

INFLUENCE OF PROJECT MANAGEMENT SKILLS ON PERFOMANCE OF BANK FINANCED PROJECTS IN KENYA: A CASE OF COMMERCIAL BANKS PROJECTS

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## Vol. 3, Iss. 2 (37), pp 810-838, May 25, 2016, www.strategicjournals.com, ©Strategic Journals INFLUENCE OF PROJECT MANAGEMENT SKILLS ON PERFOMANCE OF BANK FINANCED PROJECTS IN KENYA: A CASE OF COMMERCIAL BANKS PROJECTS

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## ABSTRACT

Banks are fundamental in the economic progress of any country as they are largely responsible for channeling and converting savings into investments through the provision of both long and short term loans. Over the past decade the construction industry in Kenya has drawn considerable attention from the banking industry with latest statistics from KNBS indicating that the sector had KSh81.1 billion in gross by the end of 2013 up from KSh71.7 billion in 2010. This development has seen most banks rely on project managers to oversee the execution of these projects. This study sought to explore the influence of project cost management, project time management, project risk management and project quality management skill in enhancing the performance of financed projects in Kenyan banks. The study design employed was descriptive research. The target population was 194 and census was used to select 144 respondents. Data was collected from financial reports, personal interviews and questionnaires and analysed using content analysis and Statistical Package for Social Sciences (SPSS version 21). The information was presented using bar charts, graphs and pie charts and in prose-form. The study adopted correlation and regression analysis at 5% level of significance to determine strength and direction of the relationship of the variables under study. The analysis showed that project risk management had the strongest positive (Pearson correlation coefficient =.777 with p-values of .001) influence on performance of bank financed projects. In addition, project cost management, project time management and project quality management are positively correlated to performance of bank financed projects with Pearson correlation coefficient of .657, .598 and .543 with p-values of .005, .008 and .011 respectively. The study found that all four variables significantly influence the performance of financed projects in Kenyan banks. The study recommends that project managers working in Kenyan banks should improve their project cost management skills. Lastly, the study recommends that top management in Kenya banks should give the required support to project time management team so as to ensure the success of projects.

**Key Words:** Cost Management, Time Management, Risk Management, Project Quality, Performance of Bank Finance Projects in Kenya.

#### **Background of the Study**

Banks are fundamental in the economic progress of a country as they are largely responsible for channeling and converting savings into investments through the provision of both long and short term loans (Kiragu,Wanjau, Gekara & Kanali, 2013).The KNBS annual report for 30 June 2015, indicated that loans and advances from commercial banks to the building and construction sector went up13.6% from 70.8 billion in 2013 to 80.4 billion in 2014.

The banking industry heavily relies on the services of project managers to drive its lending in the construction and real estate sectors. One way in which poor project management skills usually manifests itself in the banking industry is through the emergence of non-performing loans brought about by stalled or delayed projects. The latest data from the Central Bank of Kenya shows that the stock of gross non-performing loans as at March 2013 was Ksh. 70.3 billion (Choge & Muturi, 2014).

#### Global perspective on project management skills

Over the past 30 years the discipline of project management in the field of IT, construction and engineering has become more important as projects become complex and expensive. Globally, project management services have grown to be one of the key management efficiency tools that provide cost and resource savings while at the same time enhancing the quality of project executions (Njakwe, 2012).

Hwang and Ng (2013) released a forecast predicting that between 2010 and 2020 there will be 15.7 million project management positions created globally across seven project intensive industries i.e. business services, , finance and insurance, information systems, manufacturing, utilities, oil and gas. In the USA alone demand for project management professionals with the right skills should translate to 6.2 million jobs by the close of this decade (Chowdhury, 2013).

This trend is also being replicated in Africa. The continent's fast growing market for urbanized middle class consumers is expected to increase to 1.1 billion by 2060. This coupled with the scramble for Africa's unexploited resources point to the fact that project management has a healthy role to play in Africa's service and infrastructural expansion (Botha, 2013).

With such opportunities, the spotlight has now shifted to the technical skills that project managers are required to possess. Zou and Sunindijo (2013) stated that the number of certified project managers was approximately 413,000 many of whom are in North America and the Asia Pacific region respectively. Latin America trails in the number of managers after Europe Middle East and Africa. It is worth noting that the vast majorities of project managers from the Europe Middle East and Africa region are from Europe and Middle East and not sub-Sahara Africa (Zhang & Fan, 2013).

Despite the growing demand worldwide for qualified project managers, there is a substantial number of project managers who do not have the relevant skills nor the relevant project management practices for successful project delivery Ling and Ma (2014). (Zhang & Fan, 2013) state that projects that perform poorly signal a credibility gap as to the need for and competence of management in projects. Sunindijo (2015) opines that major infrastructure projects have a history of problems from cost overruns, delays, failed procurement or unavailability of project financing. It is important to note that most of these problems are foreseeable and avoidable if a project manager has the correct skill set

## Kenyan Perspective on project management Skill

Project Management is the overall planning, coordination, and control of a project from beginning to completion aimed at meeting a client's requirement in order to produce functionally and financially viable projects (Jackson, 2010). Project management skills are important in the Kenyan economy because People who have the relevant skills not only make capital equipment more productive but also make effective use of machines and equipment they work with (Mbeche, 2011).

The concept of project management is relatively new in Kenya. In general there is a lack of project management skills in virtually all areas of the Kenyan economy. Even though no research has been done to ascertain the level of project management skills in the Banking industry recent research undertaken by the Kenya ICT Board has revealed that companies operating in the ICT sector are having difficulty finding enough skilled project managers. According to the report, some 9 600 professionals will be needed to fill the Kenyan IT workforce by 2013, with project management roles expected to see the biggest increase in positions, at 57% growth (Mbeche, 2011).

Close to fifteen years ago project delay was a widespread phenomenon in Kenya and reflected poor project time management practices to date nothing much has changed and projects continue to experience delays. Njakwe, (2012) points that more than Kshs 100 billion is lost due to lack of project management skills and related technologies both in the private and public sector.

## **Statement of the Problem**

Over the past decade the construction and real estate industry in Kenya has drawn considerable attention from the banking industry with latest statistics from KNBS indicating that the sector had KSh81.1 billion in gross by the end of 2014 up from KSh71.7 billion in 2013. This development has seen most banks rely on the expertise of project managers to oversee their assignments. It is therefore important for the project managers handling these bank financed projects to have the correct project management skills.

One way in which poor project management skills usually manifests itself in the banking industry is through non-performing loans resulting from failed projects or delays in project implementation (Githenya and Ngugi, 2014). Poor project execution leads to delays in project implementation or stalled projects. In both cases scarce funds are tied in unfinished projects causing problems of mortgage servicing (Chin et al., 2011). The latest data from the Central Bank of Kenya shows that nonperforming loans increased by 14% from Ksh. 61.6 billion in December 2012 to Ksh. 70.3 billion in March 2013. Nyamongo and Temesgen (2013), opine that the banking industry succumbed to more than KSh81 billion non-performing loans by the end of 2013. The real estate and construction sectors accounted for KSh 10.8 billion of the KSh 81 billion non-performing loans (CBK,2013).

## **General Objective**

The purpose of the study was to establish the influence of project management skills on performance of bank financed projects in Kenya.

