THE INFLUENCE OF PROJECT MANAGEMENT MATURITY ON PROJECT IMPLEMENTATION IN THE LARGE PEER GROUP FINANCIAL INSTITUTIONS IN KENYA

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A PROJECT RESEARCH SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION IN THE BUSINESS SCHOOL OF AFRICA NAZARENE UNIVERSITY

DECLARATION

I declare that this document and the research that it describes are my original work and that they have not been presented in any other university for academic work.

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This research was conducted under my supervision and is submitted with my approval as the university supervisor.

28/08/2020 University Supervisor signature

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Date

DEDICATION

This research project is dedicated to my family, for giving me ample time to undertake it and for their patience and endurance.

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I am eternally grateful to the Almighty God for granting me the grace and well-being to complete this work. I also appreciate my supervisor, Dr David Mbogori for his enlightenment and suggestions which made it possible for me to successfully undertake this study. Moreover, much appreciation goes to all the respondents who participated in the research fieldwork.

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ABSTRACT

Across the globe, studies have shown that the number of projects that are considered challenged or failed is significantly higher than those deemed successful. Further, in an ever intensively competitive market due to digital disruption, organizations are keen to implement projects successfully to avoid wastage of limited capital. The purpose of this study was to establish the influence of project management maturity on project implementation in the large peer group financial institutions in Kenya. The objectives of the study were: to establish the extent to which organizational structure influences project implementation in the large peer group financial institutions in Kenya; to examine the influence of organizational project processes on project implementation in the large peer group financial institutions in Kenya; to assess the influence of people management on project implementation in the large peer group financial institutions in Kenya and to determine the influence of systems and tools on project implementation in the large peer group financial institutions in Kenya. The study is grounded on two theories namely, The Systems Theory and Theory of Constraints. The quantitative cross-sectional survey research design was used to enable the researcher to obtain opinions of project management professionals in large peer group financial institutions regulated by the Central Bank of Kenya. The study used a sample of 123 project management professionals derived from a target population of 178. The sample size was derived at using stratified sampling. A questionnaire was distributed to collect data from the potential respondents. The data collected were analysed using descriptive statistical tools and inferential tools. The Chi-Square test of association was employed to test the study hypothesis. The findings were presented in the form of tables and figures. The study findings suggested that project management maturity has a significant influence on project performance in the large peer group financial institutions in Kenya. Further, findings revealed that an appropriate organizational structure, adequate people management, the use of project management processes and the deployment of appropriate technology influenced project performance in the large peer group financial institutions. Based on the findings the following recommendations were made; Senior executives in the large peer group financial organizations should focus on the project management function by having it appropriately embedded in the organization structure given its strategic importance; the organization should ensure the project management function is sufficiently resourced from a staff and technology perspective. Follow up studies should examine the influence of project management maturity in the medium and small peer group financial institutions. Also, it would be worth exploring the influence of the respective maturity levels and the use of maturity models on project implementation.

DEFINITION OF TERMS

Organizational Project Processes: Operationalised to mean the standardization and institutionalization of project management procedures, methods etc. This implies the use of project management methodology and the adoption of a continuous improvement philosophy.

Organizational Structure: Operationalised to mean the organization structure and by extension the roles and responsibilities and the respective resource owners within the organization.

People management: Operationally defined as the management of people involved in projects concerning skills training and development, performance management and motivation and the establishment of clear job descriptions and career paths.

Project Implementation: Operationally defined as the extent to which a project meets its efficiency goals; being on time and budget and effectiveness goals; meeting stakeholders' requirements.

Project Management Maturity: Operationally defined as the state at which an organization has adopted project management processes aligning them to the organizational structure, appropriately deploying staff and technology resources to enable effective delivery of projects.

Systems and Tools: Operationally defined as the adoption of technology such as a project management information system or an ERP solution to manage projects concerning planning, budgeting, execution, monitoring and control and depository of lessons learnt.

ABBREVIATIONS AND ACRONYMS

ATM Automated Teller Machine

APM Association for Project Management

CBK Central Bank of Kenya

EPM Enterprise Project Management

FinTech Financial Technology

HRM Human Resource Management

ICT Information and Communication Technology

KBA Kenya Bankers Association

MbP Management by Projects

MNO Mobile Network Operator

NACOSTI National Commission for Science, Technology, and Innovation

NGO Non-Governmental Organization

PMBOK Project Management Body of Knowledge

PMI Project Management Institute

PMIS Project Management Information System

PMM Project Management Maturity

PMMM Project Management Maturity Model

PMO Project Management Office

PPM Project & Portfolio Management

PwC PricewaterhouseCoopers

SACCO Savings and Credit Cooperative Society

SPSS The Statistical Package for the Social Science

SME's Small and Medium Enterprises

ToC Theory of Constraints

CHAPTER ONE

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 Introduction

This study seeks to find out the influence of project management maturity on project implementation in the large peer group financial institutions in Kenya. Project Management Maturity (PMM) is the independent variable while project implementation is the dependent variable. This chapter describes the variables of the study providing a background on the development of the concepts in Kenya's financial market while articulating the statement of the problem. The study objectives, significance, scope, and limitations are thereby laid out in the chapter.

1.2 Background of the Study

1.2.1 Project Implementation

Project implementation refers to the extent to which a project meets its budget, schedule, and scope goals and the extent to which stakeholders are satisfied with the results it generates (Standish Group, 2015). Thus, two dimensions are critically important, First, is the traditional definition of successful implementation commonly referred to as the triple constraints or iron triangle i.e. the project-specific goals of budget, schedule, and scope. The second dimension is that of meeting stakeholders' requirements. This implies that a project could overcome its triple constraints and still not be considered successful. Conversely, a project can blow its budget or be delivered so late yet still deemed successful by stakeholders.

1.2.2 Project Management Maturity

Merriam-Webster dictionary assigns one definition of mature as that of relating to a condition of full development ("Mature", n.d.). Thus, Project Management Maturity can be referred to as the steps an organization takes for its project management function to reach its full development (PMSolutions, 2012). Recognizing the importance of maturity in managing projects, there has been an influx of Project Management Maturity Models that mostly hypothesize that an organization must go through levels of maturity from a rudimentary level one to that of full maturity. The components of what constitutes maturity are as varied as there are maturity models. This study adopted the components of maturity as laid out in the PwC Maturity Model, (PwC, 2004). These are; Organizational structure, Project processes, People and Systems and tools.

The way an organization is structured fundamentally impacts on project performance largely in the way resources are allocated and controlled. The elements of organizational structure include ownership of resources such as staff and budgets, clearly defined roles and responsibilities, support and involvement of senior and top management and the availability of a Project Management Office (PMO). Processes refer to the processes, methodologies, and standards in place to enable efficient delivery of projects. There should be an efficient link with corporate processes and a desire to continually improve on the said processes. People are a critical element of project management maturity as the main characteristic is that projects are delivered through people. Thus, teamwork and collaboration are essential for successful project implementation. Moreover, the level of both hard and soft skills impact project delivery significantly. Other elements include a well-motivated team created through well-established performance management and training plans and clear job descriptions and career paths. Systems and tools refer to the extent to which project processes have been

automated to support the project manager in decision making, managing resources, archiving lessons learnt and reporting. The calibre of software in use and the extent of its adoption thus affect project implementation (PwC, 2004).

1.2.3 Project Implementation in Kenya's Banking Industry

Kenya's banking industry has evolved significantly since the 1950's when there were only two banks namely, Barclays Bank of Kenya Limited (now ABSA Bank Kenya Limited) and Standard Bank Limited (now Standard Chartered Bank Kenya Limkted) to 33 banks at the end of 1993. In this period, the projects were largely for real estate development of branches and head offices. The notable head offices constructed in this period were Cooperative Bank House and Kencom House. Towards, the end of 1993 there was a major restructuring of the financial sector with the liberalising of the interest rates and removal of the exchange control regime (CBK, 1994).

From 1994 to 2006 the focus of banks was to use ICT to improve customer service and increase efficiency. This saw the introduction of; ATMs and shared ATM networks such as Kenswitch; debit and credit cards and Internet Banking. In this period, banks interconnected their branches i.e. branchless banking, taking advantage of the VSAT technology that facilitated faster and more reliable data transmission. At an industry level, Magnetic Ink Character Recognition (MICR) cheques were introduced, and the Real-Time Gross Settlement (RTGS) process launched. A critical one-off project was the Millennium bug (Y2K) project that saw many banks modify their systems to ensure they were not affected by the bug (CBK, 1998, 1999, 2001, 2002, 2006).

From 2007 to date, there has been an upsurge in the technology-driven projects to counter the digital disruption created by the Mobile Network Operators (MNO's). In

2007, Safaricom and Celtel launched money transfer services namely Mpesa and Sokotele. Several banks also upgraded or changed their core banking systems migrating to off-the-shelf systems such as Flexcube, T24, Finacle and Bankers Realm. For most of the banks that launched Islamic Banking, iMal was the favoured system to manage this value proposition.

Also, there has been a push by banks to widen their revenue streams through the introduction of new products such as Bancassurance, Islamic Banking and mobile phone lending and relaunching products such as mortgages and Small and Medium Enterprises (SME) specific propositions. Further, as part of their channel strategy, a few banks introduced agency banking and ATM real-time deposit-taking machines. In this period too, there has been several acquisitions and mergers that have necessitated rebranding projects to be mooted. Several banks have also reduced their brick and mortar outlets and released staff on a voluntary retirement basis as an indirect consequence of technological advancements. At an industry level, the Credit Reference Bureaus took their place in the market as the Credit Information Sharing (CIS) framework settled in. In 2011, the Kenya Bankers Association driven cheque truncation project was delivered while in 2016, the banks introduced Pesalink, a money transfer service to counter the Mpesa onslaught (CBK, 2008, 2009, 2010, 2012, 2015, 2017).

From the above discourse, it can be determined that over the years, many projects in the banking industry have had a significant technology component. And, looking into the future, CBK (2017) states that FinTech together with emerging and disruptive technologies such as; Blockchain, Internet of Things (IoT), Big Data, Cloud Computing, Artificial Intelligence (AI) and Machine Learning will influence the way financial institutions relate with their customers. Thus, project management will

continue to be key in supporting financial institutions in Kenya to transform their businesses in readiness for the future.

1.3 Statement of the Problem

Increasingly, financial institutions in Kenya are adopting the "management by projects" approach in the delivery of the business strategy. This is in response to the rapid technological advancements and increased activity by the so-called digital disruptors. There are significant sums of monies deployed in this regard as strategic investments to counter the disruptors and prepare for the future. The ideal situation is that the implementation of the strategic projects/programmes should result in the organization meeting its goals through successful project implementation. However, reality paints a different picture. According to PMI (2013), organizations risk losing 13.5 per cent of every dollar invested in project initiatives. Further, as stated in the Chaos 2016 Report by the Standish Group, 71% of technology projects in 2015 failed or were challenged, of which 19% were deemed as failed (as cited in Meier, 2017).

In the recent past, a good proportion of the large peer group banks have implemented projects to change their Core Banking System (CBS). These include Kenya Commercial Bank (KCB), ABSA Bank Kenya (ABSA), NCBA Kenya PLC (NCBA), CFC Stanbic Bank and Equity Bank. According to Ochwoto and Ogolla (2017), this was with a lot of delays. While the details on the impact on cost and scope are scanty, from the delays in implementation, the cost overruns can be extrapolated. The Kenya Bankers Association (KBA) launched PesaLink, in February 2017. The service enables bank customers to transfer money between banks in real-time without the need of third parties, particularly M-Pesa (Suberg, 2017). Pesalink has been wrought with system reliability issues, slow customer uptake and at least one serious hacking

incident reported in September 2017 (Herbling, 2017). These are just a few mentions on the implementation of projects in the financial sector.

The dismal performance, which reflects current global trends, could be attributed to the level of maturity of project management in these organisations. Thus, this study is necessitated by the need to investigate organizational project management maturity in the large peer group banks in Kenya and its influence on project implementation. The desired outcome will be a better understanding of PMM and thus create an appetite at the C-Suite level for higher maturity levels of the PM function leading to improved project implementation and eliminating wastage of strategic investment capital.

1.4 Purpose of the study

The purpose of this study was to establish the influence of project management maturity on project implementation in the large peer group financial institutions in Kenya.

1.5 Objectives of the Study

The objectives of this study were: -

- i. To establish the extent to which organizational structure influences project implementation in the large peer group financial institutions in Kenya.
- ii. To examine the influence of organizational project processes on project implementation in the large peer group financial institutions in Kenya.
- iii. To assess the influence of people management on project implementation in the large peer group financial institutions in Kenya.
- iv. To determine the influence of systems and tools on project implementation in the large peer group financial institutions in Kenya.

