inform you that you have been authorized to undertake research in Westlands District for a period ending **30th September, 2011**.

You are advised to report to the **District Commissioner and the District Education Officer of Westlands District** before embarking on the research project.

On completion of the research, you are expected to submit **one hard copy and one soft copy** of the research report/thesis to our office.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:
The District Commissioner
Westlands District

The District Education Officer
Westlands District

NCST/RRI/12/1/550

THIS IS TO CERTIFY THAT:

Research Permit No.....

Prof. Dr. Mr. Mrs. Miss NOREEN MUHONJA MUSINYA

Date of issue 4/5/2011

Fee received KSHS. 1000

of (Address) UNIVERSITY OF NAIROBI BOX 30197 NAIROBI



has been permitted to conduct research in

.....Location,

.....WESTLANDS.....District,

.....NAIROBI.....Province,

on the topic INFLIENCE OF PROJECT

MANAGEMENT BEST PRACTICES ON

ORGANIZATIONAL PERFORMANCE:

A SURVEY OF CONSTRUCTION COMPANIES

IN WESTLANDS DISTRICT, NAIROBI NRB.

for a period ending 30TH SEPTEMBER 2011

[Handwritten Signature]
Applicant's
Signature

[Handwritten Signature]
Secretary
National Council for
Science and Technolog