# INFLUENCE OF PROJECT MANAGEMENT LEADERSHIP ON PERFORMANCE OF INFORMATION TECHNOLOGY PROJECTS: A CASE OF FINTECH KENYA

BY

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A Research Project Report Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of Master of Arts in Project Planning and Management of the University of Nairobi

## DECLARATION

I hereby declare that this research project report is my own original work and to the best of my knowledge, the work has not been previously submitted for the award of any other degree of the University.

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

## **DEDICATION**

I dedicate this work to my parents, most especially my dad, Joseph Kiioh who believed in me and sacrificed many of life's necessities, investing in my education to ensure that I had the opportunity and foundation for continuing education, and my late mum, Keziah Andesia who is my pillar of strength. My research effort is further dedicate to my lovely daughter Kay, and I say a big thank you for your understanding whilst I denied you the attention needed, pursuing this degree. I hope this work will provide encouragement to you to aim for the stars in pursuit of your dreams.

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## LIST OF ABBREVIATIONS AND ACCRONYMS

- ATM Automated Teller Machine
- **IT** Information Technology
- IS Information Systems
- KPMG Klynveld Peat Marwick Goerdeler (accounting firm).
- MA (PPM) Masters of Arts in Project Planning and Management
- **PML** Project Management Leadership
- PM Project Manager
- **SD** Software Development
- **UON** University of Nairobi

#### ABSTRACT

Many projects continue to fail despite the huge investment and use of established project methods and techniques, as the leadership competency required for successful project performance have been found lacking. Previous research has stopped short of identifying leadership as a factor that influences project performance. A project's success or failure is in part, contingent on effectively managing the constraints of scope, time, costs, and quality expectations. In order to achieve this, it is essential that the project manager possess and display appropriate project management leadership. Empirical literature indicates no evidence of research on leadership aspects that have established it as a factor influencing the performance of Information Technology projects. The aim of this study was to add to the existing body of project management leadership research by examining the influence of leadership aspects on performance of Information Technology projects. The study identified four aspects of leadership which included, skills, experience, control and style and investigated their influence on performance of IT projects at Fintech Kenva. The study employed a descriptive survey design and adopted a combination of both quantitative and qualitative methods. The targeted population comprised 100 full time employees of Fintech Kenya that included senior managers, project managers, project team members and consultants. The sample size was 80 drawn from the targeted population and this was in accordance with the Krejcie and Morgan formula. Data was collected by use of questionnaires, and a pilot study was conducted prior to the main research to pre-test and try out research protocols, data collection instruments, sample strategies, and other research techniques. Both content and construct validation were used to tests the validity of the instrument while Cronbach's coefficient was used to assess the reliability of the instruments. Data was collected and analyzed through descriptive analysis and content analysis. The collected data was coded, categorized and presented in form of tables and frequencies. From the findings, 68.11% of the respondents indicated that leadership skills influenced performance of IT projects to a very great extent; 57.97% of the respondents indicated that leadership experience influenced performance of IT projects to a very great extent; 66.66% of the respondents recommended changes to the leadership control (processes and procedures) to positively influence performance of IT projects. While 75% of the respondents indicated that leadership style influenced performance of IT projects at a very great extent. The study concluded that there was a significant relationship between project management leadership aspects and performance of IT projects; project management leadership style had the greatest influence on performance of IT projects. The study recommended that: effective leadership skills to be acquired by all project staff; emphasis be given to the experience of project staff to ensure projects are effectively executed in order to fully meet set objectives; introduction of effective controls including processes and procedures and finally, the study recommended that performance of IT projects should be evaluated from the perspective of leaders and team members using their style to demonstrate concern, care and respect to other employees, in order to increase the employees' interest in their work, thereby affecting their job satisfaction positively, enabling them put up better performance.

## CHAPTER ONE INTRODUCTION

#### **1.1 Background of the study**

Globally, Information technology management is a strategic component of any business organization. Over the past decade, organizations have begun to realize the increasing importance and the potential of exploiting Information Technology to gain competitive advantage in their particular realm. When the global economy experienced the largest economic meltdown in 2008 since the Great Depression (Hilsenrath & Paletta, 2008; Claessens et. al.2010: Shachmurove, 2011), this event forced organizations to re-evaluate their current positions. Organizations are now pursuing increased productivity while, at the same time, decrease costs. They have pushed for the implementation of robust IT solutions not only to facilitate and augment crucial decision making processes, but to improve organizational efficiency and effectiveness as well. In Africa, most society's todays are being transformed by continuously evolving technologies that are changing the way we do things at the most fundamental levels. At a macro level, IT is one of the driving forces behind globalization of world economies and at an enterprise level, it is playing a crucial role in re-engineering and restructuring of business processes in response to increased competition. On an individual level, every aspect of our daily lives is subject to technological innovations. We have become dependent on the flexibility, access, and services that they provide us. Computers, fax machines, networks, cable television, fiber optics, and ATMs have all played a pivotal role in the way we communicate, work, play, and do business.

In Kenya today, as the information age progresses, we increasingly owe more of our economic and technological progress to the free flow of ideas and knowledge across the globe. Consequently, it becomes more important that we have access to superior and timely information. As a nation our advantage in the information age relies heavily on technological progress and scientific and technical information. From an organizational standpoint, the information age is in full swing and both public and private institutions are experiencing an increase in the use of a variety of information technologies (IT's). Realistically, it has become nearly impossible for an organization to operate without the use of one or more IT's. Since their inception, IT's have been held up by many people as the cure-all for a variety of organizational ills, and in many cases viewed as an antidote to poor performance-efficiency through the miracle of automation. However, there is still a widespread dissatisfaction about the performance of Information Technology projects. Wateridge (1995), quoted a survey which reported that twice as many Information Technology projects are considered to be `less successful' than are considered to be successful and lamented lack of research in examining the success factors. Much of the project management literature suggests performance of IT projects depends on a wide range of critical factors, which are difficult to quantify, standardize and present in varying degrees among projects (Yetton, Martin, Sharma, & Johnston, 2000; Tesch, Kloppenborg, & Frolick, 2007; Gowan & Mathieu, 2005). At the same time, there are also questions about whether leadership is critically important for achievement of high level of projects performance (Finkelstein & Hambrick, 1996; Katz & Kahn, 1978; Peterson, Smith, Martorana, & Owens 2003). This mixed research findings of the different scholars, suggest that there is need for more studies to establish the influence of leadership on performance of IT projects.

The study's focus was Fintech Kenya, a certified enterprise IT solutions and service provider. Being an organization in the realm of IT industry, project implementation often requires a variety of technologies, and so the project leaders, who are rarely the technical expert, must lead a team of experts in incorporating various technology domains such as hardware, operating systems, networks, databases, web services, information security, and the various business application modules and related business processes. The employees are expected to create and manage positive outcomes for their projects as they design and build a system that re-defines how business processes within a domain will supposedly function. However, in the recent past, implementation of the enterprise IT projects was a challenge due to the limited understanding by the project team members on how to utilize their aspects leadership to influence performance of their projects. The change management aspects of the implementation of this kind of projects was daunting and there was need for employees to utilize their various aspects of leadership to build collaboration and highly effective sub-teams within the organization. This study therefore identified four aspects of leadership which included skills, experience, control and styles and sought to establish how these aspects influenced the performance of IT projects at Fintech Kenya.