1.6 Hypotheses

The research hypotheses, tested at 95% significance level, were: -

 \mathbf{H}_{01} : There is no significant relationship between organizational structure and project implementation in the large peer group financial institutions in Kenya.

 \mathbf{H}_{02} : There is no significant relationship between organizational project processes and project implementation in the large peer group financial institutions in Kenya.

 \mathbf{H}_{03} : There is no significant relationship between people management and project implementation in the large peer group financial institutions in Kenya.

 \mathbf{H}_{04} : There is no significant relationship between systems and tools and project implementation in the large peer group financial institutions in Kenya.

1.7 Significance of the Study

The foremost contribution of this research is the appreciation of the role of project management in the implementation of business strategy in a rapidly changing environment. The study explores to determine the link between project management maturity and successful project implementation. Given the heavy capital invested in projects, top management in any bank would be keen to ensure efficient delivery of its projects. Thus, they would be desirous to know whether the adoption of the Management by Projects approach is adding value to the organization and, if so, the PMM level in their organization. Thereby, the organization can put in place measures to improve its PMM level to an appropriate level. The overall benefit to the bank is better success rates of project implementation. Furthermore, this study finding may also be of use by scholars as a source of reference for future studies and augment project management literature as regards maturity and project implementation in Kenya.

1.8 Scope of the Study

This research is limited to project management maturity and project implementation in the large peer group financial institutions in Kenya. The Central Bank of Kenya (2017) classifies banks into three peer groups using a weighted composite index: the large, medium, and small peer groups. The index is arrived at based on the net assets, liabilities, number of loan and deposit accounts and capital/reserves. A bank with an index of 5 per cent and above is considered a large peer group bank. As of 31st December 2017, there were eight large peer group banks namely; Kenya Commercial Bank, Equity Bank, Co-operative Bank, ABSA Bank, Standard Chartered Bank, Diamond Trust Bank, NCBA Bank Kenya PLC and Stanbic Bank.

The rationale for selecting the large peer group banks for the study is that, first, out of a total of 42, these 8 institutions control over 65 per cent of the banking sector market share and accounting for slightly over 80 per cent of the total pre-tax profit of the industry (CBK, 2017). Second, the Large Peer Group banks have adopted project management as a tool to implement business strategy; thereby separating Business as Usual (BAU) operations and change management. All the projects undertaken by these institutions are considered, be they technology, real estate infrastructure or business transformation projects. Moreover, the focus of this research is limited to Project Management only. Portfolio and Programme management will be referred to the extent that it associates with project management.

1.9 Delimitation of the Study

This research study focuses on the influence of project management maturity on project implementation in the large peer group financial institutions in Kenya. Thus, the attention is on mainstream large banking financial institutions only. The second and third-tier banks as defined by CBK are not the focus of this study. Non-Banking Financial Institutions such as insurance companies, investment firms, Savings and Credit Cooperative Societies (SACCO's) are also not included in this study. Furthermore, other increasingly important players in Kenya's financial markets such as Safaricom, with its flagship Mpesa product, are not scoped in the study.

1.10 Limitations of the Study

By their very nature, banks are very guarded and reticent on information disclosure. They also place stringent confidentiality obligations on their employees. Therefore, obtaining information from the sample group for this study required substantive prior engagement with top management. This allowed respondents to complete the questionnaires without the fear of contravening organizational confidentiality and disclosure obligations.

Furthermore, according to Ibbs and Kwak (2000), the most preferred approach to measuring the project management maturity is through in-depth face to face interviews with the respective organization's project managers. However, due to constraints of rawness in interviewing techniques and moderating focus groups, the survey will be carried out by way of a survey questionnaire.

1.11 Assumptions of the Study

The study was conducted with the assumptions that the respondents were honest and candid with their responses. It was also assumed that the respondents had a good understanding of project management principles and practice in the financial sector.

1.12 Theoretical Framework

1.12.1 System Theory

According to Heylighen and Joslyn (1992), the General Theory of Systems was originally put forward by Ludwig von Bertalanffy in 1968 and has since developed into diverse conceptual and philosophical viewpoints. Kim (1999) defines a system as "any group of interacting, interrelated, or interdependent parts that form a complex and unified whole that has a specific purpose." According to Skyttner (1996), the basic assumptions of the Systems Theory are: there is a state of order, regularity, and predictability and all systems have some common characteristics whereby any statements made concerning these characteristics are universally applicable generalizations. Bastedo (2014) alludes to the fact that open systems are significantly influenced by their environment. The environmental factors being political, economic, social, and technological. Sankaran et al.; (2010) postulate that a project can be considered as an open system with the following characteristics. The boundary: being the scope of interest or concern that the project comes into existence. The environment: the external influences of a system, in this case, the project which ordinarily includes the wider organization. The inputs: these are the resources that the project as a system takes from the environment such as staff, financial and time. Processes (Throughput): the transformation of the input into results. Output: the unique result, product or service that is created after processing. Feedback: the evaluation of the system performance by measuring the inputs against the outputs. Non-positive feedback demands remedial action while positive feedback increases performance.

In today's world, organizations are adopting the 'management by projects approach' whereby strategy and change are delivered through projects. This leads to the creation of a multi-project environment (Fenech & Dovey, 2005). Each project is a

system within the larger organization that continually interacts with its environment and adapts based on the feedback it receives from within the system and the environment. Thus, from the perspective of organizational project management, organization inputs into project management by; investing in a department to implement its projects, employing project managers, creating a PMO's, adopting project management methodologies, providing requisite training and upskilling staff and investing in information systems. The anticipated output from the project management system is the successful delivery of projects. This explains why the satisfaction of the stakeholders external to a project significantly determines implementation success. Therefore, an analysis of the level of project management maturity enables an organization to determine the value of its project management function, as a subsystem of the overall organization, creates for the whole organization.

1.12.2 Theory of Constraints

The Theory of Constraints (TOC) was developed by Dr Eliyahu M. Goldratt in his 1984 book *The Goal*. The fundamental assumption of the ToC is that at any given time, each organization has at least one constraint that hinders it attaining its objectives (as cited in Hardin, 2013). The Theory of Constraints provides a specific methodology for identifying and eliminating constraints, referred to as the Five Focusing Steps. Tendon (2012) details these steps. Step one; identify the current constraint. Step two; exploit the constraint. Step three; subordinate all other activities to the exploitation decision. Step four; elevate the system constraint. Step five; repeat the above steps for a new system's constraint. Dettmer (1997) contends that the Theory of Constraints can be viewed as a continuous improvement theory. He asserts that unlike other improvement philosophies that focus on individual processes to achieve overall

organizational improvement, Goldratt appreciated the interdependence and linkages between various processes.

Applying the Theory of Constraints to this study, the researcher argues that the major constraint to successful project implementation is the maturity of the project management function in an organization. Thus, an organization that desires successful business transformation needs to appreciate the import of the project management function in delivering business strategy. Therefore, drawing from the theory, an organization should apply the five focusing steps to progressively eliminate the constraint of low maturity levels. Moreover, the researcher proposes that this study will contribute to Step one of the ToC in that it aims to answer the question as to whether there is a relationship between project management maturity and project implementation and if indeed low maturity levels are a constraint to business performance.

1.13 Conceptual Framework

The conceptual framework indicates that the implementation of project management in the large peer group financial organizations requires an appropriate organization structure that establishes resource ownership, provides how the top management interacts and supports the project management function vide clear roles and responsibilities especially where a PMO has been established. The large peer group financial organizations would require the adoption and standardization of project management processes more so, a project management methodology. There should be a well-trained and skilled manpower component, with clear career paths and performance development mechanisms to appropriately motivate staff. Finally, the parent organization should avail appropriate systems and tools such as ERP solutions that will enable better tracking of projects and their benefits and aid in resource capacity

management. If the above factors are in place then the chances of projects being implemented on time, within budget, as per the agreed scope and meeting stakeholder expectations will be much higher.

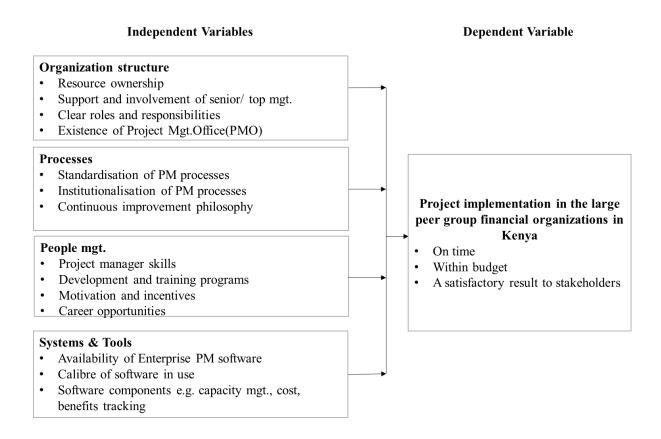


Figure 1.1. Conceptual Framework

Source: Researcher (2019).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature related to project management maturity and successful project implementation. Foremost, the chapter reviews the literature related to the four independent variables of project management maturity their influence on project implementation. Lastly, the chapter summarises the research gaps that the study aims to fill.

2.2 Review of literature

2.2.1 The evolving definition of Project Implementation

According to Jugdev and Muller, (2005) "success is context-dependent and, trying to pin down what success means in the project context is akin to gaining consensus from a group of people on the definition of "good art". Turner & Zolin argue that the true judge of success is the stakeholder more so the sponsor, (as cited in Serrador & Turner, 2015). Standish Group defines project implementation, as the extent to which a project meets its budget, schedule and scope targets while delivering a satisfactory result to the stakeholders. (as cited in Hastie & Wojewoda, 2015). Broadly, therefore successful project implementation can be defined as a project that meets two objectives. The first is that of project efficiency i.e. meeting the project schedule and costs as set out at the initiation of a project. The second, and increasingly important goal, is that of meeting business objectives namely; customer satisfaction, team satisfaction, business success, and preparing for the future. For this study, an operational definition of project implementation was applied. It combined the Standish Group and the Turner and Zolin definitions as follows: a successfully implemented

project is defined as one that is completed on time, on budget, within scope (project efficiency) with a satisfactory result (meeting business objectives) i.e. project effectiveness.

2.2.2 The rationale for project management maturity.

The realization of an organization to consistently review its project management practices and continuously improve on them first emanated in the eighties within the technology sector of the United States Military. The development of the Capability Maturity Model (CMM) for Software was an attempt to prescribe the levels of maturity that an organization must progress through to attain maturity in its project management practices. A good number of other maturity models have been developed over the years. The notable ones include The Project Management Institute's Organizational Project Management Maturity Model (OPM3), The PRINCE2 Portfolio, Programme and Project Maturity Model (P3M3) and PwC's Project Management Maturity Model.

From 1997 through to 2003 the focus was on the development and application of the Project Management Maturity Models (PMMM's). From 1998 to 2006, the research was centred on comparing the average project management maturity levels among various industries. From 2006 to the present day the focus has been on the analysing the benefits of implementing project management maturity models with a view of continuous improvement (Albrecht & Spang, 2016). Since 2004, PricewaterhouseCoopers (PwC) has periodically researched the state of project management in business organizations. In the first study of 2004, a key finding was a positive correlation between maturity levels and project performance, (PwC, 2004). Subsequent research studies from 2007 through to 2013, reiterated this positive correlation. (PwC, 2013).

At a continental level, two noteworthy studies have been carried out on project management maturity. In Ghana, a study was carried by Ofori and Deffor (2013) to; "examine the level of understanding of the concept of PM maturity; perform a detailed component level comparison of project management maturity between selected industries in Ghana". The key findings were; NGO's had comparatively higher maturity levels and public-sector organizations had low levels of maturity. The study further concluded that these low maturity levels could be a contributory factor to the many instances of public sector project failures. A similar study was carried out in South Africa on Information Technology projects with one key question being "what is the correlation between IT project management maturity and project success in South Africa?" An astounding result of the study was that there was no correlation between PMM and project success (Labuschagne, Marnewick, & Jakovljevic, 2016).

In Kenya, the studies on project management maturity are infrequent. This could be attributed to the fact that "Project Management has not been effectively embraced locally. The profession is still not widely accepted as a key stakeholder by public and private enterprises who have little knowledge of what Project Management really represents" (PMI Kenya Chapter, 2017). Albeit a case study on South Nyanza Sugar company "revealed that the use of standard benchmark practices for project management was generally low in Sony Sugar; the practices were informal in most cases" (Otieno, 2012). Further, research carried out on building contractors in the Westlands area of Nairobi concluded that "the construction PM process maturity and practices maturity of the contractors (Grade-1 contractors in Kenya) are found to be at low level... Not a single contractor has managed to achieve an intermediate standard of PM practice maturity level." (Ouko, 2016).

