THE INFLUENCE OF PROJECT MANAGEMENT OFFICE ON

INFORMATION TECHNOLOGY PROJECT SUCCESS: CASE OF

NATIONAL MICROFINANCE BANK PLC.

LEONANCY FRANCIS

A DISSERTATION SUBMITTED IN PARTIAL FULLFILMENT FOR

THE REQUIREMENTS OF MASTER DEGREE OF PROJECT

MANAGEMENT OF THE OPEN UNIVERSITY OF TANZANIA

2015

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a dissertation entitled, **"The Influence of Project Management Office on Information Technology Project Success Case of National Microfinance Bank Plc***"* in partial fulfillment of the requirements for the degree of Master degree of Project Management of Open University of Tanzania.

…………………………..…………..

Dr. Edephonce Nfuka

(Supervisor)

……………………………….

Date

COPYRIGHT

No part of this dissertation may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronically, mechanical, photocopying, recording or otherwise without prior written permission of the author or The Open University of Tanzania on behalf.

DECLARATION

I, Leonancy Francis, do hereby declared that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

……………………………………

Signature

………………………………..

Date

DEDICATION

This work is dedicated to my lovely family Judith Nkondo, Terrence Francis and Yahleju Francis due to their wonderful support.

ACKNOWLEDGEMENT

I would like to thank my colleagues at Open University of Tanzania Dar-es-Salaam, Dr. Katunzi, Dr. Chacha, Dr. Mbowe, Mr. Kalanje, Mr. Mchembe, who supported me both professionally and personally as I was studying and writing this paper. It was your support and insight helped me horn and focus my research topic. All respondents who engaged on my research at National Microfinance Bank Plc for their cooperation and support during research study, special thanks to Alexander Nangawe for his great support on clarifying project related issues and for sharing with me project management documents.

In addition; I would like to acknowledge Dr. E. Nfuka my research supervisor for working hand in hand from the beginning of the study up to date, Dr. P. Ngatuni my College Dean and Mr. Mato my course coordinator for the gift of their professionalism and expertise. My fellow students who were crucial in creating a collaborative and supportive class learning environment that fostered intellectual and spiritual growth. The conversation we shared in and outside the classroom provided additional insights and understanding .Special thanks to my classmate friends Boki Shabani, Silvestre, Lusasi, Rose Haule and Gamba the time we spent in communicating in and out to me was valuable learning experience.

Finally, I dedicate this research to my family, brothers and sisters who encouraged me to pursue my degree and provided emotional support when this research become challenging. I am truly grateful for the sacrifice you have made on my behalf. It's my turn to give you back.

ABSTRACT

As many information technology projects continue to fail, the requirement to establish a Project Management Office (PMO) has gained rapid acceptance in large organizations including Tanzanian banking sector. This paper is an effort to explore the influence of Project Management Office (PMO) on IT projects success in the Tanzanian banking sector using National Microfinance Bank (NMB PLC) as case study. Research approach used was exploratory study and methods for data collection were through semi-structured interviews and questionnaires which were administered to 30 respondents to both IT staffs and project managers from PMO department. Data analysis adapted Seidel Noticing, Collecting and Thinking Model. The study found out that, PMO has greater influence on IT project success, there is a mixture of IT project management practices within the bank depending on the nature of the IT project, and perceived IT project success not only based on meeting the triple constraints (time, cost, scope) but also when stated deliverables in terms of set objectives are achieved such as banking operations improvement. This study recommends that, PMO should provide project management training to IT staffs to improve project management knowledge which may increase IT projects success.

LIST OF ABBREVIATIONS

ATM   Automated Tailor Machine

BOT   Bank of Tanzania

CIOO   Chief of Information and Operation Officer

IT   Information Technology.

IS   Information Systems

LAN   Local Area Network

MPM   Master of Project Management

NBC   National Bank of Commerce

NMB   National Microfinance Bank

OGC   Office of Government Commerce

OPM3   Organization Project Management Maturity Model

PID   Project Initiation Document

PMBOK Project management Body of Knowledge

PMI.   Project Management Institute

PMO   Project / Program Management Office

PMP   Project Management Professional

PRINCE Projects in Controlled Environment

PWC   Project Working Committee

PSC   Project Steering Committee

WAN   Wide Area Network

UK   United Kingdom

TABLE OF CONTENTS

LIST OF TABLE

LIST OF FIGURES

CHAPTER ONE

1.0   INTRODUCTION

1.1 Background to the Problem

Information technology project success is a research topic that has received the attention of many academics and practitioners in the last two decades (Atkinson, 1999; Delone& Mclean, 2002).Organizations rely on information technology to meet their business goals as well as growth. IT based projects help organizations to deliver better products or services at the right time. Despite decades of research and the accumulation of a substantial knowledge base, the failure rate of IT projects continues unabated (Dwivedi et al., 2013).

In 2012 the Standish Group, publishers of the CHAOS studies provided global view of project statistics of which 60% of the projects from US, 25% from Europe, 15% the rest of the world and reported that 43% of IT projects were late, over budget and / or with less than the required scope; and 18% were cancelled prior to completion or delivered and never used (The Standish Group, 2013). PMAT (2015) conducted online poll in Tanzania on project management performance and results were, 46.2% partly successful, 33.3% failure, 8.6% successful. NMB bank has encountered also problems in executing its IT related projects including cost overrun, and delay due to scope creep in implementing Microsoft Dynamics NAV ERP project of which initial requirements were not implemented on time (NMB ICT Audit Report, 2015).

Cost (budget), time (schedule), or scope (requirements) are referred to in project management as the triple constraint parameters (Schwalbe, 2010). Based upon the triple constraint criteria, the Standish Group (2013) classified projects into three

types of outcomes; successful, challenged, or failed. A successful outcome must meet all three of the triple constraint criteria, challenged outcome refers to a project that was completed and operational but did not meet one or more of the triple constraint criteria, and a failed outcome refer to a project that was started but was cancelled at some time during the project development life cycle. Looking for a way to stay ahead of the pack in today's competitive and chaotic global economy, companies are turning to project management to consistently deliver business results (PMI, 2010). Why project management matters? The high rate of failed or challenged projects can be mitigated by increasing the project management maturity level in an organization (Sidenko, 2006).

According to Sidenko (2006) organization with more mature project management practices have improved project performance including triple constraint performance. OPM3 (2013) recommends the implementation of a Project Management Office (PMO) as an approach to improve an organization's project management maturity to enable improved project success. As noted by Ward and Daniel (2013), the number of PMO being formed in organizations is growing, suggesting that organizations believe that these are the effective means of addressing the challenges of the growing number and complexity of IT projects that they are undertaking.

1.1.1 Project Management at National Microfinance Bank Plc. (NMB)

National Microfinance Bank Plc (NMB) is one of the largest commercial banks in Tanzania, providing banking services to individuals, small to medium sized corporate clients, as well as large businesses. It was established under the National

Microfinance Bank Limited Incorporation Act of 1997, following the break-up of the old National Bank of Commerce, by an Act of parliament. Three new entities were created at the time, namely: NBC Holding Limited, National Bank of Commerce (1997) Limited and National Microfinance Bank Limited. Initially, NMB could only provide payment services as well as offer savings account, with limited lending capabilities, before becoming a fully-fledged universal retail bank.

In 2005, the Government of the United Republic of Tanzania privatized the bank when it sold part of its shareholding (49%) to a consortium led by the Cooperative Centrale Raiffeisen-Boerenleenbank B.A. (Rabobank Group). Subsequently, there was further divestiture in 2008 when the Tanzanian Government off loaded another 21% of its shareholding to the Tanzanian public through an Initial Public Offering (IPO).The listing of the bank's stock on the Dar es Salaam Stock Exchange has led to a diversified ownership structure and share distribution (appendix I). To respond to business needs NMB decided to invest in project management by first introducing project management jobs title such as project manager, program manager, later implementing Project Management Office (PMO) as project governance body to deliver individual projects and programs to support organizational goal.

Initially each department including IT as well as IT sections had their own projects running by accidental functional project managers. This created a lot of challenges in terms of resource utilization, communication among various projects, conflicts of project priorities in alignment with business strategic goals, and difficulties in managing projects dependencies. Overall, NMB decided to implement PMO for one or more of the following reasons: to reduce the risk of projects failing to deliver to

time, cost and quality targets, to increase the success of projects and programs in delivering the business value expected, to make more efficient use of project resources by using a "shared service", and to make more effective use of scarce skills and resources across projects and programs (NMB PMO Report, 2012)

1.2 Statement of the Research Problem

Managing successful IT projects has become a significant factor in banking industry success and investment in project management is integral to that success. However, many organizations still struggle to achieve success with majority of their IT projects. Too many IT projects are not completed on schedule, on budget, and within scope, resulting in cost overruns, and missed business opportunities (Standish Group, 2013). In 2012 the Standish Group, publishers of the CHAOS studies provided global view of project statistics of which 60% of the projects from US, 25% from Europe, 15% the rest of the world and reported that 43% of IT projects were late, over budget and / or with less than the required scope; and 18% were cancelled prior to completion or delivered and never used (The Standish Group, 2013). NMB bank has encountered also problems in executing its IT related projects including cost overrun, and delay due to scope creep in implementing Microsoft Dynamics NAV ERP project of which initial requirements were not implemented on time (NMB ICT Audit Report, 2015).

Cisco NAC (Network Admission Control) project was disabled for more than a year of which huge license cost was already paid to purchase this technology (NMB ICT Audit Report, 2015). Some believe that effort and money spent in implementing Project Management Office (PMO) has made a big difference in the level of success

achieved in managing IT projects (Bernheim, 2012) while other studies found out that PMO has no effect on the overall success rates of information systems projects (Ward, et al., 2013).If the influence of PMO on IT projects success were to be clearly understood there was the need to conduct research in this area. Besides the best of researcher knowledge, no study had been conducted on the influence of PMO on IT projects success in Tanzanian banking industry in which IT has contributed its growth. Hence there was a knowledge gap in this area and it was the objective of the proposed study to fill that gap by focusing on NMB as a case study.

