FACTORS INFLUENCING CORE BANKING PROJECT DELIVERY BY COMMERCIAL BANKS IN KENYA: CASE OF EQUITY BANK LIMITED

STEPHEN OCHWOTO, PATRICIA OGOLLA

FACTORS INFLUENCING CORE BANKING PROJECT DELIVERY BY COMMERCIAL BANKS IN KENYA: CASE OF EQUITY BANK LIMITED

Stephen Ochwoto[*1], Patricia Ogolla[2]

[1]Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

[2]Jomo Kenyatta University of Agriculture & Technology (JKUAT), Kenya

ABSTRACT

Core banking project delivery is a sensitive phenomenon in the banking industry due to digitization and technological changes. The general objective of the study is to investigate the factors influencing the delivery of core banking projects in Kenya, a case of equity bank limited. The study adopted descriptive survey and targeted 52 project members of equity bank limited as the sample frame. Quantitative as well as qualitative techniques were used for data collection. Questionnaires were used for the primary data collection while secondary data were obtained from equity bank archives and website. The data collected was analyzed by use of SPSS (Vs21). The four variables were regressed against the independent variable. The independent variable was measured in terms of cost, time and quality. The results of Pearson correlation analysis revealed there was a positive linear relationship between project delivery and the independent variables (project manager competence at 79.4%, stakeholder management at 81.2%, project team capacity at 76.7%, and scope management at 82.5%). The study had the following conclusions, project management is emerging trend as one of the key strategies for creating a digital bank setting, qualification in terms of professional training in project management would further boost the overall effectiveness of the team, user participation is important in early stages of system development as a way of increasing later acceptance of the final project, top management support needs to be focused on the initiation and realization of benefits from all IT projects rather than the narrowly defined project activities. The recommendations were as follows; project management office should be viewed as strategic pillar of the bank, the bank should capitalize on project management for digitization, staff should be encouraged to work as a team through all the processes and phases of core banking projects, top management should engage in consistent communication with project teams and support by sufficient human and material resources, project managers who receive the necessary training are able to perform hence training gives the employee a greater understanding of their responsibilities within their role and adoption of monitoring and evaluation tools, evaluation analyzes why intended results were or were not achieved while monitoring focuses in particular on efficiency.

Key Words: *Project Manager, Stakeholder Management, Project Team, Scope Management*

INTRODUCTION

Buys (2015) argues that delay and cost overrun are inherent part of most projects despite the much acquired knowledge in project management. Although some may argue that this is negligible, it is important to note that physical and economic scale of projects today is such that it is driven under the platform of profit to the parent organization and of national interest by the degree of success defined within the project triangle of cost, time, and scope. It is therefore much appreciated to look at some reasons of delays and cost overrun in project and their mitigation process, so as to increase the perception of project success (Buys, 2015). Banking Sector has an important function of economic and socio development in any economy. This makes core banking system development a very sensitive so as not to lose important information yet large projects which depend on various determinants including complexity, duration of development, available budget and the desired quality of the project. In the core banking system projects, the complexity depends on the project scope, including the number of business functions affected and the extent to which the core system implementation changes business processes, procedures and functionalities (Koch, 2002).

In the United States, $250 billion each year is spent on IT application development of approximately 175,000 projects. The average cost of a development project for a large company is $2,322,000; for a medium company, it is $1,331,000; and for a small company, it is $434,000. A great many of these projects will fail. Software development projects are in chaos (Standish group, 2014). The Standish Group research shows a staggering 31.1% of projects will be cancelled before they ever get completed. Further results

indicate 52.7% of projects will cost 189% of their original estimates. The cost of these failures and overruns are just the tip of the proverbial iceberg. The lost opportunity costs are not measurable, but could easily be in the trillions of dollars. One just has to look to the City of Denver to realise the extent of this problem. The failure to produce reliable software to handle baggage at the new Denver airport is costing the city $1.1 million per day. Hexaware technologies (2012) acknowledges that the challenges of core banking systems implementation is related to; non availability of updated business requirements documents, lack of required business scenarios specific to the bank, incomplete traceability of the test scenarios to the business requirements, testing all the interfaces with respect to the business process to ensure test coverage, excessive local customization leading to risk in regression, lack of proper audit trial in manual testing and issues in data integrity (Hexaware Technologies, 2012).

In Europe, banks from 10 countries in their transformation of the core banking system conducted by the Boston consulting group in 2005, respondents said that most IT core banking renewals are suffering from significant overruns to cost and time with current delays varying roughly 25-60 % over the original time scheduling and budget varying between 10 and 100% over the original estimates. At the same time large European banks are faced with a dilemma brought on by shifting business environment and sticker regulatory controls, which makes inevitable. Legacy systems are complex and costly to upgrade and maintain. Bank have to find ways to extend the use of the existing system, while enhancing them (Infosys, 2013).

As depicted by the central bank of Kenya annual report Out of the 43 institutions, 39 commercial banks and the mortgage finance institution are

privately owned while the Kenya Government holds controlling stakes in the remaining 3 commercial banks. 25 of the 39 privately owned banks and the 1 mortgage finance institution are locally owned while 14 are foreign owned (CBK, 2016). All this financial institution run with a specific core banking application. Projects are referred to as part of the main pillars contributing to economic growth. Delays in core banking projects are said to be a common and re-occurring phenomenon and are experienced in any sector that delivers services through software project. The government of Kenya and its developing partners continue to allocate huge financial resources to finance development. However the benefits intended for the developments are partly or never realized due to un-successful project implementations. According to trading economics (2014), the banking industry contributed 44.58% of domestic credit towards Gross domestic Product (GDP) for the years indicating a key role in the economy (Economics, Trading, 2014). The banking crisis has propelled the banks into becoming innovative in the products and services rendered to their customers, thus increasing the need for proper implementation of projects to guarantee success.

Equity Bank Limited is incorporated, registered under the Kenyan Companies Act Cap 486 and domiciled in Kenya. The Bank has subsidiaries in Kenya, Uganda, South Sudan, Rwanda and Tanzania. Its shares are listed on the Nairobi Securities Exchange and Uganda Securities Exchange. Equity Bank was founded as Equity Building Society (EBS) in October 1984 and was originally a provider of mortgage financing for the majority of customers who fell into the low income population. The society's logo, a modest house with a brown roof, resonates with its target market and their determination to make small but steady gains toward a better life, seeking security and advancement of their dreams. The vast majority of Africans have historically been excluded from access to financial resources. (Equity Bank, 2016)

Statement of the Problem

The banking industry has seen lots of challenges when it comes to core banking system delivery. These challenges have been caused by lack of proper mechanism for management of projects as most organizations concentrate on project formulation at the expense of implementation. The consequences of improper implementation of banking systems have led to stoppage of the roll-out of new systems midstream for fear of losing their customers. Other banks have had to incur exorbitant costs in trying to procure expertise to fix post-go live problems while others still have had to incur serious losses due to the bugs inherent in their system which have led to customer losing funds thereby instituting legal cases in the courts of law seeking compensation. These challenges have left the industry in shock as most of the banks have continued to rely on their current systems even beyond their "sell-by-date." In the recent past, Kenya Commercial Bank (KCB), Barclays bank of Kenya (BBK), Commercial Bank of Africa (CBA), CFC Stanbic Bank, Family Bank, Equity bank, Central Bank of Kenya (CBK), Kenya Bankers Association (KBA) and NIC Bank just to mention but a few, have changed their core banking systems with a lot of delays.

Kiboro (2010) from his findings on the study investigation of factors causing MIS project failures in the banking industry of Kenya, concludes that local banks were found to experience information systems project partial failure due to poor project planning, poor reliability, poor support from the management, inability to complete work assigned owing to insufficient staff and lack of executive support. High MIS project turnover among others factors needs to be looked at as it points in one

direction: toward high rates of IT failure in developing countries (Kiboro, 2010). Ignoring indirect costs, for example, the loss of revenue due to insufficiently train employees, have far reaching consequences for companies. It is estimated that 25% of core banking system transformations fail without any results while 50% do not achieve the transformation objectives – costs and implementation times double or triple. Information Technology (IT) related projects fail due to certain managerial implications which are not taken into account due to the preoccupation with financial evaluation techniques, to the detriment of the overall outcome of initiated projects (Kudav, 2016).