2.2.3 Organizational Structure and Project Implementation

The organizational structure includes factors such as resource ownership, staff, and budgets; clear roles and responsibilities; support and involvement of senior and top management (PWC, 2004). Standish Group found a significant positive relationship between executive support and project success, (as cited in Hastie & Wojewoda, 2015). Prado PMMM provides organizational structure as one of the seven dimensions of its PMM and defines it as the relationship of authority and power between project managers and the various areas of the organization involved with projects, (Archibald & Prado, 2014). Further, the PMBOK Guide suggests that the organizational structure determines the form the project management process takes and its success thereof. For instance, a strong matrix organization will tend to have a fulltime project manager with significant authority that increases the possibility of successful projects (PMI, 2017).

Santos, Barriga, Jugend, and Cauchick-Miguel, (2019) studied the organizational factors influencing project success in the automotive industry in Brazil. A quantitative survey was carried out through the distribution of questionnaires for data collection. The main finding of the study showed that factors that influence project success are organizational culture, change management and top management support.

Nguyen and Watanabe (2017) investigated the impact of organizational structure on project performance in construction projects. The cross-sectional research design was adopted, and primary data was collected through the issue of questionnaires amongst project managers in Vietnam. Univariate, bivariate, and multivariate techniques were adopted for data analysis. It was documented that contract commitment to contractual terms had a positive impact on project performance. Also, the alignment of project goals with work orientation and contract commitment had a positive contribution to customer satisfaction. It was recommended on the need to adopt a

participatory approach in the implementation of construction projects to enhance project performance.

Ogwueleka (2012) studied the critical factors affecting construction projects in Nigeria. He commenced by identifying twenty-two critical factors by reviewing the relevant literature. He then narrowed down to sixteen critical factors using Cronbach's Alpha test of data reliability. Out of the sixteen, five factors were established as the most critical namely, objective management, management of design, technical factors, top management support and risk management. He recommended that practitioners should focus on these five key areas to improve performance in project delivery.

Ochieng' (2016) investigated the effect of organizational structure on project performance in Taylor Nelson Solfers in Kenya. A descriptive research design was adopted, and primary data was collected through issuance of 80 questionnaires which were administered amongst respondents selected through stratified random sampling. Descriptive statistics, correlation and regression analysis analyzed the data. Study findings documented that project performance as contingent to leadership style, decision-making criterion and organizational structure adopted.

Oyaya (2017), investigated the effect of leadership style on construction project performance in Westland sub-County. The cross-sectional research design was adopted, and primary data collected through the issue of questionnaires among 78 project managers and construction site employees. Univariate, bivariate, and multivariate techniques were adopted for data analysis. Study findings documented that project performance was dependent on transformation leadership, organizational culture, and team commitment.

Nziva (2018) investigated the effect of project leadership on performance of Compassion International projects in Kitui County. The descriptive research design

was adopted, and primary data collected through the issue of questionnaires. Univariate, bivariate, and multivariate techniques were employed for data analysis. Qualitative data were analyzed through content analysis. It was documented that project performance was anchored on the quality of leadership. It was concluded that there is a need to incorporate participatory approach in decision making to increase the likelihood of project acceptance and minimize conflicts associated with project identification, implementation and monitoring and its evaluation.

2.2.4 Organizational Project Process and Project Implementation

Organizational Project processes refer to the standardization and institutionalization of project management processes (PWC, 2013). This aspect mainly refers to the adoption and use of project management methodologies. According to PMI's Pulse of the profession 2018 report findings, regardless of the project management methodology used, organizations that adopt some type of formal project management approach are successfully meeting their goals, within budget and on time, compared to those that don't, (PMI, 2018). Joslin and Müller (2015) examined the impact of project methodologies on project success in different contexts. Qualitative data was collected by conducting 19 semi-structured interviews and analysed using NVivo. It was concluded that while there is a positive correlation between the use of project management methodologies and project success, environmental factors such as governance have a moderating effect.

Pace (2019) carried out a correlational study investigating the relationship between project management methodology and project success, including moderating variables of industry and project manager experience. His findings surprisingly revealed that project management methodology has a weak correlation with project success and that the correlation is not moderated by industry nor project manager

experience. He recommended that since his findings contradicted many previous studies, there was the need for continued investigation of factors influencing project success including additional intervening variables.

Abdulla & Al-Hashimi, (2019) carried out a case study of the oil and gas industry on the impact of project management methodologies on project success. A descriptive research design was adopted with questionnaire data from 95 project management practitioners within the oil and gas industry in the Kingdom of Bahrain. Correlational and regression analyses were used to test the research hypotheses. One major finding was the underlying importance of adopting applied project management methodologies to achieve project objectives.

Chelangat & Karanja, (2018) studied the agile project management and its impact on the construction of commercial properties in Nairobi County, Kenya. The study adopted a descriptive research design obtaining the sample by simple random sampling applied to select 35 respondents. Primary data was collected using questionnaires and univariate, bivariate, and multivariate approaches were adopted for data analysis. The study findings established the influence of agile project management practices on project success.

2.2.5 People Management and Project Implementation

People management in the context of this study refers to; the level of skills and qualifications of the project management staff; the availability of personal development and training programs; the motivation and incentives and career opportunities for project management staff. Supernaw, (2019) researched the use of trained and certified project managers in emergency projects in North Carolina, USA. The study adopted a qualitative approach interviewing 35 emergency managers. The results indicated that emergency managers could improve the successful results of projects with project

management training and certification. Emergency managers with project management certification had a 100% implementation success rate.

Imran et al. (2016) considered the impact of human capital practices on project success. The study was a conceptual research work that was based on a critical review of the existing literature to examine the effect of human capital practice on project success. It was documented that project success is dependent on the employee's experience, attitudes, abilities, and culture. Also, human capital development such as training and development, teamwork, and trust had an impact on the successful implementation of projects. It was concluded that human capital practices should be incorporated into a project undertaking to enhance success.

Wambua (2013) examined the effect of human resources factors on project performance in Nairobi County. A quantitative research design was adopted, and simple random sampling applied to select 138 respondents. Primary data was collected using questionnaires. Descriptive statistics and regression and correlation analysis were used to establish whether a relationship exists between these practices and performance. Study findings revealed a positive and significant relationship between staff welfare issues, technical expertise, planning and project implementation. Wambua recommended that there was a need for the HRM department to ensure that the rules and guidelines in project-oriented organizations were sufficiently flexible to deal with the unique requirements of such organizations.

Odhong' et al. (2014) investigated the effects of human capital on organizational performance. A case study research design was adopted, with quantitative primary data collected using questionnaires. Correlation and regression techniques were used to establish the relationship and organization performance. The findings were that human capital was documented to have a positive significant effect

on organization performance. The study further recommended that there is a need for an organization to develop measures aimed at strengthening human capital base as it ultimately promotes organizational performance.

Mutahi and Busienei (2015) researched the effect of human resources practices on the performance of public universities in Kenya. A quantitative research design was applied, and primary data was collected through the issue of questionnaires. Both descriptive and inferential statistics were adopted for data analysis. Correlation and regression analysis were utilized to establish the relationship between human resource practices and performance. It was documented that human resources practices had positive and significant effects on the performance of public universities. Also, reward management, training and development had a positive and significant influence on the performance of public universities. It was recommended that human resources management policies in public universities should enhance job security, recruitment should be anchored on the availability of opportunities.

Njoki (2017) investigated the effects of human resources practices on employee performance in Aga Khan university hospital in Nairobi. A descriptive research design was adopted, and primary data was collected using structured questionnaires distributed to a sample of 30 employees of the hospital. Descriptive statistical techniques were adopted for data analysis. It was documented that human resources practices had a positive and significant effect on employee performance. The study recommended that the organization should develop a robust corporate-wide training programme and devise ways of motivating staff.

2.2.6 Systems and Tools and Project Implementation

Systems and tools refer to the computerization of the project management function, (Archibald & Prado, 2014). According to PMI 2017, one emerging trend in

project management is the use of automated tools to collect, analyse and use the information to meet project and business objectives, (PMBOK, 2017). Raymond and Bergeron (2007) carried out a study on the impact of project management information systems on project managers and project success. Questionnaire data obtained from 39 project managers was used in the study which concluded that there is a significant contribution of a Project Management Information System (PMIS) to successful project management in terms of better project planning, scheduling, monitoring and control and timelier decision-making.

Jessen (2011) carried out a study on the impact on project success of using technology. The study relied on secondary data and conclusions obtained from two previous international studies. The first study examined the impact of technology tools used for planning and control of projects on all three project success criteria. The success criteria were a project being on time, within budget and as per the agreed scope. The second study recognised project success as having a broadened criterion such as stakeholder satisfaction. The first study concluded that the use of appropriate technological tools in project planning, follow up and control is beneficial for project success. The second study revealed that the impact of technological tools had varied outcomes on the respective project success criteria. He recommended that an organization should determine which project success criteria is key to pursue to avail the level of technical support required.

Rahman, Shafique & Rashid (2018) examined the link between the use of a PMIS and project success. A quantitative research design was adopted with primary data collected by way of a questionnaire. Correlation and regression analysis were adopted to analyse the data. It was concluded there is a significant link between the deployment of a PMIS and project success. The study further recommended that

organizations must consider the quality and use of the PMIS to enhance their project implementation capabilities.

Ngari & Ndiritu (2017) examined the relationship between the use of PMIS and project performance in youth polytechnic development projects in Embu County in Kenya. Primary data was collected through use structured questionnaires that were issued to project managers. Correlation analysis was adopted for data analysis. Study findings concluded that use of the software to generate quality information needed by the project manager helped the project managers perform their tasks more professionally thereby enhancing the possibilities of the project success. Second, it is not the complexity of the software that matters but rather the appropriateness of the information generated and the ability of the user to utilise the information to manage the project. It was recommended that youth polytechnics should adopt the use of PMIS's in the management of their projects.

Bor & Kiptum (2017) evaluated the influence of Integrated PMIS's on the performance of construction projects in South Rift of Kenya. Both qualitative and quantitative data were collected for this study. Correlation and regression analysis were used to infer the relationship between PMIS and project implementation. The findings of this study indicated project management information system efficiency had a significant relationship with project performance. Secondly, the study concluded that the management of South Rift construction companies should take cognizance of technical training on the software's in use to ensure proficiency and increased productivity. Also, the study recommended that the companies should also acquire the latest information systems infrastructure such as those with web-based utilities.

2.3 Summary and Research Gap

From an empirical review perspective, the literature suggests a relationship between project management implementation and the operationalised variables that define maturity namely, organizational structure, project processes, people management and system and tools.

The literature submits a link between project implementation and project management maturity. This explains the growth in the use of PMMM's to assess maturity levels in organizations in the so-called developed world. The impact of digital disruption in the financial industry is significant. This has made financial institutions in Kenya to adopt innovative strategies for business growth. These strategies have been implemented through projects as organisations adopt the 'management by projects' approach. However, there is limited information on the success rates of project implementation in the financial sector in Kenya. This is quite perturbing given that globally the indications are that the wastage of resources from failed or challenged projects are massive.

Further, studies on the maturity levels of project management in the financial sector in Kenya are limited. Thus, this study sets out to determine the link between project management maturity and project performance in the large peer group financial institutions in Kenya. Based on this, organizations can benchmark their project management functions to improve their project management practices. This may lead to better implementation of projects and the use of scarce strategic investment capital. Lastly, the academic world will gain from the study as it will add to the existing literature in the field of project management maturity and form a basis for further research on the topic.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter focuses on the research design and methodology outlining the research design, target population, sample size and selection techniques, research instruments, their validity and reliability, data collection and analysis procedures and ethical considerations in the research.

3.2 Research Design

According to Kothari (2010), a research design is the establishment of conditions for collection and analysis of data combining relevance to the research purpose with economy in procedure. The research approach used for this study is a descriptive survey design. Dudovskiy (2017) describes descriptive research as the current statement of affairs with the researcher having no control over variables. Descriptive studies are used to describe various facets of the phenomenon and the characteristics and/or behaviour of a sample population. The survey approach has been adopted for this study. The approach entails obtaining statistical information by asking questions to a sample of the target population. This involves sampling, question design and data collection procedures (Fowler, 2014).

3.3 Research Site

This study was carried in Nairobi. The rationale being that most persons in the large financial institutions linked to projects, directly or indirectly, are located at the head offices of the respective institutions.