1.3 Objective of the Study

1.3.1 General Objective

The general objective of the study or research was to examine the influence of project management office on IT projects success in the banking industry in Tanzania.

1.3.2   Specific Objectives

1. To identify information technology project management practices influencing IT projects success in the banking industry in Tanzania

2. To assess the perceived IT projects success in the banking industry in Tanzania

3. To assess an extent PMO implementation has influenced IT projects success at National Microfinance Bank Plc

1.4 Research Questions

1. What are the common information technology project management practices in the banking industry?

2. What is the perceived information technology projects success in the banking industry?

3. What is the influence of the project management office to information technology projects success?

1.5 Significance of the Study

Conducting this research or study is important and needed for several reasons. First, to explore the influence of Project Management Office (PMO) on information technology projects success in the banking industry in Tanzania, using NMB as single case study. Second to focus on qualitative findings in order to gain an in-depth understanding of how project management office practices influence IT projects success. Having in-depth information enable the researcher to compile the results from the study with relevant solutions to IT projects failure problems.

Third this study has added new insights to scholars who believe PMO establishment influence success of IT projects. As it has been pointed out by different scholars that there is a prevailing debate over the IT projects success and introduction of project management offices, this study might bring or being part of providing the solution.

1.6 Scope and Limitation of the Study

In Tanzania there are several banks offering different banking products, most of this products depend largely on information technology as a business drive to successful business growth. But information technology project success is almost a great challenge or problem to many banks. This research focused on National Microfinance Bank Plc confined only to Dar es Salaam (head office and few branches) as a case study, this is due to the fact that it has established Project

Management Office (PMO) to assist different projects including current information technology projects and incoming projects. Limitations of the Study were lack of relevant studies on particular studies on influence of project management office on IT project success in Tanzanian banking industry. Limited sufficient funds and time to facilitate studies.

1.7 Organization of the Study

Chapter One has stated the purpose of this study which was to examine the influence of Project Management Office (PMO) on Information Technology (IT) projects success, it also stated objective and significance of the study. Chapter Two covers literature review relevant to the study with emphasis to the key concepts and theoretical and empirical review. Chapter Three provides a detailed explanation of the research methodology, research design, population selection, instrumentation, validation procedure, instrumentation modification, instrument distribution, and data collection goals. Chapter Four covers data analysis from the field and results of this research work. Chapter five covers recommendations and conclusions to the study.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1Introduction

This chapter presents a review of related literature relevant to the study. Section 2.2 covers conceptual definitions, section 2.3 theoretical literature review, section 2.4 empirical literature review, section 2.5 research gap, and section 2.6 conceptual framework, and section 2.7 Descriptions of framework.

2.2 Conceptual Definitions

2.2.1 Information Technology Project Management

Application of knowledge, skills, tools, and techniques to IT project activities in order to meet or exceed IT project requirements (Schwalbe, 2013). Information technology projects involve using network, software, and hardware to create service, product, or result. There are five key issues commonly encountered in IT projects (Bridge, 2015). Number one, there are typically multiple vendors or partners who may be supplying the infrastructure like servers or hardware components, database or firmware, or any other components. Each vendor-partner comes with their own expectations, their assumptions or constraints that must be captured and incorporated into the overall project charter or project plan (Bridge, 2015).

Number two, changing versions and releases. There are multiple components going on and specifically with IT it changes so rapidly between hardware improvements or enhancement coming along, even firmware or software. This can happen in the middle of the project and most of the time they need to be incorporated and constantly monitored (Bridge, 2015).

Then there are complex dependencies. Sometime if there is a delay in one of component, this can have impact on other components which affect all other deliverables of the project (Bridge, 2015). Then there is disaster recovery. The disaster recovery is a project on its own as it needs to be well planned, implemented and tested before the go live of the implemented system. Making sure all people and resources are available to accomplish disaster recovery project is a challenging task (Bridge, 2015). Number five, most importantly, is the support. This should be addressed as early as possible. Making sure there is a proper support when something goes wrong, that they get escalated and get support in a timely manner (Bridge, 2015).

2.2.2 Information Technology Project Success Rate

Associates a percentage of the number of planned projects compared to the actual number of successfully implemented projects for one fiscal year (Standish, 2009). During project feasibility study, all projects expected to be undertaken; analysis is done that identifies all possible projects which can be implemented within given budget and time. The results of this are comparison between actual projects completed and total projects within the given year (Standish, 2009).

2.2.3 Project Definition

Project management institute-PMI (PMBOK, 2013) defines a project as a 'temporary endeavour to create a unique product, services, or results'. Prince2-glosary-of-terms (2009) define a project as a temporary organization that is created for the purpose of delivering one or more business products according to a specified business case. On this study project definition will be based on Project management Body of

Knowledge- PMBOK (2013) definition. Projects have constraints such as 'time, scope, and cost' in which all these need to be balanced in order to achieve desired project success.

2.2.3.1 Project Management

Project management institute-PMI defines Project management as application of knowledge, skills, tools and techniques to projects with aim of delivering projects within specified scope, time, and cost (PMBOK, 2013).According to PMI, project management have 5 process groups and 10 knowledge areas. The 5 process groups are initiation, planning, execution, monitoring and control, and closing (PMBOK, 2013).

Initiation process group: Those processes performed to define a new project or a new phase of an existing project by obtaining authorisation to start a project or phase (PMBOK, 2013).

Planning process group: Those processes required to establish the scope of the project, refine the objectives, and define course of action required to attain the objectives that the project was undertaken to achieve (PMBOK, 2013).

Executing process group: Those processes performed to complete the work defined in project management plan to satisfy the project specifications (PMBOK, 2013).

Monitoring and Control process group: Those processes required to track, review and regulate the progress and performance of the project; identify any areas in which

changes to the plan are required; and initiate corresponding changes (PMBOK, 2013).

Closing process group: Those processes performed to finalise all activities across all process groups to formally close project or phase (PMBOK, 2013).

These process groups are not sequential instead they complement each other as shown on Figure 2.1

Figure 2.1: Process Group

Source: Project Management Institute

Ten knowledge areas in Table 2.1 are integration, procurement, communication, stakeholder management, human resource management, risk management, quality management, cost management, Scope management, and time management (PMBOK, 2013). All ten knowledge areas need to be mapped to five project process groups for better project outcome hence project success (PMBOK, 2013). Table 2.1 shows mapping.

Table2.1: Ten Knowledge Areas Mapped to Five Process Groups

Process Groups Knowledge Area	Initiating	Planning	Executing	Monitoring Controlling	Closing
Project Integration Management	Develop Project Chatter	Develop Project Management Plan	Direct and Manage Project Work	Monitor and Control Project Work Perform Integrated change Control	Close Project or Phase
Project Scope Management		Plan Scope Management Correct Requirements Define Scope Create WBS		Validate Scope Control Scope	
Project Time Management		Plan Schedule Management Define Activities Sequence Activities Estimate Activity Resource Estimate Activity Duration Develop Schedule		Control Schedule	
Project Cost Management		Plan Cost Management Estimate Cost Determine Budget		Control Cost	
Project Quality Management		Plan Quality Management	Perform Quality Assurance	Control Quality	
Project Human Resource Management		Plan Human Resource Management	Acquire Project Team Develop Project Team Manage Project Team		
Project Communication Management		Plan Communications Management	Manage Communications	Control Communications	
Project Risk Management		Risk Management Planning Risk Identification Qualitative Risk Analysis Quantitative Risk Analysis Risk Response Planning		Risk Monitoring and Control	
Project Procurement Management		Plan Procurement Management	Conduct Procurement	Control Procurements	Close Procurements
Project Stakeholder Management	Identify Stakeholders	Plan Stakeholder Management	Manage Stakeholder Engagement	Control Stakeholder Engagement	Administrative Closure

Source: Project Management Book of Knowledge, 2013:61

2.2.3.2 Characteristics of Project Management

According to Project Management Maturity Model (OGC, 2010), good project management will be expected to have the following characteristics.

i. A finite and defined life span

ii. Defined and measurable business deliverables that contribute towards the achievement of business objectives

iii. A defined amount of resources

iv. Delivery of capabilities from which business benefits and performance improvements can be leveraged

v. An organizational structure, with defined roles and responsibilities

vi. Focus on management and coordination

vii. Delivery of outputs within time and cost constraints

viii. Quality management, focusing on fit-for-purpose output based on requirements

ix. Business cases containing an accurate budget for output delivery

x. Risk management focused on cost, quality and timescales for delivery

xi. Issue management is proactive and focused on ensuring successful delivery

xii. Project plans that are both product and activity oriented

2.2.4 Programme Management

Project Management Institute defines programme management as 'application of knowledge, skills, tools and techniques to a program in order to meet the program requirements and to obtain benefits and control not available by managing projects individually (PMBOK, 2013). 'Programs are projects which are related and compete in terms of resources of which can be Money, people, or equipment's.

2.2.4.1 Project Management Office

Project Management Institute defines Project Management Office (PMO) as a 'management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques (PMBOK, 2013). Other terms are also used for the organizational entities described by the definition above, including programme management office and project or programme management Centre of excellence (OGC, 2009).

A PMO may be established to support a single large project or programme or to coordinate multiple unrelated or loosely related projects. The later may deal exclusively with one area of an organization's projects such as new product development or information systems and technology or may have a role that encompasses all major projects and programmes, sometimes termed 'enterprise' or 'corporate' PMOs (Aubry et al, 2010).

 The use of PMO has a long history dating back to the 1930's (Babaeianpour et al., 2015). OPM3 (2013) discusses key factors to achieving a project office's long –term vision. It also provide insights on the role of the project office in assisting project teams and organization in achieving desired project management level through constantly evaluating organization project maturity level by comparing organization project management practices with OPM3 framework.Dai and Wells (2004) studied PMO features and their relationship to project performance and found strong evidence that project management standards and methods are highly correlated with project performance (p.531).

Dai and Wells further found that PMOs providing historical archives also had a significant correlation with project performance. Lee (2006) studied IT PMOs and found that they have positive effects on all nine of the PMI knowledge areas (time, cost, scope, quality, risk, communications, human resources, procurement, and integration).Dai and Wells (2004) indicates that the term project success is commonly used interchangeably with positive project performance. A common practice of defining project success is in terms of meeting the triple constraint parameters of project scope, cost, and time (Schwalbe, 2013).