#### **1.2 Statement of the problem**

Several researchers such as Müller & Turner, (2007); Norrie & Walker, (2004); and Thamhain, (2004) observed that leadership had not been extensively studied as general management, thus the theory of leadership within the unique context of IT project management appeared to be at a rudimentary level of conceptual understanding. Given the dynamic nature of the IT projects and processes at Fintech Kenya, the organization's potential of becoming a leading software solutions and service provider in Africa was challenged. Implementation of the enterprise IT projects at Fintech Kenya was of major concern, given the significant amounts of money that had been invested on these projects. This was largely attributed to the limited understanding by the project leaders to utilize the aspects of leadership which include skills, experience, control and styles to influence the performance of their projects. Prior research found out that one of the most important issues within project management was leadership (Carson, Tesluk, & Marrone, 2007). However, at Fintech Kenya, research about the crucial leadership aspects in an IT context was still limited and this study sought to contribute to fill the gap, since leadership emerged to be a core theme in projects delivery, and it was imperative to improve the performance of the IT projects in order to achieve organizational effectiveness. The motivation of this study therefore was to identify and investigate four aspects of leadership that project leaders could utilize to influence the performance of IT projects at Fintech Kenya.

#### **1.3 Purpose of the study**

The purpose of this study was to investigate the influence of project management leadership on performance of Information Technology projects at Fintech Kenya.

#### **1.4 Objectives of the study**

In order to address the purposes of this study, the following research objectives were formulated;

- 1. To determine the influence of project management leadership skills on performance of IT projects at Fintech Kenya.
- To establish the influence of project management leadership experience on performance of IT projects at Fintech Kenya.
- To assess the influence of project management leadership control on performance of IT projects at Fintech Kenya.

 To determine the influence of project management leadership styles on performance of IT projects at Fintech Kenya.

## **1.5 Research questions**

The current study under investigation attempted to answer the following research question;

- 1. How does project management leadership skills influence the performance of IT projects at Fintech Kenya?
- 2. To what extent does project management leadership experience influence the performance of IT projects at Fintech Kenya?
- 3. Does project management leadership control influence the performance of IT projects at Fintech Kenya?
- 4. To what extent does project management leadership style influence the performance of IT projects at Fintech Kenya?

### **1.6 Significance of the study**

Due to the unique problems and challenges in managing and leading IT projects and their teams, this research aimed to establish ways in which project leaders could use the aspects of leadership to influence the performance of their projects. The unit of study was IT projects at Fintech Kenya, which had not previously been studied. This research study is significant in many aspects: To begin with, the study may serve as a source of policy guidance to the organization and provide necessary leadership incentive for increasing productivity. Secondly, the study may be used to enlighten the management at Fintech Kenya on how project teams can effectively use the aspect of leadership to influence the performance of their projects. In addition, the research may particularly challenge both the management and the project teams at Fintech Kenya on the importance attached to organizational effectiveness, and will enlighten the teams on their obligations to the leadership in the organization. Finally, the study serves as a partial fulfilment for the award of MA (PPM) and the work may be of immense benefits to researchers/practitioners and aid in future researcher on leadership in the performance of IT projects.

#### **1.7 Basic assumptions of the study**

In defining this study, the following assumptions were applied; Fintech Kenya's core business was IT projects, and the organization's main concern was achievement of shared goals. Secondly, since leadership is a human-based factor and not necessarily bound to a specific industry, the results of this study would be applicable to other organizations. Further, since the respondents were given a statement regarding confidentiality of the survey, the study assumed that respondents would answer the survey as honestly as possible because there was guaranteed anonymity. Lastly, being a mixed research, the results of this study would be a starting point for other studies.

#### **1.8 Limitations**

Some of the constraints encountered during the course of the research study were; the researcher encountered reluctance by respondents to fill questionnaires for fear that the information would be used against them. Also some respondents had a negative attitude and were unwilling to make the study a very viable one. However, the researcher obtained an introductory letter from the university that assured the respondents that their information would be used for academic purposes only. In addition, the researcher shared a confidentiality statement with the respondents. Finally, the study required a longer period of time to gather the necessary and quality data for effective work. However, the study was conducted within the stringent timelines as required by UON.

## **1.9 Delimitations**

The scope of study was exclusively restricted to Fintech Kenya and it extended to senior managers, project managers, project teams and consultants in the organization.

#### 1.10 Definition of significant terms used in the study

The significant terms used in the study included the following;

#### Control

Management function or process implemented in an organization aimed at helping in achieving defined goals within an established timetable. It is usually understood to have three components which include setting standards, measuring actual performance, and taking corrective action.

#### Experience

Knowledge and skill gained through time spent doing a job or activity or active direct participation in events or activities, leading to the accumulation of knowledge especially of practical matters.

## **Information Technology**

A range of rapidly evolving diverse set of digital technologies, software applications, tools and resources used to communicate and create, disseminate, store, and manage information.

### Leadership

Ability to guide others without force into a direction or decision that leaves them feeling empowered and accomplished. It is about being open, authentic, lifting others up and working towards a common mission.

## **Project Management**

The discipline of carefully projecting, planning, organizing, motivating, directing and controlling resources to achieve specific goals and meet specific success criteria.

## Skill

An ability and capacity acquired through deliberate, systematic, and sustained effort arising through talent, training or practice to smoothly and adaptively carryout complex activities or job functions involving ideas (cognitive skills), things (technical skills), and/or people (human skills).

### Style

Combination of characteristics expressed in a particular (often unique) and consistent manner or a particular procedure, manner or way by which something is done.

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### Performance

Actual output or results of an organization as measured against its intended outputs and it encompasses three specific areas of firm outcomes including financial performance, product market performance and shareholder return.

## 1.11 Organization of the study

The study was organized in five chapters of which Chapter One covered the introduction to the subject on the influence of project management leadership on performance of IT projects, with the relevance and justifications, the research questions, problem statement, objectives, limitations/delimitations and definition of significant terms. Chapter Two covered the Literature review which gave analysis of the existing literature on the subject of leadership on performance of IT projects, developed a theoretical and conceptual framework for the study, and finally identified the existing gap in the reviewed literature. Research methodology marked Chapter Three and it entailed the methods of data research, design, collection and analysis that were used to achieve the research objectives. Chapter Four presented and analyzed data. Lastly, Chapter Five presented the findings, conclusions and gave recommendations for future research.

## CHAPTER TWO LITERATURE REVIEW

### **2.1 Introduction**

Chapter Two presents a comprehensive literature review on leadership and performance of IT projects by previous researchers, with an intent of collecting enough evidence to validate a theory and apply the theory to the real study. The chapter begins with an overview of the performance of IT projects, giving a detailed review on how the various leadership aspects including skills, experience, control and styles influenced the performance of IT projects. Theoretical and conceptual frameworks, premises upon which the study was developed and built are presented, the research gaps from the empirical literature are identified and a summary of the chapter given.

### 2.2 Concept of performance of Information Technology projects

The term "Information Technology" (IT) is defined as a diverse set of technological tools and resources used to communicate and create, disseminate, store, and manage information (Blurton 1999:46). IT encompass a range of rapidly evolving technologies and they include telecommunication technologies (telephony, cable, satellite, TV and radio, computer-mediated conferencing, video conferencing) as well as digital technologies (computers, information networks (internet, World Wide Web, intranets and extranets) and software applications (Chisenga, 2006). With increased awareness of the potential for IT to facilitate re-engineering and restructuring of business processes in response to increased competition, there is a growing reliance on IT in all aspects of organizational work. IT solutions are deployed through implementation of IT projects which is critical component in the strategic or operating plans in many organizations today Carter (1988). However, there is a widespread dissatisfaction about the performance of these projects.

