INFORMATION TECHNOLOGY PROJECT MANAGEMENT METHODOLOGIES AND INFORMATION TECHNOLOGY PROJECTS PERFORMANCE IN KENYAN COMMERCIAL BANKS

BY:

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D61/67302/2011

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE DEGREE OF MASTERS IN BUSINESS ADMINISTRATION OF THE UNIVERSITY OF NAIROBI.

NOVEMBER 2013
DECLARATION

This research project is my original work and has not been presented for a degree in any other University for assessment or award of a degree.

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KAMAU T. K.

D61/67302/2011

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

Signed: _____________________________ Date: __________________________

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DEDICATION

I dedicate this project to my entire family and supervisor for their hard work, support and encouragement through the entire project.
ACKNOWLEDGEMENTS

This project would not have been possible without the support of people, to whom I recognize below for their contribution.

I would like to express my warm and sincere gratitude to my supervisor, Dr. James M. Njihia for his continuous guidance and support. His knowledge and advice on the research project was of utmost help to me. His suggested approaches gave me direction and facilitated in the completion of the project. I am extremely grateful and fortunate to have benefitted from his brilliance.

I would as well thank all the respondents who took time to fill the questionnaires. It is through their effort that produced the data used in my analysis.

I would also like to thank my family, parents and friends for believing in my interests to pursue the MBA and for supporting me along the way.

I thank God for the strength, courage and determination, which has seen me through the course.
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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>APM</td>
<td>Association of Project Managers</td>
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<td>APMG</td>
<td>Accrediting Professional Managers Globally</td>
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<td>CCPM</td>
<td>Critical Chain Project Management</td>
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<td>CFPM</td>
<td>Center for Finance &amp; Project Management</td>
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<td>IPMA - ICB</td>
<td>International Project Management Association Competence Baseline</td>
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<tr>
<td>ISO</td>
<td>International Standards Organization</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>ITS</td>
<td>Information Technology Services</td>
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<tr>
<td>NASA</td>
<td>National Aeronautics and Space Administration</td>
</tr>
<tr>
<td>NTCP</td>
<td>Novelty, Technology, Complexity and Pace</td>
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<td>OGC</td>
<td>Office of Government Commerce</td>
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<td>PM</td>
<td>Project Management</td>
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<td>PMBOK</td>
<td>Project Management Body of Knowledge</td>
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<td>PMI</td>
<td>Project Management Institute</td>
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<td>PRINCE</td>
<td>Projects IN a Controlled Environment</td>
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<td>PWC</td>
<td>PricewaterhouseCoopers</td>
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<td>USD</td>
<td>United States Dollar</td>
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ABSTRACT

Commercial banks in Kenya have been experiencing rapid growth and expansion, necessitating technology changes in order to maintain a competitive edge. While these changes facilitate development and launch of products, they have also led to more vibrant information technology projects management activities. The purpose of this paper was to study the project management methodologies used in Kenyan banks, determine the factors used in their selection, study the relationship between the methodologies and bank project performance and finally compare the methodologies to determine how they pit against each other. The study made use of the cross-sectional descriptive survey design model. Surveys are more flexible in the sense that a wider range of information is collected. Questionnaires were used to gather data from representatives of the various commercial banks. Statistical methods such as mean, standard deviation and chi-square were utilized to analyze the data collected from the respondents. The findings of the research revealed that in the modern day project management in Kenyan commercial banks has adopted and generally preferred to use the formal methodologies to manage IT projects. The top Tiered banks recoded the highest adoption of the mainstream formal methodologies with least adoption recorded in the lower Tiers. Overall, the research found that the use of methodologies led to marked improvements in the project delivery time, the project cost, the quality of final product, management of project risks, realization of expected benefits and improved stakeholder adoption and satisfaction. Additionally, most banks believe that the use of a proper management methodology is a differentiating factor in the outcome of the project hence ranking PRINCE2, In-house formal methodologies and PMBOK high in their level of adoption and use. The type and size of the projects coupled with the ease of tailoring a methodology to fit the project and organizational structure were deemed quite important factors in selecting a methodology. Recommendations were made for banks to ensure full adoption of the formal methodologies in order to realize maximum benefits and to consider combining methodologies where need be, to cater for the complex types of projects that may require more than a single methodology.
CHAPTER ONE

INTRODUCTION

1.1 Background

Project management Institute (2004) defines projects as temporary effort to create a unique product or service and thus require effective management of resources. Projects generally involve groups of people who work in collaboration towards a common goal, where the objective is to meet those set goals within a timely, cost effective manner and to the agreed quality. Activities performed by these people are often interrelated. Information Technology Services Project Management Group (2012) defines a project as a group of related work activities organized under the direction of a project manager which, when carried out, will achieve specified objectives within a stated timeframe.

The concept of project failure, according to Wilson and Howcroft (2002), can take three descriptions: None achievement of agreed standards (project does not meet requirement, does not stay within budget, misses its deadlines or is cancelled before completion), operational failure (the cost to keep the project running outstrips the benefits anticipated prior to construction), lack of routine assessment (the quality of the system is not evaluated). Research conducted by the Standish Group in 1995 indicated that 31.1 percent of projects American public companies and government agencies evaluated were cancelled before they were completed, some 50 percent challenged, whilst the remaining succeeded (The Standish Group, 1995). Market research group (Gartner, 2000) complemented these findings stating the 30 percent of Information Technology (IT) projects will not meet their desired end goal via project completion. Later surveys by the Standish Group International indicate that success rates have improved to 34 percent of all projects—more than a 100 percent improvement over their first study in 1994, whose report was published in 1995, but that still leaves overall IT project success rates at less than 40 percent. In 2010, more evidence was shown by a follow-up reports analysis is summarized in Table 1.1.

Table 1.1: Percent resolution results from CHAOS research for the years 2000-2008

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<tr>
<td>Succeeded</td>
<td>28</td>
<td>34</td>
<td>29</td>
<td>32</td>
</tr>
<tr>
<td>Failed</td>
<td>23</td>
<td>15</td>
<td>18</td>
<td>24</td>
</tr>
<tr>
<td>Challenged</td>
<td>49</td>
<td>51</td>
<td>53</td>
<td>44</td>
</tr>
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</table>

Data Source: Standish group IT Industry Chaos Summary for 2010
From the Table 1.1, succeeded projects are those that completed on time and on budget, with all features and functions as initially specified. Challenged projects were completed and operational but over budget, over the time estimate, and offers fewer features and functions than originally specified. Failed or impaired projects were canceled at some point during the development cycle.

Some examples of big projects that have failed include Project Taurus (Calleam, 2012), an initiative by the London Stock Exchange that was expected to provide a hassle free paperless share-trading environment. The project was abandoned after 10 years of development without any live environment use at a cost of USD 75 million. Recently, after four years of a USD 68 million solution development, but just four years of use the London Stock Exchange’s flagship trading platform (TradElect) was decommissioned and replaced due to system performance problems, system reliability issues, Inappropriate choice of technologies (Calleam, 2009). Wanjiku (2013) cites the failed set up of digital villages in 210 constituencies around the country. Six years later, only 63 pasha digital centers are operational. Reasons cited by the Kenya ICT board were largely the assumption that all applicants hoping to establish the pasha centers had the technical skills and business acumen that was required to implement the idea. A report by Deloitte (Kenya) has recently compelled the ICT board to halt the project and team up with a technical consultant to oversee the project and put in place the relevant framework of implementation and a bank to manage the financial and risk aspect of the projects.

1.1.1 IT project management methodologies

The term methodology, in the strictest sense of the word, means the study of method. When applied to information systems, it has come to mean "a methodical approach to information systems planning, analysis and design" (Olle et al., 1986). System development projects must meet user needs, conform to all the organizational standards, fit the budgetary constraints and be completed on time. A methodology must be used to achieve this (Wright 1991). According to Information Technology Services Management group (ITS Project Management Group, 2012), a project management methodology is a conceptual framework for program and project management, which gives a set of guidelines, standards and processes. There are a number of project management methodologies in existence that have been created and adopted by project managers in Kenya and around the world. Each of these methodologies, though purporting to lead to the same successful results, presents slightly different approaches to management of projects.

The role of methodologies in delivering a successful project is often overlooked. A research paper by Oracle (2011) noted one of the major project management pitfalls is lack of enforcement of a chosen methodology. It went on to note that the choice of a methodology, whether standardized or organization-specific, is secondary to its usage and adherence during project execution. The guidance,
governance and standardization of outlined processes provide an elaborate way of execution hence
improving the chances of project success. Bosman, et al. (1992) found that while numerous factors
influence success for projects revolving around the system development process (Lyytinen and
Hirscheim 1987), it has been empirically proven that the use of system development methodologies can

Specifically for IS development, Corbin (1991) supports the need for a methodology for information
systems development in order to establish a productive software development environment. By ensuring
the consistency of techniques, standards and deliverables, a methodology can improve the productivity
of development personnel and the quality of the systems developed. Furthermore, the use of a formal
methodology improves control of the development process while simultaneously improving system
documentation and maintainability. This reduces development and maintenance costs (DeMarco 1982;
Corbin 1991; McLeod 1992). While many factors can influence project success, a methodical approach
to systems development is clearly a critical factor.