## Specific Objectives of the Study

The specific objectives of the study were to:

- Find out how project cost management affects performance of bank financed projects in Kenya
- Examine how project time management affects performance of bank financed projects in Kenya
- Determine how project risk management affects performance of bank financed projects in Kenya

 Explore how project quality management affects performance of bank financed projects in Kenya

## LITERATURE REVIEW

The chapter covers the theoretical review, conceptual framework, concept of project management skills and performance of bank financed projects.

## **Theoretical Review**

This study hinges its variables on four theories namely: ABJ sticky cost theory, Pareto Principal of time management, Enterprise risk Management theory and Six Sigma methodology.

## **ABJ Sticky Cost Theory in Project Management**

Traditional models of cost behavior usually posit a linear relation between activities and costs where in the short run, total costs equal fixed costs plus unit variable costs × activity volume. This model implies a mechanical relation between changes in costs and contemporaneous changes in sale activity. According to Müller and Jugdev (2012) resent research has begun to focus on how managerial incentives affect the tradeoff between fixed and variable costs.

The starting point of the sticky costs theory is that many (but, not necessarily, all) costs arise as a result of deliberate resource commitment decisions made by managers (Shahu, Pundir and Ganapathy, 2012). Sudhakar (2012) opined that the concept of cost stickiness is consistent with the thought that costs arise as a result of deliberate resource commitment decisions made by managers. This means that the absolute change in selling, general, and administrative cost associated with decreased sales activity is systematically less than those associated with increased sales activity and they interpret this as evidence of overt cost management (Tabish and Jha, 2012). Verschuren et al. (2010) argue that when sales decrease, managers choose to retain slack resources to avoid resource adjustment costs such as severance payments to dismissed workers or disposal losses on equipment.

The main obligations of a project team towards a client are usually reduced to concerns around functional requirements, specific quality, and delivery within acceptable budget and time-frame. Usually for most clients, the cost aspects seem to rank highest (Ward and Daniel, 2013). A project manager needs to have a clear understanding of cost behavior since this form the basis for many decisions such as budgeting, controlling, and compensation. The concept of cost stickiness is thus important in this study as it portrays a clear connection on how managerial incentives affect the tradeoff between fixed and variable costs. The above theory relates to influence of project cost management on performance of bank financed projects

## The Pareto Principle of Time Management

In 1895, Vilfredo Pareto, an Italian economist, noted that about 80% of the land in Italy was owned by about 20% of the people. As he examined his ideas he noticed that this 80/20 rule was equally valid in other ways (Wells, 2012). The idea, which is now called the Pareto principle, relates to time management because 20% of work usually generates about 80% of positive results.

Zwikael and Globerson (2006) define time management as the process of determining needs, setting goals to achieve these needs, prioritising and planning tasks required to achieve these goals. Wells (2012) defines time management as behaviours that aim at achieving an effective use of time while performing certain goal-directed activities. This definition highlights the fact that the use of time is not an aim in itself but more of focusing on some goal-directed activity, such as performing a work task which is carried out in a manner that implies an effective use of time (Zwikael and Globerson, 2006).

Time management is not controlling every seconds of life, but it is showing new ways through which people can use the time properly to improve their lives (Wells, 2012). Thus, by focusing on the vital few (the critical 20%) rather than the trivial many (the remaining 80%), one can get far more accomplished. The 80/20 Rule is therefore a shortcut that helps to manage the project manager's affairs and focus his energies since the ability to choose the important tasks is the key to success (Ward and Daniel, 2013).

The Pareto principle of time management differs with the 100% rule states that 100% of the work needed to accomplish the project objective must be included in the work breakdown structure. In large, complex projects, there are typically multiple phases and multiple levels of work that must be done to achieve the project objective. By focusing and prioritizing the project work using the Pareto principle of time management theory then the project manager will be able to achieve deadlines in a realistic manner. The theory relates to effect of project time management on performance of bank financed projects.

## **Enterprise Risk Management Theory**

Risk management refers to the culture process and structures that are directed towards the effective management of potential opportunities and adverse effects (Verschuren et al., 2010). Effective risk management helps to improve the performance of an organization by creating value to the firm through better service delivery, effective manage of change, efficient use of resources, better project management, minimizing waste, minimizing fraud and supporting innovation. Tabish and Jha (2012) defines ERM as a strategic business discipline that supports the achievement of an organization's objectives by addressing the full spectrum of its risks and managing the combined impact of those risks as an interrelated portfolio. Historically firms managed different kinds of risk separately. This fragmentation of risk management occurred because different functions within a corporation handled different parts of risk management e.g. finance often addressed risks associated with interest rate variations, insurance handled natural catastrophes and liability, and operations managed quality and safety risks (Sudhakar, 2012).

The major task of enterprise risk management is therefore to ensure that the organization can keep on creating value under any uncertain environment. Managers can save a lot of money if they deal with uncertain project events in a proactive manner that will minimize the impact of threats and seize the opportunities that occur (Shahu *et al.*, 2012).

The ERM theory is central to this research since risk resilient organizations must objectively asses their existing risk management capacities, evaluate their organizational culture with regard to risk, performance and reward and implement sustainable risk management practices. The above theory relates well with the influence of project risk management on performance of bank financed projects.

## Six Sigma Approach to Quality Management

Total Quality Management is a management philosophy that seeks to integrate all organizational functions i.e. marketing, finance, design, engineering, production, customer service, etc. to meeting customer needs focus on and organizational objectives (Parker et al., 2013). Müller and Jugdev (2012) define total quality management as philosophy for managing an organization in a way which enables it to meet stakeholder needs and expectations efficiently and effectively, without compromising ethical values.

Six Sigma is a total quality management tool whose origin comes from statistics. Sigma is a term used in statistics to refer to the frequency of deviation from the standard. According to Flannes and Levin (2001) Bill Smith and Bob Galvin, both of Motorola, developed the Six Sigma quality improvement process in 1986.

From a business point of view Six Sigma may be defined as a business strategy used to improve business profitability, effectiveness and efficiency of all operations to meet or exceed customer's needs and expectation. Six Sigma inherited the Deming's approach to continuous improvement and some principles from Total Quality Management such as focus on the customer, decision making based on facts and data, root cause analysis, structured problem solving, rewards for improving and improvement of processes capability. Six Sigma was initially used in the manufacturing industry to reduce wastes due to manufacturing process deficiencies but nowadays it is used by almost all industries (Hulme, 2003).Improvement activities in Six Sigma are carried out through projects. A six sigma project is a problem solution that has a set of metrics that can be used to set project goals and monitor progress. The Six Sigma remarkable characteristic is its clear linkage between the improvement results and the financial gains (Jetu and Riedl, 2012).

Davies and Hobday (2005) see quality management as being important because failure to meet quality standards in project management can have serious negative consequences: Safety, Liability, Re-work, Scrap, etc. Secondly the cost of preventing mistakes is always much less than the cost of correcting them. This view is also shared by Chiu-Chi et al. (2002) who state that any failure to satisfy the customer is a loss determined by variation of performance from optimum target values. The Six Sigma can be used as a management approach yardstick for an organization focused on quality and continuous improvement. Chin et al. (2011) pointed out that the objective of Six Sigma programs is to create a higher perceived value of the company's products and services in the eyes of customers.