3.4 Target Population

A population refers to an entire group of individuals, events or objects having a common observable characteristic (Sekaran & Bougie, 2013). For this study, the population is described as all employees working in large peer group financial institutions regulated by the CBK. The target population is top and middle-level management staff employed by large peer group financial institutions in Kenya who are directly or indirectly involved in project, program, and portfolio management. Typically, these are Head of Project Teams, Heads of PMO's, Project Managers and Project Support Officers.

Table 3.1: Target Population for the study

Organization	Count (N)	Percentage
ABSA Bank of Kenya PLC, (ABSA)	22	12
KCB Bank, (KCB)	25	14
Equity Bank Limited, (EBL)	42	24
Co-operative Bank of Kenya, (Coop)	33	19
Standard Chartered Bank, (SCB)	25	14
Stanbic Bank, (Stanbic)	7	4
NCBA Bank Kenya PLC, (NCBA)	19	11
Diamond Trust Bank, (DTB)	5	3
Total	178	100

Source: LinkedIn (2019).

3.5 Study Sample

3.5.1 Sample Size

The sample was made up of 123 respondents selected from the eight large peer group banks, as defined by CBK. The sample size was arrived at as follows. The researcher took 173 as the total population. The sample size of 123 was then derived using the Yamane formula (1967) given by:

$$n = N / (1 + Ne^2)$$

... where n = sample size

N = population size

and e = alpha level.

Taking the alpha level as 0.05.

Table 3.2: Sample Size

Organization	Count	Percentage
ABSA Bank Kenya PLC, (ABSA)	15	12
KCB Bank, (KCB)	17	14
Equity Bank Limited, (EBL)	29	24
Co-operative Bank of Kenya, (Coop)	23	19
Standard Chartered Bank, (SCB)	17	14
Stanbic Bank, (Stanbic)	5	4
NCBA Bank Kenya PLC, (NCBA)	13	11
Diamond Trust Bank, (DTB)	3	3
Total	123	100

3.5.2 Sampling Procedure

Sampling is the process of selecting a few individuals from a population for study such that the individual selected bears features and characteristics like the large group - the population from which they were selected (Cooper & Schindler, 2014). A stratified random sampling procedure was used in selecting the sample for the study. Stratified sampling is used when the population has distinct categories, normally called 'strata' (Obwatho, 2014).

3.6 Data Collection

3.6.1 Data Collection Instruments

A questionnaire consists of several questions structured in a definite order on a form that is delivered to respondents who are expected to read and understand the questions and write down the reply on their own (Kothari, 2010). The study used a questionnaire to obtain primary data relevant to the research objective. The questionnaire was divided into two sections. Section one was used to obtain biodata of the respondents and information about their respective institutions. This section has 11

questions. Section two has 22 questions aimed to obtain the respondents' perspectives on organizational project management maturity elements and project implementation.

3.6.2 Pilot testing of Research Instruments

A pilot survey is a replica and rehearsal of the main survey that uncovers any weaknesses of the questionnaire and survey techniques. From these learnings, improvement can be implemented (Kothari, 2010). According to Connelly (2008), a pilot study sample should be ten per cent of the sample projected for the larger parent study. Thus, the researcher carried out a pilot study with ten per cent of the population, that is, twelve employees. The test questionnaire was distributed electronically to twelve project management professionals in the designated sample. Respondents were requested to indicate questions that they found vague or difficult to comprehend and to make any other comments that could improve the questionnaire. The respondents selected for the pilot were excluded from the main survey.

3.6.3 Instrument Reliability

Reliability is the degree to which a research instrument is neutral in its effect and consistent across multiple occasions of its use (Sekaran & Bougie, 2013). For this study, the Test-retest reliability approach was adopted to determine reliability. The questionnaire was administered to the pilot group twice in one week. Pearson's correlation coefficient was used to determine the correlation between data from the two tests. There was a positive and strong relationship between the results of the two pilot studies.

3.6.4 Instrument Validity

Validity indicates the degree to which an instrument measures what it is supposed to measure (Kothari, 2010). The researcher has adopted the face validity

approach for this study. Face validity relies on previous studies that have shown that the instrument is a good indicator or measure of the thing it is meant to measure (Fox, 2014). The study adopts an abridged version of the questionnaire used in the Prado PMMM assessment — with permission (D. Prado, personal communication, April 4, 2018). The Prado PMMM assessment has been carried out in Brazil since 2005 right through to 2017. The model was developed for Brazil which has many similarities with Kenya as an emerging economy.

3.6.5 Data Collection Procedure

The researcher sought the consent of top management of the respective financial institutions before the commencement of data collection. Thereafter, the researcher delivered the questionnaires to the selected respondents using the drop-and-pick-later method. Moreover, to facilitate a better response, the questionnaire was simultaneously electronically transmitted to the respondents through the web using the *eSurvey* portal. Thus, the respondents had the option of accessing the questionnaire by way of an internet link.

3.7 Data Analysis

The analysis adopted a two-step approach i.e. data cleaning and data transformation Data cleaning is the process of identifying, correcting or removing inaccurate data in when collecting data. (Obwatho, 2014). Data was then transcribed for statistical inference through coding and tabulation. SPSS, a statistical analysis tool was used to analyse the data using statistical tools such as means, frequencies and percentages as well as correlation analysis. The results were presented in the form of tables and figures. Chi-square test of association was used to test the null hypotheses of project maturity on project implementation in large peer financial institutions in Kenya.

The decision criterion was that if the p-value was less than 0.05, then the project maturity criterion had a significant influence on project implementation.

3.8 Ethical Considerations

The main ethical consideration was obtaining permission to use the Prado – PMMM assessment questionnaire with some modifications to tailor it to the financial services sector in Kenya. This permission was kindly granted. Besides, before commencing the survey, permission was sought from the National Council of Science and Technology. Furthermore, top management sanction from the respective financial services organizations was requested for before approaching the respondents to participate in the survey. In seeking this authorisation, the researcher gave an assurance that the sources of information and respondents would be treated with the utmost confidentiality and solely for this research study.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This section presents the study findings from primary data collected through the issue of questionnaires. The study aimed at investigating the influence of project management maturity on project implementation in the large peer group financial institutions in Kenya. Descriptive and inferential statistics were adopted for data analysis. Study findings are presented in tables and figures.

4.2 Response Rate

Of 123 questionnaires administered 96 were filled and returned. This accounted for 78% of the response.

Table 4.1 Response Rate

	Count	Percentage
Filled and returned questionnaires	96	78%
Incompletely filled and non-returned questionnaires	27	22%
Total	123	100%

Source: Researcher (2019).

This response rate was commendable as proposed by Kothari (2010) who stated that a response rate exceeding 60% in social sciences is commendable and if it is more than 80% then its excellent.

4.3 Background Information

The study sought to find out respondents' background information. It included age, gender, the highest level of education, project management certification, project management experience, current primary role, number of projects implemented, the period of project implementation and project budget.

4.3.1 Age

Respondents age was grouped into age groups for 30 to 39 years, 40 to 49 years and 50 years and above. Study findings were presented in Table 2.1.

Table 4.2. Age of respondents

Age (in years)	Frequency	Percentage
30 - 39	52	54%
40 - 49	33	34%
50 +	11	12%
Total	96	100%

Source: Researcher (2019).

Tabular presentation in Table 4.2 depicted that (54 per cent) aged between 30 to 39 years, followed by (34 per cent) and (12 per cent) aged above 50 years. This shows that most respondents are in the young adults' age group with full nests.

4.3.2 Gender

Gender representation of respondents was sought, and study findings documented in Table 4.3 below.

Table 4.3. Gender

Gender	Frequency	Percentage
Male	56	58%
Female	40	42%
Total	96	100%

Source: Researcher (2019).

Most respondents (58 per cent) were male and (42 per cent) were female. This may be attributed to the nature of project implementation that may require frequent travelling for site visits that may not be favourable for female. Also, the nature of the projects undertaken may call for requisite skills which are engineering-based and are mostly skewed towards the male gender.

4.3.3 Highest Level of Education

Formal education qualifications are credited with imparting formal skills that may be crucial in the implementation of projects. Study findings are presented in Table 4.4.

Table 4.4. Highest Level of Education

Highest Level of Education	Frequency	Per Cent
Secondary School Certificate	9	9.4%
Undergraduate Degree	27	28.1%
Master's Degree	60	62.5%
Total	96	100.0%

Source: Researcher (2019).

Study findings in Table 4.4 found that (62.5 per cent) of respondents had master's qualifications, followed by (28.1 per cent) were undergraduate holders and (9.4 per cent) were secondary school graduates. This shows that most respondents had formal skills that would aid in the implementation of projects by commercial banks.

4.3.4 Project Management Certification

Project management experts are certified by alternative bodies and these qualifications differ. The current study examined project management certification acquired by respondents as shown in Table 4.5.

Table 4.5 Project Management Certification

Project Management Certification	Responses (n)	Per cent (n/96)
PRINCE2 Foundation	77	81%
PRINCE2 Practitioner	75	79%
PRINCE2 Agile Practitioner	74	78%
MSP Foundation	10	11%
MSP Practitioner	21	22%
MSP Advanced Practitioner	3	3%
Certified Associate in Project Management		
(CAPM)	31	33%
Project Management Professional (PMP)	37	39%
Agile Certified Practitioner (PMI-ACP)	26	27%
Portfolio Management Professional (PfMP)	28	30%
Program Management Professional (PgMP)	17	18%

Study findings in Table 4.5 revealed that (81 per cent) of respondents had PRINCE2 foundation certification, (79 per cent) were PRINCE2 practitioner certified, (78 per cent) were PRINCE2 agile practitioner. This implies that most project managers in the large peer group financial institutions had undergone professional training and consequently they were equipped with skills that would aid in the achievement of project objectives.

4.3.5 Project Management Experience

Project implementation is congruent to a combination of formal and informal training. Hence, the study examined project management experience as shown in Table 4.6.

Table 4.6 Project Management Experience

	n=96			
	Up to 3	4 to 6	7 to 9	10 to 15
	years	years	years	years
Team Member	75	0	0	25
Project Manager	78.1	17.7	0	4.2
Senior Project Manager	29.2	43.8	20.8	6.3
Program Manager/Director	18.8	58.3	16.7	6.3
Other roles in Project Management	12.5	60.4	13.5	13.5

Source: Researcher (2019).

Study results found that (75 per cent) of respondents were project team members for a period of up to three years and (25 per cent) served in the same role for a period of 10 to 15 years. Also, (78.1 per cent) had served as project managers for at most three years, (29.2 per cent) had been senior managers, (18.8 per cent) were program managers/ directors and (60.4 per cent) had served in other project management roles for at least 4 to 6 years. This shows that project team members in the large peer group financial institutions had a combination of formal and informal skills that would aid in the implementation of projects. This would enhance the likelihood of achieving project objectives on time and avoid chances of cost overruns.

4.3.6 Current Primary Role

The study examined the current primary role undertaken by each respondent study results are presented in Table 4.7.

Table 4.7. Current Primary Role

Current Primary Role	Count	Per Cent
Team Member	18	18.8%
Project Manager	54	56.3%
Senior Project Manager	24	25.0%
Total	96	100.0%

Source: Researcher (2019).

The table presentation depicted that majority (56.3 per cent) were serving as project managers, followed by (25 per cent) who were senior project managers and (18.8 per cent) were team members. This shows that there was heterogeneity of role performance by project team hence they could easily understand on ingredients of successful project implementation.

4.3.7 Number of Project Managers in Your Organization

Further, the study evaluated the number of project managers in respective large peer group financial institutions. Study findings are documented in Figure 4.5.

Table 4.8. Number of Project Managers in Your Organization

No. of PM's in your organization	Frequency	Per cent
6 - 10	14	15%
11 - 20	60	63%
21 - 50	22	23%
Total	96	100%

Source: Researcher (2019).

Study results in Table 4.8 documented that (63 per cent) of respondents had between 11 to 20 project managers followed by (23 per cent) that had 21 to 50 project managers and (15 per cent) had 6 to 10 project managers. This shows that the large peer group financial institutions had an adequate workforce that would aid in the implementation of project objectives.

4.3.8 Number of Projects Implemented in the Last Year

Further, the study examined the number of projected implemented in the last 12 months. Study findings are shown in Table 4.9.

Table 4.9 Number of Projects Implemented in the Last Year

	Frequency	Per cent
Data not available	6	6.3
Up to 5 projects	3	3.1
From 10 to 20 projects	9	9.4
From 20 to 30 projects	15	15.6
From 30 to 50 projects	27	28.1
Over 50 projects	36	37.5
Total	96	100

Source: Researcher (2019).

Study findings in Table 4.9 found that (37.5 per cent) had implemented more than 50 projects, followed by (28.1 per cent) that implemented from 30 to 50 projects, (15.6 per cent) had implemented from 20 to 30 projects and (6.3 per cent) had no data available on projects that they had implemented. This depicts that large peer group financial institutions had invested heavily on project implementation, hence the need to understand the overall impact of projects on the organization.