1.1.2 Commercial Banks in Kenya

According to the Central Bank of Kenya (2013), the banking sector comprises of 43 licensed
commercial banks and 1 mortgage finance company. These have been licensed pursuant to the
provisions of the Banking Act and the regulations and Prudential Guidelines issued by the Central Bank
(CBK). Banks have come together under the Kenya Bankers association (KBA), which serves as a lobby
for the interests of the banks. KBA also serve as forum to address issues affecting members.

The banking survey 2013 by Think Business (2013), summarised the categories of the banks as: Tier I
(asset base above 1, 150 billion), Tier II (asset base between 50-150 billion shillings) and Tier III (asset
base between 15-50 billion shilling) and Tier IV (asset base below 15 billion shillings). Of the 43 banks,
5 are Tier I, 7 are Tier II, 17 are Tier III and 19 are Tier IV. It is noted that Deposit Taking Microfinance
(DTM) institutions are not considered commercial banks but fall within the broader category of
financial institutions regulated by the Central Bank.

According to Kenya Bankers Association (2013), it is noted that the clearing of payments between banks
has been efficiently processed through the Automated Clearing House for clearing of Magnetic Ink
Recognition (MICR) base technology cheques and Electronic Funds Transfer (EFT) payments. The
central bank of Kenya is encouraging the population to move to non-cash payment instruments such as
payment cards and electronic money. The development of financial infrastructure has become top
priority in the economy and the Central Bank is at the forefront to ensure that the efficacious system is
developed and maintained to facilitate smooth operations of payment systems and the stability of the
financial markets (Central Bank of Kenya, 2013). Ashvir (2013) notes that the deposit base of the banks was 53.7 percent of GDP compared to tax collected that accounted for 26.7 percent of GDP. This signifies the importance of this sector to the economy.

Importantly, the banks have been experiencing rapid growth and expansion necessitating technology changes in order to maintain a competitive edge. These changes are also in a bid to roll out more products into the market while leveraging on the technology investments made which includes better core banking systems, self-service online portals, mobile banking and other third-party systems integrations. The Kenya Bankers Association has undertaken major initiatives in development of banking, including the modernization of the payments systems in Kenya; and the Automated Clearing House, which it operates in conjunction with the Central Bank of Kenya. Additional key milestone projects include the Real Time Gross Settlement System, the Credit Information Sharing Initiative, the Cheque Truncation System and the Currency Centre projects. These innovative projects are aimed at delivering significant efficiencies across the country (Kenya Bankers Association (2013).

The 2013 banking survey (Think Business, 2013) that the usage of banking products was also heavily differentiated by technology. The Mshwari and M-kesho products by Commercial Banks if Africa and Equity Bank respectively, accounted for 32% of the highest used products. These leverage of Technology hence need for proper project management during product creation. From a web article (Technology Africa, 2011), Standard Chartered Bank Kenya recently upgraded its electronic commerce platform, in a move to make its applications easy to use and to grow the number of mobile commerce clients. The upgrade was done by a Kenyan software firm Cellulant and the bank reported, on the same article, that the investment had seen it double the active base of M-banking users over the second quarter winning the Bank an award within its global network. Equity Bank also upgraded its core banking storage systems to the latest enterprise of IBM storage, with the assistance of IBM so as to allowing overdraft applications at ATMs (HumanIPO, 2013). This upgrade however resulted in service deterioration for several days. From the examples above, and others like M-Kesho and M-Shwari products heavily reliant on mobile technology, it is evident that there are many projects affecting the commercial banks but there is also very little information on the project management methodologies that are used by the banks in the implementation of their IT projects and how they are deemed successful.
1.2 Statement of the problem

Over time, several factors have been identified as probable causes of projects failure, some of which include organizational, technical, people and culture. Of these four, the organizational factor is divided into three ‘sub-factors’: the presence of a formal methodology, clear business objectives, executive support and minimized project scope. Despite the use of formal methodologies, however, many IS projects fail to meet budget and time constraints and/or to satisfy user requirements. Hackathorn and Karimi (1988), suggest that inadequate coverage of methods can be a contributing factor. Others (Butler-Cox 1987; Avison and Wood-Harper 1990) contend that organizations have a variety of project types, and that also, no one method will satisfy all requirements and suggest a contingency approach where a suitable methodology would be chosen per project. While this is intuitively appealing, little empirical evidence has been presented to support this view.

Walubengo (2013) suggests several causes of the Kenyan government ICT project failures: corrupt leadership, complex procurement processes, poor change management due to lack of top management support and lack of institutionalization of projects under implementation. But could these be similar factors affecting IT projects implemented by commercial banks and has use of methodologies led to any change in IT projects outcome? As is also evident from the literature review, IT project management methodology research results are quite varied. Little research that has been done in the area of IT project management methodologies and their effectiveness in Kenya even though it is clear from global studies that they play an important role. For Kenyan commercial banks, this research shall focus on seeking to identify if project management methodologies do play a role in project success or failure for commercial bank projects and if so, how do they relate and to what extent could they also explain IT projects implementation failure in Kenyan banks?

1.3 Research Objectives

a. To establish the methodologies used for IT projects in Kenyan commercial banks

b. To determine the factors considered in the selection of a methodology for IT projects

c. To determine the relationship between the use of IT project management methodologies and the success of projects in Kenyan commercial banks.

\[ H_0 = \text{The IT project outcomes are independent of methodologies used to manage the projects.} \]

d. To compare the performance of the various IT project management methodologies used by the different commercial banks in Kenya.
1.3.1 Value of the Study

The research findings of this study should be useful to the project management bodies such as the Project Management Institute (PMI), as it will give perspective on the state of the respective methodologies adoption and their correlations to projects performance in Kenya.

To the government, the report will provide useful information and enhance the case for use of formal project management methodologies for government IT projects, which should hopefully lead to improved results.

The extension of the various philosophies and paradigms that have been adopted to shape how projects are managed will be beneficial to the academia since it offers a critical look at the theories at play, their differences and the effect that has on an adopted model.

The banks will be direct beneficiaries of the research findings in the report since the study was targeted at a sector that they belong. A view of the overall project performance in the sector and what the other banks are using could be used for competitive advantage.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
This chapter presents a review of issues relating to the performance of IT projects and project management methodologies as most businesses and organizations are constantly engaged in one IT project or another. The aim is to look at the various methodologies that are used to manage IT projects, how they compare, their adoption and effectiveness in addressing project failure.

2.2 Project Management
According to A Guide to the Project Management Body of Knowledge (PMI, 2004), “project management is the application of knowledge, skills, tools and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project. Meeting or exceeding stakeholder needs and expectations invariably involves balancing competing demands among: 1. Scope, time, cost and quality; 2. Stakeholders with differing needs and expectations; 3. Identified requirement (needs) and unidentified requirements (expectations).”

Nader, Ooi and Abdollahi (2011), defined Project management as being about creating an environment and conditions in which defined or desired objective or goal can be achieved in a controlled manner by a team of people. Further, they noted that Project Management is fulfilled via the application and integration of project management processes i.e., initiating, planning, executing, monitoring, controlling and closing. Most of the books called this process as Project Life Cycle. To successfully reach the ambitious project objective or goal, project manager is responsible for collaborating and managing all these processes. In most of the cases, project management is also used to describe an organizational approach to the management of some projects or ongoing operations. An organization that adopts this approach usually defines its activities as projects. In these recent days, there have been tendency for organizations to manage its operational activities using project management.

2.3 Project Management Methodologies
A project methodology, as described by ITS Project Management Group (2012), is an evolving vehicle for sharing and communicating lessons learned and best practices for program and project management whose purpose is to provide project managers and teams advice and guidelines to deliver better and consistent project results, provide a common language and framework describing programs, projects and the practice of project management and to provide project managers a means of sharing and leveraging experience, lessons learned, and best practices.
Project management teams are required to follow a step-by-step process of planning, execution and control of a project. This has however become increasingly challenging in a dynamic business environment experiencing rapid change in technology and globalization leading to unforeseen opportunities. Consequently, projects have become more complex to handle calling for a new way to look at them (Cleland and King, 1983; Jugdev, 2003; Shenhar, 2004). There are several methodologies that are globally accepted and used. The following is a summary based on Al-Maghraby, 2010, comparative analysis.

### 2.3.1 Project Management Body of Knowledge

Project Management Institute’s Project Management Body of Knowledge (PMBOK) is an assembly of underlying principles of good project management which is the most widely acknowledged the in the world (Project Management Institute, 2004). The PMBOK presents a significant collection of project management knowledge in an accessible package with the current fifth edition of the PMBOK having been released in 2012.

Project Management Institute (PMI)'s PMBOK can be considered the most generic and traditional framework for project management. It's intended to be so in order to fit a wide spectrum of project cases as possible. While other frameworks concentrate more on the management tasks for the project manager and the senior management team, PMBOK emphasizes definition of tasks estimation of effort and duration, dependencies, risk identification and handling. For small IT projects, PMBOK seems so encompassing of extras that if literally applied would be rigid and difficult to adapt for any effectiveness (Project Management Institute, 2013).

### 2.3.2 PRojects IN a Controlled Environment 2

The UK-based Office of Government Commerce’s (OGC) PRINCE2 method is the mandated standard project management method in the UK, many parts of Europe and increasingly in Australia and New Zealand. The number of people acquiring PRINCE2 qualifications continues to increase exponentially. PRINCE2 supports organizational needs for effective governance of projects. The current fifth edition was released in 2009 (OGC, 2009).