Extensive research has revealed that IT projects are continuing to fail at a disturbing rate nationally as well as internationally (Wateridge, 1995: Yeo, 2002, Baccarini et. al, 2004; Dekkers & Forselius, 2007). Globally, Information Technology projects are expensive, complex and often fail. In 2004, KPMG's international survey of 600 organizations reported that more than half had at least one project failure in the past year. In 2003, the reported failures were 57%

for at least one project (Ewusi-Mensah, MIT 2003). Applegate, et. al., (2007), estimate that the failure rate for IT development projects at 50%. The cost of failure is high, since many IT projects today have costs that exceed many millions of dollars. The Gartner Group reported in 2006 that there was \$3.7B spent worldwide on application development tools. This was up 5% from 2003. In the United States, De Marco (1982), reported that 15% of all software development never delivers anything, and overruns of 100-200% are common in software projects. Inordinate delays, excessive budget over-runs, post-implementation testing, user dissatisfaction, late deliveries, poor reliability, maintenance problems to mention but a few (Abdel-Hamid, Kapur, 1989; Tarek and Stuart, 1990). Similarly, the Standish Group begun to run a survey which was later known as the Chaos Chronicle, in order to gain a better understanding of the state of the IT projects in the region. The Chaos Chronicle in 2011, repeatedly reported about significant time and cost overruns, complemented by projects not fully meeting quality expectations of the project sponsors. The survey also indicated that the performance rate of successful, challenged and failed projects was 42%, 37% and 21% respectively (Curtis, 2012; Marnewick, 2012). According to Xia and Lee (2004), only 16.2% percent of all projects were ultimately considered successful by their executives, concerning IT projects in the United States in the 1990's. In the global audit, sub-Saharan Africa is not faring much better either, as the report suggested that a number of regions are not performing well enough to boost connectivity. Latin America, the Caribbean and sub-Saharan Africa still suffer from a serious lag despite infrastructure improvements, an expansion of coverage and a push into e-government. In Africa 16% of people are using the Internet and there is a broad gap in terms of fixed-broadband penetration rates, with 6.1% in developing countries (and less than 1% in Sub-Saharan Africa), compared with 27.2% in developed countries. Kenya is inhabited by over 43million residents and is one of Africa's fastest growing countries in terms of IT infrastructure. Together with South Africa, Nigeria and Egypt, Kenya plays a critical role in driving innovation across the continent.

IT projects have consequently gained an infamous reputation within the project management domain (Konczynski, 2011; Marnewick & Labuschange, 2012: Savolainen et.al, 2012). KPMG International, for example, noted that a quarter of the benefits of IT projects are being lost by organizations across the globe because of failures (Hollaway, 2005). These failures and reasons

are manifold and have been going on for decades. The primary ones, however, are not technological, but rather managerial issues Scott and Vessey (2002). Some of the reasons cited by the various researchers are: poor planning, weak project management, inadequate resources allocated to the project, and people problems (Mochal, 2005). We can therefore deduce that a common thread over time appears to be the human aspect of project management and implementation, rather than technology. Substantial research has proved the importance of leadership for team effectiveness, and hence, for project performance, (Durham, Chambers, MacDonald, Power, Major, 2003). Carter (1988) and Cleland (1995), have also stressed the importance of leadership as a critical factor for achieving projects performance. A project's success or failure is the result of the leadership of the project's stakeholders (Cleland, 1995), and lack of appropriate leadership or ineffective leadership is among the top hindering factors for IT project effectiveness (Sumner, 2000). Yulk (1990), emphasizes the importance of leadership in Information Systems domain and acknowledges that the most obvious cause of the increased cost is the lack of effective leadership in Software Development projects. Therefore, bridging the gap between Software and product development requires a holistic project management leadership within the software design teams. However, Klenke (1996), notes that research in IS domain has paid little attention to the influence of leadership processes in the design and implementation of IT projects. At the same time, leadership studies have rarely incorporated performance of IT projects as either independent or dependent variables into the design of empirical research although they represent major organizational interventions. This clearly shows that despite the much research on leadership, there is still paucity of empirical studies on the influence of leadership on performance of IT projects. Thus, leadership aspects like skills, experience, control and style emerging as central themes that the study seeks to coordinate and integrate to establish their influence on performance of IT projects at Fintech Kenya.

#### 2.3 Leadership skills and performance of Information Technology projects

Skill as defined by Zenger & Folkman (2002), is the combination of knowledge, abilities, traits, and attributes that collectively enable someone to perform a given job. In this study, leadership skill is defined as the ability to use one's knowledge and competencies to accomplish a set of goals or objectives, and these skills can be acquired through talent, training, and practice. Skill is developed following a cluster approach, such that basic skills are learned first and then combined

to form higher-order skills (Lord & Hall, 2005). For example, a leader may develop selfregulation, self-monitoring, motivation, and empathy as individual skills. Skills approach suggests that leadership competencies can be developed and are not necessarily learnt in the same way. Skills are usually developed in an individual partly by the introduction of theory, but mainly by practice, that is learning by doing. This is called 'experiential learning'. Kolb's experiential learning cycle has been used to assess how one learns a skill by doing it, reflecting upon it and learning from it, then planning how you will do it again and then repeating it (doing it again). "Practice of a key skill without feedback can be almost totally ineffective" (Gibbs 1994). Researchers have studied leadership skills directly or indirectly for a number of years (Bass, 1990). However, the impetus for research on skills was a classic article published by Robert Katz in the Harvard Business Review in 1955, titled "Skills of an Effective Administrator." Katz's article appeared at a time when researchers were trying to identify a definitive set of leadership traits and it was an attempt to transcend the trait problem by addressing leadership as a set of developable skills. More recently, a revitalized interest in the skills approach has emerged. Beginning in the early 1990s, a multitude of studies have been published that contend that a leader's effectiveness depends on the leader's ability to solve complex organizational problems. Since most organizations in the world today have a huge demand for a more skilled workforce, one solution might be to employ a virtuous spiral of skill upgrading and technology transfer because countries with very low skill levels are often unable to attract initial investment and may find it hard to adapt technologies that have been developed for high skill "leader" countries.

Over the years, the use of skills in establishing the influence of leadership on performance of IT projects has become somewhat controversial, (Hollenbeck, McCall, & Silzer, 2006). For instance, the "competency movement," as Zenger and Folkman (2002) refer to it, has weaknesses, including, the failure to relate "lists" of competencies to leadership effectiveness in a specific situation and the mistaken assumption that all competencies are equal. Nevertheless, the competencies perspective is generally seen as one valid piece of leadership development. In their research, Zenger and Folkman (2002) found that sixteen groups of competencies were seen as associated with performance of IT projects. These included character (displaying integrity and honesty), technical and professional expertise, problem-solving and analytical ability,

innovation, self-development, a focus on results, setting "stretch" goals, taking personal responsibility for outcomes, effective communication, inspiring and motivating others, trust and interpersonal effectiveness, concern for others' development, collaboration and organizational change skills, ability to champion change, and ability to relate well to outside stakeholders. The researchers also found out that leaders with strengths in multiple competencies were most effective, and, significantly, that particular combinations of competencies seemed to be more powerful predictors of effectiveness. For example, being able to give feedback did not always correlate with effectiveness, whereas giving feedback while building trust did (Zenger & Folkman, 2002). They also found out that listening skills alone were not particularly valuable, but listening skills plus other interpersonal skills like being considerate and caring did make a difference.