4.3.9 Period to Implement Project

Project implementation life cycles differ among projects. This study examined the period in which respective projects were implemented as shown in Table 4.10.

Table 4.10 Period to Implement Project

Project Implementation Period	Frequency	Per Cent
Up to 3 months	6	6.3%
From 3 months to 6 months	3	3.1%
From 6 months to 1 year	30	31.3%
Over 1 year	57	59.4%
Total	96	100.0%

Source: Researcher (2019).

Tabular presentation in Table 4.10 depicted that (59.4 per cent) of projects were implemented for a period of 1 to 2 years, followed by (31.3 per cent) were to be implemented from 6 months to 1 year and (6.3 per cent) were to be implemented up to three months. Since these projects had varied project implementation period there is a need for coherent project management scheduling to ensure they are achieved within the requisite time frame.

4.3.10 Project Budget

Further, the study examined the project budget on different projects that were implanted by the large peer group financial institutions. Study results are presented in Table 4.11.

Table 4.11 Project Budget

	Frequency	Per cent
5,000,001 - 10,000,000	21	21.9
10,000,001 - 25,000,000	33	34.4
25,000,001 - 50,000,000	13	13.5
50,000,001 - 100,000,000	7	7.3
> 100,000,000	22	22.9
Total	96	100

Source: Researcher (2019).

The results revealed that (34.4 per cent) of projects undertaken had a budgetary allocation of 10 million to 25 million, followed by (22.9%) whose budget exceeded 100 million, (21.9 per cent) had a budgetary allocation of between 5 million and 10 million. This shows that there were variations in project budgets undertaken by large peer group financial institutions. This may explain the need for a PMIS to ensure constant monitoring of project budgets to ensure optimal use of resources.

4.4 Project Management Maturity Information

The main objective of the study was to examine the influence of project management maturity on project implementation. Project management maturity was operationalized as organizational structure, organizational project process, people management and system tools. Each influence was examined using descriptive statistics and results presented in Figures and Tables.

4.4.1 Top Level Management Involvement in Project Management

The study examined the extent of top-level management involvement in project management. Study findings are in Table 4.12.

Table 4.12 Top Level Management Involvement in Project Management

	Frequency	Per cent
In the last two years, there has been a satisfactory involvement of senior management with projects, participating in committees, watching "closely" the strategic projects, etc. They have the proper knowledge and encourage the use of project management processes.	71	74
The situation is slightly inferior	19	19.8
The situation is significantly inferior	6	6.3
Total	96	100

Source: Researcher (2019).

It was documented that, in the last two years there was satisfactory involvement of senior management with projects participating in committees, watching closely the strategic projects. They have the proper knowledge and encourage the use of project management processes as indicated by (74 per cent), (19.8 per cent) reported the degree of involvement as slightly inferior and (6.3 per cent) perceived the situation as significantly inferior. Through this culture of top-level management support, employee morale will improve, and the achievement of project objectives will be easier.

4.4.2 The Practice of Steering Committee

Further, the study examined the practice of project steering committees in respective large peer group financial institutions as shown in Table 4.13.

Table 4.13 The Practice of Steering Committee

	Count	Per Cent
For 2 to 5 years	12	13%
For over 5 years	84	87%

Source: Researcher (2019).

Tabular presentation in Table 4.13 revealed that (87 per cent) of financial institutions had adopted the practice of steering committees or executive monitoring structure as a tool for assessing and evaluating the project portfolio. Through, incorporation of this culture it would be easier to achieve project goals and objectives on time and budget. This is because the hierarchical project evaluation structure would aid in the early identification of corrective measures that ought to be undertaken to correct any likelihood of project overruns.

4.4.3 Project Management Organizational Structure

The study examined the dominant organizational structure adopted by large peer group financial institutions in the management of their respective projects.

Results are summarized in Table 4.14.

Table 4.14 Project Management Organizational Structure

	Frequency	Per cent
Functional: Project Manager has little or no authority, works part-time on projects with the project resources (staff & budget) under the control of the functional manager	7	7.3
Balanced Matrix: Project Manager has low to moderate authority, works part-time on projects with project resources (staff & budget) under the mixed control between the project manager and the functional manager	18	18.8
Strong Matrix: Project Manager has moderate to high authority, works full-time on projects with project resources (staff & budget) under the control of the project manager.	68	70.8
Project-based: Project Manager has high to almost total authority, works full-time on projects with project resources (staff & budget) under the control of the project manager.	3	3.1
Total	96	100

Source: Researcher (2019).

Results shown in Table 4.14, found that (70.8 per cent) adopted strong matrix in management of projects and their project managers had moderate to high authority,

worked full time on projects and had control of the staff and budget resources. Secondly, (18.8 per cent) documented that they adopted a balanced matrix in which project managers had low to moderate authority and worked part-time on projects. Further, (7.3 per cent) had a functional model and (3.1 per cent) applied a project-based approach. There is a need for blending organizational structure with the project function, this would aid in the management of resources and their respective allocation.

4.4.4 Number of Employees in the Project Management Office

The study examined the number of employees who were deployed in respective large peer group financial institutions PMO's to oversee project implementation. This is shown in Figure 4.15.

Table 4.15 Number of Employees in the Project Management Office

No. of staff in the PMO office	Frequency	Per cent
Up to 3	23	24.0%
From 4 to 6	42	43.8%
From 16 to 20	9	9.4%
Over 20	22	22.9%
Total	96	100.0%

Source: Researcher (2019).

Tabular presentation in Table 4.15 revealed that most project management offices in large peer group financial institutions had 4 to 6 employees (43.8 per cent), followed by (24 per cent) which had up to three, (22.9 per cent) that had over 21 and (9.4 per cent) had from 16 to 20 employees. The 22.9% PMO's with over 20 staff shows that for some organizations the project managers were PMO resources seconded to respective projects to return on completion for deployment to the next project.

4.4.5 Stakeholders Perception of the Project Management Office

Further, the study examined stakeholder's perception of the project management office. This was summarised in Table 4.16.

Table 4.16 Stakeholders Perception of the Project Management Office

	Frequency	Per cent
The PMO adds lots of value	59	61.5
The PMO adds medium value	23	24.0
The PMO adds little value	7	7.3
We do not have a PMO	7	7.3
Total	96	100

Source: Researcher (2019).

Results in Table 4.16 revealed that PMO added a lot of value (61.5 per cent), followed by (24 per cent) who perceived it to add medium value, (7.3 per cent) credited it for little value or they did not have it at all in their institutions. It is recommended that large peer group financial institutions with no project management office incorporate it to receive benefits accruing from it.

4.5 Organizational Project Process and Project Implementation

The second objective of the study examined the influence of organizational project processes on project implementation in large peer group financial institutions in Kenya. To achieve this the study examined the standardization of project management process, the institutionalization of the project management process and continuous improvement philosophy in place.

4.5.1 Level of Authority in Current Project Implementation

The study examined the level of authority project managers had in the projects which they were undertaking. Results are shown in Table 4.17.

Table 4.17 Level of Authority in Current Project Implementation

	Frequency	Per cent
Full authority to achieve project outcomes.	28	29.2
Authority within an established project plan	38	39.6
Limited authority	30	31.3
Total	96	100

It was documented that majority (39.6 per cent) currently implementing had project authority within established project plan, (31.3 per cent) had limited authority and (29.2 per cent) had full authority to achieve project outcomes. Thus almost 69% of the project managers had full authority or authority within established project plans to implement projects. With sufficient authority, the project manager can influence the project outcomes thereby creating a positive impact on project implementation.

4.5.2 Management Methodology for Project Management

The current study evaluated dominated project management methodologies applied in financial institutions as shown in Table 4.18.

Table 4.18 Management Methodology for Project Management

Management methodology	Responses (n)	Per cent (n/96)
Agile approaches e.g. adaptive software development, Kanban, and Scrum.	61	63.5%
Association of Project Management's Body of Knowledge (APM)	39	40.6%
PRINCE2 (Projects in a Controlled Environment)	51	53.1%
Project Management Institute's Body of Knowledge	48	50.0%
You were not aware of the methodology being used	5	5.2%

Source: Researcher (2019).

Results in Table 4.18 indicated that dominant project management approach was agile as accounted for by (63.5 per cent), followed by (53.1%) that adopted

PRINCE2 (projects in a controlled environment) and (50 per cent) applied PMBOK. The data implies that, as most projects by large peer group financial institutions are technology-driven, the methodologies adopted align towards the agile and lean philosophies. These also align towards the Theory of Constraints which advocates for continuous improvement by identifying and eliminating constraints to successful project implementation.

4.5.3 Project Management Methodology Acceptance Rate

Further, the study examined the project methodology acceptance rate as documented in Table 4.19.

Table 4.19 Project Management Methodology Acceptance Rate

	Frequency	Per cent
The importance of a project management methodology is a well-established theme by the leadership. Initiatives have been observed in the past 12 months to advance the understanding of the subject, such as meetings, conferences, courses, etc.	58	60.4
The situation is slightly inferior	35	36.5
There is some effort in this direction	3	3.1
Total	96	100

Source: Researcher (2019).

Results in Table 4.19 depicted that (60.4 per cent) of respondents argued that the importance of project management methodology was a well-established theme by leadership. This was achieved through initiatives undertaken in the past 12 months to advance understanding of the approach through seminars, conferences, and courses. The high acceptance of proven methodologies in delivering projects aids in the successful implementation of projects. This is in line with the literature put forward by (PMI, 2018) which asserted that organizations that adopt some type of formal project

management approach are successfully meeting their goals, within budget and on time, compared to those that don't.

4.5.4 Project Process Mapping and Standardization

Further, the study examined project process mapping and standardization procedures adopted by large peer financial institutions in Kenya as shown in Table 4.20.

Table 4.20 Project Process Mapping and Standardization

	Frequency	Per cent
Regarding project process mapping and standardization, all processes were mapped, standardized, and some computerized. The existing material is apparently complete and adequate and is in use for over one year.	56	58.3
The situation is slightly inferior	12	12.5
The situation is significantly inferior	28	29.2
Total	96	100

Source: Researcher (2019).

Study findings in Table 4.20 documented that (58.3 per cent) reported that project mapping processes were mapped from proposal idea, feasibility studies, the negotiations, budget approval, resource allocation, project implementation and benefits realization. Also, (29.2 per cent) that in their respective institutions the situation was significantly inferior and (12.5 per cent) had it slightly inferior.

4.5.5 Project Practices in an Organization

Respondent opinion on project practices in their respective organization was examined in the five-point Likert scale as shown in Table 4.21. Respondents responses ranged from strongly disagree (SD), Disagree (D), neither agree nor disagree (NAND), agree (A) and strongly agree (SA). Frequencies and percentage were adopted for analysis.

Table 4.21 Project Practices in an Organization

			n=96		
	SD	D	NAND	A	SA
A general culture of continuous improvement in all activities throughout the organization is present.	4.2	9.4	12.5	31.3	42.7
Lessons learnt from project implementation are documented and archived for future reference	8.3	7.3	16.7	32.3	35.4
There is an encouragement to experiment with new approached/ideas and to take calculated risks.	6.3	11.5	8.3	29.2	44.8

The majority (31.3 per cent) agreed and (42.7 per cent) strongly agreed that a general culture of continuous improvement in all activities throughout the organization is present. Secondly, (35.4 per cent) strongly agreed and (32.3 per cent) agreed that lessons learnt from project implementation are documented and archived for future references. Finally, (44.8 per cent) strongly agreed and (29.2 per cent) agreed that there is an encouragement to experiment with new approaches/ideas and to take calculated risks. Consequently, financial institutions should maintain the culture of continuous improvement in their project implementation. All documents about specific projects should be adequately recorded and archived to assist managers in implementing projects in the future to learn from past projects thereby minimize the likelihood of repeating past errors.

4.6 People Management and Project Management Implementation

The third objective of the study assessed the influence of people management on project implementation in the large peer group financial institutions in Kenya. To achieve this the study investigated project management skills in place, development and training programs undertaken and career opportunities in the respective financial institution.

4.6.1 Monitoring of Project Managers' Work and the Incentive for Goal Achievement

Project managers work monitoring and evaluation are crucial in the examination of shortcoming associated with the achievement of project objectives. The study examined the motivation of monitoring project managers work and incentives for goal achievement.

Table 4.22 Monitoring of Project Managers' Work and the Incentive for Goal Achievement

	Frequency	Per cent
There is an evaluation system of project managers, which establishes goals and, at the end of the period, depending on their evaluation results, they could possibly get bonuses for performance. The system works successfully for at least 2 years.	28	29.2
The situation is slightly inferior	14	14.6
The situation is significantly inferior	47	49
There is some effort in this direction	3	3.1
There is no effort in this direction	4	4.2
Total	96	100

Source: Researcher (2019).