One of the distinguishing characteristics of OGC's PRINCE2 is separation between the Project Manager and Team Manager roles, making it more appealing and suitable for project managers who do not possess the soft skills and people skills necessary for leading and managing project staff directly. OGC-International also describes PRINCE2 as a business-oriented approach for project management, with a case study behind the undertaking. This is referenced throughout the project life, with continuous
updates and re-consideration of the project being continually desirable and viable. PRINCE2 can be applied to stand alone projects or projects within programs. It doesn't, however, handle program management itself. It is easy to plug into portfolio management methodologies.

### 2.3.3 AGILE

The Agile framework is well known IT methodology more suited for software development and IT projects. According to Forrester Research, based on responses from an August 2009 survey, 35 percent of IT professionals say they have adopted agile processes (Forrester, 2010).

Agile is generally recommended for not so well defined projects; as it is more geared towards information gathering and human interactions. The role of project manager is quite diminished because of the team self-organization and self-management nature. It is less structured work environment and Social Project Management, by emphasizing the importance of the people factor in the success of project management, and incorporation of social elements in project management activities. According to the PwC 2012 research report on project management, the Scrum process is the predominant Agile project management methodology in use, with approximately 43 percent of respondents leveraging this methodology.

### 2.3.4 IPMA Competence Baseline

The International Project Management Association’s Competence Baseline (currently in version 3.0) is a competence-based model used to build, assess, and certify the competency, knowledge, experience, and qualification of the project manager himself as the practitioner of the project management practices. It defines sets of competence elements, classified in three ranges, each addressing a certain area of skills; namely Contextual Competences, Behavioral Competences, and Technical Competences, combined in what's called the Eye of Competence (IPMA-ICB, 2006).

Al-Maghraby (2010) notes that the way the ICB presents the project management methods is somehow the opposite of the presentation in other frameworks which focus on the processes in consecutive project management phases, while the ICB focuses on the person who will be applying the activities of these processes (the project manager) and what and how he will be performing. The ICB doesn't recommend or include specific methodologies, methods, and tools. Methods and tools may be defined by the organization. The project manager should choose the appropriate methods and tools for a particular project situation. His conclusion was that, the most appropriate usage of ICB is in evaluating and matching the project manager level and capabilities to the project size and degree of complexity as a best effort guarantee for project success. This is independent of industry, and applicable to almost every kind of project.
2.3.5 In-House Methodologies and other developments

Several organizations have internally grown in-house methodologies that are used to guide specific management of projects in the organizations. An example would be the Transform framework that is developed by PWC to guide its internal projects. It covers strategy and assessment, design, construction, implementation, operation and review of projects. Shenhar et al. (2005), note in their publication, that NASA has also built and adopted its own framework for guiding its specific kind of projects.

According to the ISO 10006-2003 standard document, a new "Project Management - Guide to project Management" ISO 21500 standard is currently under development. The Standard will provide a common platform that will become a reference point for all project management professionals and facilitate knowledge transfer and the harmonization of principles, vocabulary and processes in existing and future Standards (ISO,2003). These will however remain guidelines and not methodologies.

2.4 IT Project success and Adoption of IT Project Management Methodologies

Several empirical studies have been done to validate the link between project management methodologies and IT project success or failure with varied results. One research group developed the project management planning quality index (PMPQ) to evaluate project planning and then used it to examine the relationship to project success Globerson and Zwikael (2002). Although they found that a higher quality score was positively correlated with project success, their research has been limited to just the planning aspect of project management. Gowan and Mathieu (2005) examined the relationship between project management methodology and meeting the target date for completion, but their measure of the methodology was limited to just five aspects of project management. Milosevic and Patanakul (2005) examined organizational project management methods and observed that greater standardization of project management tools across projects within an organization was associated with enhanced project management success. Crawford (2005) examined the relationships between management’s ratings on project personnel in terms of their value and effectiveness, adherence to project management practices and project management knowledge. She observed no significant relationship between either aspect of project management and management’s ratings.

In a survey conducted in 2004, PwC also established a link between project management methodology and project success. A follow-up survey in 2012 established that the state of project management performance was measured against several key elements, amongst them, processes, systems and tools. A key finding from the survey, as illustrated in figure 1 below, was that using established project
management methodologies, under the processes element, increased success in the key performance indicators of quality, scope, budget, schedule, and business benefits.

Figure 1: Reported performance vis-a-vis use of Project Management Methodologies

![Graph showing performance against methodology use.]


KPMG’s global IT Project Management Survey (2005) found out that standardized processes and methodologies are common but not dominant. Nearly half of the participants covered by the survey considered their project management maturity to be ‘standardized’. A surprisingly high 39 percent, while acknowledging the prevalence of methodology and supporting technology available today, still considered themselves to be ‘informal’, 47 percent Standardized, 7 percent Strong and leading in practice, and 7 percent Ad hoc.

Additionally, the survey found out that the dominant project management methodologies used were: PMI’s PMBOK 11 percent, OGC’s PRINCE2 6 percent, No formal methodology 15 percent, Home-grown 25 percent, hybrid 36 percent, Other (e.g. vendor/consultant determined) 5 percent. Organizations still prefer to have their own methodology, with 61 percent indicating they use a hybrid or home-grown model. It was accepted that there is increased influence from generally accepted methods or bodies like PMBOK or PRINCE2, but few accept them as the core. Seven years later, PwC, 2012 Global survey’s results show a significant change in the dominance of the methodologies as shown in figure 2:

Figure 2: Reported use of PM methodologies

![Pie chart showing percentage of use of methodologies.]

Interestingly, it was noted that organizations with the highest project success rates use in-house methodologies or combinations of methodologies. This result indicates these organizations may have a greater investment in PM methodologies that meet their unique situations (PwC, 2012).

A second key finding was also that on a global scale, reported use of established methodologies is stable and many consultants and organizations employees are obtaining applicable certification. The number of respondents reported using combinations of multiple methodologies; the most common methodologies included in these combinations were PMBOK, PRINCE2, and other IT methodologies like AGILE (PwC, 2012).

In regard to prevalence, figure 3 shows how the two main project management methodologies have been adopted globally. When it came to an organizations structure and the role of project management offices, a key finding was that established project management offices result in projects with higher quality (74 percent) and business benefits (62 percent) across the globe especially where a standard formalized methodology was adopted for its projects.

Figure 3: Comparison of reported use of PMBOK and Prince2 methodologies in different regions.

2.5 Project Management Theories and Models

2.5.1 The Classical Contingency Theory
The project management literature has often assumed that all projects share a universal set of managerial characteristics. Yet projects can be seen as “temporary organizations within organizations” and may be different than their mother organizations. Several authors have expressed disappointment from the universal, one-size-fits-all idea, and recommend more contingent approaches (Shenhar, A.J., 2001).

However, the one aspect that has remain unchanged from the traditional way of managing projects, the assumption that all projects can be handled in the same way, with the same tools, techniques and methodologies. Further, even current books and articles tend to suggest a ‘one-size-fits-all’ kind of
approach since all projects are considered to have similar characteristics. Additionally, it is also noted that there is no standard way to distinguish between various projects for proper match to various methodologies much as that has been noted in research as a concern (Wheelwright and Clark, 1992). A lack of this distinction is suggested to be a reason for project failures as well since wrong methodologies and approaches are easily adopted (Dvir et al; Shenhar, 2003).

Classical contingency Theory implies that different external conditions require different organizational characteristics, and that the effectiveness of an organization is contingent upon the fit between structural and environmental variables. While these two may have been studied in detail when the organization is viewed as a unit, they have been less investigated in the project context. The Project management institute also recognized the problem of “one size fits all” and initiated extensive studies on the current projects carried out by Crawford, Hobbs, and Turner (2004). At the end, they suggested that there was a solid point to define an organizational-specific framework for identifying and managing different project types to reduce the probability of failure. Jones and Kydd (1988) provide evidence that the implementation of the same methodology in two different organizational settings produced vastly different results. The successful use of methodologies is therefore dependent on selecting the appropriate methodology and managing it correctly (Saarinen 1990; Butler Cox 1987; Redmill 1990). It is on this premise that several scientists have derived models and approaches from the contingency theory. One of those models is the NTCP Diamond Model, which sought to deal with project failure at NASA. The importance of this theory to the study is the assertion that different projects may require different management approaches which in turn lead to development of different methodologies and approaches all of which are aimed at improving the chances of an IT project success.

2.5.2 The Novelty, Complexity, Technology and Pace (NTCP) “Diamond” Model

Shenhar and Dvir (1996) developed a typological theory of project management and a three dimensional framework for analysis, called the UCP – for Certainty, Complexity, and Pace. In 2001, their research had also shown how the theory could be applied to the practicing organization, offering that different project management styles should be associated with different types of projects. Shenhar extended the concept of classical contingency theory to project management by suggesting that a few NASA accidents may have been caused by inherently wrong project management style that may have led to an oversight. Recently, Shehar and Dvir (2004) have suggested a more refined model consisting of novelty, complexity, technology, and pace – the NTCP “Diamond” Model. This goes to show that various frameworks and methodologies match to different projects and may lead to different project outcomes depending on their adoption, which will ultimately influence the success or failure of a project.
2.5.3 Theory of Constraints and the Critical Chain

The Theory of Constraints states that constraints determine the performance of a system. A constraint is anything that prevents a system from achieving a higher performance relative to its goal. A system is any collection of interconnected parts sharing a common goal. The Theory of Constraints (TOC) is a management paradigm that views any manageable system as being limited in achieving more of its goals by a very small number of constraints. There is always at least one constraint, and TOC uses a focusing process to identify the constraint and restructure the rest of the organization around it (Blackstone, 2010).