According to Khakasa (2009), the fundamental research is that in the banking industry, the level of usage of sophisticated techniques that integrate financial and strategic analysis to appraise IT investment is low compared to the usage of traditional appraisal techniques that focus on the financial return of an investment. This conclusion study underlines the importance of further developing and spreading knowledge on how to analyse potential IT investments using formal techniques (Khakasa, 2009). Firms that fail to recognize the importance of conducting a rigorous appraisal of IT investments before acquisition and implementation are very likely not to leverage the benefits of these technologies, or may experience the failure of their IT projects. In addition, inefficiencies in decision making and resource deployment will prevail. Thus, firms that seek to use information technology must be willing to think carefully through the appraisal processes and be willing to take advantage of methods developed for IT appraisal (Khakasa, 2009).

Although previous studies have discussed project implementation factors in banking industry there is less evidence of research on the critical factors influencing delivery of core banking projects within the Kenyan banking industry. Projects in commercial banks are directed towards serving customers more efficiently and effectively and reduce costs for the banking institution. Delay of such projects will therefore impact negatively on the customers as they do not get what they should from commercial banks culminating to business loss and customer inconvenience. This study therefore seeks to investigate the factors influencing delivery of core banking projects with particular reference to IT related projects that would enable commercial banks successfully streamline services to their customers.

Research Objectives

The General objective of the study was to identify factors influencing core banking project delivery by commercial banks in Kenya. The specific objectives were:-

- To establish the influence of project manager competence on the delivery of core banking projects by commercial banks in Kenya.
- To determine the influence of stakeholder management on delivery of core banking project by commercial banks in Kenya.
- To examine the influence of project team capacity on the delivery of core banking project by commercial banks in Kenya.
- To investigate the influence of project scope management on the delivery of core banking by commercial banks in Kenya.

LITERATURE REVIEW

Theoretical Framework

Stakeholder Management Theory

Stakeholder theory is described as addressing morals and values in managing an organization,

from every stakeholder interest or perspective. Phillips is more concerned with the integrity and defining the "principle of stakeholder fairness (Philips, 2008). For the everyday project manager, when handed a project, consider your stakeholders and answer these questions to help you understand the fundamentals of stakeholder theory and implement them: define stakeholder, stakeholder importance, knowledge and decision (Scheid, 2011). According to Scheid (2011), every project manager needs to understand the importance of defining stakeholders and their roles in the project. There are ways to define your stakeholders through a stakeholder analysis and stakeholder prioritization. When considering the stakeholder theory and its fundamentals, project managers must look at how project could be harmed or if the integrity of the outcome is influenced by the lack of stakeholder involvement. Managers must also be aware that stakeholders, no matter what level, do offer an element to the project and each stakeholder must be aware of what the others are contributing. You can achieve this best by involving the stakeholders in writing the project scope (Scheid, 2011).

Stakeholder theory is important to project management (PM). The days when all project managers had to think about was the iron triangle of time, cost and quality are long gone. Some say they never existed. Complexity within PM has grown year on year because of a number of factors. Massive technological advances in mobile devices, data storage and real time communication means that more project decisions have to be made faster. Unknown future events and innovative ideas are certain to impact your project, but are very hard to predict. And as projects get bigger and more expensive the number of stakeholders you need to interact with increases (Pinches, 2014). Pinches (2014) continues to say that it is a shame that a lot of PM thinking still revolves around Milton

Friedman's old-fashioned management theory in which shareholders are the only stakeholders that matter. Far too much of the PM literature focuses on 'managing upwards' and trying to identify the 'key stakeholder' – usually the individual or group paying the bills. But can project managers really make decisions about the management of the project without considering the implication of this decision on all stakeholders (Pinches, 2014).

According to Phabhu (2013), a project in a bank is not just a project but a program involving and engaging multiple stakeholders with the project manager taking end-to-end ownership and accountability. She has to manage the complexity of dealing with multiple stakeholders apart from managing scope, time, cost, and budgets. Risk planning and mitigation is done exhaustively in banks and FIs. The project manager needs to be cognizant of these facts and also have a clear understanding of production support process and methodologies, since high availability and management of the service level agreement are core objectives of production support teams (Phabhu, 2013). This emphasizes the importance of stakeholder management in any banking project.

Theory of constraints

Methodology of the theory of constraints critical chain allows to overcome the main drivers reflected in this study on project manager competence and capacity of project team. Korneva (2016) looks at reduction effect of bad multitasking, the company has to reduce the number of available jobs on the pipeline. The very presence of many tasks on each desktop creates too many opportunities for poor multi-tasking and prioritizing work incorrectly. Project managers motivated to complete their projects on time will convince to give them more resources and to change the priorities (Korneva, 2016). Clients and administration will exert their

pressure to refocus resources. Workers also tend to choose between a variety of tasks based on their own preferences and motivation. All this ensures poor multi-tasking as a result (Kothari, 2004). Critical Chain stimulates the reduction of the number of active projects by freezing a large part of the projects in the pipeline. Further Korneva(2016) reduction of multitasking people stay focused and perform tasks much more quickly, allowing them to move quickly from one stage to another, faced with much less work queue. Freezing at least 25% of the projects are usually enough to speed up the progress of work and, therefore, projects completion time. When initially selected projects comes to the end, the frozen projects can be activated and executed much faster. This mechanism itself usually leads to a significant increase in the number of projects completed on time, without delays of any projects (even if the former were frozen initially).

The Theory of Constraints is a methodology for identifying the most important limiting factor that stands in the way of achieving a goal and then systematically improving that constraint until it is no longer the limiting factor. In manufacturing, the constraint is often referred to as a bottleneck. The Theory of Constraints takes a scientific approach to improvement. It hypothesizes that every complex system, including manufacturing processes, consists of multiple linked activities, one of which acts as a constraint upon the entire system (Leanproduction, 2011). One of the appealing characteristics of the Theory of Constraints is that it inherently prioritizes improvement activities. The top priority is always the current constraint. In environments where there is an urgent need to improve, TOC offers a highly focused methodology for creating rapid improvement. A successful theory of constraints implementation will have the following benefit; increase profitability, fast improvement, capacity

improvement, reduce time lead and reduce inventory (Leanproduction, 2011).

Resource allocation is one of the trickier aspects of leading a high-performing project team. From time to time someone has to work on something that isn't their core area of expertise, but provided they have the support required, that could be a good development opportunity. However, assuming you have the luxury of being able to access a range of resources with varying skills, how should task allocated to different needs of the project (Kumar, 2011). Kumar (2011) approves that planning a project is one of the most difficult things in project management, the bigger they get, the more chaos and uncertainty creeps into them. But this can be managed and controlled using a management methodology called Critical Chain Project Management. Kumar (2011) estimates that companies spend close to $2 billion per year on early generations of project management software and associates services. And even after this much investment, most of the projects are delivered beyond schedule or over budget or under scope. As per the Standish group report in 2009, only 32% are successful, with 44% were challenged and 24% met failure (Kumar, 2011).

Kurt Lewin's step change theory

Information Systems projects more often than not introduce changes to the way things are done within an organisation. (Morrison, 2014)Introduced the three step change model in which he prescribed three phases that an organisation goes through in the course of implementing organizational change. This social scientist views behavior as a dynamic balance of forces working in opposing directions. Driving forces facilitate change because they push employees in the desired direction whereas restraining forces hinder change because they push employees in the opposite direction. These forces

must be analyzed and managed which is where Lewin's model can help shift the balance in the direction of the planned change and help organizations transition from one IT system to the next one with minimal disruption to their business operations. The three step is Unfreeze, change and freeze.

Proschi (2016) argues when an organization introduces a change with a project or initiative that change needs to be effectively managed on both the technical side and the people side. A technical side focus ensures that the change is developed, designed and delivered effectively. The discipline of project management provides the structure, processes and tools to make this happen. A people side focus ensures that the change is embraced, adopted and utilized by the employees who have to do their jobs differently as a result of the project. The discipline of change management provides the structure, processes and tools to make this happen. Project management and change management both aim to increase the likelihood that projects or initiatives deliver the intended results and outcomes. Although each discipline can function independently, the most effective approach is to integrate change management and project management to create a unified approach to implementing change on both fronts. Here, Prosci provides an overview of integrating change management and project management, including recent data on the effectiveness of integration. (Proschi, 2016)

Change will only reach its full effect if it's made permanent. Once the organizational changes have been made and the structure has regained its effectiveness, every effort must be made to cement them and make sure the new organization becomes the standard. Further changes will be made down the line, but once the structure has found a way to improve the way it conducts its operations, "re-

freezing" will give the people the opportunity to thrive in the new organization and take full advantage of the change. Many quote the model as saying the third step of this approach is to re-freeze, when in Lewin's original work it was "freeze". (Morrison, 2014)