#### **Conceptual Framework**



## Independent variables Dependent Variables Figure 1 Conceptual Framework Project Cost Management

Chowdhury (2013) recognize profitability and cost management to be at the core of enterprise

performance management as it represents the bottom line for every company. Hwang and Ng (2013) see project cost management as a series of activities for estimating allocating and controlling costs within a project. Project cost management includes the processes involved in planning, estimating, budgeting, and controlling costs so that the project can be completed within the approved budget (Botha, 2013). Project cost control consists of projecting company operations into the future and then using that projection to manage the operations that actually develop (Hewage et al., 2011). Project cost control is important because the project manager must regularly ensure that the money spent is according to budget (Chou, Irawan and Pham, 2013). One major component of the cost control process is project performance reviews. These reviews compare cost performance over time, schedule activities or work packages overrunning and under-running budget, milestones due, and milestones met.

The three most common performance-reporting techniques are variance analysis, trend analysis and earned value analysis. Variance analysis involves comparing actual project performance to planned or expected performance (Dainty, Mei-I and Moore, 2005). Trend analysis involves examining project performance over time to determine if performance is improving or deteriorating Lehtiranta et al., (2012). The earned value technique compares planned performance to actual performance. (Tam, Shen and Kong, 2011) are of the opinion that the purpose of Earned Value Management is to ensure that value and expenditure stay approximately the same during the project execution

Project management softwares are often used to monitor project planned value versus actual costs and to forecast the effects of variances (Chou and Yang, 2012). The use of a coding system is also one way that project managers use to control costs. The purpose of the cost code system is to enable huge of cost data to be identified and coded for the most efficient application of cost management throughout the contract period.

Project Cost Estimation is the process of developing an approximation of the monetary resources needed to complete project activities based on the information known at a given point in time. The United States Government Accountability Office defines a cost estimate as the summation of individual cost elements, using established methods and valid data, to estimate the future costs of a program, based on what is known today. Costs estimated include labor, materials, equipment, services, facilities, and special categories like inflation (Cheung et al., 2013).

Expert based estimation is one of the ways that a project manager can use to approximate costs. Expert judgment, guided by historical information, provides valuable insight about the environment and information from prior similar projects. Though this is a common method of cost estimation, a potential downside of experienced-based estimation is the difficulty in thoroughly evaluating the complex relationships between the many cost influencing variables or its inability to quickly generate different cost alternatives in a sort of what-if analysis (Hewage et al., 2011).

One major problem with cost estimation is that when formulating plans at the beginning of a project there is usually insufficient information to estimate with any degree of accuracy (Dainty et al., (2005). Project management cost estimating software applications, computerized spreadsheets, simulation, and statistical tools are becoming more widely accepted to assist with cost estimating. Such tools can simplify the use of some cost estimating techniques and thereby facilitate rapid consideration of cost estimate alternatives (Chou and Yang, 2012).

Project Cost Budgeting is one of the final causes of bankruptcy is inadequate cash resources and failure to convince creditors and possible lenders of money that this inadequacy is only temporary (Chou, Irawan and Pham, 2013). Money flowing into a business is termed positive cash flow and monies paid out are termed negative cash flow. The difference between the positive and negative cash flows is termed the net cash flow. The use of cash flow forecasting as a cost budgeting tool is very important in project management. Cash flow forecasting according to Zwikael and Globerson (2006) provides a good warning system to predict possible insolvency.

## **Project Time Management**

Project Time Management includes the processes required to manage timely completion of the project. The four key tenets of project time management are activity definition, estimating activity resources needed, estimating activity time and time control schedule.

The technique of decomposition, as applied to defining activities, involves subdividing the project work packages into smaller, more manageable components called activities. Activities represent the effort needed to complete a work package (Kiragu et al., 2013). Project success may be attributed specifically to use of a Work Breakdown Structure (Choge and Muturi, 2014). The Work Breakdown Structure defines the final outputs as activities rather than deliverables, as done in the WBS process the activity list, and WBS dictionary can be developed either sequentially or concurrently.

One other method that a project manager may use to define activities is through the use of expert judgement. This is the use of structured or unstructured inputs from different individuals who have specialist knowledge of a particular domain. Hwang and Ng (2013) see an expert as the person whose judgment is to be elicited. The common bias associated with expert judgment is framing problems. Conflict scholars use the term framing to mean the process of describing and interpreting an event (Chowdhury, 2013). Zou and Sunindijo (2013) provide a proper scoring rule version based on first and second moments rather than quantiles. The Classical Model of Cooke model enables project managers to choose weights by means of an asymptotically proper scoring rule.

Estimate Activity Resources is published estimate data is one way in which a project manager may use to manage time. A cost database is an electronic reference of cost data used to support the formation of cost estimates. The Institute of Quantity Surveyors in Kenya routinely publish updated production rates and unit costs of resources for an extensive array of labour trades, material, and equipment for different countries and geographical locations within countries (Zhang and Fan, 2013).

Project management software can also be used to estimate activity resources. These softwares have the capability to help plan, organize, and manage resource pools and develop resource estimates. Depending on the sophistication of the software, resource breakdown structures, resource availability, resource rates and various resource calendars can be defined to assist in optimizing resource utilization (Sunindijo, 2015).

Estimate Activity Durations can be the time reserve is a scheduled time period that protects a task from delays, breaks or other factors that may extend the task's duration. It creates schedule buffers that prevent undesired variations and help reach task completion by the target date. The contingency reserve may be a percentage of the estimated activity duration, a fixed number of work periods, or may be developed by using quantitative analysis methods. Contingency should be clearly identified in schedule documentation (Ling and Ma, 2014).

Analogous estimating is the second method that could be used to estimate activity duration. Analogous estimating uses parameters such as duration, budget, size, weight, and complexity, from a previous, similar project, as the basis for estimating the same parameter or measure for a future project. This technique relies on the actual duration of previous, similar projects as the basis for estimating the duration of the current project. Though generally less costly and time consuming than other techniques, analogous duration estimates is less accurate and must be used in conjunction with other estimating method (Githenya and Ngugi, 2014). Time Control Schedule are schedules that are used to monitor the status of the project, update project progress and manage changes to the schedule baseline. Schedule controls are concerned with determining the current status of the project schedule and managing the actual changes as they occur (Levy, 2014).

Performance review is one of the tools used as a time control schedule. These reviews focus on descriptive and normative questions, such as: what a particular project has achieved (either at an intermediate point in execution or at the conclusion of an implementation period; how it is being implemented and how it is perceived and valued (Flannes and Levin, 2001). Performance reviews are important in time management as they measure, compare, and analyze schedule performance such as actual start and finish dates, percentage completed, and remaining duration for work in progress (Marcelino-Sádaba et al., 2014).

#### **Project Risk Management**

Risk management refers to the culture process and structures that are directed towards the effective

management of potential opportunities and adverse effects (Davies and Hobday, 2005). When it comes to project risk management the four key areas are risk identification, risk analysis, risk responses and risk control and monitoring.

Identifying Risk; The Delphi technique developed Rand Corporation in the 1950's aims to achieve a convergence of opinion on a specific real-world issue(Anfara and Mertz, 2006). Project risk experts use this technique to solicit ideas about the important project risks (Milunovic and Filipovic, 2013).Common surveys try to identify "what is," whereas the Delphi technique attempts to address "what could/should be" (Miller, 2006). The responses are summarized and are then recirculated to the experts for further comment. Theoretically, the Delphi process can be continuously iterated until consensus is determined to have been achieved. However, Müller and Jugdev (2012) point out that three iterations is often sufficient to collect the needed information and to reach a consensus in most cases. The Delphi technique helps reduce bias in the data and prevents any one person from having undue influence on the outcome.