The idea of Critical chain project management (CCPM) introduced in 1997 by Eliyahu M. Goldratt through his book, Critical Chain, is based on methods and algorithms derived from Theory of Constraints. Application of CCPM has been credited with achieving projects 10 percent to 50 percent faster and/or cheaper than the traditional methods, Critical Path Method, Gantt, et cetera developed from 1910 to 1950s. In project management, the critical chain is the sequence of both precedence and resource dependent terminal elements that prevents a project from being completed in a shorter time, given finite resources. If resources are always available in unlimited quantities, then a project’s critical chain is identical to its critical path. Mabin and Balderstone (1998), found that implementing Critical Chain resulted in mean reduction in lead-times of 69 percent, mean reduction of cycle-times of 66 percent, mean improvement in due date performance of 60 percent, mean reduction in inventory levels of 50 percent and mean increases in revenue throughput of 68 percent. With traditional project management methods, 30 percent of the lost time and resources are typically consumed by wasteful techniques. This theory is useful to the area of study as it focuses on the project success parameters – time, cost, quality as constraints around which the project management organization is structured.

Summary

In view of the above studies, it is evident that there exists a link between project methodologies and project success or failure. However, there is not much academic research that has been done in the project management area in Kenya, specifically, on IT project methodologies. Although several, knowledge and adoption of these methodologies in Kenya is low, and projects keep failing. There is therefore a need to know the current situation in Kenya so as to establish if these project management methodologies can be useful in increasing success levels in Kenya.
Conceptual Framework:

Figure 4: Conceptual model for the project management methodologies performance

The diagrammatic concept above outlines the independent variable (project performance/outcome) and the independent parameters, in this case being the level of usage or adoption of the methodologies by Kenya commercial banks.
CHAPTER THREE

RESEARCH METHODOLOGY

This section of the research focuses on the plan and structure; the research design that was employed on the study, the population and its description, data collection, analysis of data in order to obtain answers to the research questions hence achieving the objectives of the study.

3.1 Research Design

The study used a cross-sectional descriptive survey design. Surveys are more flexible in the sense that a wider range of information can be collected (Mugenda and Mugenda, 2003). They provide information that is useful for drawing comparisons and generalizations. In addition, In-depth interviews were also used to gather data from the key informants who are authorities in the IT project management field. It was also established that several other research papers of this nature have used similar research design. For example, Nader, Ooi and Abdollahi, on “Key Success Factors for Managing Projects”.

3.2 Population and sampling

The study population was all the 43 commercial banks in Kenya according to the directory of commercial banks and mortgage finance companies published by the Central Bank of Kenya as at 25th August 2013. A Census approach was used because the population is small. Additionally, one experienced consultant who had been involved with commercial bank projects was interviewed to supplement the survey data as the key informants.

3.3 Data Collection

One project manager or an equivalent senior manager was the respondent of the questionnaire in each company. The questionnaire was availed online and a link to emailed to the respondents. The questionnaire was divided into Part A, which captured general information about the respondent, Part B, which captured data on the Methodologies in use at the banks, Part C, which captured data on the relationship between the IT project methodologies and project failure or success while the last Part D collected data on specific methodologies in use at any particular bank. The questionnaire was pilot tested to ensure effective data capture, reliability and analysis.

The consultant was interviewed with qualitative questions drawn from the questionnaire for comparison and supplementary purposes.
3.4 Data Analysis

Data analysis adopted two different techniques in order to meet the four objectives of the study. The descriptive analysis technique was used for the first two objectives, that is, to find out the prevalence of the project management methodologies and the factors considered in their selection. Frequency, mean and standard deviation measures were be tabulated and compared.

Chi-square techniques were used for objective three to investigate the relationship between project methodology and performance. Ranking of respondent responses was used to compare the performance of the various IT project management methodologies for objective four.

Data collected through in-depth interviews was analyzed through content analysis to identify supplementing information to the responses received from the banks on the topic of study. Pattorn (2002) defined content analysis as any qualitative data reduction and sense making effort that takes a volume of qualitative material and attempts to identify core consistencies and meanings.
CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction
This chapter presents results of findings obtained from the questionnaires. It’s organized on the basis of summaries of data findings together with interpretations presented by use of tables and charts indicating their frequencies, means, standard deviations, and percentages and in some cases, relationships, with respect to the total respondents for each question. There is a discussion section for research objectives detailed comparison. A total of 43 commercial banks respondents were invited to participate in the survey and a link to the online questionnaire availed to each of them.

4.2 Demographic Findings

4.2.1 Profiles of respondents
Out of the 43 questionnaire requests sent to the banks respondents, 23 were comprehensively completed and submitted. This translated to 53.49% response rate among the respondents. The questionnaire covered the objectives of the study which were; to establish the methodologies used for IT projects in Kenyan commercial banks; to determine the factors considered in the selection of a methodology for IT projects; to determine the relationship between the use of IT project management methodologies and the success of projects in Kenyan commercial banks and to compare the performance of the various IT project management methodologies used by the different commercial banks in Kenya.

4.2.2 Banks representation
The study sought personal data and part of it was an indication of the banks where the respondent worked from the list provided in the questionnaire. The information collected was presented in Table 4.2.2 and categorized in bank Tiers as classified by Central bank of Kenya.

<table>
<thead>
<tr>
<th>Tiers</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Adoption (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier I</td>
<td>5</td>
<td>22%</td>
<td>100%</td>
</tr>
<tr>
<td>Tier II</td>
<td>7</td>
<td>30%</td>
<td>100%</td>
</tr>
<tr>
<td>Tier III</td>
<td>9</td>
<td>39%</td>
<td>75%</td>
</tr>
<tr>
<td>Tier IV</td>
<td>2</td>
<td>9%</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: The Think business 2013 banking survey magazine
4.2.3 Level of Education

As part of personal data, it was crucial for the study to establish the level of ICT education of the specific respondents. The data collected was presented in the form of frequencies and percentiles as shown in Table 4.2.3.

Table 4.2.3: Respondents Level of Education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Diploma</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Higher Diploma</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>Undergraduate degree</td>
<td>6</td>
<td>26%</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>15</td>
<td>65%</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the responses, all surveyed respondents had at least one academic qualification translating to 100% of the total responses. It was evident that most of the respondents had above an undergraduate degree. It was also established that the larger fraction is of the respondents held graduate qualifications.

4.2.4 Years in project management environment (Experience In project management)

The number of years a respondent had been in a project management environment was sought and the responses were as represented in Table 4.2.4 below.

Table 4.2.4: Respondents years of project management experience

<table>
<thead>
<tr>
<th>Level of Experience</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than five years</td>
<td>14</td>
<td>61%</td>
</tr>
<tr>
<td>Five to ten years</td>
<td>7</td>
<td>30%</td>
</tr>
<tr>
<td>Ten to twenty years</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>Over twenty years</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the respondents (61.0%) only had an experience of up to five years in a project management environment with 30% of them having been there longer than five years but up to ten years while only 9% had been in projects for more that ten years with none more than twenty years.
The interviewed consultant on the other hand had over 15 years experience in the project management environment.

**4.2.5 Job Level or Role in project management**

It was important to know the roles of the respondents in the various banks as a pointer of the people involved in the project management responsibilities. The findings were tabulated in Table 4.2.5.

*Table 4.2.5: Respondents Job level*

<table>
<thead>
<tr>
<th>Job level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Senior Manager</td>
<td>6</td>
<td>26%</td>
</tr>
<tr>
<td>Middle level manager</td>
<td>11</td>
<td>48%</td>
</tr>
<tr>
<td>Supervisor</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

From responses above, it is noted that 74% of respondents held roles of middle level manager and above. This was mostly so for the top tiered banks, Tier I and II. Line supervisors were also tasked with project management responsibility for mid-tier banks while the 17%, which represents lower ranking officers in the firms was mainly liked to Tier IV banks that are smaller. This could ne interpreted to mean that the sizes, hence the risk of the IT projects undertaken by the big Tier I one bands required higher management oversight compared to smaller sized projects undertaken by Lower Tier banks.
4.2.6 Project Organization Structure

It was equally important to establish the project management structure adopted by the banks in order to tell where the main responsibility on the management of project lies.

Table 4.2.6: Project organisation structure

<table>
<thead>
<tr>
<th>Structure</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A project management office</td>
<td>10</td>
<td>29%</td>
</tr>
<tr>
<td>A project management department</td>
<td>12</td>
<td>35%</td>
</tr>
<tr>
<td>A project management team that includes members of top management</td>
<td>6</td>
<td>18%</td>
</tr>
<tr>
<td>An external project management consultant depending on the project</td>
<td>5</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

From the data in Table 4.2.6, it was evident that the most popular structures adopted for project governance were: a project management office and a separate project management project, both accounting for 64% of responses. Importantly, it was noted that none of the respondents selected one structure only but rather, a combination of structured based on each projects needs.

4.2.7 Project management methodology as a differentiating factor between project success and failure

A buffer question was introduced in the questionnaire in order to determine, in summary, if project managers in the banks considered the use of project management methodologies a differentiating factor between success and failure of their projects.