Conceptual Framework
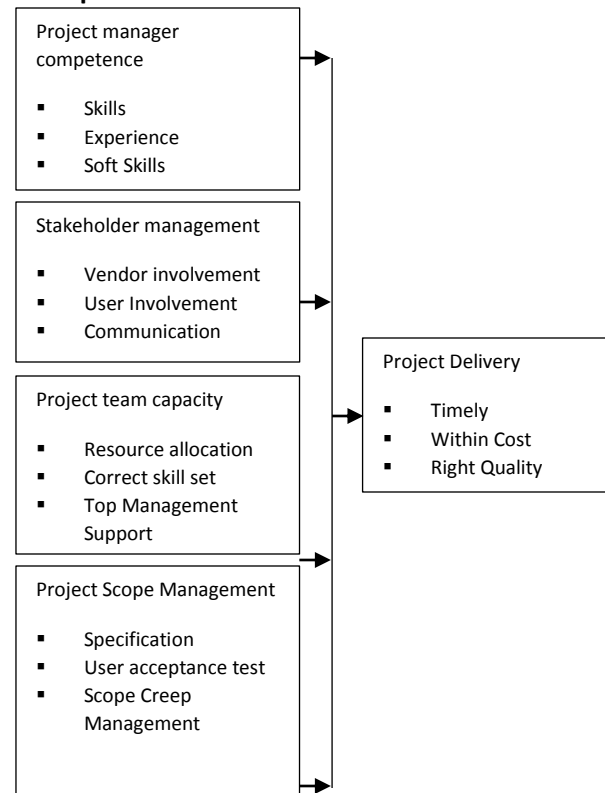
Independent variable   **Dependent Variable**

Figure 1: Conceptual Framework

Review of factors influencing delay of core banking project

Project Manager Competence

According to (Muller & Turner, 2007)), although the project success literature has traditionally ignored the project manager (and his or her competence, personality, or leadership style) as a project success factor, much has still been written

on the subject of the project manager. They reviewed literature from a myriad of authors and derived the following conclusions :that the project manager's competence is related to his or her success as a project manager; that different project leadership styles are appropriate at each stage of the project life cycle; that specific leadership styles are appropriate for multi-cultural projects; that project managers have a leadership role in creating an effective working environment for the project team; that project managers prefer task-oriented to people-oriented leadership styles and that the project manager's leadership style influences his or her perception of success in different situations. Project Management Knowledge areas are critical to project success and whether the project manager's leadership style influences his or her perception of control. What they did find was the project manager's leadership style influenced his or her perception of success on the project and thus the inner confidence and self-belief from personal knowledge and experience are likely to play an important role in a manager's ability to deliver a project successfully (Lee-Kelly, Gilbert, & Mannicom, 2008).

Project manager skill remains absolutely important, it is important to have certain elements to be the most effect project manager. Time management and problem solving are useful skills to have as you will need these on a daily basis. When it comes to decision-making, you need to be stubborn but also able to negotiate when appropriate. It is also important to be able to work well with your staff and be a good listener and an effective communicator so everyone understands the role they have been delegated (Jobs UK, 2016). Research has identified that people management drives project success more than technical issues do. Despite this finding however, there exists only a small body of research that examines the people side of project management (Kloppenborg & opfer, 2008).

Successful project manager should have the following skills and competencies: flexibility and adaptability, preference for significant initiative and leadership, aggressiveness, confidence, persuasiveness, verbal fluency, ambition, activity, forcefulness, effectiveness as a communicator and integrator, broad scope of personal interests, poise, enthusiasm, imagination, spontaneity, able to balance technical solutions with time, cost, and human factors, well organized and disciplined, a generalist rather than a specialist, able and willing to devote most of his or her time to planning and controlling, able to identify problems and willing to make decisions (Harrin, 2015).

Project manager experience becomes critical in aligning to project delivery, Carlos (2016) says that even with the best of intentions or solid plans, project can go awry if they are not managed properly. All too often, mishaps can occur, this is when the project manager must recognize a warning sign and take action. If you understand the difference between symptoms and problems and can spot warning signs of project failure, your training will help you take steps to right the ship before it keels over. Yes, it's the project manager's responsibility to correct the listing no one else. In addition to applying the processes and principles taught in project management class, you can also use your personal work. Complacency can easily set in. When this happens, the process of "monitoring" breaks down. This is why the project manager must remain in control of a project and be aware of any activity which presents a risk of project failure (Carlos, 2016). The combination of a changing organizational environment and changing project characteristics make the role of the project leader difficult. Within this environment, a competent project manager is frequently regarded as having a significant impact on overall project success as well as being critical to other project elements, such as the success of the project team, including team members" motivation and creativity (Krahn &

Hartman, 2004). This strong link with success ensures that project manager competencies are of particular interest.

Stakeholder Management

Most of bank projects are handles by external vendors who sell system to the bank. Vendor's management becomes critical for project to be delivered within the stipulated time lines. Many reasons have been given to involve users in information technology implementation projects. In their study, Kuen, (2009) established that effective communication by itself was not related to project success. One of the reasons for this finding could be that this element is already embedded into the other success factors. The communication element is present in the personnel and stakeholder acceptance factor, success factors such as project mission, top management support and personnel competency which has led to project success in manufacturing. On the other hand, researchers (Esteves & Pastor, 2001); (Bhatti, 2005)consider it a critical success factor for the implementation of information systems. Banks look at vendor management primarily from a risk and compliance perspective. According to respondents, reputation is the highest of the various bank risks. Compliance risks are also critical, as failing to comply can force banks to stop accepting deposits or prevent them from acquiring another bank. The board of directors is personally liable for any non-compliance situations, e.g., data security, privacy breeches. These risks and regulatory compliance requirements cause bank professionals to make vendor management a bank-wide issue (ITM Software, 2008).

User involvement is predicted to increase user satisfaction and acceptance by: developing realistic expectations about system capabilities, providing an arena for bargaining and conflict resolution about design issues, leading to system ownership by users, decreasing user resistance to change and committing users to the system (Casanovas, Esteves, & Pastor, 2004). By involving end-users in decisions relating to implementation, workers may become more invested in the success of the implementation and more satisfied with the system through the social-psychological mechanism of perceived control .However, characteristics such as user expertise, degree of organizational decentralization, project complexity and users" previous experience with IS could determine the degree of their involvement (Casanovas *et al.*, 2004).

Bhatti (2005) found out that user involvement refers to a psychological state of the individual and is defined as the importance and personal relevance of a system to a user. It is also defined it as the user's participation in the implementation process. There are two areas for user involvement when the 2 company decides to implement a system: (1) user involvement in the stage of definition of the company's system needs, and (2) user participation in the implementation of systems. The function of the system rely on the user to use the system after going live, and recognizes the user as a significant factor in the implementation. Lack of user involvement has proved fatal for many projects. Without user involvement, nobody in the project feels committed to a system, and can even be hostile to it. If a civil engineering project is to be successful, senior management and project promoters notably 13 the government needs to be involved from start, and continuously throughout the development. This requires time and effort but can significantly reduce delays.

Capacity of Project team

According to MICA (2014), whether it's because of poor planning and a need for clash management

tools, over-allocation is the most common scheduling misstep companies make. As a project manager in charge of ensuring that projects are completed on time and with the resources available, but it doesn't help anyone to over-extend those resources to the point of burnout, or to put other projects at risk. Figuring out when a developer has time is just one of the many things you may be expected to handle. You're constantly managing your team, keeping clients happy, checking budgets, and preparing project documentation while handling the schedules for people, meetings, and equipment. Over-allocating is a bad habit that demands payment down the line from someone, most often in the form of employee wellbeing, morale, and quality of work. It can delay the projects your team is completing, and even halt one project to make room for another. Your crew might pull together to save the day, but it's unfair, unhealthy, and unsustainable to continually over-allocate them (MICA, 2014). The project should be the top and that is only when the workload would be manageable. As far as possible, teams should be collocated together at an assigned location to facilitate working together (Kwak 2002). They should be given compensation and incentives for successfully completing the project on time and within its assigned budget (Kartam, 2005).

The findings of a study by (Kuen, Zailani,, & Yudi, 2009) revealed that competent project personnel are significant to direct project success. A competent project team comprised of a project leader and members, who are specifically selected, trained and possess the required skills, knowledge and experience to handle the demands of the project. When the project is complete and being introduced to the stakeholders or end users, the ability of the team members to convince and sell the benefits of the project is important to ensure that the project is readily accepted by the stakeholders. Established that people are involved

in every process and human dimensions exist in nearly all critical factors related to the project success, including the duty to determine the adequacy of each process that has been carried out. Thus, the competence of project personnel contributes significantly to project success in manufacturing (Cook-Davies, 2002). The sharing of information within the company particularly between project partners and between partnering companies is vital and requires partnership trust (Lam, C 2004) Partnership should be managed with regular scheduled meetings. Incentive and risk sharing agreements will assist in working together to achieve similar goals (Al-Hejji. 2006). Project teamwork and composition is important throughout the project life cycle. The project team should consist of the best people in the organization. Building across functional team is also critical. Teams should have a mix of consultants and internal staff, so that internal staff can develop necessary technical skills (Al-Hejji. 2006). Both business and technical knowledge are essential for the project.