Risk identification checklists can be helpful when identifying potential risk areas (Shahu, Pundir and Ganapathy, 2012). Risk identification checklists are developed based on historical information and knowledge that has been accumulated from previous similar projects and from other sources of information. While a checklist can be quick and simple, one of their major draw backs is that it is usually impossible to build an all exhaustive checklist.

Risk Analysis; Risk probability and impact assessment is crucial when it comes to risk analysis. probability addresses how likely the risk event or condition is to occur and impact details the extent of what would happen if the risk materialised (Shahu, Pundir and Ganapathy, 2012). Risk probability assessment investigates the likelihood that each specific risk will occur. Risk impact assessment investigates the potential effect on a project objective such as schedule, cost, quality, or performance, including both negative effects for threats and positive effects for opportunities (Tabish and Jha, 2012). Risk probabilities and impacts are rated according to the definitions given in the risk management plan

The first problem in assessing the probability of project risks is that risks are possible future events that have not yet occurred, and as such their probability of occurrence cannot be *measured* but can only be estimated (Tabish and Jha, 2012). Another group of subconscious influences affecting perception of risk probability is heuristics. Heuristics are internal frames of reference used by individuals and groups to inform judgement when no firm data are available (Verschuren et al., 2010).

Monitor and control risks; Technical performance measures (TPMs) are tools that show how well a system is satisfying its requirements or meeting its goals. These TPMs provide assessments of the product and the process through design, implementation and test (Ward and Daniel, 201). Such technical performance measures might include weight, transaction times, number of delivered defects, and storage capacity among others.

One of the most valuable tools that a project manager has is a weekly project status meeting (Zwikael and Globerson, 2006). Project risk management should be an agenda item at periodic status meetings. Frequent discussions about risk makes it more likely that people will identify risks and opportunities. One flipside of this technique is that status meetings have a tendency to get a bad reputation. Many can feel that spending anywhere from a half-hour to an hour just talking about project status when there is real work to be done is a major waste of time

Plan Risk Responses involves the process of developing options and actions to enhance opportunities and to reduce threats to project objectives. Risk Responses addresses the risks by their priority, inserting resources and activities into the budget, schedule and project management plan as needed (Zwikael and Globerson, 2006).

## **Project Quality Management**

Quality management includes both quality assurance planning to meet quality requirements and the quality control steps taken to monitor results to see if they conform to requirements (Wells, 2012). The whole aspect of project quality management is usually made up of quality management, quality assurance and quality control.

Quality Management Plan are the modern quality management complements project management. Since both disciplines recognize the importance of customer satisfaction and uses concept of prevention over inspection (Ward and Daniel, 2013). One of the fundamental tenets of modern quality management states that quality is planned, designed, and built in and not inspected in.

The first step of quality management is stake holder analysis. The definition of quality often depends on the stakeholders. The Verschuren et al. (2010) define a stakeholder as a person such as an employee, customer or citizen who is involved with an organization, society, etc. and therefore has responsibility towards it and an interest in its success. The world bank defines stakeholder Analysis as a methodology used to facilitate institutional and policy reform processes by accounting for and often incorporating the needs of those who have a 'stake' or an interest in the reforms under consideration.

A critical element of Project Quality Management is to turn stakeholder needs, wants, and expectations into requirements (Sudhakar, 2012). Each requirement must be clear and unambiguously stated and its outcome verifiable so that it may be determined unequivocally whether the requirements have been satisfied (Tabish and Jha, 2012).

According to Müller and Jugdev (2012), the cost of quality is considered by both Crosby and Juan to be the primary tool for measuring quality. Parker et al. (2013) found that without an effective quality cost system in place, performance improvement can be very difficult to identify and measure. The same view is also held by Shahu et al. (2012) who saw that to provide optimum benefits, companies should apply the most reasonable and cost effective method to achieve client satisfaction. According to Flannes and Levin (2001) loss must be measured as a system-wide cost on a life cycle basis not as just the internal costs of non-conformance or defect detection at the time of shipment.

Internal failure costs are costs that are caused by not products or services conforming to requirements or customer/user needs and are found before delivery of products or services to external customers. According to Flannes and Levin (2001), external failure costs are costs that are caused by deficiencies found after delivery of products and services to external customers, Appraisal costs are costs that occur because of the need to control products and services to ensure quality standards and performance requirements.

Quality Assurance; According Hulme (2003), quality Assurance is a program covering activities necessary to provide quality in the work to meet the project requirements. Quality Assurance involves establishing project related policies, procedures, standards, training, guidelines, and system necessary to produce quality.

Participation of all employees is very important. The ultimate goal of the team approach is to get everyone, including contractors, designers, vendors, subcontractors, and owners involved with the quality management process (Jetu and Riedl, 2012). Quality teams provide structured environments that are necessary for successfully implementation and continuously application of the quality management process. Hobday (2005) is of the opinion that people are motivated to make projects work if they understand the aims of the project and think that the project has value.

Allocation of assets is key in quality assurance. According to Chiu-Chi et al. (2002) materials in project and availability of personnel with high qualifications strongly affect the quality performance of a project. Davies and Hobday (2005) are of the opinion that many opportunities to optimize resources are missed due to the lack of real-time, up-to-date information. Labor, in particular, poses a great challenge when it comes to collecting real-time data relating to its on-site performance.

Quality Control is a process that involves monitoring specific project results to determine whether they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory results. It looks back at the product (Chin et al., 2011). Quality Control usually includes taking action to eliminate causes of unsatisfactory project performance.

The process analysis phase has the potential to provide the highest return on investments because if the real problems are not identified then the project manager may unintentionally design the same problems back into the processes (Davies and Hobday (2005). Process analysis is usually conducted to identify needed improvements from an organizational and technical standpoint. This usually includes root cause analysis and defect prevention techniques.

Statistical methods provide problem-solving tools to the quality process. According to Chin et al. (2011), statistical methods provide teams with the tools to identify the causes of guality problems, to communicate in a precise language that can be understood by all team members, to verify, repeat, and reproduce measurements based on data, to determine the past, present, and to a lesser degree, the future status of a work process, and to make decisions on facts that are based on data rather than the opinions and preferences of individuals. or groups. The most commonly used statistical methods in the TQM process include histograms, cause and effect diagrams, check sheets, Pareto diagrams, graphs, control charts, and scatter diagrams (Jetu and Riedl, 2012).

## Performance of Bank Financed projects

Milunovic and Filipovic (2013) define performance measurement as the process of quantifying the efficiency and effectiveness of action. Müller and Jugdev (2012) see performance measurement as the use of a multi-dimensional set of performance measures for planning and management of a business. According to Shahu et al. (2012), performance measurement systems are considered to be important for evaluating the accomplishments of firm goals, constructing strategies for development, making decisions for investments and compensating managers.

Anfara and Mertz (2006) define criterion as standard of judgment or principle by which something is measured for value. In the early 90s', project success was measured on the bases of time,

monetary cost and project performance (Tabish and Jha (2012). While the triple constraint is necessary, it is not enough. Verschuren et al. (2010) advocates that measures for project success should also include project psychosocial outcomes. The same view is also shared by (Paker, 2014) who opined that delivering a project on-time and on-budget is no longer an adequate measure of project success. In today's environment, the key question should be: "Did the project deliver value to the business?"

One way that banks can use to measure performance of bank financed projects is through the use of key performance indicators. A key performance indicator is a measurable value that demonstrates how effectively a company is achieving key business objectives. Shahu et al. (2012). (Paker, 2014) is of the opinion that measuring business value is best done through defining key performance indicators and measuring actual performance using these key performance indicators.