Table 4.2.7: Project management methodology as a differentiator

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23</td>
<td>100%</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

| Total    | 23        | 100%       |

The results of the survey indicate that 100% of all the respondents considered the formal methodologies a key factor in the success of projects. Additionally, the interviewed consultant, agreed in totality.
4.3 **Main Project Management Methodology used/adopted by the surveyed banks**

Objective one of the study was to determine the IT project management methodologies adopted by Kenya commercial banks. The questionnaire presented four popular methodologies and allowed for inclusion of other in-house developed frameworks, the traditional model or any other formal methodology not listed. Results were as shown in Table 4.3 (a):

*Table 4.3 (a): Banks Methodology adoption*

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PmBOK</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>PRINCE II</td>
<td>13</td>
<td>57%</td>
</tr>
<tr>
<td>AGILE</td>
<td>2</td>
<td>9%</td>
</tr>
<tr>
<td>ICB-IPMA</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>In-house</td>
<td>6</td>
<td>26%</td>
</tr>
<tr>
<td>Traditional</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Analysis of the responses on the main methodology adopted by each bank showed that PRINCE2 was the most adopted methodology by 57% of the banks project management teams followed by In-house developed frameworks. Several banks still preferred to make use of highly customised frameworks, internally built for ease of fit with the company culture. PMBOK and AGILE methodologies were only used by 9% of the banks as their main methodologies each implying their low uptake. ICB-IPMA, the traditional and other methodologies did not get consideration as main bank methodologies. It was however noted that some banks made use of more than one single methodology for various IT projects that they undertook as depicted by Table 4.3(b).

*Table 4.3 (b): Methodologies Extent of use*

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Sum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PmBOK</td>
<td>23</td>
<td>2.35</td>
<td>1.34</td>
</tr>
<tr>
<td>PRINCE</td>
<td>23</td>
<td>3.43</td>
<td>1.50</td>
</tr>
<tr>
<td>AGILE</td>
<td>23</td>
<td>2.35</td>
<td>1.27</td>
</tr>
<tr>
<td>ICB-IPMA</td>
<td>23</td>
<td>1.52</td>
<td>0.79</td>
</tr>
<tr>
<td>In-House</td>
<td>23</td>
<td>3.39</td>
<td>1.34</td>
</tr>
<tr>
<td>Traditional</td>
<td>23</td>
<td>1.57</td>
<td>0.84</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>1.52</td>
<td>0.73</td>
</tr>
</tbody>
</table>
From the statistics above, PRINCE recorded the highest mean, implying that it had the highest positive extent of use. Its high standard deviation also indicates that it has more varied extents of use compared to all other methodologies. The in-house methodology also ranks high and the order is the same as Table 4.3(a) with ICB-IPMA and other methodologies having the lowest mean and least deviation to indicate that they may be used but to a very low adoption and extent is not widely spread thus confirming the ranking of the main methodologies adopted by the banks.

No other formal methodologies were mentioned to be in use in the banking community and the age-old traditional methodology was found not to be in use in any of the respondent’s banks.

4.3.1 Level of Adoption of each Methodology:
The research also sought to identify the level of adoption of each of the methodologies.

PMBOK - Project Management Body of Knowledge

Table 4.3.1(a): PMBOK level of implementation

<table>
<thead>
<tr>
<th>PMBOK Knowledge areas</th>
<th>Frequency</th>
<th>% Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope Management</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Time Management</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Cost Management</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Quality Management</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Human Resource Management</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>Communication Management</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>Risk Management</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Procurement Management</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>Integration Management</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PMBOK focus groups</th>
<th>Frequency</th>
<th>% Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation Process group</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Planning Process group</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Executing Process group</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>Closing process group</td>
<td>2</td>
<td>100%</td>
</tr>
</tbody>
</table>

With about 9% of the respondent banks adopting PMBOK as their main project management methodology, Table 4.3.1(a) shows the extent of adoption in these banks to stand at 86.76%. This
implies there is a small percentage of PMBOK principles that are not taken up during implementation.

**PRINCE2 - PRojects IN a Controlled Environment**

*Table 4.3.1(b): PRINCE2 level of implementation*

<table>
<thead>
<tr>
<th>PRINCE2 THEMES</th>
<th>Frequency</th>
<th>% Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Case</td>
<td>12</td>
<td>92%</td>
</tr>
<tr>
<td>Organization</td>
<td>10</td>
<td>77%</td>
</tr>
<tr>
<td>Planning</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>Controlling</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>Risk management</td>
<td>11</td>
<td>85%</td>
</tr>
<tr>
<td>Quality management</td>
<td>12</td>
<td>92%</td>
</tr>
<tr>
<td>Change management</td>
<td>12</td>
<td>92%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRINCE2 PROCESSES</th>
<th>Frequency</th>
<th>% Adoption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting up a Project</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>Directing a project</td>
<td>12</td>
<td>92%</td>
</tr>
<tr>
<td>Initiating a project</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>Controlling a project</td>
<td>13</td>
<td>100%</td>
</tr>
<tr>
<td>Managing product delivery</td>
<td>9</td>
<td>69%</td>
</tr>
<tr>
<td>Managing stage boundaries</td>
<td>9</td>
<td>69%</td>
</tr>
<tr>
<td>Closing a project</td>
<td>11</td>
<td>85%</td>
</tr>
</tbody>
</table>

With 57% of adoption of the PRINCE across the commercial banking sectors, calculations based on Table 4.3.1(b) above indicate that 89.5% of PRINCE2 themes and processes are actually used. This represented the highest extent of use for any particular main methodology.

**IPMA-Competence Baseline (ICB)**

The competence areas and the technical competencies made the list of variables by which the extent of adoption was to be determined. There being no bank that adopted ICB-IPMA as its main methodology, no responses were received.
AGILE

Table 4.3.1(c): AGILE level of Implementation

<table>
<thead>
<tr>
<th>AGILE PRINCIPLES</th>
<th>Frequency</th>
<th>Adoption Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active user involvement is imperative</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>The team must be empowered to make decisions</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Requirements evolve but the timescale is fixed</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Capture requirements at a high level; lightweight &amp; visual</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Develop small, incremental releases and iterate</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Focus on frequent delivery of products</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Complete each feature before moving on to the next</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Apply the 80/20 rule</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Testing is integrated throughout the project lifecycle Ð test early and often</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>A collaborative &amp; cooperative approach between all stakeholders is essential</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

With about 9% of the respondent banks adopting Agile as their main project management methodology, the Table 4.3.1(c) shows the extent of adoption in these banks to stand at 27.27%. This implies there is a very big percentage of Agile principles that are not taken up during implementation.

Traditional Methodology

The traditional methodology did not also get considered for any respondent banks main methodologies hence its adoption extent through its main five phases couldn't be determined. The same case applied to the ‘other’ category of methodologies.

In-House Methodology

With 26% of the respondent banks having adopted In-house methodologies, it may also follow that these methodologies have the highest extent of individual processes adoption. This is because the in-house methodologies are highly customized and developed to fit and accommodate the organizations
kind of projects. The data collected also indicated that about 60% of the In-house methodologies tend to benchmark with the known formal models & methodologies.

### 4.4 Factors considered in selecting a methodology

Objective two of this research was to determine the factors considered in the selection of a methodology for IT projects.

Before selecting a methodology, any organization, in this case the banks have a number of factors that may in one way or another influence the methodology to be considered for adoption. The table below ranks the main factors and aimed to determine which of these factors are most important to the banks while making the choice on the methodology to adopt.

*Table 4.4: Methodology consideration Factors*

<table>
<thead>
<tr>
<th>Selection Factor</th>
<th>Rank</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The scale/size of the envisaged IT projects influenced the choice of methodology.</td>
<td>1</td>
<td>3.70</td>
<td>1.46</td>
</tr>
<tr>
<td>The ease of tailoring and use with various kinds of IT projects influenced the</td>
<td>2</td>
<td>3.65</td>
<td>1.23</td>
</tr>
<tr>
<td>choice of methodology.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The failure/success history of previous IT projects undertaken influenced the</td>
<td>3</td>
<td>3.61</td>
<td>1.23</td>
</tr>
<tr>
<td>choice of methodology.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The methodology selected was based on current staff skills/knowhow.</td>
<td>4</td>
<td>3.43</td>
<td>1.16</td>
</tr>
<tr>
<td>The financial position of the organization affected the choice of the methodology.</td>
<td>5</td>
<td>3.26</td>
<td>1.54</td>
</tr>
<tr>
<td>The cost of embedding the methodology and structuring the organization to fit</td>
<td>6</td>
<td>3.17</td>
<td>1.15</td>
</tr>
<tr>
<td>influenced the choice.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The popularity of the methodology with peer companies affected the choice of</td>
<td>7</td>
<td>2.87</td>
<td>1.55</td>
</tr>
<tr>
<td>methodology.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In Table 4.4, the mean ranges from 3.696, the highest, to 2.869 the lowest. Most of the means are above 3.0 and are relatively close to each other and so are the standard deviations for each. This implies that the factors listed get useful consideration. The type and size of project is the biggest consideration implying that it is not always a one methodology fits all for all of an organizations a projects. The popularity of the methodology adopted by peer companies ranked the lowest with most respondents in disagreement. How easily customizable a methodology is to fit the project in question is noted to be the second most important factor followed by proven success history of a methodology.
4.5 Relationship between methodologies and project outcome

Objective three was to determine the relationship between the use of IT project management methodologies and the success of projects in Kenyan commercial banks.