2.2.4.2 Functions of Project Management Office

Project management Office primary functions are;

Standards, Methodologies, and Processes; This function focuses on project-management methodology definitions, metrics definitions, process development, and improvement (Salameh, 2014).

Project/Program Delivery Management; this function includes project resource management; project schedule, cost, or scope management; project risk management; stakeholder management; communications; and project integration (Salameh, 2014).

Portfolio Management; Portfolio management includes project prioritization, strategic alignment, portfolio reporting, resource management allocation according to project prioritization and organization strategically objectives, opportunities and investment analysis, risk management, and benefits realization tracking and reporting (Salameh, 2014).

Talent Management; this function pertains to training; career paths and development; capability and skills development; and certifications, qualifications, and credentials (Salameh, 2014).

Governance and Performance Management; Governance and performance management are focused on an organization's performance reporting, issue escalation, information distribution, metrics and key performance indicators, compliance, financial management, and PMO performance management (Salameh, 2014).

Organizational Change Management; This function focuses and addresses customer and stakeholder satisfaction, managing resistance, readiness assessment, stakeholder management, and communications (Salameh, 2014).

Administration and Support; Administration and support revolve around tools provisioning, implementation, and support. In addition, the PMO can provide a consulting and IT/information systems support role in proof of concepts, selection, contracting, and implementation (Salameh, 2014).

Knowledge Management; The knowledge-management functions is used to define knowledge-management policies, managing intellectual collateral and property, lessons learned, content management, and collaboration (Salameh, 2014).

Strategic Planning; Strategic planning relates to confirming strategic priorities, defining business goals and aligning to initiatives, environmental scanning, and opportunity analysis (Salameh, 2014).

Combined project management office functions not only help organizations to excel in project management knowledge but also help to successful deliver projects on budget as planned cost and actual cost are constantly monitored and controlled to keep project budget on track, it also helps projects to be delivered on schedule as project actual schedule is monitored against planned schedule and if there exist any deviation is controlled as early as possible. Project management office as acting as agent of change is constantly monitor and control project changes through defined change management procedure. Proper change management help projects to be delivered as per agreed project scope. Most IT projects failure are caused by failure to meet project budget, and schedule attributed by constantly changes on requirements which leads to changes in project scope. Controlling the triple constraints cost (budget), time (schedule) and scope leads to information technology projects success.

2.3 Theoretical Literature Reviews

A system can be defined as an entity, which is a coherent whole (Ng, Maull and Yip, 2009) cited Cristina et al., (2010) such that a boundary is perceived around it in order to distinguish internal and external elements and to identify input and output relating to and emerging from the entity. A systems theory is hence a theoretical perspective that analyzes a phenomenon seen as a whole and not as simply the sum of elementary parts. The focus is on the interactions and on the relationships between parts in order to understand an entity's organization, functioning and outcomes. This perspective implies a dialogue between holism and reductionism. Systems can be found in nature, in science, in society, in an economic context, and within

information systems. A distinctive characteristic of systems theories is that it developed simultaneously across various disciplines and that scholars working from a systems theory perspective build on the knowledge and concepts developed within other discipline.

Systems are a set of interrelated parts that turn inputs into outputs through processing. All systems have common patterns, properties, and behaviors used to gain insight into the behavior of complex phenomena (Kerzner, 2009). Systems theory provides an analytical framework for reviewing an organization in general (Schwalbe, 2013). Any change in the environment will directly affect the structure and functions of the systems (Sprouse, 2010). Systems theory suggests management design technique that can be used across many disciplines. This technique has come to be called systems management, project management, or matrix management (Kerzner, 2009).

Between the middle and late 1960s, more executive began searching for new management techniques and organizational structures that could be quickly adapted to a changing environment (Kerzner, 2009). By 1970s and again during the early 1980s, more companies departed from informal project management and restructured to formalize the project management process, mainly because the size and complexity of their activities had grown to a point where they were unmanageable within the current structure (Kerzner, 2009).Because current organizational structures are unable to accommodate the wide variety of interrelated tasks necessary for successful project completion, the need for project management has become apparent (Kerzner, 2009). By the 1990s, companies had begun to realize

that implementing project management was a necessity, not a choice (Kerzner, 2009).

Business practitioners clarify a system by the users, environment, and goal of the system (Kerzner, 2009). The elements in the group, either non-human or human, are organized in a manner such that the elements function as a whole toward a common objective or goal (Kerzner, 2009). Business practitioners view systems as collections of interacting subsystems that when properly tuned and organized create a synergistic output (Kerzner, 2009). Programs are understood as the first-level elements of a system (Kerzner, 2009). Programs group undertakings are designed to attain a broad goal that may continue over time such as several years (Kerzner, 2009).

Many corporations design and implement Project Management Office (PMO) to aid the project managers to work toward a broader goal than the individual project work (Sprouse, 2010).Although the business enthusiasm for project management and Project Management Office (PMO) is strong, the resulting consequences seem to be disappointing (Sprouse, 2010). The rate of challenged and failed IT project is still high (Standish, 2013). In 2012, Chaos Report showed that 43% of IT projects were late, over budget and / or with less than the required scope; and 18% were cancelled prior to completion or delivered and never used (The Standish Group, 2013).

2.4 Empirical Literature Reviews

Empirical Literature Review refers to a way of gaining knowledge by means of direct or indirect observation and experience. Empirical evidence, the records of

one's observation can be analyzed quantitatively or qualitatively (Narsisi, 2014). A researcher can answer and identify research gap through observing empirical studies and collected information.

2.4.1 Empirical Literature Review in the World

According to Ward, John and Daniel, Elizabeth research paper, "The role of project management offices (PMOs) in information systems/information technology project success and management satisfaction". From journal (Enterprise Information Management 2013). The concept of project management offices (PMOs) is finding increasing acceptance in many organizations. Organizations are increasingly using project or programme management offices (PMOs) to coordinate activities across Information Systems (IS/IT) projects. The paper aims to explores how the presence of PMOs and their involvement in (IS/IT) projects relates to project success and senior management satisfaction with those projects. Approximately 1900 managers from organizations with PMOs in mainland European and 500 managers from United King Dom organizations were surveyed. The results show that the presence of PMO did not appear to improve the overall success rate of projects.

Kelly (2014) on the report "Failing in Management and Governance" studied events leading to the £1.5 billion Capital shortfall at the Co-operative Bank in the UK where a six year IT "replatforming" project was cancelled. The study identified concerns over clarity of project scope, the definition of the target operating model, the development of implementation project plans, the organization of the project management office, allocation of accountabilities and supplier management. Kelly, (2014) is suggesting weak project management office governance was a major cause

of the capital shortfall at the Co-operative Bank in the UK.

According to Santosus (2015). An article "Why you need a Project Management Office (PMO)" an online survey conducted worldwide by CIO and the Project Management Institute (PMI), revealed that out of 450 people, 303, or 67 percent, said their companies have Project Management Office (PMO). Of those with PMO, half said the PMO has improved project success rate, 22 percent didn't know or don't track the metric, and 16 percent said success rate stayed the same. There is also a strong link between the length of time a PMO has been operating and project success rate. The longer the better. While 37 percent of those who have had a PMO for less than one year reported increased success rates, those with a PMO operating for more than four years reported a 65 percent success rate increase.

2.4.2 Empirical Literature Review in Africa

According to Sukhoo et al. (2015) on Survey of Project Management Tools, Techniques and Methodologies used in Mauritius: The Current Status, a large number of companies are either not comfortable with existing projects management methodologies, which have western origins, or are not using any methodology at all. The absence of a project management methodology advances chaos in a software development process and may contribute to the failure of a project (Sukhoo, 2015). In such situations software development as well as project management tend to be performed on an ad hoc basis, thereby leading to inefficient management of time, budget and quality (Sukhoo, et al,. 2015). Sukhoo et al. (2015) furthermore surveyed tools and techniques in use as well as the level of success of projects within organisations with respect to the project parameters such as time, cost and quality.

It was found that. For example 20% of companies sampled claimed that more than 75% of their projects annually failed to meet the set deadline, while 10% of companies sampled claimed that more than 75% of their projects annually suffered from budget overrun (Sukhoo, et al,. 2015). These figures are quite alarming, therefore improvement must be brought in this area.

Sukhoo et al. (2015) suggest that project management concepts, especially those of western origins, may not be universally applicable, as developing countries have to constantly face a shortage of skilled staff, difficult economic and social conditions, weak political institutions, as well as deeply rooted cultural and religious beliefs. Therefore, there is need to encourage the emergency of project management methodologies of a certain indigenous nature, which can cope with the actual status of developing countries (Sukhoo, et al., 2015). The research implication is that, more studies are required in the area of project management and Information Technology in developing countries in order to improve projects success.

2.4.3 Empirical Literature Reviews in Tanzania

The closest studies on the influence of PMO on IT projects success in Tanzania are that of Yonazi (2012) and Nfuka et al., (2010). According to Yonazi (2012), an article Exploring facilitators and challenge facing ICT4D in Tanzania, Journal of e-government studies and best practices. The researcher found one of challenges facing ICT4D in Tanzania organizational is poor championship, inadequate planning and unsupportive processes. Yonazi (2012) claims that projects with strong championship and adequate planning were successful. Although researcher has not

termed this as project management but adequate planning, project championship are strong elements of project management knowledge. Application of adequate planning and strong leadership makes higher chances of IT projects to be successful.

According to Nfuka et al. (2010) on IT governance Maturity in the public sector organizations in a developing country: The case of Tanzania. Tanzania Revenue Authority as one of the autonomous government agencies assessed performed better than others in the studied IT processes. This could have been attributed to the implementation of favorable mechanisms among of which is globally used project management framework (PRINCE 2). Sukhoo et al. (2015) claims that the use of project management methodology makes higher chances of IT projects to be successful.