Project managers are expected to partner with the customer, understand the business drivers, and ensure that the project delivers the business results as specified in the Zwikael and Globerson (2006), This view is also shared by (Ward and Daniel, 2013) who opines that scope has to mirror end-user adoption. Customer satisfaction measures how products or services supplied by a company meet or surpass a customer's expectation (Cockerell, 2014). Customer satisfaction is important because it is a leading indicator of consumer repurchases intentions and loyalty. Ultimately stakeholder/customer satisfaction should lead to increased number of established projects.

Chou, Irawan & Pham (2012) sees efficiency as a success criterion when looking at execution of projects. Wells (2012) defined efficiency as a measure of how well the project was implemented

or the degree to which targets of time and cost from the start-up phase to full production. Zwikael & Globerson (2006) define project efficiency is a ratio to determine the relation between the outputs from a process against the resources invested into performance of this project

Project Efficiency can be measured by the volume of outputs obtained per the inputs utilized. If the outputs are adequate to inputs, then project efficiency is equal to 100%, since the project implementation has been accomplished within the planned constrains which were identified on the project planning stage, in terms of workforce, cost, time and objectives and with the planned outcomes Chowdhury (2013). Project efficiency ultimately leads to an increased number of completed projects. (Serradorp, 2014) through a survey of 1,386 projects has shown that project efficiency correlates moderately strongly to overall project success (correlation of 0.6 and R2 of 0.36).

Sudhakar (2012) considers satisfaction as an attribute of success. Müller and Jugdev (2012) defined the measure of value as evaluating the satisfaction of owner's needs in a global sense. It includes the realization for the owner of quantity produced, operational and maintenance costs, and flexibility. Verschuren et al. (2010) believe that if end-users are satisfied, the project can be considered successfully completed in the long run.

The handover of the site to the client takes place once the contract administrator has confirmed that the works defined in the contract are complete Zwikael & Globerson (2006). Most projects are profit-oriented. The private clients, developers, as well as the public clients do not want to have a negative net profit after completion (Chan, 2002).

#### **Empirical Review**

Roque and de Carvalho (2013) carried a study on understanding the impact of project risk

management, assessment of risks on project performance in Brazillian Vendor companies. The objective of the study was to comprehend the impact of risk assessment on IT project performance and to investigate the degree of diffusion of project risk assessment in Brazilian Project risk identification-Risk reporting, -Risk registration-Risk allocation, -Risk control, Risk checklist. IT Project performance-Project timeliness-Schedule-Quality of products Achieving project objectives-Profitability Project risk assessment--Transferring-Time Reduction, available, \_ Avoidance, -Occurrence of risks. The methodological approach involved a survey of 415 projects at different companies in IT sectors in Brazil. The results demonstrate that adopting risk assessment and planning has a significant positive impact on project success as project staff were able to identify and take measures to mitigate occurrence of risks to a greater extent. The study found that assessing uncertainties during the project, making use of the risk management strategies and deeply understand the business environment are critical success factors had a significant impact on project performance (P<0.05, r=0.002,b=0.413). The results demonstrated that the impact of project risk assessment on project success was positive.

The documented design, materials specifications for functional and aesthetic reasons, actual site conditions, in conjunction with pre-planned work schedules merge during implementation. This may present another set of issues that are influence the contractors' performance. Saqib et. *al.*,(2008) categorised a number of these key issues. Among the issues they noted were the clear and precise definition of project scope and objectives, timely decision-making, risk attitude and emphasis on low construction cost/ high quality of construction/ quick construction. Other aspects include project design complexity, mistakes/delays in producing design documents, adequacy of plans and specifications, project planning, scheduling, communication and speed of information flow, and supervision. Alarcon L. and Mardones D.,(2009) presented the factors in three categories: design quality related to design drawings and specifications, design standards coupled with suitability for the existing technology, and constructability of the designs(Amalraj et. al., 2007).

Addison and Vallabh, (2002) carried out a study on impact of project risk Identification performance of software projects in IT enterprises in China. The study adopted a survey research design. Data collection was achieved through the use of a structured questionnaire, which asked respondents questions aimed at achieving the study objective. A total of 70 project managers from IT enterprises were sampled the method of sample selection referred to as 'snowball' sampling was used. Of the 70 questionnaires distributed, 36 were returned. The study found out that software project risks identification of unclear or misunderstood scope/objectives. unrealistic schedules and budgets, inadequate knowledge/skills and lack of effective project management methodology and misunderstanding the requirements identified by many researchers, subcontracting risk and regularly occur in software projects influence management adopting appropriate risk mitigation measures influencing software projects completion within time and increase profitability. The study further found that as management involvement increases, or the risk of unclear misunderstood scope/objectives appears to decrease and improve project performance. The p-value showed a relationship between project risk identification and project performance was significant at a 95% confidence level.

According to Kenya Roads Board (KRB) report, Kenya National Highways Authority is annually

allocated approximately 30% of the total fund allocated to the ministry of roads. Many projects experience cost overrun and thereby exceed initial contract amount. In Kenya, the number of public roads construction projects is increasing from time to time. However, it becomes difficult to complete projects in the allocated cost budget. Taking into account the scarce financial resources of the country, cost overrun is one of the major problems in Kenya. Statistics from the republic of Kenya report show that KeNHA has been experiencing cost overruns in its Roads projects. For instance, in the construction of Thika Super Highway, the cost escalated from 26.44 billion to 34.45 billion (World Bank, 2014). In addition, the initial deadline of the Thika super highway project was July 2011, which was later revised to July 2013. Further, the sewerage system in Lot1-RD 0530 of Thika superhighway project was changed after the construction of the road

Weiss, Hoegl and Gibbert (2014) conducted a study on the perceptions of Material Resources in Innovation Projects: What Shapes Them and How Do They Matter? This paper focused on team members' perceptions of the provided material resources' adequacy to address this gap. Understanding what drives perceptions of material resource adequacy may not only reconcile conflicting results in the literature, but may also provide much-needed guidance for project funding, so as to maximize innovation project performance. Further, the analyses in this paper differentiate between two outcome dimensions of innovation project performance, namely, the degree of new product quality and new product novelty, and thus offer a more fine-grained analysis of the relationship between perceptions of material resource adequacy and innovation project teams' performance. The posited hypotheses were tested using a sample consisting of survey data from 121 innovation projects in the electronics industry. The results of the regression analyses identify team potency and workload as socio-cognitive drivers of innovation project teams' perceptions of material resource adequacy. They also established that donor support influences Innovation Projects. Moreover, it is found that perceived material resource adequacy relates positively to new product quality, while it relates negatively to new product novelty.

According to statistics by commercial banks 67% of their projects in the last five years have been successful, this has been largely attributed to the implementation of Enterprise Risk management, which has enabled them to successfully manage risk during the project implementation (CBK, 2013). This study sought to fill the existing research gap by conducting a study to establish the influence of portfolio risk management on project success in Kenya, with special reference to Commercial Banks in Kenya. The study targeted 183 respondents who were involved in project implementation at various levels. Stratified random sampling technique was used to select a sample of 55 respondents. With regard to establishing the influence of portfolio risk management on project success in Kenya, with special reference to Commercial banks in Kenya Projects. The study found that risks identification had a positive influence on project success in Kenya.

#### **RESEARCH METHODOLOGY**

This chapter presents the research methodology used to conduct the study.