Table 4.5: Project outcomes

<table>
<thead>
<tr>
<th>Project outcome Parameters</th>
<th>Sum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall delivery time</td>
<td>23</td>
<td>3.17</td>
<td>0.58</td>
</tr>
<tr>
<td>Overall project cost budget</td>
<td>23</td>
<td>2.97</td>
<td>0.88</td>
</tr>
<tr>
<td>Quality of final products</td>
<td>23</td>
<td>3.35</td>
<td>0.71</td>
</tr>
<tr>
<td>Adherence to agreed initial scope</td>
<td>23</td>
<td>3.13</td>
<td>0.87</td>
</tr>
<tr>
<td>Realization of expected project benefits</td>
<td>23</td>
<td>3.30</td>
<td>0.76</td>
</tr>
<tr>
<td>Stakeholders adoption &amp; satisfaction</td>
<td>23</td>
<td>3.26</td>
<td>0.75</td>
</tr>
<tr>
<td>Overall project Risk Management</td>
<td>23</td>
<td>3.48</td>
<td>0.95</td>
</tr>
</tbody>
</table>

A test of interdependence was carried out to establish whether the outcome parameters were dependent on the methodologies. A chi-square test on the data in Table 4.5 above returned a P-value of 0.0226. We can reject the null hypothesis and conclude that the performance is not independent of project management methodologies and their extent of usage.

4.6 Performance of the main project management methodology

The fourth and last objective was to compare the performance of the various IT project management methodologies used by the different commercial banks in Kenya.

The results of from the data collected can be summarized in table 4.6(a).
### Table 4.6(a): Project Management methodology evaluation

<table>
<thead>
<tr>
<th></th>
<th>Project Methodology Evaluation Parameter</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The project management methodology does not improve my ability to deal with the real-time complexity of the project environment.</td>
<td>1.96</td>
<td>1.15</td>
</tr>
<tr>
<td>2</td>
<td>The project management methodology works well for a while, after which it seems to diminish in its value added.</td>
<td>1.96</td>
<td>1.15</td>
</tr>
<tr>
<td>3</td>
<td>The project management methodology does not improve the accuracy of my project decisions in a significant manner.</td>
<td>1.91</td>
<td>1.20</td>
</tr>
<tr>
<td>4</td>
<td>Many project management 'issues' should be, but are not, managed within the project management methodology.</td>
<td>2.83</td>
<td>1.27</td>
</tr>
<tr>
<td>5</td>
<td>The project management methodology does not seem to ensure adequate resources for the full length of the project (resources = data, information, equipment/tools, skills, expertise, time, money).</td>
<td>2.39</td>
<td>1.37</td>
</tr>
<tr>
<td>6</td>
<td>The project management methodology does not seem to help me, and my team, to continuously adapt to project changes.</td>
<td>2.04</td>
<td>1.22</td>
</tr>
<tr>
<td>7</td>
<td>The project management methodology seems to have a poor relationship with 'real' project management.</td>
<td>1.96</td>
<td>1.07</td>
</tr>
<tr>
<td>8</td>
<td>The project management methodology does not inform me of how well I am managing the project.</td>
<td>2.13</td>
<td>1.25</td>
</tr>
<tr>
<td>9</td>
<td>My project management project team complains about the project management methodology.</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>If I could directly influence the methodological content within the project management methodology, I would probably perform better as a project management.</td>
<td>2.70</td>
<td>1.18</td>
</tr>
<tr>
<td>11</td>
<td>The project management methodology is not fully integrated with the project management tool.</td>
<td>2.43</td>
<td>1.08</td>
</tr>
<tr>
<td>12</td>
<td>The project management methodology does not provide me with statistics of the financial performance of the project (e.g., ROI (return on investment), Cost, Profit, Cash Flow, targets).</td>
<td>2.83</td>
<td>1.23</td>
</tr>
<tr>
<td>13</td>
<td>The project management methodology usually increases my management workload.</td>
<td>2.52</td>
<td>1.27</td>
</tr>
</tbody>
</table>
The project management evaluation parameters were then summarized per methodology as shown in Table 4.6 (b) in order to measure performance of the methodologies based on the evaluation of those parameters.

*Table 4.6 (b): Project management methodologies performance rate*

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Avg Performance Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINCE</td>
<td>57%</td>
</tr>
<tr>
<td>IN-House</td>
<td>31%</td>
</tr>
<tr>
<td>PMBOK</td>
<td>7%</td>
</tr>
<tr>
<td>AGILE</td>
<td>5%</td>
</tr>
</tbody>
</table>

The performance ranking is as shown in graph 4.1 below which indicates that PRINCE2 had best performance among the banking participants followed by In-house methodologies and PMBOK and AGILE rank lowest with assured performance of less than 10%.

*Graph 4.1: Project performance vs. management methodology*

4.7 **Quantitative Data Analysis**

One interviewed consultant gave feedback that was used to complement the respondent’s responses. Drawing from experience of implementing IT related projects in at least three Tier I banks, the main advantages of adopting methodologies cited were: Consistency, Succession planning and ease of audit. The IT project management methodology used was a hybrid combination of PRINCE2 and PMBOK. On the factors considered in the selection of a methodology for IT projects, five were cited as key: Risk, complexity, type of project and resources/clients experience. Additionally, it was noted that the
consultant does not use one methodology for all projects but rather, tailors the methodology for each project.

From previous projects undertaken in the banking sector, the consultant’s project performance outcome measured against the performance parameters were as follows: Overall delivery time, low; overall project cost budget, low; quality of final product, low; Adherence to agreed initial scope, low; Realization of expected project benefits, low; Stakeholders adoption & satisfaction, low.

As regards the level of adoption and utilization versus the benefits realized from use of formal methodologies in management of projects, the project management consultant indicated the adoption levels were low hence the little benefits realized from implementation of the methodologies.

**4.8 Discussion**

The first objective was to establish the methodologies used for IT projects in Kenyan commercial banks. Analysis of the responses on the main methodology adopted by each bank, showed that PRINCE2 was the most adopted methodology by 57% of the banks project management teams followed by In-house developed frameworks. KPMG’s global IT Project Management Survey (2005) found out that a high 39 percent, while acknowledging the prevalence of methodology and supporting technology available today, still considered themselves to be ‘informal’, 47 percent Standardized, 7 percent Strong and leading in practice, and 7 percent Ad hoc. Additionally, the survey found out that the dominant project management methodology used were: PMI’s PMBOK 11 percent, OGC’s PRINCE2 6 percent, No formal methodology 15 percent, Home-grown 25 percent, hybrid 36 percent, Other (e.g. vendor/consultant determined) 5 percent. Organizations still prefer to have their own methodology, with 61 percent indicating they use a hybrid or home-grown model. In relation to the findings, we see that the dominance of the methodologies in Kenyan banks differ from the global outlook where PMBOK is more dominant compared to PRINCE2 locally. PMBOK and AGILE methodologies were only used by 9% of the banks as their main methodologies each implying their low uptake. The use of in-house methodologies at 26% locally, compares very well with 25% use of home-grown methodologies globally. Several banks still preferred to make use of highly customised frameworks, internally built for ease of fit with the company culture. Additionally, with the rest of the world using 5% of other non-formal methodologies, none of the Kenyan banks recorded use of non-formal IT projects management methodologies. ICB-IPMA, the traditional and other methodologies did not get consideration as main bank methodologies. PwC (2012)’s survey, which is also very consistent with KPMG’s research from a global scale, presents the same results when compared with the research findings.

The second objective was to determine the factors considered in the selection of a methodology for IT projects. From the ranking of the factors based on means, the type and size of project were the biggest considerations implying that it is not always a one methodology fits all for all of an organizations a
projects. The same feedback was received from the project management consultant who cited Risk, complexity, type of project and resources/clients experience. This was very much consistent with the Classical contingency theory and conclusions by Crawford, Hobbs and Turner (2004) and Jones and Kidd (1988) who provide evidence that the implementation of the same methodology in two different organizational settings produced vastly different results. The successful use of methodologies is therefore dependent on selecting the appropriate methodology and managing it correctly (Saarinen 1990; Butler Cox 1987; Redmill 1990).

The popularity of the methodology adopted by peer companies ranked the lowest with most respondents in disagreement. How easily customizable a methodology is to fit the project in question was noted to be the second most important factor followed by proven success history of a methodology. PwC (2012) noted that most success in projects was based on hybrid models of project management methodologies, which is consistent with the ease of customization that ranked quite high with the local commercial banks.

The third objective was to determine the relationship between the use of IT project management methodologies and the success of projects in Kenyan commercial banks. A test of interdependence was carried out to establish whether the outcome parameters were dependent on the methodologies. A chi-square test on the data in Table 4.2.14 above returned a P-value of 0.0226, which is less than 0.05 at 95% confidence level. We can reject the null hypothesis and conclude that the performance is not independent of project management methodologies and their extent of usage. This implies that the performance of a project is also influenced by the methodology used. Several other empirical studies have been done to validate the link between project management methodologies and IT project performance with varied results. The variance was mostly because each of the studies was limited to certain aspects of the project management and methodologies. Globerson and Zwikael (2002) found that a higher quality score was positively correlated with project success, their research has been limited to just the planning aspect of project management. Milosevic and Patanakul (2005) examined organizational project management methods and observed that greater standardization of project management tools across projects within an organization was associated with enhanced project management success.