Top management support is one of the most critical factors for success, research suggests top management support should be understood as a 'meta-factor' that encompasses other factors, exposition of the three eras of computing suggests top management support has moved from being just a critical success factor to become 'the critical success factor' (Peppard, 2007). The greatest risk of IT projects is that they can fail to deliver any business benefits and for benefits to be realized, organizational changes are generally required changes that generally require top management support (Peppard, 2007).

Project Scope Management

Scope is the term that defines the entire deliverables that is expected at the end of a project.

Therefore, logically, it can be said that all project plans, estimation, schedule, quality and base lines are usually designed base in the initial project scope. Thus, any change in the project scope during execution will mean that the entire initial project plan will have to be reviewed such that a reviewed budget, schedule and quality will have to be developed. This means more time and resources will be needed as against the initial baseline. "With each scope change, precious project resources are diverted to activities that were not identified in the original project scope, leading to pressure on the project schedule and budget". Project scope change could be as a result of wrong initial scope definition, inherent risk and uncertainties, sudden change of interest, project funding change, etc. this could lead to change request which in turn could lead to change in project deliverables, budget and/or even the entire project team (Buys, 2015).

Buys, (2015) states that Poor scope change management could lead to dispute that may require spending time and money on arbitration and litigation for what the contractor or the client believes he is entitle to. This will no doubt lead to delay and cost overrun of the project. To achieve a proper control for scope change, it is important to first identify the fact that change is inevitable in project and could equally be beneficial to the entire project success. Thus the most important thing to do is to integrate a proper change management plan such that a proactive approach could be adopted involving the project stakeholders and incorporating their needs throughout the project lifecycle. During the planning phase of the project, it is important to identify the key success factor in conjunction with the client and establish KPI in the form of milestone that will measure the success for of attaining the project scope. Similarly, to avoid disputes, it is important to always seek approval for changes from sponsor and communicate changes in a timely way. For highly evolving change in project,

the scope could be frozen so as to concentrate on the expected deliverable.

Requirements gathering is an essential part of any project and project management. Understanding fully what a project will deliver is critical to its success. Requirements gathering sounds like common sense, but surprisingly, it's an area that is given far too little attention. Many projects start with the barest headline list of requirements, only to find later the customer's needs have not been adequately understood. One way to avoid this problem is by producing a statement of requirements, this document is a guide to the main requirements of the project (Haughey, 2017). A nice description of requirements gathering at the same time, the statement of requirements is not enough to ensure success of the project. Stakeholders need to be taken thru a set of requirements starting from the product capabilities, quality and the ability to be embedded into the existing enterprise infrastructure. As for baseline of the gathered requirements, well, the only high-level requirements are stable, more granular requirements will become stable after having the product design completed. Here it is possible to get the full support of stakeholders and their sign-off.

User acceptance testing (UAT) is the last phase of the software testing process. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications. UAT is one of the final and critical software project procedures that must occur before newly developed software is rolled out to the market (Setter, 2013).UAT directly involves the intended users of the software. UAT can be implemented by making software available for a free beta trial on the Internet or through an in-house testing team comprised of actual software users. The steps involved in in-house UAT: Planning, the UAT strategy is outlined during the planning

step; Designing test cases, test cases are designed to cover all the functional scenarios of the software in real-world usage. They are designed in a simple language and manner to make the test process easier for the testers; Selection of testing team, the testing team is comprised of real world end-users. Executing test cases and documenting, the testing team executes the designed test cases Bug fixing which responding to the bugs is found by the testing team, the software development team makes final adjustments to the code to make the software bug-free. Sign-off, when all bugs have been fixed, the testing team indicates acceptance of the software application, this shows that the application meets user requirements and is ready to be rolled out in the market. UAT is important because it helps demonstrate that required business functions are operating in a manner suited to real-world circumstances and usage (Technopedia, 2017).

Scope creep the insidious tendency for software projects to grow beyond their original bounds looms on every software development project. If you're a project management professional, avoiding scope creep increases the chance of delivering the project on time and on budget. Smaller projects have a much greater chance of success, so savvy project managers split a massive assignment into smaller components (Clark, 2014). Scope creep arises naturally. For example, the client wants more functionality for the same price; the project manager wants to hold the line on costs and time delays. Many clients don't know how to define their requirements, and "I'll know it when I see it" is a tough criterion to meet (Clark, 2014).

Empirical review

Onsogo (2008) in an empirical study of information technology investment evaluation of commercial banks in Kenya found that 56% of banks surveyed have had at least two (2) failed IT projects attributed to the failure to meet initially set out objectives and project failure to stay on budget and failure to be implemented within the set timeframe. Onsogo (2008) established that the highest project failures occurred among small banks which accounted for 41% as opposed to 25% among large banks. IT investments have a tremendous impact on firms, for instance, ATM coverage of KCB around the East and Central African Region: the highly successful mobile phone banking (M – Banking) services that have contributed to customer education of the services. Although user involvement plays a role in IT project success, there are several factors that may have contributed (Onsongo, 2009).

Musau (2015), on his study to establish the factors influencing successful implementation of core banking system, the specific objectives of the study were; to determine the influence of human resource management on the implementation of core banking systems by commercial banks in Kenya, to establish the influence of project scope on implementation of the core banking system by commercial banks in Kenya, to establish how project risks management influence the implementation of core banking system by commercial banks in Kenya and to establish the influence of vendor selection on the implementation of core banking system by commercial banks in Kenya (Musau, 2015). The areas that influenced core banking implementation were product delivery risk analysis, strategic risk, ensuring that risk mitigation were in place, resources risk analysis and risk and issue identification, business risk analysis, operational risk analysis , process and controls risk analysis, risk assessment procedure and process and controls risk analysis, ICT Risk analysis and accounting risk analysis. The study established that liquidity/ market risk/ profitability risk analysis, legal,

regulatory and taxation compliance risk analysis were important factors on risk management influence core banking system implementation. The study concludes that vendor selection positively influence core banking system implementation in Kenya to a great extent and project implementation methodology, project management staff skills and system support mechanisms were the factors that most affected vendor selection (Musau, 2015).

According to Chege (2014), in a bid to remain relevant and sustain customer growth, Kenyan banks are increasingly looking to introduce new and innovative products and service channels to leverage on emerging technologies. The introduction of these new products and channels is often done through IT project teams comprising of bank and non-bank employees especially when the new technology is bought from external parties. Whereas it would be expected that projects run for or by banks would be smooth and ultimately deliver on the intended business benefits, several instances have been witnessed within the Kenyan banking industry where IT projects that had been touted to take as little as six months have been highly unsuccessful running into years, costing tens of millions of shillings more than had been initially intended and delivering far less benefits that had been projected (Chege, 2014). The study found that whereas the outside world sees CBA"s IT project delivery model as highly successful, CBA project stakeholders themselves feel that their IT projects are rarely successful as none of them are completed on time or within budget. The study further found that realization of business objectives is the single most important determinant of project success at CBA with top management feeling that whereas they were very clear on their business objectives before pursuing the IT projects, none of the projects completed during the survey period had delivered on their intended business benefits. Top management support to IT projects was found to be

very strong at CBA but this has not resulted in successful projects with 74% of survey respondents blaming poor project delivery to project manager incompetence (Chege, 2014).

Ng'ang'a, (2014), argues that ICT adoption by commercial banks in Kenya would help systems expand its market and customer share, thus facilitating a firm's growth strategy. ICT adoption affects a firm's growth ability by increasing its scope and extending its core business through market penetration and development or product development. ICT adoption help a banks to improve relationships with customers by providing more effective marketing, new channels, shorter time to market, customized or personalized product, online 24-hour technical support and online interactive community (Ng'ang'a, 2014).

RESEARCH METHODOLOGY

The study adopted descriptive survey research. The target population was Equity Bank Project team, comprised of project managers and project team members working on projects delivery between 2011 and 2017 at equity bank project management office, head office, Upper hill, Nairobi located in Kenya (Equity Holdings, 2016). A total of 46 members of staff from project management department at equity bank was selected as the sample size for the study. Questionnaires were preferred for this study as they allowed for reach and collection of data within a short time. Secondary data were obtained from literature sources through review of published journals, articles, thesis and textbooks. Equity bank resource center was useful in finding archived records with important lessons in project management practice. Data collection concentrated on the main objective of the study. The insights gained from the preliminary findings was used to refine the

questionnaire in preparation for the field study. Data was analyzed using both qualitative and quantitative techniques. Qualitative data was analyzed by giving explanation of information obtained from the empirical literature. Data was analyzed using descriptive statistics and inferential statistics with the help of Statistical Package for Social Sciences (SPSS) Version 21.