2.5 Research Gap

Extent research has shown that the number of PMOs being formed in organizations is growing (Hobbs and Aubry, 2007). Suggesting that organizations believe that these are effective means of addressing the challenges of growing number and complexity of IT projects that they are undertaking (Aubry and Hobbs, 2010). Altahtooh et al. (2013) provided a general picture of the establishment of a PMO and its effect on IT projects by exploring the difference between the organizations that established PMO and organizations that did not in Saudi Arabia. Whilst previous studies have identified a range of activities undertaken by PMOs (Hobbs and Aubry, 2010).Besides the best of researcher knowledge, no study had been conducted on the influence of PMO on IT projects success in Tanzanian banking industry in which IT has contributed its growth.

2.6 Conceptual Framework

This framework is developed based on an extensive literature review. The framework in Figure 2.2 shows the relationship between the IT project and the PMO within an organizational context. Almost all organizations want an IT project that is completed on time within cost and to the specified scope.
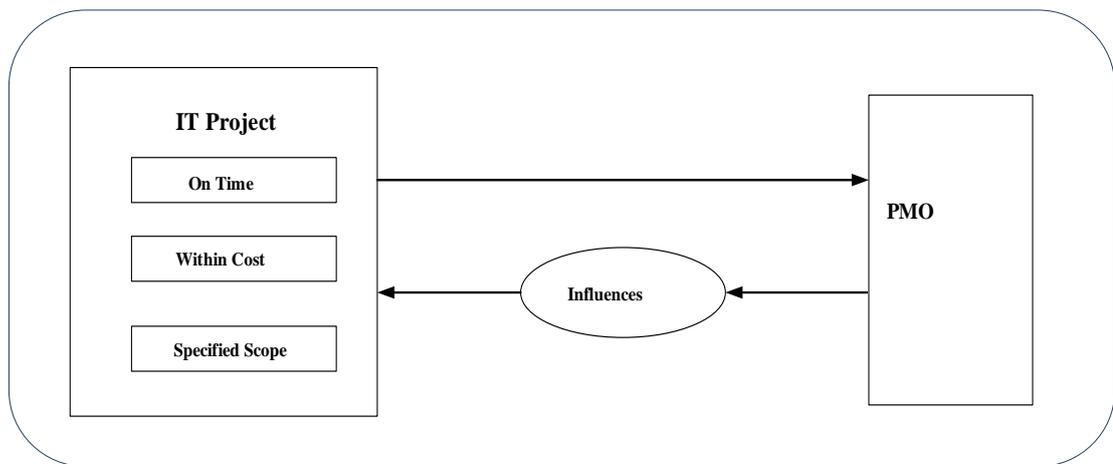
Figure 2.2: Conceptual Framework

Source: Researcher, 2015

2.7 Description of Framework

Based on the theoretical and empirical literature on PMO and IT project success, an in-depth review of theory suggests the following general relationship among the study concepts shown in Figure 2.2. The PMO provides IT projects with standards methodologies which ensures the uniform data capture from all the projects and report to top management. This facilitates management reporting and help in accurately tracking the status of the IT projects in terms of cost, schedule and scope deviation.

The use of projects standards methodologies may increase the chances of IT project success. Consistent proven standards methodologies that include industry best practices such as PRINCE 2-managing success projects, PMBOK-project management body of knowledge, ISO 10006-guidelines to quality in project management, are important for any project success. Successful implementation and consistent use of best practices, and project management methodologies within each and every IT project can assist an organization in achieving project management maturity and significant improvement in IT project success rate.

PMO provides project management training and education for effective IT project management. Training provides individuals with necessary skills, knowledge, and competencies needed to perform project tasks. Some of skills needed by project team are; project communication skills, stakeholder management skills, and problem solving skills, project planning, monitoring and closing skills. Adequate training enables those who receive the training to do their job more effectively and hence lead the team towards IT project success. PMO help to develop a knowledge repository to capture, catalogue, and maintain knowledge of numerous IT projects undertaken by an organization. Knowledge repository helps IT project managers to make informed decisions when it comes to project issues resolving by referring to previous projects. This reduces project implementation time and may reduce project cost as well. On the other hand IT projects provide PMO with the information, knowledge and experience gained on other IT projects and IT project performance data.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This section investigate methodologies used to conduct this research. It starts from philosophical point of view discussing interpretivism, positivism, and critical; then discusses the research design, which in turn show why the case study was chosen as the appropriate research strategy for this study. Finally it discuss how data were collected and analysed using both qualitative and quantitative research tools. It also provide critical analysis why the research is much basing to be more of qualitative research while incorporating some of quantitative data collection techniques.

Most positivist researchers generally assume that reality is objectively and can be described by measurable properties, which are independent of the observer or researcher and his or her instruments (Myers &Avison, 2002). The shortcoming of this approach to be used in this study is because the positivist perspectives does not include the researcher as a contributor to the subject under study. Critical researchers assume that social reality is historically constituted and that it is produced and reproduced by people (Myers &Avison, 2002).Critical researchers focuses on the oppositions, conflicts and contradictions in contemporary society, and seeks to be emancipatory; that is, it should help to eliminate the causes of alienation and domination (Myers &Avison, 2002).

Underlying philosophical assumptions for this research is interpretive study, whereby social and human factors are incorporated into the study and the researcher is also considered as the part of the study. Myers &Avison (2002) suggest that

interpretive studies generally attempt to understand phenomena through the meanings that people assign to them.

3.2 Research Design

This study is an exploratory study to assess the influence of PMO on IT projects success. The strategy adopted is case study approach, the choice of this strategy is because of its flexibility to incorporate the context and the research problem into picture. Robson (2002:178) cited by Saunders, et al. (2009) defines case study as 'a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence'. Case studies enable to give a holistic account of the subject of research. They help the researcher to focus on the interrelationships between all the factors such as people, groups, policies and technology that make up case studies (Fisher, et al., 2010). The case study gives room for the research to be either explanatory or descriptive and the advantage of using case study method, is to use different techniques to collect data through instruments such as interviews, observation, questionnaires and secondary data.

As noted by Kothari (2004) a case study research method gives a researcher depth of understanding rather than breadth as other methods such as survey. The case study of National Microfinance Bank (NMB) was chosen as a result of one of the major banks in Tanzania that has established Project Management Office (PMO) to manage various projects within the bank including IT projects. This includes project selection, execution, monitoring and control and project management knowledge dissemination. The researcher also acknowledges there are some disadvantages of a

case study research such as sometimes perceived as lacking rigor and leading to generalizations with poor credibility.

3.3 Research Area

The study has been conducted in financial industry, case of National Microfinance Bank (NMB PLC) at Dar es Salaam (head office and some branches). NMB was chosen as a result of one of the major banks in Tanzania that has established Project Management Office (PMO) to manage various projects within the bank including Information Technology projects.

3.4 Sampling Design and Sample Size

Refers to a plan for obtaining a sample from a given population, (Kothari, 2004). Broadly a technique or the procedures that researcher have adopted in selecting items for the sample. (p.35).A decision has to be taken concerning a sampling unit before selecting samples. Sampling may be a geographical one, such as a state, district or village. On the other hand the researcher decide a sample he/she could use, decide the technique to be used in selecting the item for the sample. In fact this technique stands for design itself. Obviously must select the design which for a given sample size and for a given cost has a smaller sampling error.

3.4.1 Sample Size

The sample target population for this exploratory study included Project Management Office personnel and Information Technology staffs of National Microfinance Bank Plc both head office and branches. The sampling number was determined according to case study guidelines (Saunders et al., 2009).The sample

consisted of individuals with common characteristics as identifiable by the researcher (Creswell, 2012). This sample included 28 Information Technology personnel who deal with technical implementation of IT projects, 2 Project managers from Project Management Office who assist on proper project delivery and have project management knowledge and owners of recently computerized processes, making total of 30 people. This sample was characterized as representative of the population.

3.4.2 Sampling Design

Before deciding which method is the most appropriate for data collection there is a need to determine relevant sampling techniques. (Dawson 2002).In this research a researcher opted combination of convenience and purposeful sampling methods. Convenience sampling method is an option entailing participant willingness and availability for the study (Creswell, 2012). Purposeful sampling was the appropriate term for studying the central phenomenon (Creswell, 2012). This sampling methodology select individuals judged to be information rich based upon their experience in project management and information technology. The sampling method assumes that staffs from the project management office have more insight into project management practices and experiences than the general population of employees. Contact with respondents was done through interaction, email and telephone.

3.4.3 Variables and Measurement Procedures

The research gathered qualitative data that was collected through semi-structured interviews, collection of documents, and reflective journals, while quantitative data

was collected through survey questionnaires. With qualitative information from the research assisted the researcher in gaining access and developing trust with the bank. The researcher wants to know the specific information which can be compared and constructed with information gained from other interviewers and literature resources. Questions were the same to every respondent during interview session.

The variables collected and measured by observing the results and participation, but through discussion the variables also measured by level of contribution towards the main topic or question, while through questionnaires involved by understanding of the questions and how the respondents' feedback matches with the expected outcomes.

3.5 Methods of Data Collection

The study employed two methods to collect data, namely, Secondary data collection related method and Primary data collection related method.

3.5.1 Secondary Data

Secondary data are those which have already been collected by someone else and which have already been passed through statistical processes (Kothari, 2004). The researcher consulted secondary data for this study from review of documentary sources these includes NMB PMO reports, NMB ICT Audit reports, and NMB ICT policies were reviewed; online sources were also consulted, this includes NMB internal portal and NMB public portal. Other sources includes observations of IT project management activities.

3.5.2 Primary Data

This is the first information obtained directly from the field; researcher obtained these data using questionnaires and interviews. The data were collected afresh from the original source and for the first time therefore happen to be original in character. Interviews on commonly project management practices, perceived IT project success and influence of PMO on IT projects success in banking industry were done with the following; Project managers who assist on proper IT projects delivery and have project management knowledge.

Survey technique was used to distribute questionnaires aimed to compliment interviews to selected IT employees within the company. The survey was done electronically through emails for branches staffs while head office staffs were hand delivered by researcher. Response was voluntary where by willing respondent was free to decide questions to reply. A pilot survey was done prior to verify appropriateness of selected methods and tools for data collection.