Results in Table 4.22 depicted that (49 per cent) revealed that the evaluation process in place was slightly in the achievement of its goals and achievement, (29.2 per cent) argued that there had an evaluation system of project managers, which established goals and at the end of period depending on their evaluation results, they could possibly get bonuses for performance. This system was operational for at least two years. From the data, there is a need for improving the performance evaluation and reward criterion in place to ensure project managers are sufficiently motivated.

4.6.2 Internal and External Project Training in the Last 12 months

For an organization to achieve its corporate goals there is a need to continually upskill its workforce. Hence, internal, and external training evaluated in the last twelve months were examined as summarized in Table 4.23.

Table 4.23 Internal and External Project Training in the Last 12 months

	Frequency	Per cent
Many professionals of the department participated in training in the last 12 months. The training covered aspects related to areas of knowledge and processes (such as the available standards, PMBOK, IPMA, Prince2, etc.).	60	62.5
The situation is slightly inferior	5	5.2
The situation is significantly inferior	3	3.1
There is some effort in this direction.	28	29.2
Total	96	100

Source: Researcher (2019).

Results in Table 4.23 revealed that (62.5 per cent) of respondents agreed that many of the professionals in the project management function participated in training in the last 12 months. The training covered aspects related to areas of knowledge and processes. This shows that project managers and stakeholders were fully equipped with requisite skills that would aid in the achievement of organization goals and objectives.

4.6.3 Incentives for Ongoing Training and Certification

The study examined incentives for ongoing training and certification among project team stakeholders in large peer financial institutions as summarized in Table 4.24.

Table 4.24 Incentives for Ongoing Training and Certification

	Frequency	Per cent
There is a policy to encourage professionals to continuously obtain qualifications and certification. It is running for over two years with good results and an adequate number of professionals have obtained certification.	60	62.5
The situation is slightly inferior	5	5.2
The situation is significantly inferior	3	3.1
There is no effort in this direction	28	29.2
Total	96	100

The results revealed that (62.5 per cent) reported that there was an organizational level policy in place that encourages project professionals to continually improve their skills and qualification. This was in contrast with (29.2 per cent) who had not responded to that direction. Consequently, it can be deduced that project management among large peer financial institutions would be undertaken by professionally trained project teams owing to skills development.

4.6.4 Improvement of Project Managers Capacity

Further, the study examined the extent of project management capacity improvement in respective peer group financial institution as shown in Table 4.25.

Table 4.25 Improvement of Project Managers Capacity

	Frequency	Per cent
Virtually all project managers have gone through an extensive training program on human relationships. The program is running successfully for at least two years and always presents new pieces' training.	43	44.8
The situation is slightly inferior	46	47.9
There is no effort in this direction	7	7.3
Total	96	100

Source: (Researcher, 2019)

Results in Table 4.25 revealed that (44.8 per cent) of all project managers have undertaken extensive program training on human relationships. The program is running successfully for the last two years and always present new pieces of training. This was in contrast with (47.9 per cent) of those who perceived the program as slightly inferior. The data shows that financial organizations in Kenya still need to put in effort on the training of project management staff on soft skills to enable them appropriately manage their projects.

4.7 System and Tools for Project Management

The fourth objective of the study evaluated the influence of system and tools on project implementation in the large peer group financial institutions in Kenya. To achieve this, respondent's opinion on the availability of professional project management tools was sought, the calibre of software in use and software components.

4.7.1 Computerised Project Management

The study investigated the presence of computerised project management system in place at the respective financial institution as summarized in Table 4.26.

Table 4.26 Computerised Project Management

	Frequency	Per cent
The importance of having a computerized system is an already well-established theme by the leadership. Initiatives have been observed in the past 12 months to advance the understanding of the subject, such as meetings, conferences, courses, sourcing etc.	56	58.3
The situation is slightly inferior	6	6.3
There is some effort in this direction	34	35.4
Total	96	100

Source: Researcher (2019).

Results in Table 4.26 depicted that (58.3 per cent) reported that the importance of computerized system is already well-established theme by the leadership. Initiatives have been observed in the past 12 months to advance the understanding of the subject, such as meetings, conferences, courses, sourcing etc. This shows that there is the incorporation of the use of relevant software in project management. Hence, it would be easier to manage and optimize resources allocated to a given project.

4.7.2 Enterprises Project Management Tool

The study investigated the use of project management software tools, such as SharePoint, Microsoft project online, Plan-view, Primavera in the respective financial institution as shown in Table 4.27.

Table 4.27 Enterprises Project Management Tool

	Frequency	Per cent
Microsoft SharePoint	35	36.5
Microsoft Project Server or Project Online	10	10.4
Plan-view	18	18.8
Primavera	5	5.2
None	28	29.2
Total	96	100

Source: Researcher (2019).

Results in Table 4.27 documented that (36.5 per cent) were using Microsoft SharePoint, (18.8 per cent) had deployed Plan-view and (5 per cent) Primavera. Also, (29.2 per cent) had no software in place. According to the literature put forward by (Jessen, 2011), the use of appropriate technological tools in project planning, follow up and control is beneficial for project success. Thus, it necessary to encourage financial institutions to deploy computerised project management systems to improve on project implementation.

4.7.3 Benefit from Project Management Tools

Adoption of computerised project management tools is expected to yield some benefits in project implementation. Results of the study are summarized in Table 4.28.

Table 4.28 Benefit from Use of Project Management Tool

	Frequency	Per cent
No benefits	9	9.4
Limited benefits	21	21.9
Some benefits	66	68.8
Total	96	100

Source: Researcher (2019).

As shown in Table 4.28, the majority (68.8 per cent) reported that there were some benefits associated with the use of project management tools, followed by (21.9 per cent) who documented limited benefits and (9.4 per cent) had not accrued any benefits. There is a need for the adoption of project management tools to accrue benefits with measures such as improved resources optimization and allocations.

4.7.4 Software Tools to Manage Project Schedules

The study investigated the use of software tools adopted for the management of project schedules and dominant ones were summarized as shown in Table 4.29.

Table 4.29 Software Tools to Manage Project Schedules

	Frequency	Per cent
We use an EPM/PPM Solution	30	31.3
We create resource plans using Office tools	66	68.8
Total	96	100

Source: Researcher (2019).

From Table 4.29 most financial institutions created resources planning tools using Office tools as accounted by (68.8 per cent), and (31.3 per cent) were using an EPM/PPM solution. Thus, while there are various customised tools available to assist project managers in scheduling, a good proportion (68.8 per cent) still rely on Office

tools. This seems to be in line with what (Ngari & Ndiritu, 2017) concluded that it is not the complexity of the software in use but rather the appropriateness of the information generated and the ability of the user to utilise the information to schedule a project.

4.7.5 Software Tools to Manage Project Resources

The study further evaluated software tools used to manage project resources. Study findings are summarised in Table 4.30.

Table 4.30 Software Tools to Manage Project Resources

	Frequency	Per cent
We use an EPM/PPM Solution	30	31.3
We use resources Management System	22	22.9
We create resource plans using Office tools	44	45.8
Total	96	100

Source: Researcher (2019).

Results in Table 4.30 depicted that (45.8 per cent) created resource plan using office tools, followed by (31.3 per cent) who were using an EPM/PPM solution and (22.9 per cent) were using the resources management system. A comparatively large proportion (45.8 per cent) still rely on rudimentary Office tools in managing project resources. This too is in line with the (Ngari & Nderitu, 2017) conclusion that it is not the complexity of the software in use that matters but how the project management practitioner tailors it to fit the management of project resources.

4.7.6 Benefits of Historical Data Management

The study examined the culture of knowledge management adopted by financial institutions regarding project management implementation as shown in Table 4.31.

Table 4.31 Benefits of Historical Data Management

	Frequency	Per cent
For over 2 years a database of great quality containing this information is available. The system is in use by major stakeholders to avoid past mistakes and optimize the planning, execution, and closure of new projects.	20	20.8
The situation is slightly inferior	24	25
The situation is significantly inferior	16	16.7
There is some effort in this direction	36	37.5
Total	96	100

The results in Table 4.31 revealed that (20.8 per cent) had a robust project management database for at least the last 2 years that assists in the lessons learnt process. (37.5) said that there was some effort in this direction. Large peer group financial institutions need to invest in historical databases that provide information about previous project implementations. Through avoiding past project mistakes and adopting practices that have had a positive effect, the execution of projects becomes more efficient through continuous improvement.

4.8 Descriptive Statistics on Project Implementation

Project implementation was evaluated through adherence to schedules, budget, compliance to original plans and satisfaction of client need. Results are shown in Table 4.32.

Table 4.32 Descriptive Statistics on Project Implementation

	Strongly Disagree	Disagree	n=96 Neither agree nor disagree	Agree	Strongly agree
Projects met their schedule					
objectives	4.2	9.4	11.5	42.7	32.3
Projects stayed within budget					
limits	1	7.3	26	39.6	26
Projects met the original goal and					
business intent (scope).	3.1	10.4	11.5	32.3	42.7
Project results met stakeholder					
expectations	2.1	15.6	9.4	29.2	43.8

Study findings were analysed using frequency and percentages as presented in Table 4.32. From the finding's majority (32.3 per cent) strongly agreed, (42.7 per cent) agreed that their project met their schedule objectives. Secondly, (39.6 per cent) agreed and (26 per cent) strongly agreed that their project stayed within budget limits. Thirdly, (32.3 per cent) agreed and (42.7%) strongly agreed that their projects met original goals and business intent. Finally, (43.8 per cent) strongly agreed and (29.2 per cent) agreed that their projects met stakeholder's expectations.

4.9 Hypothesis testing

4.9.1 Organizational Structure and Project Implementation

The first null hypothesis H_{01} stated that there is no significant relationship between organizational structure and project implementation in the large peer group financial institutions in Kenya. The Chi-square test of association was adopted to test this hypothesis is depicted in Table 4.33.

Table 4.33 Organizational Structure and Project Implementation

		Project Implementation		
Organizational Structure		Not Satisfied	Satisfied	Total
Functional	Frequency	3	4	7
	Row Per cent	43%	57%	100%
	Column Per cent	9%	7%	7%
Balanced Matrix	Frequency	8	10	18
	Row Per cent	44%	56%	100%
	Column Per cent	23%	16%	19%
Strong Matrix	Frequency	24	44	68
	Row Per cent	35%	65%	100%
	Column Per cent	69%	72%	71%
Project-based	Frequency	0	3	3
	Row Per cent	0%	100%	100%
	Column Per cent	0%	5%	3%
Total	Frequency	35	61	96
	Row Per cent	37%	64%	100%
	Column Per cent	100%	100%	100%
Chi-squ	are = 23.8, d.f. = 3	$P_{1} = 0.000$		

Results in Table 4.33 depicted that there was a significant association between organizational structure and project implementation in large peer financial institutions (Chi-square = 23.8, d.f. = 3, p-value = 0.00). Since p-value was less than 0.05, a change in the organizational structure from functional, balanced, strong, and project-based significantly affected project implementation on time, within budget, attainment of scope. Hence, the H_{01} hypothesis was rejected leading to the conclusion that top management should adopt organizational structures that aid the project management function to achieve optimal benefits in the delivery of projects.

4.9.2 Organizational Project Process and Project Implementation

The second null hypothesis H_{02} stated that there is no significant relationship between organizational project management processes and project implementation in the large peer group financial institutions in Kenya. Chi-square test of association was adopted, and study findings presented as shown in Table 4.34.

Table 4.34 Organizational Project Process and Project Implementation

	Project Implementation			
Organizational Process		Not Satisfied	Satisfied	Total
Low Level	Frequency	14	32	46
	Row Per cent	30%	70%	100%
	Column Per cent	40%	53%	48%
High Level	Frequency	21	29	50
	Row Per cent	42%	58%	100%
	Column Per cent	60%	48%	52%
Total	Frequency	35	61	96
	Row Per cent	37%	64%	100%
	Column Per cent	100%	100%	100%
Chi s	square = 13.83, d.f.	= 1, P value $= 0$.	.00	

Study findings documented in Table 4.34 revealed that organizational project process had a significant influence on project implementation in large peer group financial institutions in Kenya (Chi-square = 13.83, d.f. = 3, P-value = 0.000). Hence, the H₀₂ hypothesis was rejected leading to the conclusion that there is a need to adopt organizational project management processes as this has a positive effect on the implementation of projects by financial institutions in Kenya.