#### **Research Design**

This study adopted a descriptive research design.

#### **Target Population**

Kenya has ten registered commercial banks listed on the main segment of the Nairobi Securities Exchange. These are Barclays Bank, Co-operative Bank of Kenya, CFC Stanbic Bank, Diamond Trust Bank, Equity Bank, Housing Finance, KCB Bank, National Bank of Kenya, NIC Bank, and Standard Chartered Bank. These ten banks were chosen for this study because according to CBK 2015 report, they disbursed 91% of the total project finance loans in the banking industry. The target population of the study was 194 projects financed by these commercial banks.

#### Sampling Frame and Sampling Technique

For the purpose of this study each commercial bank understudy was categorized based on the list of the number of projects financed.

## Data Collection Tools and Procedure

This research study adapted the triangulaization method to collect data. Trangulaization is the use of multiple techniques within a given method to collect and interpret data. This study collected both primary and secondary data.

#### **Data Analysis and Presentation**

This study had both qualitative and quantitative data. Content analysis was used to analyse qualitative data. In the process, statements were studied, organized and presented in prose form in order to draw some meaningful conclusions from the data.

## DATA ANALYSIS, FINDINGS AND DISCUSSIONS

This chapter sort to establish the influence of project management skills on performance of financed projects in Kenya.

#### **Response Rate**

The study the targeted responses from 194 relationship managers handling the various construction projects in the ten banks out of which

144 respondents filled in and returned the questionnaires giving a response rate of 74.22%.

## **Gender of the Respondents**

The respondents were asked to indicate their gender. From the findings, as shown in Figure 4.1, 58.24% of the respondents indicate that they were male while 41.75% indicated that they were female. This shows that most of the respondents were male.

## Age Bracket of the Respondents

The respondents were also asked to indicate their age bracket. According to the findings, respondents reported that they were aged between 25 and 35 years, 27.5% reported that they were aged between 36 and 45 years, 15.2% reported that they were above 45 years in age and 5.8% of the responded indicated that they were below 25 years in age. This implies that respondents were well distributed in terms of their age during the study.

## **Respondents' Level of Education**

The respondents were further asked to indicate their highest level of education. From the findings, 73.6% of the respondents indicated that they had bachelor's degree, 21.1% indicated that they had postgraduate degrees and 5.2% indicated that they had diploma.

## Work Experience

In an effort to determine their work experience, the respondents were asked to indicate for how long they had worked in their institution. 39.4% of the respondents reported that they had been working in their institution for between 5 and 7 years, 24.7% indicated that they had worked for between 2 and 4 years, 21.2% indicated for over 7 years and 15.2% indicated for less than 2 years.

## Most Recently Bank Financed Projects

The respondents were asked to indicate the most recent financed projects that their banks had undertaken. From the findings, the respondents indicated that projects relating to residential housing projects accounted for 64% of the financed projects.

## **Project Cost Management**

The first objective of this study was to establish whether the estimated project cost did influence performance of projects financed by commercial banks. The study established that 67% of the respondents posited that it assisted in increasing the number of established and new projects, 70% of the respondents stated that it helped increase the number of completed projects and 65% of the respondents cited that it led to an increase in the number of commissioned project. These findings seem to concur with (Botha, 2013) who opined that project cost management includes the processes involved in planning, estimating, budgeting, and controlling costs so that the project can be completed within the approved budget. These findings also agree with with Zwikael and Globerson (2006) argument that project cost helps in ensuring that the money spent for is according to budget.

The study showed that project budget influenced performance of projects financed by commercial banks in Kenya.

## **Project Time Management**

The second objective of this study was to examine if project time management influences the performance of financed projects in Kenyan banks. The study sought to find out whether the defining project activity influenced performance of projects financed by commercial banks in Kenya. The findings established that 58% of the respondents cited that it assisted in increasing the number of established projects, 73% of the respondents cited that it enhanced the number of completed projects and business success, 66% of the respondents indicated that defining project activity led to a positive increase in number of commissioned projects.

The finding seem to agree with (Choge and Muturi, 2014) who opine that pproject success may be attributed specifically to use of a Work Breakdown Structure which involves subdividing the project work packages into smaller, more manageable components called activities.

## **Project Risk Management**

The third objective of this study was to analyze the influence of project risk management on the performance of financed projects in Kenyan banks. The study investigated the effects of identifying project risks on performance of projects financed by commercial banks in Kenya. The findings revealed that 72% of the respondents cited that it assisted in increasing the number of established projects, 69% of the respondents cited that it increased the number of projects completed and 81% of the respondents indicated that it led to a positive impact on the number of commissioned project financed by the commercial banks. These findings concur with Verschuren et al. (2010) argument that risk management supports the quality improvement and improves cost estimation by identifying and mitigating potential risks.

## **Planning for Project Quality Management**

The fourth objective of this study was to examine the effect of quality planning on the performance of financed projects in Kenyan banks. The study sought to establish the influence of plan for quality management on performance of projects financed by commercial banks in Kenya. The study revealed that 78% of the respondents cited that it assisted in establishment of new projects, 66% of the respondents cited that it enhanced the completion of financed projects and, 70% of the respondents indicated that it led to increased number of commissioned projects financed by the commercial banks.

## **Performance of Bank Financed Projects**

The study sought to establish from the respondents on some of the key factors that contributed on poor performance of projects financed by commercial banks in Kenya. The study revealed that 74% of the respondents cited that projects performed poorly due to lack of proper estimation of actual resources required by the project, 80% of the respondents posited that lack of developing a time control schedule, 70% of the respondents indicated lack of performing quality control, 70% stated lack of monitor and control of risks, 58% of the respondents indicated that lack of plan for risk responses and 68% of the respondents also posited that lack of proper identification of project risks.

## **Correlation Analysis**

Pearson correlation was used to measure the degree of association between variables under consideration i.e. independent variables and the variables. dependent Pearson correlation coefficients range from -1 to +1. Negative values indicates negative correlation and positive values indicates positive correlation where Pearson coefficient <0.3 indicates weak correlation, Pearson coefficient >0.3<0.5 indicates moderate correlation and Pearson coefficient>0.5 indicates strong correlation. The analysis of correlation results in Table 4.11 illustrates that between project cost management and performance of bank financed projects show a positive coefficient 0.667, with pvalue of 0.031. It indicates that the result is significant at  $\alpha$  =5% and that if the project cost management increases it will have a positive impact on performance of bank financed projects. The correlation results between project time management and performance of bank financed projects also indicates the same type of result where the correlation coefficient is 0.661 and a p-value of 0.041 which significant at  $\alpha = 5\%$ . The results also show that there is a positive association between project risk management and performance of bank financed projects where the correlation coefficient is 0.669, with a p-value of 0.022.