Current thinking uses a "strengths perspective," in which PMs' 'work to build upon their strengths and find situations that optimize (Buckingham & Clifton, 2001). Zenger and Folkman (2002), agree that magnifying strengths is the best overall approach, but add that "fatal flaws" must be fixed. For example, they found that an inability to learn from mistakes and a lack of core interpersonal skills were fatal flaws. Yukl (2006), notes that the different competences mixes are needed at different managerial levels, with conceptual skills more important at higher levels and technical skills more important at lower levels. Some of each competences will be needed at every level, and interpersonal skills are equally important at every level of management. In summary, leadership skills taken in the context of Information Technology projects presents special challenges. The role of the project manager is more challenging and vital than in other types of projects where it may be less critical, (Cleland, 1995).

#### 2.4 Leadership Experience and performance of Information Technology projects

In many cultures, the myth is that people get wiser due to more exposure and experience gained over a period of time. For example in African culture, experience is considered as a priority for leadership positions in different organizations set ups (Ahiazu, 1989). Trompenaars, (1993) viewed that leadership and performance of individuals differ from culture to culture and country to country depending upon life patterns, beliefs and value system or otherwise on the knowledge and experience of the people. Kaifi, Bahaudin and Mujtaba, (2010) in their study on Afghans

and Americans, concluded that experience indeed influences performance of individuals. In the opinion of Cash and Fox (1992), "successful projects almost always have a "champion" who either by past experience or by persistent determination provides needed leadership to members of the project team to see that results are achieved". Most employees would unquestionably subscribe to the statement that leadership experience is a most desirable, if not an indispensable qualification for effective organizational performance. Therefore, we would expect an employees to serve in a lower supervisory job first before moving up to higher managerial positions. Most organizations, especially IT organizations recommend or prescribe a minimum of time which a PM must serve in a particular position before he can be considered for promotion. In fact, most advertisements and recruiters for top management positions stress previous experience in the similar jobs as a prerequisite.

This section's focus is on the influence of project management leadership experience in the performance of IT projects, and experience is examined through the quantitative measure of time in years. Several theories lend understanding to the relationship between leadership experience and performance of projects. Human Capital Theory suggests that leaders make investments of experience in themselves, which enhance their ability to influence teams and eventually organizational performance (Ehrenberg & Smith, 2000). According to Easton and Rosenzweig (2012), a PMs' experience can influence the performance of the people whom they supervise, thus indirectly affecting projects performance. IT PMs' have more responsibilities as they must oversee a project's progress from initiation, implementation, completion and through to support. They step in and intervene in the execution of the work, redirect, or serve as mediators for conflicts among employees involved in related tasks within a given project McManus, (1997); Meredith and Mantel, (2011). As a result, a PMs' experience over the years would naturally be expected to reflect in the performance of the teams that they supervise. Experience provides employees' with accumulation of both technical and workforce knowledge. The extensive experience of the "technical" requirements is crucial in addressing a specific type of project while the "workforce" experience is required to supervise projects executed by teams. Workforce experience may indicate, for example, the areas in which more supervision is needed or the interests of employees performing interrelated tasks might clash, (Chinowsky et al. 2008; Doloi, 2009; Schmidt et al. 2009). This experience provides managers with a deeper understanding of employees who have dealt with the same modules before and which tasks they have executed most competently for each module. Such experience about where expertise resides is important for both planning projects (Faraj and Sproull 2000; Liang et al. 1995), and supervising their execution (Schmidt et al. 2009). A wider extent of experience equates to familiarity with a broader set of employees, their skills, and the social dynamics. This additional information becomes relevant and potentially crucial when PM's have to supervise employees in the execution of their projects, (ElArmani et al. 2006; Santamaría-Sánchez et al. 2010). Managers with expansive experience are better placed to design project teams that incorporate a mix of employees who are more capable of effectively executing projects. Furthermore, should a conflict arise between employees, the project managers' past experience in both employees and the nuances of the interactions may help in resolving the conflicts within project teams.

## 2.5 Leadership Control and performance of Information Technology projects

Tannenbaum (1968), defines the concept of control as a "process in which a person or group or organization determines or intentionally affects what another person, group or organization will do". Further research by Mockler (1970), considers control as "a systematic effort made by organization's management to compare performance to predetermined standards and to undertake, if necessary, corrective actions to see that human and other corporate resources are being used in the most effective and efficient way possible in achieving an organization's objectives." Additionally, according to Morris et al, (1988), the concept of control is viewed as "the minimization of idiosyncratic behavior and the promotion of conformity in accordance with explicit plans". Slightly following the same idea, Burlaud and Simon (1997), define control as "a system of adjusting behaviors" as well as "a language with a strong influence on those who use it, because a language represents in itself a vision of the world and those who speak it are forced to adopt it". Through its characteristics, control may be seen as a way of unifying concerns and behaviors, fact which has greater importance when dealing with project teams, more varied and geographically spread out. Finally, Anthony (1995), defines control as "a process by which managers ensure that resources are produced and used effectively and efficiently for achieving the goals of the organization". All the above considerations lead us to a certain substantial viewpoint that control should not be considered as a purpose in itself, but as a way of achieving

a goal, which is the improved functioning of the system within the organization, including its formation in order to face the changes occurring outward (Dalotă, 2003).

In IT projects, a PM's leadership control ensures the coordination and effective functioning of all activities, so that the formulated objectives are implemented and followed according to plan. All management functions may be carried out, in the sense that a project manager may plan, organize and give guidance, but he/she cannot ensure that the plans are carried out without exercising control. Therefore, leadership control is critically important to ensure satisfactory progress in attaining the organization's objectives and to make sure that the resources are used effectively (Brevis et al. 2002). Leadership control is important in IT projects because even the best plans may go wrong and thus control is exercised to ensure that, at all levels of the project, service delivery takes place according to plan and that the organization's resources are distributed in a way that the projects' goals are reached. Finally, leadership control in IT projects results in better quality management and enables organizations to cope with change and uncertainty (Brevis et al. 2002), thus ensuring effective project performance.

## 2.6 Leadership Style and performance of Information Technology projects

Fiedler (1969), postulates that leadership style refers to a kind of relationship whereby someone uses his ways and methods to make many people work together for a common task. In modern leadership theories, five leadership styles have been presented, including charismatic leadership, transactional leadership, transformational leadership, visionary leadership, and culture-based leadership (Bass, 1990; Sashkin, 1996; Sergiovanni, 1987; Yukl, 1994). Tannenbanum and Schmidt (1958), also identify four different types of leaders which have been most widely accepted and used. These leadership styles, which center around Mc Gregor's Theory 'X and Y' assumptions, are democratic, autocratic, dictatorial, and laissez faire leadership styles. Several reasons indicate that there should be a relationship between leadership style and performance of IT projects. To begin with, today's intensive and dynamic markets feature innovation-based competition, price/performance rivalry, decreasing returns, and the creative destruction of existing competencies (Santora et al., 1999; Venkataraman, 1997). Studies have suggested that effective leadership behaviours can facilitate the improvement of performance when organizations face these new challenges (McGrath and MacMillan, 2000; Teece, Pisano and

Shuen, 1997). For instance, transactional leadership helps organizations achieve their current objectives more efficiently by linking job performance to valued rewards and by ensuring that employees have the resources needed to get the job done (Zhu, Chew and Spengler, 2005). Visionary leaders create a strategic vision of some future state, communicate that vision through framing and use of metaphor, model the vision by acting consistently, and build commitment towards the vision (Avolio, 1999; McShane and Von Glinow, 2000). Some scholars like Zhu et al. (2005), suggest that visionary leadership will result in high levels of cohesion, commitment, trust, motivation, and hence performance in the new organizational environments. Prior research has shown that leadership style has a significant relation with performance of IT projects, and different leadership styles may have a positive correlation or negative correlation with the organizational performance, depending on the variables used (Fu-Jin et al., 2010). McGrath and MacMillan (2000), report that there is significant relationship between leadership styles and projects' performance. Effective leadership style is seen as a potent source of management development and sustained competitive advantage. Generally, leadership performance is identical with projects performance, and IT projects attributes their successes to leadership efficiency in the sense that a project managers leadership style has a considerable effect on the organizational performance (Sun, 2002). FuJin et al. (2010), opine that when PMs' use their leadership style to demonstrate concern, care and respect for employees, it would increase interest of employees in their work and enable them to put up better performance, thereby affecting their job satisfaction positively. Howell and Frost (1989), cited in Fu-Jin et al (2010), also confirm that there is a positive relation between leadership style and performance.