The fourth objective of the research was to compare the performance of the various IT project management methodologies used by the different commercial banks in Kenya. A ranking of the project management methodologies performance in Kenya was summarized in Graph 1. PwC (2012) suggested that the best project performance globally was exhibited by projects executed via a hybrid model, that is, a combination of methodologies. This was attributed to the ability to channel large investments to such complex models. In the local context, the banks in higher Tiers – I, II, III are able to adopt and exploit the methodologies appropriately compared to the lower tier banks. However, it can also be noted that
there is a small element of combination of methodologies as evidenced by the response by the project management consultancy that used a combination of two methodologies. Additionally, several banks indicated a small extent of use of more than their main methodology. From the findings though, the most popular methodology resulting in most desirable results is PRINCE2.

The role of methodologies in delivering a successful project is often overlooked. A research paper by Oracle (2011) noted one of the major project management pitfalls is lack of enforcement of a chosen methodology. It went on to note that the choice of a methodology, whether standardized or organization-specific, is secondary to its usage and adherence during project execution.
CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The objectives of this study were; to determine the methodologies used for IT projects in Kenyan commercial banks; to determine the factors considered in the selection of a methodology for IT projects; to determine the relationship between the use of IT project management methodologies and the success of projects in Kenyan commercial banks and to compare the performance of the various IT project management methodologies used by the different commercial banks in Kenya.

This research study was conducted on the commercial banks and the response rate achieved was 53%. Though the entire population of 43 banks was targeted, 23 bank respondents and one consultant did fill the questionnaire.

5.2 Summary

The findings for this study show that the use of the project management methodologies for the management of IT projects is not an entirely new area in Kenya. Out of all the respondents, none returned a null response for at-least using one methodology. The top Tiered banks recorded the highest adoption of the mainstream formal methodologies with least adoption recorded in the lower Tiers. This could be attributed to the cost of embedding procedures, processes and best practices that require expensive expertise to tailor fit to an organization.

It is apparent that most banking staff involved in IT projects are both highly qualified individuals academically and hold a managerial position that allows them to make decisions and offer advice. However, the results of their experience in the area, which is relatively low at less that 10 years, are very much in tandem with the fact that project management as an independent discipline is also relatively new. Any associated risks are however well covered by the fact that most banks have their project management expertise organized in teams either though an established project management office or a project management department.

The findings also indicate that use of a project management methodology is an important differentiating factor in the overall outcome of the project. The methodologies used in Kenyan banks were: PRINCE2, AGILE, PMBOK and In-house methodologies with the most popular being PRINCE2, used by at-least 57% of the banks, and the highly customized in-house developed methodologies. A characteristic common to these two, as complemented by the research findings, is the ease of tailoring/custom fitting and embedding in a banks project management environment. This
was interestingly noted as the second most important factor in selection of a methodology after considering the size or scale of the envisaged project.

Overall, the research found that the use of methodologies led to marked improvements in the project delivery time, the project cost, the quality of final product, management of project risks, realization of expected benefits and improved stakeholder adoption and satisfaction. This implies that the rates of success if IT projects in Kenya have improved with adoption of the methodologies. This was again consistent with Milosevic and Patanakul (2005) who examined organizational project management methods and observed that greater standardization of project management tools across projects within an organization was associated with enhanced project management success.

On comparison of the performance of actual methodologies in use, PRINCE 2 ranks as the most effective methodology among Kenya commercial banks leading to best project outcomes; an average success rate of 57% in comparison to the other methodologies. This is in direct contrast when compared to the results of other researches carried out by KPMG (2005) and PwC (2012).

5.3 Conclusion

The findings of the research revealed that in the modern day project management in Kenyan commercial banks has adopted and generally preferred to use the formal methodologies to manage IT projects. It is evident that the use of these methodologies has an overall effect on the positive performance of the project. PwC 2012, notes that globally, organizations with the highest project success rates use in-house methodologies or combinations of methodologies. This result indicates these organizations may have a greater investment in PM methodologies that meet their unique situations. Though it may be in slight contrast to the research findings, the similarity is the structured guidance offered by the methodologies and the ability to be tailored to fit the nature of project and organization, has made formal methodologies attractive to banks. Additionally, the proven best practices attached to these methodologies coupled with a track record of improved performance in practice have played a role in their uptake.

Unlike many other regions of the world, an extension of the research findings would suggest that Kenya is predominantly a PRINCE 2 country. The methodology has the highest rate of adoption compared to the rest. However, the research also suggests that cost and size of project may very well be limiting factors for small tier banks, which opt mostly for smaller in-house methodologies, which are cheaper and easier to manage with less expertise and expensive training or process re-alignment.

5.4 Recommendations

From the benefits noted in this research, the first recommendation would be adoption of some form of project management methodology for all banks especially that may not have been surveyed and have none in place. Evidence shows that there are benefits accrued by use of the project management
methodologies; improved performance. Importantly, oracle (2011) noted that a methodology is not as important as its implementation. Feedback collected from the banks showed that adoption rate for the various methodologies was not 100% on individual processes. It is recommended that banks endeavor to implement and adopt in full, the methodology adopted in order to realize maximum benefits.

Second, a recommendation for banks to consider enhanced hybrid models by combining methodologies for their project best fit. This would be especially useful for very complex projects that may require a more elaborate approach since it may not be a case of one-size-fits-all methodology.

5.5 Limitations of the Study

One major challenge faced while conducting this research was the lack of ample time to conduct the research over a larger scope for more comprehensive results. Additionally, this meant that the questionnaire had less detail questions leading to several assumptions.

Out of the 43 commercial banks requested to participate on the survey, only 23 responded. Out of five interviews sought with consultants, only one was granted. It is believed that a more comprehensive analysis would have been possible should all bank respondents have given feedback and more consultants had been available for interviews.

The research design adopted by this study was based on a survey that further adopted a descriptive nature that aimed at investigating the project methodologies within a bank based on perceptions and it’s well known that perceptions are very dynamic and keep changing.

5.6 Suggestions for further study

Future research is also recommended to cover other sectors and industries of the Kenyan economy vis-à-vis the methodologies. This will give a broader perspective of project management methodologies usage at a national level. Results from such a research will be more comparative globally.
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APPENDIX 1 – QUESTIONNAIRES

IT PROJECT MANAGEMENT METHODOLOGIES SURVEY

This is a survey that seeks to determine the project management methodologies in use, their rate of adoption and their relationship to project performance specifically for IT projects undertaken by Commercial Banks in Kenya.

The questionnaire has been limited to just 12 questions and will take approximately 10 minutes of your valuable time.

The research is authorised by the University of Nairobi and is purely for academic reasons. For any questions regarding the questionnaire or request for the findings, please do not hesitate to contact me on: tkamau@students.uonbi.ac.ke.

Thank you for taking the time to complete the questionnaire and making a valuable contribution to this research effort.
SECTION A: Personal Details

Please be so kind to provide general information about yourself.

1. What bank do you work for?
   
   Please click to select one bank

2. What is your highest level of education?

   Certificate ☐ Diploma ☐
   Higher Diploma ☐ Undergraduate degree ☐
   Postgraduate degree ☐ Doctorate ☐

3. How many years have you worked in the project management environment?

   Less than five years ☐ Five to ten years ☐
   Ten to twenty years ☐ Over twenty years ☐

4. As a member of the ICT function, what is your current job level? Tick one/all.

   Director ☐
   Senior Level Manager ☐
   Middle Level Manager ☐
   Supervisor ☐

   Other : ..............................................
SECTION B: Project Management and Methodologies

5. What structure does your organisation use to manage projects? (Tick all that that apply)
   
a) A Project Management Office  ☐
b) A Project Management department  ☐
c) A Project Management team that includes members of the top management  ☐
d) An external project management consultant depending on the project  ☐

6. Do you agree a project management methodology can make the difference between a project’s success and failure?
   
Yes ☐  No ☐

7. The following is a list of Methodologies in use in IT projects. Please indicate, by keying in the number on the column heading, the IT projects management methodology (ies) in use at your organization and the extent to which they are used in the management of IT projects.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMBOK</td>
<td>No extent at all</td>
<td>Small Extent</td>
<td>Moderate Extent</td>
<td>Large Extent</td>
<td>Very large extent</td>
</tr>
<tr>
<td>PRINCE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGILE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICB-IPMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-house</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specify:…………….</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. From the methodologies in (7) above, please select the **ONE MAIN** Methodology used in the management of IT projects at your organization.

Please click to select one methodology. *(Please go to the Questions under the heading of the Methodology choice selected. Thereafter, proceed to question 9. Only questions under the selected one methodology should be answered)*
8.a.i. Which of the following PMBOK Knowledge areas are adopted and used for IT project management at your organization? (Check all that apply)

☐ Scope Management
☐ Time Management
☐ Cost Management
☐ Quality Management
☐ Human Resource Management
☐ Communication Management
☐ Risk Management
☐ Procurement Management
☐ Integration Management
☐ None

8.a.ii. Which of the following PMBOK focus groups have been adopted by your firm? (Check all that apply)

☐ Initiation Process group
☐ Planning Process group
☐ Executing Process group
☐ Closing process group
☐ None

(Please proceed to Question 9).
8.b.i. Which of the following PRINCE2 Themes are embedded in your organization's IT project management activities? (Check all that apply)

☐ Business Case
☐ Organization
☐ Planning
☐ Controlling
☐ Risk management
☐ Quality management
☐ Change management
☐ None

8.b.ii. Which of the following PRINCE2 processes are adopted by your organization for its IT projects? (Check all that apply)

☐ Starting up a Project
☐ Directing a project
☐ Initiating a project
☐ Controlling a project
☐ Managing product delivery
☐ Managing stage boundaries

(Please proceed to Question 9).