Further, the result shows that there is a positive association between project quality management and performance of bank financed projects where the correlation coefficient is 0.638, with a p-value of 0.048. This therefore infers that project risk management contributed most to performance of bank financed projects followed by project time management on performance of bank financed projects, then project cost management while project quality management had the least influence on performance of bank financed projects. The correlation matrix implies that the independent variables are very critical factors of project management skills on performance of bank financed projects as shown by their strong and positive relationship with the dependent variable; performance of bank financed projects.

|                           |                 | Performance of<br>bank financed<br>projects | Project cost<br>management | Project time<br>management | Project risk<br>management | Project quality<br>management |
|---------------------------|-----------------|---|----------------------------|----------------------------|----------------------------|-------------------------------|
| Performance of            | R               | 1.000                                       |                            |                            |                            |                               |
| bank financed<br>projects | Sig. (2-tailed) |   |                            |                            |                            |                               |
|                           | Ν               |   |                            |                            |                            |                               |
|                           | R               | .667  | 1.000                      |                            |                            |                               |
| Project cost              | Sig. (2-tailed) | .031  |                            |                            |                            |                               |
| management                | Ν               | 144   |                            |                            |                            |                               |
| Project time              | R               | .661  | .334                       | 1.000                      |                            |                               |
| management                | Sig. (2-tailed) | .041  | .043                       |                            |                            |                               |
|                           | Ν               | 144   | 144                        |                            |                            |                               |
|                           | R               | .669  | .142                       | .214                       | 1.000                      |                               |
| Project risk              | Sig. (2-tailed) | .022  | .001                       | .033                       |                            |                               |
| management                | Ν               | 144   | 144                        | 144                        |                            |                               |
| Project quality           | R               | .638  | .037                       | .046                       | .054                       | 1.000                         |
| management                | Sig. (2-tailed) | .048  | .000                       | .001                       | .009                       |                               |
|                           | Ν               | 144   | 144                        | 144                        | 144                        |                               |

#### **Table 1: Correlation Coefficients**

#### **Multiple Regression Analysis**

**Table 2: Model Summary** 

As depicted in Table 2, This test highlights that the value of coefficient of correlation(R) is 0.877 which indicates a notable strong positive relationship between the indepedent variables (project cost management, project time management, project risk management and project quality management) and depedent variable(performance of bank finance projects) and determinant coefficient which is ( $R^2$  =

76.90%) performance of bank financed projects at the ten commercial banks can be explained by the variables of project cost management, project time management, project risk management and project quality management, while the remaining of 23.10% are describable by other factors. This implies that these variables are very significant therefore need to be considered in enhancing performance of bank finance projects in the ten commercial banks.

|   | Model             | R               | R <sup>2</sup> | Adjusted R <sup>2</sup> | Std. Error of the<br>Estimate | Durbin-watson    |  |
|---|-------------------|-----------------|----------------|-------------------------|-------------------------------|------------------|--|
|   | 1                 | .877            | .769           | .531                    | .323                          | 1.001            |  |
| а | <b>Dredictors</b> | nroject cost ma | nagement       | project time management | project risk manage           | ment and project |  |

a. Predictors: project cost management, project time management, project risk management and project quality management

b. Performance of bank finance projects

Table 3 show that the significance value is 0.013 which is less than 0.05. The F-Critical at 5% level of significance is 3.896. Since F calculated (86.100) is greater than the F- critical (value = 3.896), this shows that the overall model was significant. Thus, the model is statistically significant in predicting how project cost management, project time management, project risk management and project quality management affect the performance of bank financed projects.

The Durbin Watson statistic is a number that tests for autocorrelation in the residuals from a statistical regression analysis. The Durbin-Watson statistic is always between 0 and 4. Values approaching 0 indicate positive autocorrelation and values toward 4 indicate negative autocorrelation. A value of 2 means that there is no autocorrelation in the sample therefore a value of 1.001 that was achieved by the study signals a positive auto colleration between the independent and dependable variables.

| Model      | Sum of Squares | Df  | Mean Square | F      | Sig.  |
|------------|----------------|-----|-------------|--------|-------|
| Regression | 4.443          | 4   | 1.1107      | 86.100 | .013ª |
| Residual   | 1.788          | 139 | .0129       |        |       |
| Total      | 6.231          | 143 |             |        |       |

#### Table 3: ANOVA

**NB:** F-critical Value = 3.896

**Predictors: (Constant):** Project cost management, project time management, project risk management and project quality management

The study ran the procedure of obtaining the regression coefficients, and the results were as shown on the Table 4.14. Multiple regression analysis was conducted as to determine the relationship between performance of bank financed projects and the four variables. As per the SPSS generated table above, the regression model was;

 $\mathbf{Y} = \mathbf{\beta}_0 + \mathbf{\beta}_1 \mathbf{X}_1 + \mathbf{\beta}_2 \mathbf{X}_2 + \mathbf{\beta}_3 \mathbf{X}_3 + \mathbf{\beta}_4 \mathbf{X}_4 + \mathbf{\varepsilon}$ 

Whereby Y = Performance of financed projects in Kenyan banks, X1= project cost management skills, X2= project time management skills, X3= project risk Management Skill and X4= project Quality Management Skill.  $B_0$ =Constant term while  $\beta 1$ ,  $\beta 2$ , β3 and β4 are coefficients of determination and finally  $\varepsilon$  represents the error term (standard error).  $Y = 65.335 + 0.657X_1 + 0.598X_2 +$ This becomes:  $0.777X_3 + 0.593X_4$  According to the regression equation established, taking all factors into account (Project management, project cost time management, project risk management and project quality management) constant at zero performance of bank financed projects was 65.335. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in project cost management will lead to a 0.657 increase in performance of bank financed projects.; a unit increase in project time management will lead to a 0.598 increase in performance of bank financed projects, a unit increase in project risk management will lead to a 0.777 increase on performance of bank financed projects and a unit increase in project quality management will lead to a 0.543 increase on performance of bank financed projects. This infers that project risk management contributed most to performance of bank financed projects. Table 4, as the t-test shows at 5% level of significance, project cost management had a .005 < .05 level of significance; project time management showed a .008 < .05 level of significance, project risk management showed a .001 < .05 level of significance and project quality management showed a .011< .05 level of significance hence the most significant factor was project risk management.

| Model                  |             | Unstandardized<br>Coefficients |            | Standardized<br>Coefficients | Т     | Sig. | Collinearity Statistics |        |
|------------------------|-------------|--------------------------------|------------|------------------------------|-------|------|-------------------------|--------|
|                        |             |                                |            |                              |       |      | Tolerance               | VIF    |
|                        |             | В                              | Std. Error | Beta                         |       |      |                         |        |
| (Constant)             |             | 65.335                         | 1.223      |                              | 2.615 | .009 | 6.543                   | 1.0965 |
| Project<br>manageme    | cost<br>nt  | .657                           | .103       | .452                         | 4.223 | .005 | 6.876                   | 2.7654 |
| Project<br>manageme    | time<br>nt  | .598                           | .349       | .354                         | 3.724 | .008 | 2.765                   | 1.876  |
| Project<br>manageme    | risk<br>nt  | .777                           | .217       | .516                         | 5.036 | .001 | 6.986                   | 1.876  |
| Project qu<br>manageme | ality<br>nt | .543                           | .193       | .263                         | 3.144 | .011 | 5.543                   | 1.675  |

#### **Table 4: Regression Coefficient Results**

a. Dependent Variable: Performance of bank financed projects

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study's purpose was to establish influence of project management skills on performance of financed projects in Kenyan banks.

## Summary of findings

The study sought to establish the influence of project cost management, project time management, project risk management and quality management on the performance of financed projects in Kenyan banks. The empirical literature showed that project cost management, project time management, project risk management and project quality management all had a positive impact on the overall success of a project. Other literature revealed that organizations that were able to manage their costs, execution time, project risks and the project quality were able to not only execute their projects on time, at cost and on schedule but they were also more likely to get repeat and referral customers. A pilot study was undertaken with four respondents to test the reliability and validity of the questionnaire. The stratification was based on the position that the respondent held in the bank i.e. one respondent from the top management level, one from the middle Management level and two from the lower management level.