Mehra, Smith, Dixon and Robertson (2006), argue that when some organizations seek efficient ways to enable them outperform others, a longstanding approach is to focus on leaderships' influence. Team leaders' or PMs' are believed to play a pivotal role in shaping collective norms, helping teams cope with their environments, and coordinating collective action. This leader-centered perspective has provided valuable insights into the relationship between leadership and projects' performance (Guzzo &Dickson, 1996). Some studies have explored the strategic role of leadership to investigate how to employ leadership paradigms and use leadership behaviour to improve performance, (Judge, Bono, Ilies, and Gerhardt, 2002; Judge and Piccolo, 2004; Keller, 2006; McGrath and MacMillan, 2000; Meyer and Heppard, 2000; Purcell, Kinnie, Hutchinson

and Dickson, 2004; Yukl, 2002). This is because intangible aspects of leadership are seen increasingly as key sources of strength in those firms that can combine people, processes and performance (Purcell et al., 2004).

#### **2.7 Theoretical Framework**

A review of the leadership literature revealed an evolving series of 'schools of thought' from "Great Man" and "Trait" theories to "Transformational" leadership. Whilst early theories tended to focus upon the characteristics and behaviours of successful leaders, later theories begun to consider the role of followers and the contextual nature of leadership as was discussed;

The Trait Approach arose from the "Great Man" theory as a way of identifying the key characteristics of successful leaders. It was believed that through this approach critical leadership traits could be isolated and that people with such traits could then be recruited, selected, and installed into leadership positions. This approach was common in the military and is still used as a set of criteria to select candidates for commissions. The problem with the trait approach lies in the fact that almost as many traits as studies undertaken were identified. After several years of such research, it became apparent that no consistent traits could be identified. Although some traits were found in a considerable number of studies, the results were generally inconclusive. Some leaders might have possessed certain traits but the absence of them did not necessarily mean that the person was not a leader. Although there was little consistency in the results of the various trait studies, however, some traits did appear more frequently than others, including: technical skill, friendliness, task motivation, application to task, group task supportiveness, social skill, emotional control, administrative skill, general charisma, and intelligence. Of these, the most widely explored has tended to be "charisma".

The results of the trait studies were inconclusive. Traits, amongst other things, were hard to measure. How, for example, do we measure traits such as honesty, integrity, loyalty, or diligence? Another approach in the study of leadership had to be found. After the publication of the late Douglas McGregor's classic book *The Human Side of Enterprise* (1960), attention shifted to 'behavioural theories'. McGregor was a teacher, researcher, and consultant whose work was considered to be "on the cutting edge" of managing people. He influenced all the behavioural theories, which emphasize focusing on human relationships, along with output and performance.

The leadership strategy of effectively-used participative management proposed in Douglas McGregor's book has had a tremendous impact on managers. The most publicized concept is McGregor's thesis that leadership strategies are influenced by a leader's assumptions about human nature. As a result of his experience as a consultant, McGregor came up with two contrasting sets of assumptions made by managers, and was summarized that a leader holding Theory X assumptions would prefer an autocratic style, whereas one holding Theory Y assumptions would prefer a more participative style. The Managerial Grid developed by Robert Blake and Jane Mouton focuses on task (production) and employee (people) orientations of managers, as well as combinations of concerns between the two extremes. A grid with concern for production on the horizontal axis and concern for people on the vertical axis and plots five basic leadership styles. The first number refers to a leader's production or task orientation; the second, to people or employee orientation. Blake and Mouton propose that "Team Management" is a high concern for both employees and production and is the most effective type of leadership behaviour.

Whilst behavioural theories may help managers develop particular leadership behaviours, they give little guidance as to what constitutes effective leadership in different situations. Indeed, most researchers today conclude that no one leadership style is right for every manager under all circumstances. Instead, contingency-situational theories were developed to indicate that the style to be used is contingent upon such factors as the situation, the people, the task, the organization, and other environmental variables. The major theories contributing towards this school of thought are described. Fiedler's contingency theory postulates that there is no single best way for managers to lead. Situations will create different leadership style requirements for a manager. The solution to a managerial situation is contingent on the factors that impinge on the situation. For example, in a highly routine (mechanistic) environment where repetitive tasks are the norm, a relatively directive leadership style may result in the best performance, however, in a dynamic environment a more flexible, participative style may be required. The Hersey-Blanchard Leadership Model also takes a situational perspective of leadership. This model posits that the developmental levels of a leader's subordinates play the greatest role in determining which leadership styles (leader behaviours) are most appropriate. Their theory is based on the amount of direction (task behaviour) and socio-emotional support (relationship behaviour) a leader must

provide given the situation and the "level of maturity" of the followers. One criticism of early work on leadership styles is that they looked at styles too much in black and white terms. The autocratic and democratic styles or task-oriented and relationship-oriented styles which they described are extremes, whereas in practice the behaviour of many, perhaps most, leaders in business will be somewhere between the two. Contingency theorists Tannenbaum and Schmidt suggested the idea that leadership behaviour varies along a continuum and that as one moves away from the autocratic extreme the amount of subordinate participation and involvement in decision taking increases. They also suggested that the kind of leadership represented by the democratic extreme of the continuum will be rarely encountered in formal organizations. John Adair has a long pedigree in the world of leadership and came up with the Adair model which postulates that the action-centered leader gets the job done through the work team and relationships with fellow managers and staff. According to Adair's explanation an action-centered leader must direct the job to be done (task structuring), support and review the individual people doing it and co-ordinate and foster the work team as a whole.

The models discussed so far have dwelt on the leader as some frontal figure who stands out from the rest as being somehow different and "leading" the rest of the people. The discussion now moves to recognition of the importance of the leaders' relationship with his/her followers and an interdependency of roles. No longer the hero or solo leader but the team leader. Not the leader always out in front but the leader who has the capacity to follow. Not the master, but the servant. The notion of "Servant Leadership" emphasizes the leaders' duty to serve his/her followers. Leadership thus arises out of a desire to serve rather than a desire to lead. Burns draws upon the humanistic psychology movement in his writing upon 'transforming leadership' by proposing that the transforming leader shapes, alters, and elevates the motives, values and goals of followers achieving significant change in the process. He proposed that there is a special power entailed in transforming leadership with leaders "armed with principles that may ultimately transform both leaders and followers into persons who jointly adhere to modal values and endvalues. Burns sees the power of transforming leadership as more noble and different from charismatic leadership, which he terms 'heroic' leadership, and executive or business leadership. Despite this it is surprising that most of the application of Burns' work has been in these two types of leadership. Bernard Bass developed Burns' concept of transforming leadership where

the leader transforms followers. The direction of influence to Bass is thus one-way, unlike Burns' who sees it as potentially a two-way process. Bass, however, deals with the transformational style of executive leadership that incorporates social change, a facet missing from Burns' work. Transactional leadership has been the traditional model of leadership with its roots from an organizational or business perspective in the 'bottom line'. Transactional leadership has remained the organizational model for many people and organizations who have not moved into or encouraged the transformational role needed to meet the challenges of our changing times.