3.7 Reliability and Validity of the Data

In conducting this research, data reliability and validity was taken into consideration. Data validity was attained through the sharing of the researcher's interpretations with the study participants. Reliability was attained through removal of participants error whereby participants were allowed to complete questionnaires at their convenient time when they were expected to be neither on a 'high', looking forward to the weekend, nor on a 'low' with the working week in front of them.

3.8 Data Processing and Analysis

As major part of data has been collected through techniques such as interviews, observations and study of existing documentation, the analysis for qualitative data has adapted Seidel (1998) Noticing, Collecting and Thinking Model as well as the review of returned questionnaires.

Seidel (1998) model is useful when analysing qualitative data, it involve noticing things, collecting things and thinking about interesting things (Nyoka, 2010). In this study it involved explanation, understanding or interpretation of the respondents investigated.

CHAPTER FOUR

4.0 ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter outlines the Data analysis and reports on significant findings. Data analysis considers the data collected from both sources primary and secondary data sources. There are two research methods applied to gather primary data in this research:

   i.   Qualitative research method (semi-structured interviews)

  ii.   Quantitative research method (Survey questionnaires)

4.2 Qualitative Research Method

The qualitative research method employed for this research was semi-structured interviews. The researcher carried out 2 interviews with senior managers specifically working in PMO department. All interviews were face-to face interviews.The researcher took notes during each interview, analyzed the responses and after making some comparison with the responses, summarized the findings in this section. Saunders et al. (2009) warn about the problem of biases during interviews and suggest that the interviewer should accurately record the interview responses of what the interviewee said and not what the interviewer thinks should have been said. The purpose of these was to understand IT project management practices, perceived IT project success in the banking industry and an extent PMO implementation has influenced IT project success from project management office personnel.

Sunders et al. (2009) suggest that the qualitative research using semi-structured interviews cannot be used to make generalization about the entire population that is

based on a small and unrepresentative number of cases. However, these semi-structured interviews along the critical literature review supplied sufficient information to the researcher to gain understanding about the PMO and its influence on the IT project success especially in banking industry.

4.2.1 Interview Questions and Their Responses

1. What are common IT project management practices in your organisation and banking industry as a whole?

Respondent (A)

IT projects that are considered to be closely related with daily ICT operations are managed by the IT function managers. Examples of these projects are systems upgrade and IT infrastructure remediation projects. However, IT projects which have cross functional impact or are considered to have significant financial impact are being assigned to PMO function. Examples of these projects are the IT core banking system transformation projects as such have a significant financial impact in the entire banking.

IT projects run by Functional Managers follows best effort approach whereby there is no specific framework while the IT projects run by PMO function follows the Prince2 Standards. For a project to be run by PMO the responsible functional head of which for IT projects is the Chief Information and Operation Officer (CIOO) has to write a motivation document which will then be presented in the Program Management Steering Committee. If the criteria are met, the committee will approve for the project to be run by PMO and therefore a Project Manager will be assigned from PMO department.

When an IT project is being run by PMO, there will be work streams responsible for technical areas. Examples of the typical work streams are: Procurement Work stream responsible for all the contracts and purchases. IT Networking Work stream responsible for all technical aspects on Wide and Local Area Network (WAN/LAN) and Human Resources Work stream responsible for all recruitment of human resources.IT projects run by PMO require a Project Manager to define a Project Initiation Document (PID) to get approval on budget, commitment of resources and time to complete the project. The projects also have a clear structure of the Project Working Committee (PWC) who are the project team members and the Project Steering Committee (PSC) made of sponsor, senior supplier, senior user and the project manager as a secretary of the monthly meeting. All approval are done by the Project Steering Committee.

Respondent (B)

IT projects are managed by IT departments especially those projects ran day to day as normal operations. IT Projects that seems to have strategic impact across departments are managed by PMO. PMO follows Prince2 project practices when managing projects while IT projects under IT department may partly follow Prince2 project practices such as writing business case for project justification.

From the above responses researcher noticed that Prince 2 project methodology is used by PMO to run projects while projects not run by PMO, use mixture of methodology commonly known as best effort approach in which functional manager appoint accidental project manager within the functional unit to carry out projects.

2. What are perceived IT project success in your organisation and how do they contribute to your organisation and banking industry growth as a whole?

Respondent (A)

Most of the IT projects banking have significantly contributed to the major success in the banking industry through delivery of new products like Mobile Banking, Internet Banking and User friendly core banking systems like Flexcube. The projects have improved customer service, customer experience and raise the over control environment in banking industry.

Respondent (B)

IT project is perceived to be success when stated deliverables in terms of set objectives are achieved. Achievement contribute to banking operations improvement in terms of providing alternative banking process for example TigoPesa, M Pesa hence facilitate alignment to organisation strategic direction on Information Technology and business in general.

From responses above and researcher observation on perceived IT project success, triple constraints (budget, scope, time) are key to project success there are others factors such as meeting stated project deliverables, improving banking operations and improving customers services which makes IT project to be perceived as successful project. This finding is consist with previous studies on perceived IT project success (schwalbe, 2010, kerzner, 2009) who found that triple constraints are base of project success but organisation can add other factors such as customer satisfaction, quality and term them as critical success factors.

3. To what extent PMO played role in the perceived IT project success in your organisation?

Respondent (A)

The most success rate have been witnessed with projects running under PMO as they follow the governing structure with better risk, quality and time management standards as compared to the project run on base of best effort approach. As for the case of NMB, establishment of PMO function have contributed implementation of major IT projects with fewer resources as compared to other project which were run while PMO function was not set.

Respondent (B)

PMO has helped attained project governance on Information Technology projects, subjectivity in measuring success of PMO according to organisation strategic direction.

4. What are IT project management practices in Project Management Office that contributed most to these successes?

Respondent (A)

The major contributing success factor of PMO function has been on optimisation of resources which were initially committed to each function's projects separately without coordination. Moreover, the PMO function have resulted into adoption of standard framework with clear reporting and approval structures.

Respondent (B)

PMO practices such as governance of IT project especially on communication management, accountability, change management, budget control, risk control and

quality control I think has contributed to most of these successes.

From above responses and researchers observations, researcher noticed that PMO activities such as change management, budget control, risk control, project standard methodologies and quality control contributed most on delivering successful IT projects, this findings is consistent with earlier studies (Dai and Wells, 2004, Lee, 2006) who found that project management activities improves project performance.

4.3 Survey and their Responses

The survey results were mainly analysed for frequency analysis for each of the 9 questions, refer appendix II. Total 21 respondents took part in the survey. All respondents were from IT department. The graph for each question provides a summary of survey results in terms of frequency. Comparisons were also made to examine the influence of PMO on IT project success.

4.3.1 IT Project Management Practices in the Banking Industry

When the respondents were asked about the project initiation practice in managing their IT projects as shown on appendix III Table 1, out of 21 respondents, 85.7% were agree with the way that project initiation practice follows best IT project management practices that is inclusion of project selection methods, business case development and project chatter development. 4.8% respondent disagree with the way IT projects initiation practices is done. 4.8% respondent strongly agree with the way IT project initiation practice is done while 4.8% respondent strongly disagree with the way IT project initiation practice is done. Majority were agree with the way IT project initiation practices was done, that is including project selection methods,

business case development and project chatter development. Figure 4.1 provides summary results in terms of frequency.
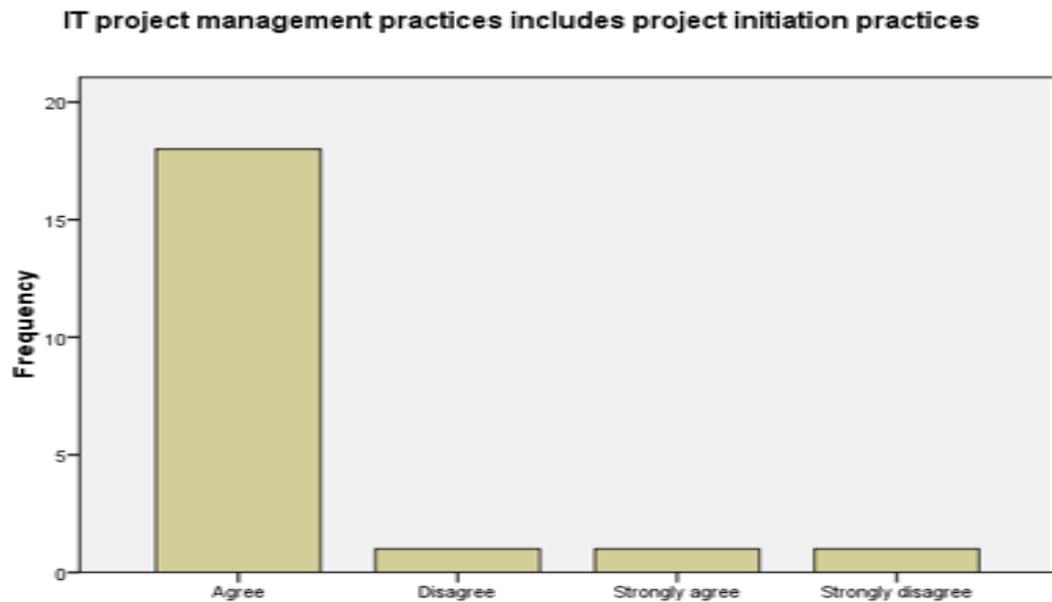
Figure 4.1: Respondents Assessment in IT project Initiation Practices

Source: Survey data 2014

Every IT project to be successful need to be well planned. Planning IT project include clear and well scope definition including project requirements, planned project schedule indicating what needs to start and by when it will be finished, well planned risk, quality, procurement, communication, human resources and integration planning. When the respondents were asked about IT project management practices including project planning in areas of scope, cost, schedule, risk, quality, procurement, communication, human resource and integration planning, refer appendix III Table 2, out of 21 respondents, 52.4% agree with the IT project planning practices, 9.5% disagree with the way IT project planning practices is done, 38.1% strongly agree with the way IT project planning practices is done while none

strongly disagree with IT project planning practices. The researcher noticed that project planning is among IT project management practices in the banking industry based on the survey results as shown on figure 4.2.