IPMA-Competence Baseline (ICB)

8.c.i. Which of the following three competence areas does your organization use to assess the total professional competence of individuals applying project management in practice? (Check all that apply)

☐ Technical competences
☐ Behavioral competences
☐ Contextual competences

☐ None

8.c.ii. Of the Technical competencies, which of the following competence elements must your organizations IT project managers poses requisite knowledge and experience in? (check all that apply)

☐ Project management success

☐ Interested parties

☐ Project requirements & objectives

☐ Risk & opportunity

☐ Quality

☐ Project organization

☐ Teamwork

☐ Problem resolution

☐ Project structures

☐ Scope & deliverables

☐ Time & project phases

☐ Resources

☐ Cost & finance

☐ Procurement & contract

☐ Changes

☐ Control & reports

☐ Information & documentation

☐ Communication

☐ Start-up

☐ Close-out

☐ None of the above (Please proceed to Question 9).
AGILE

8.d.i. Which of the following Agile principles are embedded in the management of IT software development projects at your organization? (check all that apply)

☐ Active user involvement is imperative

☐ The team must be empowered to make decisions

☐ Requirements evolve but the timescale is fixed

☐ Capture requirements at a high level; lightweight & visual

☐ Develop small, incremental releases and iterate

☐ Focus on frequent delivery of products

☐ Complete each feature before moving on to the next

☐ Apply the 80/20 rule

☐ Testing is integrated throughout the project lifecycle – test early and often

☐ A collaborative & cooperative approach between all stakeholders is essential

☒ None

(Please proceed to Question 9).

Traditional Methodology

8.e.i. The traditional project management methodology consists of 5 phases. Which of the stages below are actively referenced by your firm? (check all that apply)

☐ Initiating

☐ Planning and design

☐ Executing

☐ Monitoring and controlling

☐ Closing

☐ None

(Please proceed to Question 9).
In-House Methodology

8.f.i. Does your organizations in-house Methodology benchmark against any other formal methodologies? (Please indicate the benchmark)

Click here to enter text.

8.f.ii. Please describe briefly the elements, stages or best practices of your in-house Methodology that are currently adopted.

Click here to enter text.

(Please proceed to Question 9).

Other Methodology

8.g.i. What Methodology does your organization use for managing its IT projects?

Please indicate one . Click here to enter text.

8.g.ii. Please describe briefly the elements of your chosen Methodology above that are adopted by your organization.

Click here to enter text. (Please proceed to Question 9).
SECTION C: The factors considered in the selection of a methodology for IT projects

9. To what extent do you agree with the following statements on selection of your organization’s current project management methodologies? (Please indicate by keying in the number on the column heading).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
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<tr>
<td>Moderately disagree</td>
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<tr>
<td>Neither Agree nor disagree</td>
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<tr>
<td>Moderately agree</td>
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<tr>
<td>Strongly agree</td>
<td></td>
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</table>

The scale/size of the envisaged IT projects influenced the choice of methodology.

The financial position of the organization affected the choice of the methodology.

The methodology selected was based on current staff skills/knowhow.

The cost of embedding the methodology and structuring the organization to fit influenced the choice.

The ease of tailoring and use with various kinds of IT projects influenced the choice of methodology.

The failure/success history of previous IT projects undertaken influenced the choice of methodology.

The popularity of the methodology with peer companies affected the choice of methodology.
10. How does the most recently completed IT project by your organization perform with respect to the following parameters? *(Please indicate by keying in the number on the column heading).*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall delivery time</td>
<td>Poor</td>
<td>Fair</td>
<td>Good</td>
<td>Very good</td>
<td>Excellent</td>
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<tr>
<td>Overall project cost budget</td>
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<td>Quality of final products.</td>
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<tr>
<td>Adherence to agreed initial scope</td>
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<td></td>
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<tr>
<td>Realization of expected project benefits</td>
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<tr>
<td>Stakeholders adoption &amp; satisfaction</td>
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<tr>
<td>Overall project Risk Management</td>
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</table>
11. To what extent do you agree with the following statements in regard to the adoption, use and performance of the main project management methodology in your organization? (Please indicate by keying in the number on the column heading).

<table>
<thead>
<tr>
<th>Statement</th>
<th>1: Strongly disagree</th>
<th>2: Moderately disagree</th>
<th>3: Neither Agree nor disagree</th>
<th>4: Moderately agree</th>
<th>5: Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The project management methodology does not improve my ability to deal with the real-time complexity of the project environment.</td>
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<td>b. The project management methodology works well for a while, after which it seems to diminish in its value added.</td>
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<td>c. The project management methodology does not improve the accuracy of my project decisions in a significant manner.</td>
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<td>d. Many project management ‘issues’ should be, but are not, managed within the project management methodology.</td>
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<tr>
<td>e. The project management methodology does not seem to ensure adequate resources for the full length of the project (resources = data, information, equipment/tools, skills, expertise, time, money).</td>
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<td>f. The project management methodology does not seem to help me, and my team, to continuously adapt to project changes.</td>
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<td>h. The project management methodology seems to have a poor relationship with ‘real’ project</td>
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<tr>
<td>i.</td>
<td>The project management methodology does not inform me of how well I am managing the project.</td>
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<td>j.</td>
<td>My project management project team complains about the project management methodology.</td>
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<td>k.</td>
<td>If I could directly influence the methodological content within the project management methodology, I would probably perform better as a project management.</td>
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<td>l.</td>
<td>The project management methodology is not fully integrated with the project management tool.</td>
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<td>m.</td>
<td>The project management methodology does not provide me with statistics of the financial performance of the project (e.g., ROI (return on investment), Cost, Profit, Cash Flow, targets).</td>
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<tr>
<td>n.</td>
<td>The project management methodology usually increases my management workload.</td>
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12. Please indicate any other benefits or dis-benefits that have resulted from adoption of your organizations project management methodology for IT projects.

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IT PROJECT MANAGEMENT METHODOLOGIES SURVEY

KEY INFORMANTS QUESTION GUIDE

The questions below take an interview format and are hence open ended with no limitation of the type of answer or how long. These questions are supposed to be complementary to the main survey carried out with the banks that have implemented systems and aims to receive a perspective from external project managers or the actual system providers.

SECTION A: Background of the Respondent

Name:

Work Experience:

1. What is the name of your organization/consultancy?
2. Could you give a brief background of your organization?
3. How many years have you worked in the project management environment?
4. How long have you been with your consultancy?
5. How many countries/regions does your company operate in?

SECTION B: Project Management and Methodologies

1. Drawing from past projects, do you think a project management methodology can make the difference between a project’s success and failure?
2. What are the main advantages of adopting methodologies, if any, have you drawn from your experience?
3. What methodologies does your company use in management of client IT projects?
4. What banks has your firm implemented projects for?

SECTION C: The factors considered in the selection of a methodology for IT projects

1. What factors does your consultancy consider when selecting a methodology to adopt for a project?
2. Does your firm adopt one methodology for all types of IT projects?

SECTION D: Relationship between methodologies and project outcome
1. From previous projects undertaken in the banking sector, how was the project performance in terms of the following:
   
   a. Overall delivery time
   
   b. Overall project cost budget
   
   c. Quality of final products
   
   d. Adherence to agreed initial scope
   
   e. Realization of expected project benefits
   
   f. Stakeholders adoption & satisfaction

2. From past IT projects implementations in banks, what was the adoption, level of utilization and benefits realized due to use of a formal methodology in management the projects?
## List of Commercial Banks in Kenya

1. African Banking Corporation Ltd.
2. Bank of Africa Kenya Ltd.
3. Bank of Baroda (K) Ltd.
4. Bank of India
5. Barclays Bank of Kenya Ltd.
6. CFC Stanbic Bank Ltd.
7. Charterhouse Bank Ltd
8. Chase Bank (K) Ltd.
9. Citibank N.A Kenya
10. Commercial Bank of Africa Ltd.
11. Consolidated Bank of Kenya Ltd.
13. Credit Bank Ltd.
15. Diamond Trust Bank (K) Ltd.
16. Dubai Bank Kenya Ltd.
17. Eco Bank Kenya Ltd.
18. Equatorial Commercial Bank Ltd.
19. Equity Bank Ltd.
20. Family Bank Ltd
21. Fidelity Commercial Bank Ltd
22. Fina Bank Ltd
23. First Community Bank Limited
24. Giro Commercial Bank Ltd.
25. Guardian Bank Ltd
27. Habib Bank A.G Zurich
28. Habib Bank Ltd.
29. Imperial Bank Ltd
30. I and M Bank Ltd
31. Jamii Bora Bank Ltd.
32. Kenya Commercial Bank Ltd
33. K-Rep Bank Ltd
34. Middle East Bank (K) Ltd
35. National Bank of Kenya Ltd
36. NIC Bank Ltd
37. Oriental Commercial Bank Ltd
38. Paramount Universal Bank Ltd
39. Prime Bank Ltd
40. Standard Chartered Bank (K) Ltd
41. Trans-National Bank Ltd
42. Victoria Commercial Bank Ltd
43. UBA Kenya Bank Ltd.