## 2. 8 Conceptual Framework

The study was conceptualized upon the premise that there is a direct link between the independent variable (aspects of leadership) and the dependent variable (performance of Information Technology projects) as described in Figure 1.

## **Independent Variables**

## **Dependent Variable**

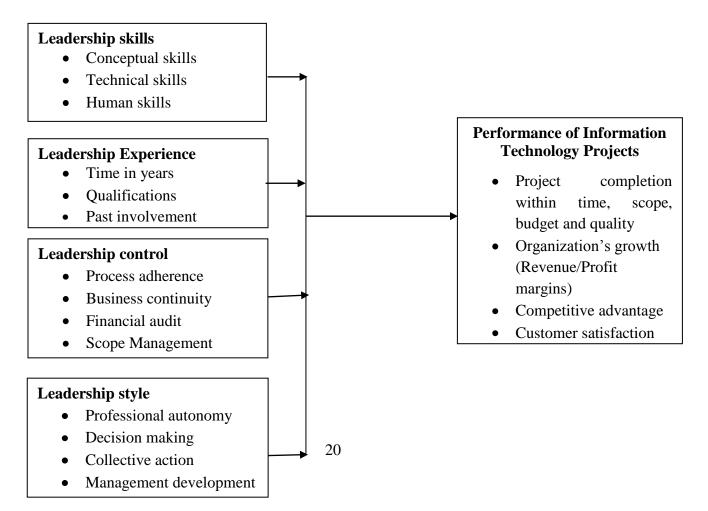


Figure 1: Conceptual Framework

## 2. 9 Research gaps

The following research gaps were identified;

| Specific<br>Variable                            | Author                                  | Findings   | Actual Gap   |
|---|---|--|--|
| Leadership                                      | Yulk (1994)                             | Most definitions assumed that<br>leadership involved a social<br>influence process whereby<br>intentional influence was exerted<br>by one person over other people<br>to structure the activities and<br>relationships in an organization. | This literature did not give<br>detailed information on the<br>different definitions of<br>leadership.   |
|   | Yukl's<br>(1989)                        | Leadership was considered to<br>influence task objectives and<br>strategies, commitment and<br>compliance in task behavior to<br>achieve objectives, group<br>maintenance and identification,<br>and culture of an organization.           | The focus on the concept<br>of leadership was largely<br>centered on influence.  |
|   | Robbins<br>(1998)                       | Leadership was considered to be<br>inspiring people with a<br>compelling vision which<br>encouraged them to come<br>together in a common cause and<br>kept them together to accomplish<br>common goals.                                    | Teams were never aware<br>of the common goals and<br>it was the leaders' role to<br>draw their attention,<br>convince and clarify the<br>common goals.                                   |
| Leadership and<br>Performance of<br>IT projects | Klenke<br>(1996)                        | Paucity of empirical studies on<br>the influence of leadership on the<br>performance of Information<br>Technology projects   | Research on Information<br>systems paid little<br>attention to the influence<br>of leadership processes in<br>the design and<br>implementation of<br>Information Technology<br>projects. |
|   | Carter<br>(1988) &<br>Cleland<br>(1995) | Stressed the importance of leadership as a critical factor for achieving projects performance.   | Leadership was seen as a<br>potent source of<br>performance management<br>and sustained competitive<br>advantage for performance<br>improvement.   |

|  | Sumner (2000)                | Lack of appropriate leadership or  | A project's success or failure was considered the   |
|--|------------------------------|--|---|
|  | (2000)                       | ineffective leadership was among<br>the top hindering factors for IT             | result of the leadership of   |
|  |                              | project effectiveness.   | the project's stakeholders.   |
| Leadership<br>skills and<br>performance of | Zenger<br>&Folkman<br>(2002) | Competency movement found<br>that sixteen groups of<br>competencies were seen as | Failure to relate "lists" of<br>competencies to leadership<br>effectiveness in a specific |
| IT projects                                |                              | associated with performance of IT projects.                                      | situation and the mistaken assumption that all  |
|  | D 1' 1                       |  | competencies were equal.  |
|  | Buckingham                   | Current thinking uses a "strengths   | Failed to recognize that  |
|  | & Clifton (2001)             | perspective," in which PMs'<br>'work to build upon their                         | fatal flaws must be fixed.  |
|  |                              | strengths and find situations that optimize.                                     |   |
|  | Yukl (2006)                  | Noted that different competences<br>mixes are needed at different                | Apart from interpersonal skills, the study did not  |
|  |                              | managerial levels, with conceptual skills more important                         | recognize other skills<br>needed at every level of  |
|  |                              | at higher levels and technical<br>skills more important at lower                 | management.   |
|  |                              | levels.  |   |
| Leadership                                 | Easton &                     | A project managers' experience   | A project managers'   |
| experience and                             | Rosenzweig                   | could influence the performance  | experience over the years   |
| performance of IT projects                 | (2012)                       | of the people whom they supervised, thus indirectly                              | was naturally expected to reflect in the performance.                                     |
|  |                              | affecting projects performance   |   |
|  | (Ehrenberg<br>& Smith,       | Human Capital Theory suggested<br>that leaders made investments of               | A PMs' experience over<br>the years was naturally be                                      |
|  | 2000).                       | experience in themselves, which<br>enhanced their ability to                     | expected to reflect in the performance of the teams                                       |
|  |                              | influence teams and eventually projects performance.                             | that they supervise.  |
| Leadership                                 | DEX (1998)                   | The concept of control   | Control was considered as   |
| control and                                |                              | represented permanent or   | a purpose in itself, but not  |
| performance of                             |                              | periodic analysis of an activity   | as a way of achieving a   |
| IT projects                                |                              | meant to provide improvement measures.   | goal.   |
| l  | <u> </u>                     |  | l   |

|                      | Mockler<br>(1970)<br>Burlaud &<br>Simon<br>(1997)          | Control was considered a<br>systematic effort made by<br>organization's management to<br>compare performance to<br>predetermined standards and to<br>undertake, if necessary,<br>corrective actions to see that<br>human and other corporate<br>resources are being used in the<br>most effective and efficient way.<br>Define control as "a system of<br>adjusting behaviors" as well as "a<br>language with a strong influence<br>on those who use it, because a<br>language represents in itself a<br>vision of the world and those who<br>speak it are forced to adopt it". | Assumed that all<br>management functions<br>may be carried out, the<br>manager would plan,<br>organize and give<br>guidance, but he/she could<br>not ensure that the plans<br>are carried out without<br>exercising control.<br>Only viewed control as a<br>way of unifying concerns<br>and behaviors. |
|----------------------|--|---|--|
| Leadership<br>styles | McGrath &<br>MacMillan,<br>(2000)                          | Suggested that effective<br>leadership behaviours could<br>facilitate the improvement of<br>performance when organizations<br>faced new challenges  | PMs' were believed to<br>play a pivotal role in<br>shaping collective norms,<br>helping teams cope with<br>their environments, and<br>coordinating collective<br>action  |
|                      | Zhu, Chew<br>&Spengler,<br>(2005).                         | Transactional leadership helped<br>organizations achieve their<br>current objectives more<br>efficiently by linking job<br>performance to valued rewards<br>and by ensured that employees<br>had the resources needed to get<br>the job done  | Linked performance to<br>reward only   |
|                      | (Avolio,<br>(1999);<br>McShane &<br>Von Glinow,<br>(2000). | Visionary leaders created a<br>strategic vision of some future<br>state, communicated that vision<br>through framing and use of<br>metaphor, model the vision by<br>acting consistently, and built<br>commitment towards the vision   | Best applicable in new organizational environments.  |