Figure 4.2: Respondents Assessment in IT Project Planning Practices

Source: Survey data 2014

IT project execution, monitoring and control practices are key to IT project success. This includes direct and managing project team, performing quality assurance in order to have better project outcome, control schedule, control cost, control risk, and stakeholder management. When respondents were asked about the IT project execution, monitoring and control practices that includes above mentioned activities, refer appendix III Table 3, out of 21 respondents, 33.3% agree with the way project execution, monitoring and control practice is done, 4.8% respondent disagree with the way IT project execution, monitoring and control practice is done, 61.9% strongly agree with the way IT project execution, monitoring and control practice is

done while 0% strongly disagree with IT project execution, monitoring and control practice is done. Figure 4.3 shows respondents assessment in which few disagree and majority strongly agree and agree. Based on below survey results researcher conclude that execution, monitoring and control are among of project practices found in banking industry
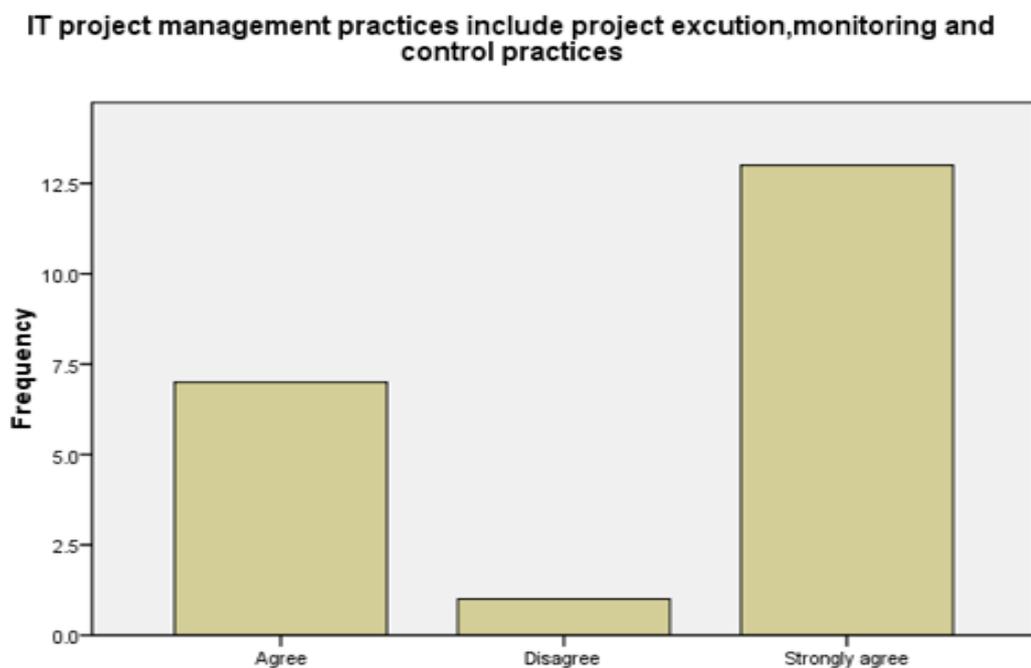
Figure 4.3: Respondents Assessment in IT Project Execution, Monitoring and Control Practices

Source: Survey data 2014

4.3.2 Perceived IT Project Success in the Banking Industry

When the respondents were asked about the perceived IT project success in the banking industry if it aligns with commonly project management triple constraints success factors that are meeting scope, cost and time, refer appendix III Table 4, out of 21 respondents, 33.3% respondents agree, 23.8% respondents disagree, 42.9%

respondents strongly agree while 0% respondent strongly disagree. Triple constraints is a base of defining IT project success factors of which could result into other factors like customer acceptance etc. Though below results in figure 4.4 are mixed, researcher noticed that triple constraints are used to define success of IT projects when conducting interview with project manager.

IT project success is defined based on triple constraints
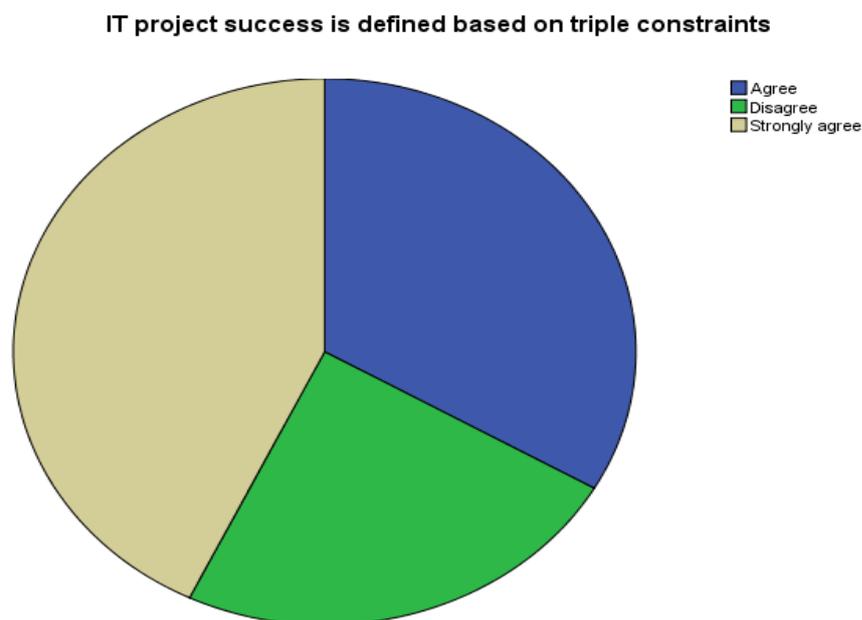
Figure 4.4: Respondents Assessment in Perceived IT Project Success Practices
Source: Survey data 2014

4.3.3An extent PMOs Implementation has Influenced IT Project Success

When respondents were asked if project plans are well developed after implementation of PMO as one of function of PMO to provide project standards. Refer appendix III Table 5,out of 21 respondents 71.4% agree, 14.3% disagree, 14.3% strongly agree while none strongly disagree. The researcher has noticed that PMO implementation has influence on IT project plans by looking on the majority respondent's survey results as shown on Figure 4.5.

Project plans are well developed after implementation of PMO
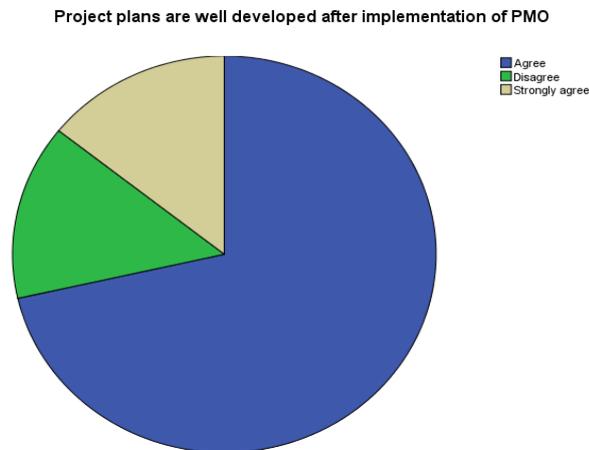
Figure 4.5: Respondents Assessment in IT Project Plans after PMO Implementation

When respondents were asked if project scope is well managed after implementation of PMO. Refer appendix III Table 6, Out of 21 respondents 61.9% agree, 14.3% disagree, 19.0% strongly agree while 4.8% strongly disagree. The researcher has noticed that PMO implementation has influence on IT project scope management by looking on the majority respondent's survey results as shown on figure 4.6

Project scope is well managed after implementation of PMO
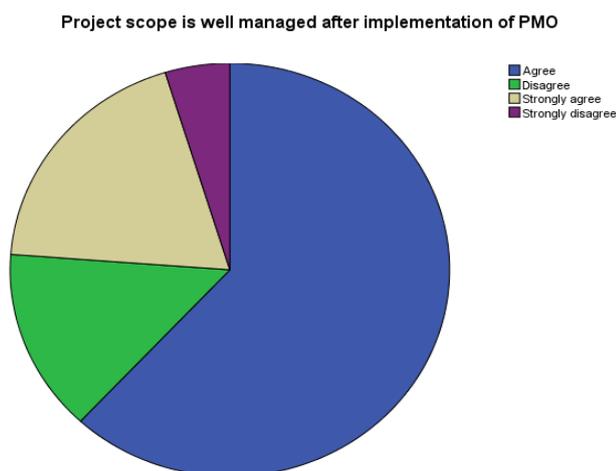
Figure 4.6: Respondents assessment in IT Project Scope after PMO Implementation

Source: Survey data

When asked respondents on how they rank projects to be on schedule after implementation of PMO. Refer appendix III Table 7, out of 21 respondents, 66.7% respondents agree, 19.0% disagree, 14.3% strongly agree while none respondent strongly disagree. The researcher noticed that PMO has influenced IT project schedule management by looking on the majority respondents results as shown on Figure 4.7

Project are on schedule after implementation of PMO

- Agree
- Disagree
- Strongly agree
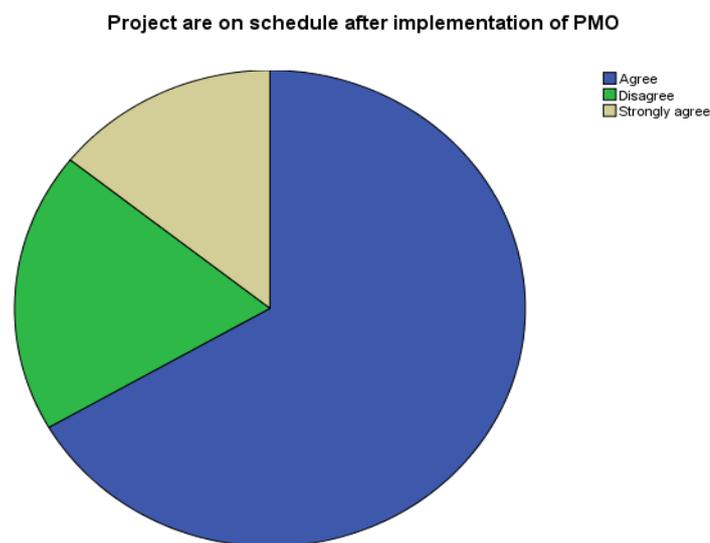
Figure 4.7: Respondents Assessment in IT project Schedule After PMO Implementation