RESEARCH FINDINGS AND DISCUSSIONS

A total of 46 questionnaires were given out to the equity bank employees in Project management department with access and rights of project management in Equity bank Nairobi, 37 questionnaires were filled and returned giving a response rate of 80.5%. In regard to their education level, 27.0% of the respondents were diploma holders, 21.6% were under-graduate and 51.4% were post-graduate holders. Those who had worked for less than 1 year were 27%, 2 – 5 years were 40.5 %, 6– 10 years were 24.4% and those who had worked for more than 10 years were 8.1 %. In regard to the capacity level at project management office, 21.6 % of the respondents were project managers, while 78.4 % were project team members.

Influence of Project Manager Competence on Delivery of Core Banking Projects

A project may be well conceived and adequately financed, the resources may be specialists, and consultants may be highly experienced, but if the efforts of all the participants are not skillfully coordinated and managed, the project may overrun the budget, fail to meet the schedule, or fall short in functional and technical quality. The larger and more complex the project, the more critical this overall management function becomes.

On whether Equity Bank Project Managers were trained to Successfully Deliver core banking projects, majority of the respondents at 41% strongly disagreed, this showed project managers training was a strategic function which the bank was not emphasizing. 30% of the respondents disagree, 24% were uncertain while 5% strongly agree. On whether Success of core banking project in Equity Bank depended on Project Manager Assigned 56.8% of the respondent indicated agree that the success of core banking project is determined by the specific project manager allocated to it, 29.7% agree, 8.1%, 2.7%, 2.7% felt uncertain, disagree and strongly disagree respectively. This analysis showed that project managers were a key determinant in the delivery of core banking projects.

On whether best and most competent Staff were selected to work on Core Banking Projects, 37.8% of the respondent indicated agree that a competent team was selected to handle delivery of core banking projects, 21.6% agreed, 13.5%, 16.2%, 10.8 % felt uncertain, disagree and strongly disagree respectively.

On whether Team's soft skills and team dynamics played an important role determining delivery of core banking project, 37.8 % strongly agree Whereas 43.2%, 5.4%, 8.1% and 5.4% indicated agreed, uncertain, disagreed and strongly disagreed respectively.

Table 1: Core banking Project delivery

Statement	n	Mean	SD	Median
Training of PMs	37	2.0	1.1	2
Specific project manager	37	4.0	0.9	4

Best & Competent project team	37	3.5	1.3	4
Soft skills and Team dynamics	37	4.0	1.1	4
	37	**3.4**	**1.1**	**4**

Majority of the respondents disagree that projects managers are well trained to perform project delivery with a mean of 2.0. Also among the sample, Majority of the respondents agreed that project delivery was determined by the project manager allocated to it with a mean of 4.0. Respondents also agree that a competent project team is an important function in project with a mean of 3.5. Soft skills and team dynamics was agreed to be fundamental with a mean of 4.0.

Correlation Analysis between Project Manager Competence and Project Delivery

The correlation analysis between the variables was 0.794** showing a strong relationship between the variables as per below table 2. This implied that project manager competence positively affected the delivery of core banking projects.

Table 2: Correlation Analysis between Project Manager Competence and Project Delivery.

		Project Manager competence	Delivery of Core Banking projects
Project Manager competence	Pearson Correlation	1	.794**
	Sig. (2-tailed)		.000
	N	37	37
Delivery of Core Banking projects	Pearson Correlation	.794**	1
	Sig. (2-tailed)	.000	
	N	37	37

**. Correlation is significant at the 0.01 level (2-tailed).

Influence of stakeholder management on delivery of core banking projects

Stakeholders are those who can positively or negatively impact the output of the projects. It is very important for an efficient project manager to identify the names of stakeholders during the initiation stage of the projects. The stakeholders can be external and internal both.

The respondents were asked whether stakeholders were involved at all stages of the projects, 42.3% disagree that they were involved in all stages of the project, 18.9 % were uncertain, while 18.9% agreed, 1.5% disagreed and 5.4 strongly agree.

On whether internal\external stakeholder were involved during requirements definition process of Core Banking Projects, 40.5 % of respondents disagreed that internal and external stakeholders were actively involved in requirement gathering.

21.6% agreed, 16.25 were uncertain, 13.5% strongly disagreed while 8.1% agreed.

On project stakeholder's importance to project delivery, majority of the respondents agreed with project stakeholders being an important role in project delivery, 32.4%, 10.85, 10.8% and 2.7% agreed, uncertain, disagreed and strongly disagreed respectively.

On Stakeholder expectation and change management as a fundamental component of core banking projects delivery within Equity Bank, 37.8 % of respondents strongly agreed while 32.4%, 8.1%, 10.8% and 10.8% of the respondents agree, uncertain, disagree and strongly disagree respectively.

Stakeholder Management on Delivery of Core Banking Projects

Respondents agreed that communication, change management and stakeholders were Key functions to projects delivery. Majority of the respondents felt they were not involved at all stages of the project and requirement gathering.

Chandana (2013), noted it can be very costly if you ignore any of the stakeholder's expectations and it can hugely impact the project negatively like delay in deliveries. Furthermore, a project manager must manage the influence of all the stakeholders in relation to the project requirements to ensure a required output. The project manager should take care of the interests of the stakeholders balancing the requirements of the project (Chandana, 2013).

Correlation Analysis between Stakeholder Management and Project Delivery

A correlational analysis between the influence of stakeholder management and project delivery produced a value of 0.812** which showed a strong relationship between the two variables. Therefore proper stakeholders management affect core banking project delivery positively.

PM Partners (2012) agree that stakeholder Management is a critical factor for project success regardless of size or complexity. It would also be the most underestimated discipline in delivery, it is vital to understand the values and issues that stakeholders have, in order to address them and keep everyone involved throughout the project. Stakeholder Management is a discipline that helps you identify various stakeholders and gain their support. An efficient approach is to identify Key or Non-Key stakeholders so appropriate communications and actions can be executed. Regular communication is fundamental to any project especially when part of an overall communication plan that results in stakeholders being better informed throughout the life of the project (PM Partners, 2012).

Table 3: Correlation Analysis, Stakeholder Management and Project Delivery

		Stakeholder Management	Delivery of Core Banking projects
Stakeholder Management	Pearson Correlation	1	.812**
	Sig. (2-tailed)		.000
	N	37	37

		.812**	1
	Pearson Correlation		
Delivery of Core Banking projects	Sig. (2-tailed)	.000	
	N	37	37

**. Correlation is significant at the 0.01 level (2-tailed).

Influence of Project Team Capacity on the Delivery of Core Banking Project.

Organizations know that they must effectively and efficiently manage all of the projects in their portfolio. However, this is typically far easier said than done when there are a finite number of resources available. As a result, resource misallocation and imbalances are often the norm, rather than the exception.

On Equity Bank top level managers support on Core Banking Project Delivery Teams, 54.1% of the respondents disagreed with top management support on technical teams, 18.9 % agreed, 16.2% strongly disagreed, 2.7% and 8.1% uncertain and strongly agreed respectively.

On Equity Bank top management availability on decision making and guidance on escalated blockers in the Project Team, majority of the respondents strongly disagreed on equity top management readily availability for decision making and guidance on escalated blockers at 35.1% and 43.2% respectively. 8.1% are uncertain, 5.4% agree and 8.1 % disagree.

On Equity Bank resourcing on technical developers and support team, majority of the respondents strongly disagree on rightful allocation of enough technical resources to the core banking projects at 35.1% and 48.6% respectively. 8.1%, 2.7% and 5.4 % uncertain, agreed and strongly agreed correspondingly.

On vendor's technical support and guidance in projects at Their Jurisdiction, majority of the respondents agreed and strongly agreed at 27.0% and 35.1% on vendors giving enough support to the projects, 10.8% were uncertain, 18.9% disagreed while 8.1% strongly disagreed.

On technical experts distribution within Projects and Initiatives, respondents disagree at 48.6% that technical experts were appropriately distributed within project and initiatives within the bank,37.8% disagreed, 5.4% uncertain, 2.7% agreed while 5.4% strongly disagreed.

Project Team Capacity on Delivery of Core Banking Project

A number of responses were given to determine how project team influenced core banking project delivery. Respondents agreed that top management support was a major setback to delivery of core banking project delivery. Majority of the respondents disagreed with equity team and experts were well resourced within projects. Respondents agreed that the vendors gave enough attention to projects.