#### 2.10 Summary of the chapter

From the empirical literature, most research showed that leadership had a significant influence on performance of IT projects, and different project management leadership skills, experience, control and styles had a positive correlation or negative correlation with the performance, depending on the variables used by researchers (Fu-Jin et al., 2010). McGrath and MacMillan (2000), reported that there was significant relationship between leadership aspects and performance, and effective leadership was seen as a potent source of management development and sustained competitive advantage. Project management leadership helped organization achieve their current objectives more efficiently by linking job performance to valued rewards and ensured that employees had the resources needed to get the job done. According to Sun, (2002), IT projects attributed their successes to leadership efficiency and as opined by FuJin et al. (2010), when PMs' used their leadership skills, experience, control and style to demonstrate concern, care and respect for employees, it increase interest of employees in their work and enabled them to put up better performance.

# CHAPTER THREE METHODOLOGY

## **3.1 Introduction**

This chapter comprises of the research design, target population, sampling procedures, data collection methods, validity and reliability, methods of data analysis, operational definitions and ethical issues that were considered during the study.

## 3.2 Research design

This study adopted descriptive survey research design in an attempt to understand the influence of leadership aspects on performance of IT projects. Kothari (2006), describes descriptive research as including survey and facts finding enquiries, adding that the major purpose of descriptive research is description of affairs as it exists at present. Additionally, a survey design approach was considered because it provided an opportunity for a large sample size and gained insights on the participant's views and attitudes on the study, (Creswell, 2003).

## **3.3 Target Population**

The study's target population was 100 full time employees of Fintech Kenya who consisted of senior managers, project managers, project team members and consultants as indicated in company's HRM manual, 2015. The targeted projects were those implemented within the year 2015. Expected to participate in the study, 5% of the respondents were senior managers, 20% were project managers, 30% were project teams, and 45% were consultants. The percentages are based on the total number of employees in the organization as illustrated on Table 3.1.

| Targeted Population | Population | Ratio computation | Percentage |
|---------------------|------------|-------------------|------------|
| Senior Managers     | 5          | 5/100*100         | 5%         |
| Project Managers    | 20         | 20/100*100        | 20%        |
| Project Teams       | 30         | 30/100*100        | 30%        |
| Consultants         | 45         | 45/100*100        | 45%        |
| Beneficiaries       | 100        |                   | 100%       |

*Note*: From Fintech Kenya HRM Manual, 2015

## 3.4 Sample size and sampling procedures

According to Parasuraman, Grewal, & Krishnan, (2004) and Singleton, & Straits (2005), sampling is the selection of a subset of cases of the total number of units in order to be able to draw general conclusions about the entire body of units. For the study to achieve its objective, a conclusion about the sample of the target population and the sampling procedure were presented;

## 3.4.1 Sample size

The sample size of the study was determined using the Krejcie & Morgan (1970) sampling frame as adopted by Amin (2005), which recommended the appropriate sample for any given population. Given the population above and in accordance with the Krejcie and Morgan formula, the sample size for the study was 80.

## **3.4.2 Sampling procedures**

The study used both probability and non-probability sampling techniques to sample and select the respondents. Stratified sampling was employed to sample senior managers and project managers since they were few, key informants and had the information needed. Project teams and consultants were selected using simple random sampling technique that enabled all samples to have equal chance of being selected as illustrated on Table 3.2.

| Category of Respondents | Population | Sample size | Sample Percentage |
|-------------------------|------------|-------------|-------------------|
| Senior Managers         | 5          | 3           | 3.75%             |
| Project Managers        | 20         | 15          | 18.75%            |
| Project Teams           | 30         | 25          | 31.25%            |
| Consultants             | 45         | 37          | 46.25             |
| Beneficiaries           | 100        | 80          | 100%              |

## **Table 3.2: Sample Population**

Note: Adapted from field data, 2015

#### **3.5 Data Collection Instruments**

A questionnaire was deemed an appropriate instrument for data collection. Kirakowski

(2000) defines a questionnaire as "method of for the elicitation, and recording and collecting information". The questionnaires featured close ended questions that provided quantitative data for statistical analysis. On the other hand, open ended questions posed generated qualitative data for content analysis. The questionnaire design followed the objectives of the research, with the first part capturing the demographic characteristics of the respondents. Owen (2002) recommends use of questionnaires for its potential to reaching out to a large number of respondents within a short time; ability to accord respondents' adequate time to respond; offers a sense of privacy and confidentiality to the respondent. The researcher therefore opted for this instrument as a quick and cost effective way to collect data.

#### **3.5.1 Pilot Testing**

A pilot study was conducted prior to the main research to 10 respondents (12.5%) of the sample size to pre-test or try out research protocols, data collection instruments, sample strategies, and other research techniques in preparation for the study. This helped in identifying potential problem areas and deficiencies in the research instruments and protocol prior to implementation during the full study. One of the advantages of conducting a pilot study was to give advance warning about where the main research project could fail, where research protocols could not be followed, or whether proposed methods or instruments were inappropriate or too complicated. In the words of De Vaus (1993) states "Do not take the risk. Pilot test first."

#### 3.5.2 Validity

To ensure that the data obtained accurately represented the variables of the study and that the study measured what it intended to measure, each item in the instruments was reviewed by panel of experts, noted how each of the specified study objectives and research questions was captured in the instrument. Both content and construct validation were done. Content validation was ascertained by determining whether the content that the instruments contained was an adequate sample of the domain of the content they were supposed to represent. Construct validity was done to ensure that the scores from the instrument yielded correct inferences about the variable that the instrument purported to measure.

#### **3.5.3 Reliability**

Joppe (2000), defines reliability as the extent to which results are consistent over time and an accurate representation of the total population under study, and if the results of a study could be reproduced under a similar methodology, then the research instrument was considered reliable. The reliability of the study's instrument were assessed through Cronbach's coefficient alpha ranging between 0-1 and all coefficients alpha were expected to be within acceptable ranges for comparable instrumentations (Sekran, 2000). Scores between 0-0.6 indicate that the instrument had a low reliability while scores of 0.7 and above indicate that the instrument had a high level of internal consistency and reliability. By using the split-half method (Gakuu, 2013), the researcher scored two halves of the test separately of 15 selected respondents from sample. SPSS was used to compute the reliability coefficients. The Cronbach's alpha obtained was 0.745 and the Spearman-Brown's coefficient was 0.802, indicating high internal consistency of the questionnaire items. A measure of 0.7 or higher is considered acceptable.

#### **3.6 Data Collection methods and procedures**

This section outlines the data collection procedures used. In the study, primary data was collected through filled questionnaire distributed to respondents. Secondary data was obtained from internal HR Records, accounting and billing records, information systems, sales records, project reports and performance reports. Prior to commencing data collection; the researcher obtained a letter of introduction from the university. Permission was sought from the functional unit managers in Fintech Kenya before data was collected to reassure their subordinates to that the exercise was academic in nature. This facilitated data to be collected within 2weeks.