## Does project cost management affect performance of bank financed projects in Kenya?

The study sought to establish the influence of project cost management on performance of bank financed projects. From the descriptive analysis, the study found that project cost management affects the performance of financed projects in Kenyan banks. The study also found that projects in most banks had been experiencing cost overrun in the last 5 years. The study found that project cost budgeting, project cost control and project cost estimation in most banks was good. The study found that project cost control is important because the project manager must regularly ensure that the money spent for is according to budget. In addition, project cost management helps to ensure the resources available are enough for the success of the project. Further, project cost estimation helps the project managers determine whether the project is achievable or not. As well, estimation of labor, materials, equipment, services, facilities, and special categories helps in sourcing at a better price.

Further, the study revealed that the variable(Pearson correlation coefficient =.667) and p-value (0.005 < 0.05) statistically, strongly and significantly correlated to performance of bank financed projects at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that project cost management is an important factor that can boost performance of bank financed projects. This also reveals that the more project cost management becomes the more the performance of bank financed projects Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of project cost management on performance of bank financed projects was achieved because it established that project cost management influences performance of bank financed projects.

## Does project time management affect performance of bank financed projects in Kenya?

From the study results, majority of the respondents indicated that that project time management influences the success of projects in banks. The study also revealed that aspects of project time management like estimation of activity resources, estimation activity durations, time control schedule and defining project activities influences the success of projects in banks to a great extent. The study also revealed that defining of project activities helps in estimating the project cost. In addition, project time management creates schedule buffers that prevent undesired variations and help reach task completion by the target date. Project time management prevents cost overrun that comes with inflation and change in material prices. Effective management and the administration of the contract time and change provisions are central to the avoidance and mitigation extended time and cost overruns.

Further, the study revealed that the variable(Pearson correlation coefficient =.598) and p-value (0.008 < 0.05) statistically, moderately and significantly correlated to performance of bank financed projects at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that project time management is an important factor that can boost performance of bank financed projects. This also reveals that the more project time management becomes the more the performance of bank projects Therefore, from financed these quantitative results it can be deduced that the study which sought to establish the influence of project time management on performance of bank financed projects was achieved because it established that project time management influences performance of bank financed projects.

# How does project risk management affect performance of bank financed projects in Kenya?

From the descriptive results, the study established that project risk management influences the success of projects in banks to a great extent. The study also found that most banks have got plans put in place to mitigate occurrence of project risks in their banks. The study also established that risk monitoring, risk control, risk analysis, risk responses and risk identification influences success of projects to a great extent. The study found that projects risk identification helps the managers to budget for the possible risks in the project budget. The study also established that risk responses addresses the risks by their priority, inserting resources and activities into the budget, schedule and project management plan as needed. In addition, risk identification informs risk avoidance and hence changing the project management plan to eliminate the threat entirely. In addition, risk management leads to identifying and analyzing risks, and improvement of project management processes and effective use of resources.

Further, project risks management helps to establish the source of the risk (such as staff incompetency) and develop strategies to deal with them. It was also established that to increase the chances of a proposed project succeeding, it is necessary for the organization to have an understanding of potential risks, to systematically and quantitatively assess these risks, anticipating possible causes and effects, and then choose appropriate methods of dealing with them. Risk management puts processes in place to ensure management receives organized risk information early enough to apply corrective actions that will allow realistic schedule and cost estimates and assure successful completion of the project.

Additionally, the study revealed that the variable(Pearson correlation coefficient =.777) and p-value (0.001 < 0.05) statistically, strongly and significantly correlated to performance of bank financed projects at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that project risk management is an important factor that can boost performance of bank financed projects. This also reveals that the more project risk management becomes the more

the performance of bank financed projects Therefore, from these quantitative results it can be deduced that the study which sought to establish the influence of project risk management on performance of bank financed projects was achieved because it established that project risk management influences performance of bank financed projects.

## Does project quality management affect performance of bank financed projects in Kenya?

From the study results, majority of the respondents indicated that project quality management influences the success of projects. The study also found that quality assurance, quality control and quality management plan influence the success of projects in their banks to a great extent. Project quality control helps in monitoring specific project results to determine whether they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory results. Further, pproject quality control usually includes taking action to eliminate causes of unsatisfactory project performance and in determining whether the project comply with the relevant quality standards set out by NEMA, County Council, Kenya Association of Architects, Kenya Engineers Board and any other Governmental Body.

Finally, the study revealed that the variable(Pearson correlation coefficient =.593) and p-value (0.011 < 0.05) statistically, strongly and significantly correlated to performance of bank financed projects at 5% level of significance as it had a positive relationship with the dependent variable. This reveals that project risk management is an important factor that can boost performance of bank financed projects. This also reveals that the more project risk management becomes the more the performance of bank financed projects Therefore, from these quantitative results it can be

deduced that the study which sought to establish the influence of project risk management on performance of bank financed projects was achieved because it established that project risk management influences performance of bank financed projects.

## **Conclusions of the Study**

The study concludes that there is a positive and significant relationship between project cost management and performance of financed projects in Kenyan banks. The study found that project cost budgeting, project cost control and project cost estimation influence the performance of financed projects in Kenyan banks.

The study also concludes that there is a positive significant relationship between project time management and performance of financed projects in Kenyan banks. The study established that defining project activities, estimate of activity resources, estimate activity durations and time control schedule positively influences the performance of financed projects in Kenyan banks.

The study further concludes that there is a positive significant relationship between project risk management and performance in financed projects in Kenyan banks. The study found that risk identification, risk analysis, risk responses, risk control and risk monitoring influence performance in financed projects in Kenyan banks.

Further, the study concludes that there is a positive significant relationship between project quality management and performance in financed projects in Kenyan banks. The study revealed that quality management plan, quality assurance and quality control influence the performance of financed projects in Kenyan banks.

## **Recommendations of the Study**

The study found that nearly all financed projects in most banks had experienced cost overrun in the last 5 years. This study therefore recommends the following; Kenyan banks should improve on project cost management by focusing on project cost budgeting, project cost control and project cost estimation.

The study found that project time management had an influence on project cost. This study therefore recommends that project managers need to accurately estimate the activities involved in a project, the resources required in those activities and the duration of time it will take to complete those activities. This will help in ensuring the there is little or no cost overrun that comes with inflation and change in material prices.

The study found that most banks had plans put in place to mitigate occurrence of project risks, however, some banks other than insuring the project under had no documented project risk management plan in place. This study recommends that banks should always have documented risk management plans in place. Kenyan banks should also focus on all aspects of project risk management like risk identification, risk analysis, risk responses, risk control and risk monitoring.

The study found that lack of support from the management was one of the factors that were affecting project quality management. This study

therefore recommends that top management in Kenya banks should give the required support to project quality management team so as to ensure the success of projects.

## **Areas of Further Studies**

Since this study sought to establish the influence of project management skills on performance of bank financed projects in Kenya, it was established that from literature review that there are scanty studies available. The study variables examined in this study (project cost management, project time management, project risk management and project quality management) only accounted for 76.90% of the project management skills with regard to the performance of financed projects in Kenyan banks. The study recommends that other variables which account for the remaining 23.10% of project management skills namely project scope management, project human resource management, project communication management project procurement management and project integration management be researched on. Also there is need to carry out similar study on the influence of the same independent variables in other types of projects and countries in order to establish whether the link between these factors and project performance can be generalized.

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