Correlation analysis between Project team capacity and core banking project delivery

A correlational analysis between the influence of Project team capacity and project delivery produced a value of 0.767** which showed strong relationship between the two variables. Therefore

proper project team capacity affected core banking project delivery positively.

Table 4: Correlation Project Team Capacity and Project Delivery

		Project team capacity	Delivery of Core Banking projects
Project team capacity	Pearson Correlation	1	.767[**]
	Sig. (2-tailed)		.000
	N	37	37
Delivery of Core Banking projects	Pearson Correlation	.767[**]	1
	Sig. (2-tailed)	.000	
	N	37	37

**. Correlation is significant at the 0.01 level (2-tailed).

Influence of Project Scope Management on the Delivery of Core Banking Projects.

Project Scope Management is a set of processes that ensure a project's scope is defined and mapped accurately. Scope Management techniques allow project managers and supervisors to allocate just the right amount of work necessary to complete a project successfully. It is primarily concerned with controlling what is and what is not part of the project's scope.

On Equity Bank Team understanding of scope expectation for all Core Banking Projects, 35.1% strongly disagreed that equity bank team understand scope expectation for all core banking projects, 43.2 % disagreed, 8.1% are uncertain, 5.4% agreed and 8.1% agreed.

On collection of Core Banking Project Requirement Impact on Scope, majority of the respondents strongly agreed on collection of requirement having high impact on scope at 32.4%, 24.3% agreed, 13.5% were uncertain, 24.3% disagreed while 5.4% strongly disagreed.

On Equity project team involvement in collection of project scope requirement, respondents disagreed on being actively involved in collection of project scope requirement at 32.4%, 27.0% strongly disagreed, 16.2% uncertain, 18.9% agreed while 5.4% strongly agreed.

On Scope Creep, Scope Change Management Execution, 27% of the respondents disagreed on scope creep being handled procedurally, 24.3% agreed, 18.9% strongly disagreed, 21.6% uncertain and 8.1% strongly agreed.

On influence of project scope management on the delivery of core banking projects, Respondents agreed that scope has a major impact on delivery of the initiatives. Majority of the respondents disagreed with equity team understanding the scope and team being involved in scope requirement. At the point of scope creep, majority of the respondents disagreed with equity team adopting the scope change procedure.

Table 5: Correlation Analysis Project Scope Management and Core Banking Project Delivery

		Scope Change	Delivery of Core Banking projects
Scope Change	Pearson Correlation	1	.825**
	Sig. (2-tailed)		.000
	N	37	37
Delivery of Core Banking projects	Pearson Correlation	.825**	1
	Sig. (2-tailed)	.000	
	N	37	37

**. Correlation is significant at the 0.01 level (2-tailed).

A correlational analysis between the influence of Project scope management and project delivery produced a value of 0.825** which shows strong relationship between the two variables. Therefore proper project team capacity affect core banking project delivery positively.

SUMMARY, CONCLUSIONS AND FINDINGS

In the study of influence of project manager's competency on delivery of core banking projects, 71% disagreed that project manager were adequately trained in handling the projects delivery, academically they were fit for the job, they had less training on professional certification and short term training centered on project management. Majority of the respondents agreed on success of delivery of any core banking projects depends on the specific project manager allocated at 86.5%, this has direct correlation with the number of years one has worked in the bank. The respondents also highlighted that the most competitive teams are chosen to run with project at 59%. On team soft skills and dynamics, majority of the respondents

agreed on its major role on delivery of core banking project at 81%.

On influence of project stakeholders it was established that project stakeholders are not adequately involved at initiation, planning, execution, implementation and closure of the projects. Internal and external stakeholders are not well represented during the requirement definition, kick off meeting are usually called for but the stakeholders do not turn up only allowing attendees to discuss the requirement definition. Respondents agreed on the importance of project stakeholders in delivery of core banking projects. Stakeholder expectation and change management is an important element on delivery of core banking projects. Communication between project stakeholders has been noted as a fundamental function in driving delivery of core banking projects.

On the influence of project team capacity on delivery of core banking projects, majority of the respondents disagree on receiving enough top level management support in execution of projects. At the point of escalation of project issues and blocker the team noted that they do not receive enough

support from the top management, this is due the number of projects that the bank is running in relation to the number of technical persons allocated to this project. The project did not have enough technical resourcing affecting delivery in terms of time cost and scope. The bank purchases most of its software from well renowned vendors, the team agreed that the vendors were giving enough support and attention to the projects. To verify on number of technical personnel allocated to specific projects, a similar question was asked if technical experts were well distributed within projects and initiatives, the respondents disagreed, a number of project had a similar technical resource handling it, this affected delivery within timelines, budget and scope.

On project scope management, respondents felt that majority of the project team members do not understand the scope expectation of the initiatives, this is a challenge in terms of rightful delivery as per the customer expectation. It was agreed that project requirement collection had a high impact on scope expectation. The team disagreed with equity bank team being involved in in the crucial stage of requirement gathering which has high impact on scope. At the point of scope creep, the project has to undergo a scope change management process, this may depend on severity on the project, if it can be done at point of implantation it is usually the best, respondents disagreed with the procedure not being adopted.

On performance of core banking projects it was agreed that project were not delivered within timelines, projects delivered at high cost compared to the planned budgets, projects delivered were of quality. Respondents felt that the project managers were not in full control of their initiatives. The mission, vision and strategic plan of the bank supports digitization hence execution of project management.

Conclusion

Indeed project management is emerging trend as one of the key strategy on creating a digital bank setting. If adopted would play a key role in organizational in reducing cost add increasing profitability which is every goal of each organization. The project managers need to be adequately trained to handle projects through certification and short term project management courses, Qualification in terms of professional training in project management would further boost the overall effectiveness of the team. Training will also assist the members with skills that are able to measure the success of the projects in meeting intended objectives. The importance of user participation in early stages of system development, as a way of increasing later acceptance of the final project. Equity bank, using different means, has to involve its stakeholders in their intended projects in order to guarantee acceptance. Top management is the most significant factor influencing the success of IT projects. For benefits to be realized, organizational changes are required which must emanate from top management and the support thereof. These calls for more technical experts to be employed for purposes of ensuring the project are well resourced. Top management support needs to be focused on the initiation and realization of benefits from specific IT projects, however, the extent to which the banks have adopted them varies hence the variance in their performance in the market at this point of interest capping that has reduced interest income in Kenya , banks should increase project management   research and development to enhance their innovation capability and identify their unique resources and capitalize on them in order to achieve industry sustainability. The study also concludes that stakeholder's involvement affected project success. The study noted that stakeholder involvement management determine the delivery of core banking projects.

Proper involvement meant that projects will be implemented without delays.

Recommendations

Project management should be viewed as strategic pillar of the bank, during strategy development on technological innovations, the project management office should be tasked with the delivery of the stated initiatives. Banks should capitalize on maximizing the project management office that provides structured ways of enhancing delivery of core banking projects. Staff should be encourage to work as a team through all the processes and phases of core banking projects (initiation, planning, execution and closure), this should entail team building exercises and bonding sessions. Equity Bank Top management should engage users of all core banking projects at all stages of project management; from ideation, requirement gathering, designing, build, testing and deploying stage. This would be achieved through conducting regular meetings with portfolio managers to track on progress. The top management at Equity Bank should engage in consistent communication with established project teams so as to identify their needs and progress in achieving successful implementation of core banking projects. This should include provision of resources such as training requirements and material resources required. Project managers who receives the necessary training are able to perform in their job. The training will give the employee a greater understanding of their responsibilities within their role, and in turn build their confidence. This confidence will enhance their overall performance and this can only benefit the company. Employees who are competent and on top of changing industry standards help your company hold a position as a leader and strong competitor within the industry. The professional trainings recommended for project managers include projects in control environment

2(Prince 2), project management professional certification (PMP) and monitoring& evaluation certification (M&E). For project to meet budgeting and scheduling needs, resources need to be defined, project managers should have good resource management skills. The resources available should be well distributed to projects. Attempting to start a project while neglecting the resources you'll need to complete a successful project will result in chaos or project failure. Equity bank should properly resource and properly distribute developers and technical resources within the projects. Adoption of monitoring and evaluation tools. Evaluation analyzes why intended results were or were not achieved, assesses specific casual contributions of activities to results, examines implementation process, explores unintended results, provides lessons, highlights significant accomplishments or program potential and offers recommendations for improvement, on the other hand monitoring gives information on where a policy, program or project is at any given time (or over time) relative to respective targets and outcomes. Monitoring focuses in particular on efficiency, and the use of resources. M&E can be used to demonstrate progress to internal management and to external stakeholders. Internally, measurable results can justify continued funding and clarify the return on investment of information technology project to managers and shareholders.