4.9.3 People Management and Project Implementation

The third null hypothesis H_{03} stated that there is no significant relationship between people management and project implementation in the large peer group financial institutions in Kenya. Chi-square test of association was adopted, and study findings documented in Table 4.35.

Table 4.35 People Management and Project Implementation

		Project Imple	ementation	
People Management Skills		Not satisfied	Satisfied	Total
Virtually all trained	Frequency	16	27	43
	Row Per cent	37%	63%	100%
	Column Per cent	46%	44%	45%
Slightly inferior	Frequency	17	29	46
	Row Per cent	37%	63%	100%
	Column Per cent	49%	48%	48%
No effort	Frequency	2	5	7
	Row Per cent	29%	71%	100%
	Column Per cent	6%	8%	7%
Total	Frequency	35	61	96
	Row Per cent	37%	64%	100%
	Column Per cent	100%	100%	100%
Chi squa	are $=20.3$, d.f. $=2$,	P value = 0.003		

Source: Researcher (2019).

Study findings found that people management skills had significant influence on project implementation in large financial institutions in Kenya (Chi-square =20.3, d.f. = 2, P-value = 0.003). Hence, the H_{03} hypothesis was rejected. Consequently, there is a need to develop employee skills to tap benefits associated with the adoption of the respective project strategy. Career development would improve employee level of motivation since before job allocation their skills gap would be addressed.

4.9.4 Software Tools and Project Implementation

The fourth null hypothesis H_{04} stated that there is no significant relationship between systems and tools and project implementation in the large peer group financial institutions in Kenya. Chi-square test of association examined the degree of association of the use of software tools on project implementation as summarized in Table 4.36.

Table 4.36 Software Tools and Project Implementation

		Project Imple	ementation	
Systems and Tools		Not satisfied	Satisfied	Total
EPM/PPM Solution	Frequency	9	21	30
	Row Per cent	30%	70%	100%
	Column Per cent	26%	34%	31%
Resources Management	Frequency	10	12	22
	Row Per cent	46%	55%	100%
	Column Per cent	29%	20%	23%
Microsoft tools	Frequency	16	28	44
	Row Per cent	36%	64%	100%
	Column Per cent	46%	46%	46%
Total	Frequency	35	61	96
	Row Per cent	37%	64%	100%
	Column Per cent	100%	100%	100%
Chi so	quare = 13.09, d.f. =	2, P value = 0.0	002	

Source: Researcher (2019).

Study findings in Table 4.36 documented that there was a significant influence on the use of software tools on project implementation by large peer financial institutions (Chi-square = 13.09, d.f. = 2, p-value = 0.002). Hence, the H₀₄ hypothesis was rejected implying that the level of adoption of systems and tools significantly impacts on project implementation.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the main findings from the study, concludes, and makes recommendations which will be beneficial to top management, project teams and future researchers. The main findings are in line with theoretical and empirical foundations as guided by the main objective of the study. The chapter is arranged as, discussions, a summary of major findings, conclusions, and recommendations.

5.2 Discussion of Findings

5.2.1 Organizational Structure and Project Implementation

Organizational structure significantly influences project implementation in the large peer group financial institutions in Kenya. These findings mirrored Ochieng' (2016) who documented that project performance in Kenya was contingent to leadership style, decision-making criterion and organizational culture in place. Also, Nguyen and Watanabe (2017) argued that project performance was dependent on a contractual commitment to contract terms and alignment of project goals with work commitment and desire to meet customer satisfaction needs. Oyaya (2017) documented that successful implementation of construction projects in Kenya was determined by transformation leadership, organizational culture, and team commitment. Further, Nziva (2018) argued that project leaders should nurture and incorporate the culture of participatory decision making to manage and alleviate conflicts associated with project implementation. Moreover, the findings are in line with Ogwueleka (2012) who

narrowed down to five critical success factors of which top management support was one of those listed.

5.2.2 Organizational Project Processes and Project Implementation

Organizational project process influenced project implementation significantly in large peer group financial institutions in Kenya. This was in line with the argument put forward by PMI (2018) that irrespective of the project management methodology used, organizations with some type of formal project management approach have a better project implementation status. The results also confirm the Chelangat & Karanja, (2018) assertion that there is an influence of the use of project management methodologies on project success. Notwithstanding, these findings seem to contradict the conclusion by Pace (2019) who determined that there is was no correlation between the use of technology and project success even where the was a positive moderating variable like project manager experience.

5.2.3 People Management Skills and Project Implementation

People management skills significantly influenced project implementation in large peer group financial institutions in Kenya. These results confirmed Wambua (2013) who documented the significant contribution of staff welfare, technical expertise and planning on project implementation. Wambua called on the need for continuous skills development to motivate and create a sense of association among employees. Odhong' et al. (2014) supported the need for human capital development on organizational performance. This was credited with the need to address employee's hierarchical needs as documented by Maslow's hierarchy of needs. The study also mirrors the findings of Supernaw (2019) that project managers in emergency projects

in North Carolina, the USA with project management certification had a 100% implementation success rate.

Further, Imran et al., (2016) argued that employee performance was associated with work experience, attitude, ability, and culture. All these could be altered through training and career development programs and the creation of teamwork spirit that would ultimately improve project success. This cemented Mutahi and Businei (2015) findings who documented positive and significant effect of human resources practices, reward management, training, and development on the performance of public universities in Kenya.

5.2.4 System and Tools and Project Implementation

Systems and tools influenced project implementation significantly in large peer group financial institutions in Kenya. This was in tandem with Raymond and Bergeron (2007) who documented a positive impact of project management information systems on project managers and project implementation. Ngari & Ndiritu (2017) argued that youth polytechnic development projects in Embu County would benefit from the use of software irrespective of its complexity as long as it had utility and appropriateness. Further, Bor & Kiptum (2017) argued that project management information system efficiency had a significant relationship with project performance encouraging technical training on the software to ensure proficiency and increased productivity. Notwithstanding, the study findings seem to counter those of Jessen (2011) who found that the significance of the use of technology had varied outcomes on the respective project success criteria. In this study, which used the broader and generally more widely accepted definition of implementation success, the influence of project management maturity was significant on all the success factors.

5.3 Summary of main findings

The study sought to establish the relationship between project management maturity and project implementation in the large peer group financial institutions in Kenya. Project Management Maturity elements were; organizational structure, project processes, people management and systems and tools. The study confirmed a significant relationship between project management maturity and project implementation in the large peer group financial institutions in Kenya.

5.4 Conclusions

From the study findings, the following conclusions can be made. To fully benefit from the influence of organizational structure, large peer group financial institutions should create a culture of resources ownership, involve senior management in project management to create ownership and association and establish project management office to bridge gaps which may emanate from a disintegrated management approach.

Regarding organizational project processes on project implementation in large peer financial institutions in Kenya, there is a need for standardization of project implementation procedures. All project processes should be institutionalized and enshrined in the organizational structure. A culture of continuous skills development should be created and adopted in respective institutions. This would aid in the understanding of skill gaps and identification of requisite programs that would aid in bridging respective gaps.

People management skills were documented to have a significant effect on project implementation in large peer financial institutions in Kenya. Consequently, there is a need for the development of project management skills, and so respective institutions should hold internal and external development and training programs. To fully bridge skills gaps career development programs which are in line with project practitioners' needs should be executed regularly such as quarterly, semi-annually, and annually.

Systems and tools for project management had a positive and significant influence on project implementation in large peer financial institutions in Kenya. Thus, respective institution management should avail enterprise project management software. Also, they should continuously upgrade the calibre of software in use and ensure there is the conformity of software components to achieve full benefits associated with incorporation of software in their operations.

5.5 Recommendations

From the findings of this study, the researcher offers the following recommendations. To the senior management in the large peer group financial institutions, given the rapid and disruptive technological changes happening now and into the future the stature of the project management function must be appropriately embedded in the organizational structure. This is because the function will be a critical agent of transformational change. Further, the organization should ensure the project management function is sufficiently resourced from a staff and technology perspective to be able to contend with the challenges of project delivery in the financial sector.

For future researchers, a review of the literature suggests many areas that still need to be covered. For instance, it would be of great interest to examine the maturity levels of the large peer group financial institutions. Also, if any of these institutions have employed project management maturity models, the impact of the deployment

would be of much interest to top management and policymakers such as the project management professional bodies.

5.6 Areas for Further Studies

This study was limited to large peer group financial institutions, follow up studies should examine the influence of project management maturity on project implementation in the medium and small peer group financial institutions. Further studies on determining project management maturity levels and the influence of the use of maturity models would be worth further investigation. Although there are alternative research designs, this study was limited to a cross-sectional design using quantitative data. A follow-up study should be undertaken and incorporate panel data to extract nuances and information that may not come through using questionnaires - a mix of both qualitative and quantitative data should be incorporated to bridge methodological gaps associated with the shortcomings of each design. Further, it would be of much interest to research on the respective maturity levels of the large peer financial institutions in Kenya.

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APPENDICES

APPENDIX 1: Introduction Letter

Paul Amunga Walobwa PO Box 55 - 50212, Ndalu, Bungoma County.

17/09/2019

Dear Respondent,

RE: INTRODUCTION LETTER.

I am a postgraduate student pursuing a Master of Business Administration (MBA) degree at the Africa Nazarene University, School of Business. As part of the requirement for the award of the degree, I am expected to carry out and submit a research project. I am conducting a study on project management maturity and its influence on project implementation in the large financial institutions in Kenya.

In this respect, I kindly request you to provide objective answers to the following questions that will be vital information for this study. The information provided shall be treated with utmost confidentiality and will only be used for the intended purpose of the study. In case of any queries pertaining to this research project, do not hesitate to call me on Tel: 0727174173.

Thanking you in advance

Yours faithfully,

Paul Amunga Walobwa,

APPENDIX 2: PMM Survey Questionnaire

Individual and Company Information

1.1 AGE in years	? *			
O Below 25		40-49		
25-29	\bigcirc	50 years and over		
30-39				
1.2 GENDER *				
Female				
Male				
1.3 Please indicat	te the	highest level of formal edu	cation (obtained *
Secondary sc	hool c	ertificate		
Undergradua	te Deg	gree		
Master's Deg	ree			
ODoctorate or	equiva	alent		
1.4 Do you have a may select more	-	the following project man one.) *	agemer	nt certifications? (You
PRINCE2 Foundation		MSP Practitioner		Agile Certified Practitioner (PMI-ACP)
PRINCE2 Practitioner		MSP Advanced Practitioner		Portfolio Management Professional (PfMP)
PRINCE2 Agile Practitioner		Certified Associate in Project Management (CAPM)		Program Management Professional (PgMP)
MSP Foundation		Project Management Professional (PMP)		
Other (Please speci	ify)			

1.5 Please indicate the level of project management experience you have by recording the total number of years you have been engaged at each level.

		Up to 3 years	4 to 6 years	7 to 9 years	10 to 15 years	Over 15 years
Tea	m Member	0	C	0	0	O
Proj	ect Manager	0	C	O	0	O
Sen	ior Project Manager	C	C	C	C	C
Prog	gram Manager/Director	O	C	C	C	C
Oth	er roles in Project Management	0	C	C	C	C
1.6 V	What is your current primary	role? (selec	ct one only)			
0	Team Member	C Se	nior Project M	I anager		
С	Project Manager	C Pr	ogram Manag	er / Directo	r	
0	Other (please specify)					
1.7 V	What is the name of the organ	ization you	are currently	y working	for?	
1.8 F	How many employees of your	organizatio	on are project	managers	?	
0	1 to 5 C 21 to 50					
0	6 to 10					
С	11 to 20					
	How many projects were impl ths or last year?	emented in	your organiz	zation over	the past 12	
0	Data not available	C From	20 to 30 proje	ects		
0	Up to 5 projects	C From	30 to 50 proje	ects		
0	From 5 to 10 projects	Over :	50 projects			
O	From 10 to 20 projects					

1.10 V	What is the typical dur	ration	of the primary project(s) that you work on?
	Up to 3 months		From 1 to 2 years
	From 3 to 6 months		Over 2 years
	From 6 months to 1 year	ar	
	What is the typical val on or manage, in you		Kenya Shillings) of the projects you ary project role?
0<	1,000,000		25,000,001 - 50,000,000
\bigcirc 1,	000,001-5,000,000		50,000,001 - 100,000,000
<u></u>	000,001 - 10,000,000		> 100,000,000
\bigcirc 10),000,001 - 25,00,000		
Proje	ct Management Matu	rity In	formation
110,6	et Management Matu	iity iii	ioi mation
who h		er the	f top-level management (i.e. senior managers organization's projects) with projects, select
(a)	management with process of the strategic strat	rojects. project	as been a satisfactory involvement of senior, participating in committees, watching as, etc. They have the proper knowledge and management processes
(b)	The situation is slightly	y infer	ior to that described in option a).
\bigcirc c	The situation is signifi	cantly	inferior to that described in option a).
\bigcirc d	There is some effort in	this d	irection.
(e)	There is no effort in th	is dire	ction.
monit	•		ng Committee (or an equivalent executive anization for assessing and evaluating the
\bigcirc	For over 5 years	\bigcirc	For less than 1 year
\bigcirc	For 2 to 5 years	\bigcirc	We do not use Steering Committees