Source: Survey data 2014

When respondents were asked whether IT projects successfully managing budget after implementation of PMO. Refer appendix III Table 8, out of 21 respondents, 76.2% agree that PMO has influenced project budget management, 4.8% respondent disagree, 19% strongly agree, while none respondent strongly disagree. Researcher noticed that majority agree that PMO has influenced project budget management as shown on Figure 4.8

Project are successful managing budget after implementation of PMO
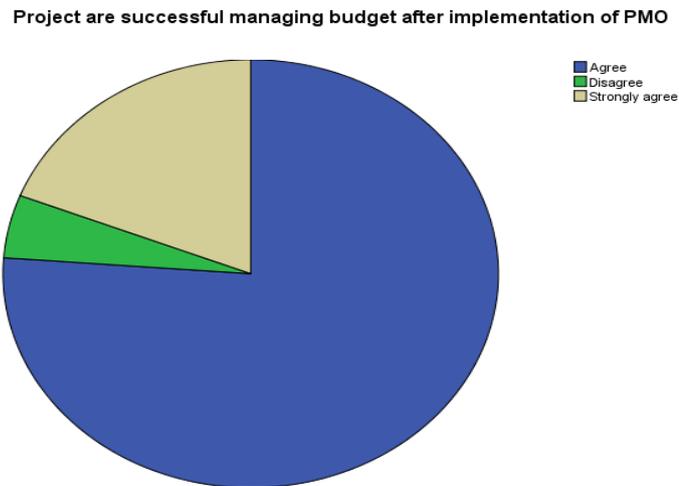
Figure 4.8: Respondents Assessment in ITProject Budget after PMO Implementation

Source: Survey data 2014

When the respondents were asked about the projects to have adequate resources after implementation of PMO. Refer appendix III Table 9, out of 21 respondents, 47.6% agree, 9.5% respondents disagree, 19.0% strongly agree while none respondent strongly disagree. The researcher has noticed that PMO has influence on project resource by noticing the majority respondent's results as shown on figure 4.9.

Project have adequate resource after implementation of PMO
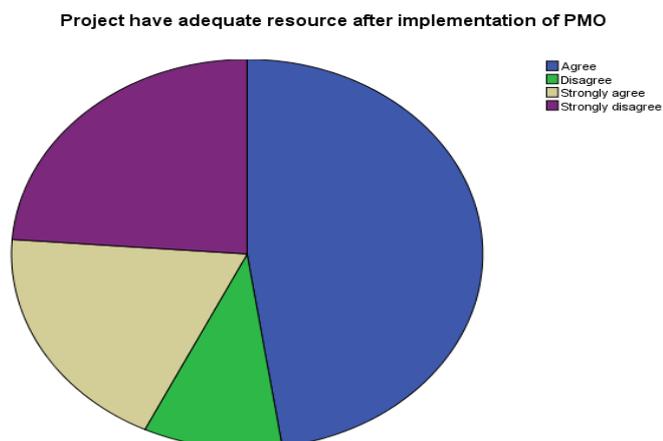
Figure 4.9: Respondents Assessment in IT Project Resources after PMO Implementation

Source: Survey data 2014

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter will conclude on the findings of this study and also provide some recommendations and future researches on the same subject.

5.2 Conclusion

The general objective of this research was to examine the influence of project management office on information technology projects success. All the responses collected and results from questionnaires analysis and interviews were adequate to address the specific objectives laid out in the research. In order to fulfil this general objective, the following specific objectives were identified:

 i. To identify IT project management practices in the banking industry

 ii. To assess the perceived IT projects success in the banking industry

 iii. To assess an extent PMOs implementation has influenced IT project success

For the above objectives to be achieved, the study answered the following specific questions:-

 i. What are common IT project management practices in the banking industry?

 ii. What is the perceived IT projects success in the banking industry?

 iv. What is the influence of the PMO to IT projects success?

The findings regarding the above research objectives and research questions made the study to reach the following conclusion; In answering the first research question, common IT project management practices in the banking industry, information

collected from both NMB project managers and IT staffs this study conclude that most IT projects viewed as day to day business operations are managed through best effort approach in which functional manager choose accidental project manager within the function or section to manage the project. IT project of this nature may partly follow Prince2 project management standards or may not follow this standard. IT projects viewed to have strategic business impact or cut across several functions, are managed using Prince2 project management standards in which project manager is assigned from PMO departments and has full authority on the project as well as project management knowledge.

The second research question on perceived IT project success in the banking industry, information collected from both NMB project managers and IT staffs this study conclude that, meeting triple constraints factors (time, scope and budget) are key measure of perceived IT project success. In additional meeting stated project objectives and client expectations are considered as criteria of IT project success.

The third research question on whether PMO implementation has influenced IT projects success, information collected from both NMB project managers and IT staffs this study conclude that, PMO implementation has greater influence on IT project success as majority of respondents agree that PMO implementation has broaden project management skills within the organization, PMO is seen as project governance body and it help management commitment to IT projects therefore greater chance of IT project success.

Schwalbe (2010) claims that one of the factors affecting the success of information technology projects is the organisations commitment to information technology in

general. Then she further continues that the information technology project managers work best in an environment in which top management values information technology. In this case PMO bring together key IT projects player's hence high commitment and higher chances of IT project success.

Generally the study concludes that, IT has changed the banking industry from paper and branch based banks to digitized and networked banking services. It is now changing the way how banks are delivering services to their customers. However, without proper project management knowledge and governance such as well-established project management office to manage IT projects there is a greater chance of IT projects failure. The success of many IT projects that use outside resources is often due to good project management (Schwalbe, 2010). It is clear that an effective PMO is an important contributor towards successful IT project delivery.

5.3 Recommendation

The following recommendations are made basing on the results of both the research and readings from the literature:

i. PMO should provide training on project management to all IT staff as this will allow them to manage IT projects using project management knowledge.

ii. Prince2 project management methodology should be used not only by PMO departments but also all organisations projects.

iii. PMO should provide project templates, standards and procedures to all IT staff so that they can guide them on managing IT projects.

5.4 Area of Further Research

The size of the population is very limited so, it is recommended for future studies to utilize a large scale sample from all banks found in Tanzania. This will allow having comprehensive study results and certain generalisation. Although this study is based on banking industry, this can be extended to other industries in which IT play greater role. The research methodology used in this study, was due to the nature of the research problem explored. Future researchers can accommodate other research methodologies that are more convenient with the time allocated for their research which has been a major limitation for this study.

In conclusion, the author believes that this research will help to shape the future of the IT project management practices in Tanzania and can be referred to as reference point towards future researches on the topic of IT project management and project management in general.

REFERENCES

Altahtooh, U. & Emsley, M. (2013) *An Empirical Study into the Use of a Project Management Office in IT Projects in Saudi Arabia*. Issues in Information Systems Volume 14, Issue 1, pp.366-375, 2013.

APM Group (2009) *Prince2:2009-glosary-of-terms*. Available at: http://www.bestmanagementpractice.com/gempdf/PRINCE2_2009_English_ Glossary_v1.0.pdf (Accessed: 20 February 2015).

Atksons, R. (1999*) Project Management: cost, time, and quality, two best guesses and a phenomenon, it's time to accept other success criteria*. International Journal of Project Management, 17(6), 337-342.

Aubry, M., Hobbs, B., & Thuillier, D. (2007). *A new framework for understanding organizational project management through the PMO*. International Journal of Project Management, 25(4), 328-336.

Babaeianpour, M., Zohrevandi, S. (2015). *Using Project Management office (PMO) to Improve Project Management Abilities*. Available at: http://utcc2.utcc.ac.th/utccijbe/_uploads/Vol06No1_10.pdf (Accessed: 10 January 2015).

Bernheim, R. (2012) *The Real Value for creating and enhance a Corporate Project Management Office (PMO).* Project Management Institute, Inc. Newton Square, Pennsylvania 19073-3299 USA.

Bridge, J. (2015) *5 Key Issues for IT Projects*. Available at: https://projectmanager.com (Accessed: 10 February 2015).

Cristina, M., Jacqueline, P. & Francesco, P. (2010) *A Brief Review of Systems Theories and Their Managerial Applications*. Service Science 2 (1-2):135.

Creswell, J. (2012) *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4thed.). Upper Saddle River, NJ: Pearson.

Dai, C. & Wells, W. (2004) *An exploration of project management office features and their relationship to project performance*. International Journal of Project Management, 22(7), 523-532.

Dawson, C. (2002) *Practical Research Methods; A user friendly guide to Mastering research*. How To Books ltd, 3 Newtec Place, Magdalena Road, OXFORD, UNITED KINGDOM.

Delone, W. & Mclean, E. (2002) *Information Systems Success Revisited*. In 35th Hawaii International Conference on Systems Sciences (Vol. 00, pp.1-11). Hawaii-USA: IEEE.

Dwivedi, Y., Henriksen, H., Wastell, D. & De, R. (2013) *Grand Successes and Failures in IT: Public and Private Sectors IFIP WG 8.6 International Conference on Transfer and Diffusion of IT, TDIT 2013*. Springer Publishing Company, Incorporated.

Fisher, C., Buglear, J. & Lowry, D. (2010) Researching and writing a dissertation an essential guide for business students. 3rd edition. Pearson Education Limited.

Hobbs, B. & Aubry, M. (2010) *The Project Management Office (PMO); A Quest for Understanding.* Project Management Institute, New York, p. 5-95.

Hobbs, B. (2007) *The Multi-Project PMO: A Global Analysis of the current state of practice.* Project Management Institute (pp. 11-12).

Kelly, C. (2014) *Failings in Management and Governance*. Available at: http://www.thekellyreview.co.uk/documents/168461-07-Kelly%20Review-

FINAL%20REPORT-30APR14.pdf (Accessed: 8 June 2014).