Areas for Further research

The general objective of this study was to investigate the factors influencing core banking project delivery with specific focus of Equity bank limited. Specifically, this study investigated the effects of project manager competency, stakeholder's management, project team capacity and scope management on delivery of core banking project in Kenya. These determinants are not

exhaustive hence further research can be carried out to unearth other determinants of project delivery in the industry. Secondly, further studies can be done on the factors influencing implementation of information technology projects within the Kenyan banking industry.

REFERENCE

Anyanzwa, J. (2012). *Crisis over new bond market software persists*. Retrieved from Standard Digital: https://www.standardmedia.co.ke/business/article/2000059246/crisis-over-new-bond-market-software-persists

Atsango, A. (1999). *An Investigation Into Factors Causing Construction Project Delays In Kenya.* Nairobi: UON.

Benmerikhi, M. (2014). *Types of Project Delay*. Retrieved from https://www.researchgate.net

Berman, J. (2007). *Maximizing project value: Defining, managing, and measuring for optimal return.* New York: Amacom, American Management Association.

Bhatti, T. R. (2005). *The Second International Conference on Innovation in Information Technology (IIT'05) critical success factors for the implementation of Enterprise Resource Planning (ERP).* empirical validation.

Bonham, S. (2008). *Actionable strategies through integrated performance, process, project, and risk management.* Boston: Artech House.

Buys, F. (2015). *Five Causes Of Project Delay And Cost Overrun, and their Mitigation Measures*. Retrieved from QS quotes: https://www.linkedin.com/pulse/five-causes-project-delay-cost-overrun-mitigation-measures-buys

Carlos, T. (2016). *Reasons why Projectc Fail*. Retrieved from PRoject Smart: https://www.projectsmart.co.uk/reasons-why-projects-fail.php

Casanovas, J., Esteves, J., & Pastor, J. (2004). *A Goals/ Questions/ Metrics Plan for Monitoring User Involvement and Participation in ERP Implementation Projects.* Newyork.

CBK. (2016, July 7). *Commercial Banks & Mortgage Finance Institutions*. Retrieved from Central Bank of Kenya: https://www.centralbank.go.ke/index.php/banksupervision/commercial-banks-mortgage-finance-institutions

Chandana. (2013). *Stakeholders and their Impact on the Projects*. Retrieved from Simple Learn Project Managament: https://www.simplilearn.com/stakeholders-impact-on-the-projects-article

Change-management-consultant.com. (2015). *Kurt Lewin 3 Phases Change Theory*. Retrieved from Change-management-consultant.com: http://www.change-management-consultant.com/kurt-lewin.html

Chege, S. (2014). *Factors affecting the success of information technology projects within the Kenyan banking industry: Commercial Bank of Africa.* Nairobi: Kenyatta University.

Christensen, B. C. (2003). *http://www.simpleprojectmanagement.com/think/4stages.html*. Retrieved from The "Four Stages Theory" of Project Management: http://www.simpleprojectmanagement.com/think/4stages.html

Clarizen. (2016). *Reaource Capacity Palnning In Project Management*. Retrieved from Clarizen: https://www.clarizen.com/work/resource-capacity-planning-in-project-management

Clark, T. (2014). *How to Manage Scope Creep*. Retrieved from Liquid Planner: https://www.liquidplanner.com/blog/manage-scope-creep-even-prevent-happening/

Cognizant. (2013). *Understanding Failed Core Banking*. Retrieved from Cognizant: https://www.cognizant.com/InsightsWhitepapers/Understanding-Failed-Core-Banking-Projects.pdf

Cook-Davies, T. (2002). *The "real" success factors in projects.* Chicago: Int. J. of Project Manage.

Creswell, J. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* New Jersey: Upper Saddle River.

Das, O. (2016). *Project Management Competencies*. Retrieved from Learning and Professional Development: http://www.das.ohio.gov/Portals/0/DASDivisions/HumanResources/LPD/pdf/LPD_PM_competencies.pdf

David, C. (2016). *Project Stakeholder Management*. Retrieved from Project Management Journal: https://www.pmi.org/learning/library/project-stakeholder-management-5216

Economics, Trading. (2014). *Domestic credit provided by banking sector (% of GDP) in Kenya*. Retrieved from Trading Economics: http://www.tradingeconomics.com/kenya/domestic-credit-provided-by-banking-sector-percent-of-gdp-wb-data.html

Editor, 2. (2013). *National Bank of Ethiopia inaugurated new Core System*. Retrieved from 2Merkato: http://www.2merkato.com/news/alerts/2708-national-bank-of-ethiopia-inaugurated-new-core-banking-system

Equity. (2015). *Equity bank*. Retrieved from http://ke.equitybankgroup.com/

Equity Bank. (2015). *Technical Project*. Retrieved from Technical Project: http://10.1.5.54/intranet/

Equity Bank. (2016, July 13). *Company profile*. Retrieved from Equity Bank group: http://10.1.5.54/intranet/index.php?option=com_content&task=view&id=15&Itemid=27

Equity Holdings. (2016). *Polaris Functional Scope.* Nairobi: Equity Bank.

Esteves, J., & Pastor, J. (2001). *Analysis of critical success factors relevance along SAP implementation phases.* Massachusetts, USA.: (AMCIS), Boston.

Gacheru, J. (2015). *Determinants Of Projects Delay In The Construction Industry In Kenya; The Case Of Selected Road Projects Implemented By Kenya National Highways Authority In Kenya's Coast Region.* Nairobi: UON.

Gartner. (2007). *Gartner*. Retrieved from Core Banking System: http://www.gartner.com/it-glossary/core-banking-systems/

Gitau, P. K. (2010). Construction Process in Kenya. 10-15.

Glover, J. (2015). *Why stakeholder management is an important part of project management*. Retrieved from Kahootz: http://cloud-collaboration.kahootz.com

Godbold, A. (2016, May 03). *Project management skills: client-side vs delivery*. Retrieved from Association of project management: https://www.apm.org.uk/blog/tale-two-disciplines

Gonzaga, S. (2014, May 15). *What Makes a Successful Project? 7 Ways To Ensure a Project's Success Before You Even Begin*. Retrieved from Teamgantt: What Makes a Successful Project? 7 Ways To Ensure a Project's Success Before You Even Begin

Greenberg, J., & Baron, R. (2000). *Behavior in organization.* Boston: lyn & Bacon.

Griffin, J. (2010). *Residential construction management: Managing according to the project lifecycle.* Ft. Lauderdale: FL: J. Ross Pub.

Harrin, E. (2015, January 8). *15 Skills Project Managers Will Need in 2015*. Retrieved from PM Perspective Blog: http://www.esi-intl.co.uk/blogs/pmoperspectives/index.php/15-skills-project-managers-will-need-2015/

Haughey, D. (2017). *Requirement Gathering*. Retrieved from Project Smart: https://www.projectsmart.co.uk/requirements-gathering.php

Hawkins, P. (2004). *South Africa's financial sector ten years on: performance since democracy. Development.* Southern Africa: pp. 179-204.

Hexaware Technologies. (2012). *Technology Solution*. Retrieved from Tech: http://hexaware.com/product-specialization.htm

IBS intelligence. (2010). *International core banking system delays in Costa Rica; new entrant takes regional offering*. Retrieved from IBS newsletter: https://ibsintelligence.com/ibs-journal/ibs-news/c381-ibsj-archive/c270-ibs-journal-archive-2010/international-core-banking-system-delays-in-costa-rica-new-entrant-takes-regional-offering/

Infosys. (2013). *Top challenges banks face when implementing core banking transformation*. Retrieved from Infosys: www.infosys.com

Investopidia. (2016). *Project Completion Restriction*. Retrieved from Investopedia: http://www.investopedia.com/terms/r/revenuebond.asp

ITM Software. (2008). *Vendor Management For Banks*. Retrieved from ITM: http://www.factpoint.com/Vendor-Management-for-Banks.pdf

Jobs UK. (2016). *I want To Be a Project Manager*. Retrieved from Project Manager: http://www.projectmanagerjobs.co.uk/articles/I-want-to-be-a-project-manager!