\bigcirc	For 1 to 2 years	\bigcirc	Committee does not apply to our scenario.
			perspective, what scenario best describes the ganization you currently work for? *
\bigcirc		_	er has little or no authority, works part-time on ources (staff & budget) under the control of the
\bigcirc	_		ager has low authority, works part-time on ces (staff & budget) under the control of the
\bigcirc	part-time on projects v	with p	Manager has low to moderate authority, works roject resources (staff & budget) under the mixed manager and the functional manager
\bigcirc			nager has moderate to high authority, works full- t resources (staff & budget) under the control of
\bigcirc	· ·		nager has high to almost total authority, works full-t resources (staff & budget) under the control of
(PMC		-	ocated to the Project Management Office rojects (excluding auxiliary functions, such as
$\bigcup U_{J}$	p to 3	\bigcirc	From 11 to 15
○Fr	om 4 to 6	\bigcirc	From 16 to 20
○ Fr	om 7 to 10	\bigcirc	Over 21
project of key	cts and their managers stakeholders on the in	with mport	O (Project Management Office) among the in your organization, what are the perceptions cance of the PMO to the success of the projects?
()Th	ne PMO adds lots of val	ue	The PMO does not add any value
○Tł	ne PMO adds medium v	alue	We do not have a PMO
○ Tł	ne PMO adds little value	2	PMO does not apply to our scenario
	hat level of authority of one only)	do you	ı have in your current primary project role?
○Fu	all authority to achieve p	oroject	t outcomes.
() Aı	uthority within an establ	lished	project plan

Limited authority - parameters set by others with key decisions referred to
higher levels of management
3.1 Which project management methodologies have you used in the projects you have been involved with? (Tick all that apply)
Agile approaches e.g. adaptive software development, Kanban, and Scrum.
Association of Project Management's Body of Knowledge
PRINCE2 (Projects in a Controlled Environment)
Project Management Institute's Body of Knowledge
You were not aware of the methodology being used
Other, including methodologies developed in house (please specify)
3.2 On the acceptance of the importance of a Project Management methodology, select the most appropriate option:
(a) The importance of a project management methodology is a well-established theme by the leadership. Initiatives have been observed in the past 12 months to advance the understanding of the subject, such as meetings, conferences, courses, etc.
(b) The situation is slightly inferior to that described in option a).
C) The situation is significantly inferior to that described in option a).
d) There is some effort in this direction.
e) There is no effort in this direction.
3.3. Regarding the project processes mapping and standardization - from the proposal of the idea, the feasibility studies, the negotiations, the budget approval, resource allocation, project's implementation, and benefits realization, we have:
a) All the above processes were mapped, standardized, and some computerized. The existing material is apparently complete and adequate and is in use for over one year.
b)The situation is slightly inferior to that described in option a).
C) The situation is significantly inferior to that described in option a).
d)There is some effort in this direction.

3.4. Please rate the follow	ving pr	actices w	ithin yo	ur organi	ization.	
	Strong Agree	•	aş	Neither gree nor lisagree	Disagree	Strongly Disagree
A general culture of continuous improvement in all activities throughout the organization is present.	O	c		С	c	С
Lessons learnt from project implementation are documented and archived for future reference	C	C		С	C	С
There is the encouragement to experiment with new approached/ideas and to take calculated risks.	C	O		С	С	С
4.1. Please rate the follow	ving wi	thin your	organi	zation.		
		Strongly				Strongly
		Agree	Agree	Neutral	Disagree	Disagree
Project Managers have the required competence (skills+knowledge+experto successfully implement projects	ience)	C	С	С	C	C
There is a clear career part people working on project to senior management lev such as a Project/Program Director	ets up vel	С	С	C	C	С
4.2. Regarding the monit provided to them to achie option:	_		_			
a) There is an evaluand, at the end of the				_		•

O e)There is no effort in this direction.

humai	n relationships (leadership, negotiation, conflict, motivation, etc.), select the appropriate option:
4.5. Re	e). There is no effort in this direction. egarding the improvement of project managers' capacity, with emphasis on
\bigcirc	d). There is some effort in this direction.
\bigcirc	c). The situation is significantly inferior to that described in option a).
\bigcirc	
\bigcap	good results and an adequate number of professionals have obtained certification. b). The situation is slightly inferior to that described in option a).
\bigcirc	a). There is a policy to encourage professionals to continuously obtain qualifications and certification. It is running for over two years with
	, PRINCE2, etc.) by project managers and PMO members, select the most priate option:
	s far as incentives for ongoing training and certification obtainment (PMP,
\bigcirc	e) There is no effort in this direction.
\bigcirc	d) There is some effort in this direction.
\bigcirc	c) The situation is significantly inferior to that described in option a).
\bigcirc	b). The situation is slightly inferior to that described in option a).
\bigcirc	a). Many professionals of the department participated in training in the last 12 months. The training covered aspects related to areas of knowledge and processes (such as the available standards, PMBOK, IPMA, Prince2, etc.).
	s far as internal and external training that occurred in the last 12 months d to basic aspects of Project Management, select the most appropriate :
\bigcirc	e) There is no effort in this direction.
\bigcirc	d) There is some effort in this direction.
\bigcirc	c) The situation is significantly inferior to that described in option a).
\bigcirc	b) The situation is slightly inferior to that described in option a).
	least 2 years.

(a)	Virtually all project managers have gone through an extensive training program on human relationships. The program is running successfully for at least two years and always presents new pieces of training.
Ob)	The situation is slightly inferior to that described in option a).
Oc)	The situation is significantly inferior to that described in option a).
Od)	There is some effort in this direction.
Oe)	There is no effort in this direction.
	s for the acceptance, by top-level management, of the importance of a et Management computer-based system, select the most appropriate option:
Oa)	The importance of having a computerized system is an already well-
	established theme by the leadership. Initiatives have been observed in
	the past 12 months to advance the understanding of the subject, such as
	meetings, conferences, courses, sourcing etc.
Ob)	The situation is slightly inferior to that described in option a).
\bigcirc c)	The situation is significantly inferior to that described in option a).
\bigcirc d)	There is some effort in this direction.
Oe)	There is no effort in this direction.
	hich Enterprise Project Management (EPM) solution or Project & lio Management (PPM) solution does your organization use?
○ Mi	crosoft SharePoint
○ Mi	crosoft Project Server or Project Online
OPla	nnview
○ Ba	secamp
○ Pri	mavera
O W	orkforce
○ No	one
Ot	her, please specify,

5.3 Is your organization achieving the anticipated benefits from this solution?

\bigcirc	Do not know
\bigcirc	No benefits
\bigcirc	Limited benefits
\bigcirc	Some benefits
\bigcirc	Most benefit
\bigcirc	All benefits
5.4 W	hich software tools are typically used to manage project schedules:
\bigcirc	We use Microsoft Project
\bigcirc	We build a plan using MS Excel
\bigcirc	We use a different planning tool
\bigcirc	We present summaries using Office tools
\bigcirc	We do not tend to use any software tools
	hich software tools are typically used to manage project resources e.g. neets and budgets:
	neets and budgets:
	we use an EPM/PPM Solution
	we use an EPM/PPM Solution We use a Resource Management System
	we use an EPM/PPM Solution We use a Resource Management System We build a resource plan using MS Excel
	we use an EPM/PPM Solution We use a Resource Management System We build a resource plan using MS Excel We create resource plans using Office tools
5.6. Al concer	we use an EPM/PPM Solution We use a Resource Management System We build a resource plan using MS Excel We create resource plans using Office tools We use something else
5.6. Al concer	We use an EPM/PPM Solution We use a Resource Management System We build a resource plan using MS Excel We create resource plans using Office tools We use something else We do not tend to use any software tools bout historical data of closed projects (Knowledge Management) and raing the aspects (if applicable): Benefits realization, Management Data,

	avoid past mistake of new projects.	s and optin	nize the pla	ınning, execı	ition, and c	losure	
\bigcirc	b). The situation is slightly inferior to that described in option a).						
\bigcirc	c). The situation is significantly inferior to that described in option a).						
\bigcirc	d). There is some effort in this direction.						
\bigcirc	e). There is no effort in this direction.						
	onsidering the entire	e portfolio	of projec	ts ended in	the last 12	months (or	
				Neither			
		Strongly		agree nor		Strongly	
		Agree	Agree	disagree	Disagree	Disagree	
Projects met their schedule objectives		C	C	C	C	C	
Projects stayed within budget limits		C	C	C	C	C	
Projects met the original goal and business intent (scope).		C	C	C	C	C	
Project results met stakeholder expectations		0	0	0	0	0	

You have completed the survey. Thank you very much for your participation

APPENDIX 3: ANU Letter of Research Authorisation



28th, June 2019

E-mail: researchwriting.mba.anu@gmail.com

Tel. 0202711213

Our Ref: 15S03EMBA013

The Director.
National Commission for Science,
Technology and Innovation (NACOSTI),
P. O. Box 30623, 00100
Nairobi. Kenya

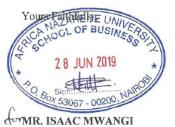
Dear Sir/Madam:

RE:RESEARCH AUTHORIZATION FOR: MR.PAUL AMUNGA WALOBWA

Mr. Walobwa is a postgraduate student of Africa Nazarene University in the Master of Business Administration (MBA) program.

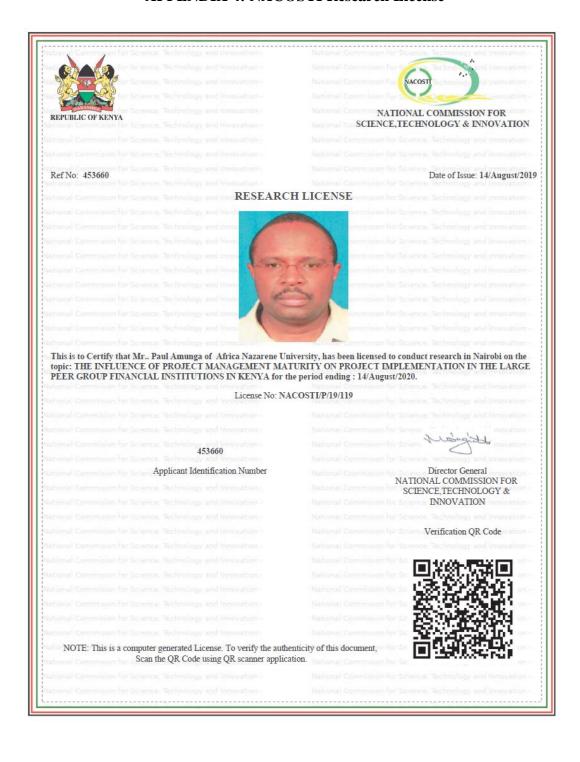
In order to complete his program, Mr. Walobwa is conducting a research entitled: "The Influence of Project Management Maturity on Project Implementation in the Large Peer Group Financial Institution in Kenya"

Any assistance offered to him will be highly appreciated.



PRINCIPAL: NAIROBI CBD CAMPUS.

APPENDIX 4: NACOSTI Research License



APPENDIX 5: Email permission to use the Prado PMMM Questionnaire

paul.amunga@gmail.com

Darci Prado <darciprado@uol.com.br>

04 April 2018 15:17 'Paul Amunga' Sent: To:

RES: CONTATO MPCM: Use of Prado PMMM for academic purposes Subject:

Thank you for your e-mail and for using our model in your research.

Feel free to use Prado-PMMM with some little modifications. It is an honor for us to have our model being used in

Darci Prado

---Mensagem original--

De: Paul Amunga [mailto:paul.amunga@gmail.com] Enviada em: quarta-feira, 4 de abril de 2018 07:22

Para: mpcm@maturityresearch.com
Assunto: CONTATO MPCM: Use of Prado PMMM for academic purposes

Empresa: Formerly with Barclays Bank of Kenya Limited

Telefone: +254727174173

I am currently undertaking an applied research project for my MBA. The study is on Project Management Maturity in

Financial Institutions in Kenya.

I wish to use the Prado PMMM with some little customization to fit the Kenya Scenario. This is solely for academic purposes. Kindly grant me the permission to do so.

Enviado pelo formulário da maturityresearch.com