Kerzner, H. (2009) *Project Management: A systems Approach to planning, scheduling and controlling*, 10th edition' John Willey&Sons, UK.

Kothari, C. (2004) *Research Methodology Methods and techniques*, New Age International publishers.

Myers, M. & Avison, D. (2002) *An introduction to qualitative research in information systems.* Qualitative research in information systems, 4, 3-12.

Narsisi, S. (2014) *Assessment of Sustainability Management Approaches in Water hygienic and Sanitation Projects. Case of Kinondoni Municipal*. Master thesis, Open University of Tanzania.

National Microfinance bank plc (2014). *About NMB History*. Available at: http://www.nmbtz.com/index.php?option=com_content&view=article&id=1 54&Itemid=191 (Accessed: 23 Feb 2014).

National Microfinance bank plc (2014). *The current shareholders of NMB*. Available at: http://internalweb.nmbtz.com/About%20NMB/Shareholde r%20info mation.pdf (Accessed: 28 Feb 2014).

National Microfinance bank ICT Audit Report, 2015. Dar es Salaam.

National Microfinance bank PMO Report, 2013. Dar es Salaam.

Nfuka, E. & Rusu, L. (2015). *IT Governance Maturity in the Public Sector Organizations in a Developing Country*. Available at: http://aisel.aisnet.org/amcis2010/536 (Accessed: 5 March 2015).

Nyoka, A. (2010) *What are the possible deficiencies of computer forensic investigation process on preserving computer-based evidence?* (MSc), University of Sal ford.

Project Management Institute (2013) *Organization Project Management Maturity Model (OPM3),* 3rd edition. Project Management Institute, Inc. Newtown Square, Pennsylvania 19073-3299 USA.

Office of Government Commerce (2009) *Prince2 Manual*, *3rd* edn. The Stationery Office. London.

Office of Government Commerce (2010) *Project Management Maturity Model*. The Stationary Office. London.

PMAT (2015) *Rate Project Management Performance in Tanzania*. Available at: http://www.pmat.or.tz/ (Accessed 5 February 2015).

PMI (2013) *A Guide to the Project Management Body of Knowledge (PMBOK Guide),* 5th edition Project Management Institute, Inc. Newtown Square, Pennsylvania 19073-3299 USA.

Project Management Institute (2013) *The Standard for Portfolio Management.* 3rd edition. Project Management Institute, Inc. Newtown Square, Pennsylvania 19073-3299 USA.

Robson, C. (2002) *Real World Research* (2ndedn). Oxford: Blackwell.

Salameh, H. (2014) *A Framework to Establish a Project Management Office*. European Journal of Business and Management, 6(9), 19-26.

Saunders, M., Lewis, P. & Thornhill, A. (2009) *Research Methodology for Business studies.*5th edition, Lotalito Lombarda. Italy.

Santosus, M. (2015) *Why you need a Project Management Office (PMO*).Available at: http://www.cio.com/article/2441862/project-management/ why-you-need-a-project-management-office--pmo-.html (Accessed: 10 March 2015).

Schwalbe, K. (2010) *Information Technology project Management*, Six Edition, Thomson Course Technology, USA.

Schwalbe, K. (2013) *Information technology project management*. Cengage Learning.

Seidel, J. (1998) *Appendix E: Qualitative Data Analysis.* Available at: http://www.qualisresearch.com/DownLoads/qda.pdf (Accessed: 24 June 2014).

Sidenko, S. (2006) *Information technology project management: project management maturity and its effect on project success.* Master's thesis, Concordia University.

Sprouse, L. (2010) *The Influence of the efficacy of the program management office on IT project Success rates*. (PhD), University of phoenix.

Standish Group Report (2009) *Standish Group CHAOS Report*. Available at: http://blog.standishgroup.com/BigBangBoom.pdf(Accessed:23 March 2014).

Sukhoo, A., Barnard, A., Eloff, M., & Van der Poll, J. (2015) *A survey of project management tools, techniques and methodologies used in Mauritius: the current status*. Available at: http://uir.unisa.ac.za/handle/ 10500/2661 (Accessed: 15 March 2015).

The Standish Group (2013) *The Chaos Manifesto 2013 –Think Big, Act Small.*

Ward, J. & Daniel, E. (2013) *The role of project management offices (PMOs) in IS project success and management satisfaction*. Journal of Enterprise Information Management, 26(3), 316-336.

Yonazi, J. (2012) *Exploring Facilitators and Challenges Facing ICT4D in Tanzania*. Journal of e-Government Studies and Best Practices Vol. 2012 (2012).

Yong, W. (2006) '*The effect of PMO on IT project management*. Research Report [Online] Available from <www.pmi.org~/media/PDF/Surveys/pp_lee.ashx (Accessed: 23 Feb 2014).

APPENDECES

APPENDIX I: THE CURRENT SHAREHOLDERS OF NMB

1. CoőperatieveCentraleRaiffeisen-   34.9%
   Boerenleenbank B.A "Rabobank
   Nederland" Rabobank

2. Treasury Registrar (Government of   31.8%
   Tanzania)

3. Standard Chartered Bank (T) Nominee   2.0%
   Limited

4. National Investment Company Limited   6.6%
   (NICOL)

5. Exim Bank Tanzania   4.6%
6. AunaliF.Rajabali   1.7%
7. SajjadF.Rajabali   1.6%
8. Standard Bank Plc   1.3%
9. Parastatal Pension Fund (PPF)   0.8%
10. National Social Security Fund (NSSF)   0.7%
11. TCCIA Investment Company Limited   0.5%

APPENDIX II: QUESTIONAIRES AND INTERVIEW QUESTIONS

Please rate your performance in the scale from (strongly agree to strongly disagree). This will enable researcher to evaluate the influence of Project Management Office on IT project success.

PART – I   IT project management practices in the banking industry

IT project management practices includes

Q 1 project initiation

(That includes project selection methods, business case development, and project chatter development)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

Q2 Project planning

(That includes scope, cost, schedule, risk, quality, procurement, communication, human resource and integration planning)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

Q3 Project execution, monitoring and control

(That includes direct and manages team; perform quality assurance, control schedule, control cost, control risk, and stakeholder management)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

PART – II   Perceived IT projects success in the banking industry

Q1 IT project success is defined based on triple constraints

(That includes meeting scope, cost and time)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

PART – III Influence of PMO implementation on IT project success

IT projects after implementation of PMO

Q1 Project plans are well developed?

(That includes development initiation and execution)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

Q2. Project scope is well managed?

(That includes planning requirements and definition)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

Q3. Projects are on Schedule?

(That includes effort estimation, schedule development & schedule control)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

Q4. Projects successfully managing budget?

(That includes estimation budgeting and cost control)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

Q5. Projects have adequate resource?

(That includes resources acquisition, team development and planning)

- Agree

- Disagree

- Strongly agree

- Strongly disagree

INTERVIEW (Semi structured). **Briefly explain on below parts to enable researcher to evaluate the influence of Project Management Office on IT project success**.

PART – I   IT project management practices in the banking industry

1. What are common IT project management practices in your organization and banking industry as a whole?

PART – IIPerceived IT projects success in the banking industry

1. What are perceived IT project success in your organization and how do they contribute to your organization and banking industry growth as a whole?

PART – IIIAn extent PMOs implementation has influenced IT project success

1. To what extent PMO played role in the perceived IT project success in your organization?

2. What are IT project management practices in Project Management Office that contributed most to this success?

APPENDIX III: QUESTIONNAIRE ANALYSIS STATISTICS (SPSS)

Table 1: IT project initiation practices cross tabulation

IT project management practices includes project initiation practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	18	85.7	85.7	85.7
	Disagree	1	4.8	4.8	90.5
	Strongly agree()	1	4.8	4.8	95.2
	Strongly disagree	1	4.8	4.8	100.0
	Total	21	100.0	100.0	

Table 2 IT project planning practices cross tabulation

IT project management practices includes project planning practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	11	52.4	52.4	52.4
	Disagree	2	9.5	9.5	61.9
	Strongly agree	8	38.1	38.1	100.0
	Total	21	100.0	100.0	

Table 3 IT project execution, monitoring and control practices cross tabulation

IT project management practices includes project execution, monitoring and control practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	7	33.3	33.3	33.3
	Disagree	1	4.8	4.8	38.1
	Strongly agree	13	61.9	61.9	100.0
	Total	21	100.0	100.0	

Table 4 IT project success factors cross tabulation

IT project success is defined based on triple constraints

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	7	33.3	33.3	33.3
	Disagree	5	23.8	23.8	57.1
	Strongly agree	9	42.9	42.9	100.0
	Total	21	100.0	100.0	

Table 5 IT project plan after PMO cross tabulation

Project plans are well developed after implementation of PMO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	15	71.4	71.4	71.4
	Disagree	3	14.3	14.3	85.7
	Strongly agree	3	14.3	14.3	100.0
	Total	21	100.0	100.0	

Table 6 IT project scope after PMO cross tabulation

Project scope is well managed after implementation of PMO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	13	61.9	61.9	61.9
	Disagree	3	14.3	14.3	76.2
	Strongly agree	4	19.0	19.0	95.2
	Strongly disagree	1	4.8	4.8	100.0
	Total	21	100.0	100.0	

Table 7 IT project schedule after PMO cross tabulation

Project are on schedule after implementation of PMO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	14	66.7	66.7	66.7
	Disagree	4	19.0	19.0	85.7
	Strongly agree	3	14.3	14.3	100.0
	Total	21	100.0	100.0	

Table 8 IT project budget after PMO cross tabulation

Project are successful managing budget after implementation of PMO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	16	76.2	76.2	76.2
	Disagree	1	4.8	4.8	81.0
	Strongly agree	4	19.0	19.0	100.0
	Total	21	100.0	100.0	

Table 9 IT project resources after PMO cross tabulation

Project have adequate resource after implementation of PMO

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	10	47.6	50.0	50.0
	Disagree	2	9.5	10.0	60.0
	Strongly agree	4	19.0	20.0	80.0
	Strongly disagree	4	19.0	20.0	100.0
	Total	20	95.2	100.0	
Missing	System	1	4.8		
Total		21	100.0		