Kaushal, A. (2014). *Importance Of Training For Project Managers*. Retrieved from Knowledge Hub for Project Managers & Tech Geeks : http://www.whizlabs.com/blog/importance-training-project-managers/

Kenya vision 2030. (2016, october 05). *Kenya vision 2030*. Retrieved from Kenya Vision2030 uses cookies to ensure you get the best experience on our website: http://www.vision2030.go.ke/

Khakasa, E. (2009). *Evaluating Information Technology Investments - A Survey of Kenya Commercial Banks*. Retrieved from Proceedings of the 10th Annual Conference: https://su-plus.strathmore.edu

Kiboro, G. (2010). *An investigation of factors causing management information system project failures in the banking industry in Kenya.* Nairobi: UON.

Kimani, Z., & Kimwele, M. (2014). Factors Influencing Project Delays in Kenya. Case of NHC. *International Journal of Social Sciences Management and Entrepreneurship*, 2(1).

Kloppenborg, T. J., & opfer, W. (2008). The Current State of project management research;Interpretations, and Predictions. *Project Management Journal*, 33 (2), 5-14.

Koch, C. (2002). *An Introduction to ERP, Getting Started with Enterprise Resource Planning (ERP).* CIO.

Kombo, D., & Tromp, D. (2006). *Proposal and thesis writing an introduction.* Mukuyu: Pualines Publications Africa.

Korneva, D. (2016). Effective Project Management WIth Theory of Constraints. *Procedia - Social and Behavioral Sciences*, 229 (2016) 96 – 103. Retrieved from Science Direct.

Kothari, C. (2004). *Research methodology: Methods and techniques.* New Delhi: New Age interantional.

Krahn, J., & Hartman, F. (2004). *Important leadership competencies for project managers: The fit between competence and project characteristic.* London: proceedings of the 2004 PMI Research Conference.

Kudav, R. (2016, Septemeber 14). *Understanding failed core banking projects:*. Retrieved from Understanding failed core banking projects:: https://cognizant.com/InsightsWhitepapers/Understanding-Failed-Core-Banking-Projects.pdf.

Kuen, C. W., Zailani,, S., & Yudi, F. (2009, January). *Critical factors influencing the project success amongst manufacturing companies in Malaysia.* Retrieved from African Journal of Business Management Vol.3 (1), pp. 016-027: http://www.academicjournals.org/AJBM ISSN 1993-8233 © 2009 Academic Journals

Kumar, R. (2011). *Theory of Constraints* . Retrieved from Project Perfect: http://www.projectperfect.com.au/white-paper-theory-of-constraints.php

lamachenka, a. (2016, October 3). *10 SMART Goal Setting Best Practices For Project Planning*. Retrieved from Captella project management: http://blog.capterra.com/10-smart-goal-setting-best-practices-for-project-planning/

Leanproduction. (2011). *what Is Theory of Constraints?* Retrieved from Leanproduction: http://www.leanproduction.com/theory-of-constraints.html

Lee-Kelly, L., Gilbert, D., & Mannicom, R. (2008). *How e-CRM can enhance customer loyalty*. Retrieved from Marketing Intelligence and Planning: http://dx.doi.org/10.1108/02634500310480121

Lemay, R. (2011). *Delays hit NAB's core banking project*. Retrieved from Delimiter: https://delimiter.com.au/2011/10/28/delays-hit-nabs-core-banking-project/

Locke, E. (2010). *Cognitive and motivational effects of participation: a mediator study' journal of organization behavior.* 15:49-63.

McLeod, S. (2008). *Likert Scale*. Retrieved from Simply psychology: http://www.simplypsychology.org/likert-scale.html

MICA. (2014). *5 Ways top project managers allocate their resources*. Retrieved from Resource Guru: http://blog.resourceguruapp.com/5-ways-top-project-managers-allocate-their-resources/

Morrison, M. (2014, July 7). *Kurt Lewin change theory three step model – unfreeze, change, freeze*. Retrieved from Rapidbi: https://rapidbi.com/kurt-lewin-three-step-change-theory/

Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative.* Nairobi: African Centre for Technology Studies.

Muller , R., & Turner, J. (2007). Matching the project manager's leadership. *International Journal of Project Management*, 25(1), 21-32.

Musau, H. (2015). *Factors Influencing Implementation of Core banking System projects by Commercial Banks in Kenya : Case of NIC Bank.* Nairobi: UON.

Nairaland. (2004). *Zenith Bank in 24 Month Mess*. Retrieved from T24: http://www.nairaland.com/104592/zenith-bank-mess-t24-software

Ng'ang'a, A. (2014). *Competitive Advantage And Information.* Nairobi: UON.

Ngui, H. (2015). *Factors Influencing implimentation of core banking system projects by commercial banks.* Nairobi: UON.

Ondari, P., & Gekara, J. (2013). Factors influencing successful completion of roads. *International Journal of Social Sciences and Entrepreneurship*, 1, (6),.

Onsongo, E. (2009). *Evaluating Information Technology Investments - A Survey of Kenyan Commercial Banks*. Retrieved from SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2940711

Palmer, E. (2016, February 5). *Five Factors That lead to Succeessful Projects*. Retrieved from The ultimate Reference for project managers: https://project-management.com/five-factors-that-lead-to-successful-projects/

Peppard, J. (2007). *Strategic Planning for Information Systems,.* Chichester: John Wiley & Sons.

Phabhu, K. (2013). *The Increased ROle of Project Manager in Banking*. Retrieved from Manageindia: http://www.pmi.org.in/manageindia/volume5/issue05/article.of.the.month.html

Philips, R. (2008). *Stakeholder Theory and organizational Ethics.* Berrett-Koehler. Retrieved from Stakeholders.

Pinches, B. (2014). *Stakeholder Theory, Project Management & Prison*. Retrieved from https://www.linkedin.com/pulse/20141030095517-13395326-stakeholder-theory-project-management-prison

PM Partners. (2012). *Improving Project Success Through Effective Stakeholder Management*. Retrieved from PM Parters: https://www.pm-partners.com.au/improving-project-success-through-effective-stakeholder-management

PMI. (2007). *Project Manager Competency Development Framework* . Retrieved from PMI: http://marketplace.pmi.org/Pages/ProductDetail.aspx?GMProduct=00101024401

PMI. (2017). *Who are project Manager*. Retrieved from PMI: https://www.pmi.org/about/learn-about-pmi/who-are-project-managers

Project management triangle. (2015, October Monday). Retrieved from Wikipedia: https://en.wikipedia.org/wiki/Project_management_triangle

Proschi. (2016, October 4). *Intergrating change management and project management*. Retrieved from Proschi: https://www.prosci.com/change-management/thought-leadership-library/integrating-change-management-and-project-management

PScope. (2017). *Project Scope*. Retrieved from Project Scope: http://www.projectscope.net/

Schade, A. (2015, April 5). *Getting it right before the first time*. Retrieved from Nielsen Norman Group: https://www.nngroup.com/articles/pilot-testing/

Scheid, J. (2011). *The Fundermental of Stakeholder Theory*. Retrieved from Bright Hub Project Management: http://www.brighthubpm.com/project-planning/96385-the-fundamentals-of-stakeholder-theory/

Science of Strategy Institute. (2016, October 05). *A General Theory of Success*. Retrieved from Science of strategy institute: http://scienceofstrategy.org/main/content/general-theory-success

Setter, M. (2013). *User Accepatance testing*. Retrieved from Usersnap: http://usersnap.com/blog/user-acceptance-testing-right/

Shaughnessy, J., Ciancetta, M., & Canada , D. (2003). *Middle school students'thinking about variability in repeated trials: A cross -task comparison. In N. Pateman, B.* Honolulu: Univeristy of of Hawaii.

Standish group. (2014). *Chaos Report*. Retrieved from Standish Group: https://www.projectsmart.co.uk/white-papers/chaos-report.pdf

Studio, V. (2016). *Capacity Planning*. Retrieved from Visual Studio: https://www.visualstudio.com/en-us/docs/work/scale/capacity-planning

Survey Monkey. (2016, 11 10). *Survey Monkey*. Retrieved from Sample Size Calculator:
https://www.surveymonkey.com/mp/sample-size-calculator/

Technopedia. (2017). *User acceptance testing*. Retrieved from Technopedia:
https://www.techopedia.com/definition/3887/user-acceptance-testing-uat

Westland, J. (2016, 10 4). *5 Goals Every Project Manager Should Aspire to Achieve*. Retrieved from CIO:
http://www.cio.com/article/2418747/project-management/5-goals-every-project-manager-should-aspire-to-achieve.html

Wikipedia. (2016, 10 11). *Cluster sampling*. Retrieved from Wikipedia:
https://en.wikipedia.org/wiki/Cluster_sampling#Two-stage_cluster_sampling

Wyman, O. (2014). *Banks Need to Optimise their Resources*. Retrieved from Morgan Stanley:
http://www.morganstanley.com/ideas/banks-need-to-optimize-their-resources