## **3.7 Data analysis techniques**

The study applied both qualitative and quantitative approaches for data analysis. Qualitative data was presented in form of explanatory notes while quantitative data, was collected using questionnaires. The data was cleaned, tabulated and analyzed with the aid of Statistical Package for Social Sciences (SPSS 21.0). The statistics was presented in the form of frequency distribution tables and percentages. The study also sought to establish a correlation between the variables by use of Pearson's Moment Product Correlation and regression analysis.

## **3.8 Operational definitions**

This section presents how concepts were to be measured and specified the procedures and operations necessary to measure a concept as shown on Table 3.3.

# Table 3.3: Operational definitions

| Objective         | Variable   | Indicators           | Measurement         | Scales  | Research     | Data            | Type of      |
|-------------------|------------|----------------------|---------------------|---------|--------------|-----------------|--------------|
|                   |            |                      |                     |         | approach     | collection tool | Analysis     |
| To determine      | Project    | -Conceptual skills   | -Organizational,    | Ordinal | Qualitative  | Questionnaire   | Descriptive  |
| the influence of  | management | -Technical skills    | system and          |         | and          |                 | /Inferential |
| project           | leadership | -Human skills        | technological       |         | quantitative |                 |              |
| management        | skills     |                      | changes             |         |              |                 |              |
| leadership skills |            |                      | - Competency level  |         |              |                 |              |
| on performance    |            |                      | - Behavior changes  |         |              |                 |              |
| of IT projects at |            |                      | in participating    |         |              |                 |              |
| Fintech Kenya     |            |                      | teams and their     |         |              |                 |              |
|                   |            |                      | results             |         |              |                 |              |
| To establish the  | Project    | -Length of time      | - Years of service  | Ordinal | Qualitative  | Questionnaire   | Descriptive  |
| influence of      | management | - Qualifications     | -Awards and         |         | and          |                 | /Inferential |
| project           | leadership | - Past involvement   | certifications      |         | quantitative |                 |              |
| management        | experience |                      | -Number of projects |         |              |                 |              |
| leadership        |            |                      | undertaken.         |         |              |                 |              |
| experience on     |            |                      |                     |         |              |                 |              |
| performance of    |            |                      |                     |         |              |                 |              |
| IT projects at    |            |                      |                     |         |              |                 |              |
| Fintech Kenya     |            |                      |                     |         |              |                 |              |
| To assess the     | Project    | -Process/procedure   | - Output/outcome of | Ordinal | Qualitative  | Questionnaire   | Descriptive  |
| influence of      | management | adherence            | the process         |         | and          | and interviews  | /Inferential |
| project           | leadership | -Business continuity | -Internal control   |         | quantitative |                 |              |
| management        | control    | -Financial audit     | framework/ policies |         |              |                 |              |
| leadership        |            | -Scope management    | -Financial          |         |              |                 |              |
| control on        |            |                      | management reports  |         |              |                 |              |
| performance of    |            |                      | -Project            |         |              |                 |              |

| IT projects at   |             |                     | success/failure      |         |              |               |             |
|------------------|-------------|---------------------|----------------------|---------|--------------|---------------|-------------|
| Fintech Kenya    |             |                     | analysis             |         |              |               |             |
| To determine     | Project     | -Professional       | -Performance         | Ordinal | Qualitative  | Questionnaire | Descriptive |
| the influence of | management  | autonomy            | appraisal evaluation |         | and          |               |             |
| project          | leadership  | -Decision making    | - Evaluation of the  |         | quantitative |               |             |
| management       | styles      | -Collective Action  | processes by which   |         |              |               |             |
| leadership       |             | -Management         | decisions are made   |         |              |               |             |
| styles on        |             | development and     | - Leader- member     |         |              |               |             |
| performance of   |             | improvement         | exchange             |         |              |               |             |
| IT projects at   |             |                     | - Recruitment        |         |              |               |             |
| Fintech Kenya    |             |                     | criteria/standards   |         |              |               |             |
|                  |             |                     | and terms of work.   |         |              |               |             |
| Performance of   | Performance | -Project completion | - Number of projects | Ordinal | Qualitative  | Questionnaire | Descriptive |
| IT projects      |             | within time, scope, | implemented within   |         | and          |               |             |
|                  |             | budget and quality  | project constraints  |         | quantitative |               |             |
|                  |             | Organization's      | -Projects            |         |              |               |             |
|                  |             | growth              | profitability        |         |              |               |             |
|                  |             | - (Revenue/Profit   | - The number of      |         |              |               |             |
|                  |             | margins)            | customer             |         |              |               |             |
|                  |             | -Competitive        | acknowledgements/    |         |              |               |             |
|                  |             | advantage           | complaints received  |         |              |               |             |
|                  |             | -Customer           | -Issues resolution   |         |              |               |             |
|                  |             | satisfaction        | turnaround time      |         |              |               |             |
|                  |             |                     | - Competitor         |         |              |               |             |
|                  |             |                     | analysis.            |         |              |               |             |
| Note:            |             | From                | Field                |         | Data         | l,            | 20          |

#### **3.9 Ethical considerations**

Two significant ethical issues that were considered in the research process included consent and confidentiality. The study relayed all important details of the study, including its aim and purpose. By explaining these details, the participants understood their role in the completion of the research. The respondents were advised that the study was voluntary. The confidentiality of the participants was guaranteed by not disclosing their names or personal information in the research. Only relevant details that helped in answering the research questions were included. The study adhered by the University of Nairobi plagiarism policy which defines plagiarism as "the action or practice of taking someone else work or idea and passing it off as one's" (University of Nairobi, 2013). Utmost care was taken to appropriately acknowledge works borrowed from other scholars and various sources of data through referencing.

#### **CHAPTER FOUR**

#### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

## **4.1 Introduction**

This chapter presents analysis, findings and discussion of the study on the influence of project management leadership on performance of IT projects at Fintech Kenya, and estimates of the model presented in the previous chapter.

#### 4.2 Response Rate

The study targeted 80 respondents from Fintech Kenya since these respondents were involved in the implementation of IT projects. Out of the 80 issued questionnaires to the respondents, 69 questionnaires representing 86.25% of the total questionnaires distributed were returned fully completed, while 11 questionnaires were not returned, representing 13.75% were not returned, as indicated on Table 4.1.

#### Table 4.1: Questionnaire return rate

| Response                  | Frequency | Percentage (n=33) |
|---------------------------|-----------|-------------------|
| Filled in questionnaires  | 69        | 86.25             |
| Unreturned questionnaires | 11        | 13.75             |
| Total                     | 80        | 100               |

From this analysis, it can be inferred that the response rate of the study was good, since it is above the 50% statistical significance according to Mugenda and Mugenda (2003).

## 4.3 Demographic characteristics of respondents

Demographic information provides data regarding research participants and is necessary for establishing whether the individuals in a particular study are a representative sample of the target population for generalization purposes. This section presents the demography of the respondents to determine their demographic characteristics.

## **4.3.1** Gender of the respondents

This section presents gender of the respondents and the results are tabulated on Table 4.2

| Response | Frequency | Percentage (n=33) |
|----------|-----------|-------------------|
| Males    | 43        | 62.32%            |
| Females  | 26        | 37.68%            |
| Total    | 69        | 100%              |

## Table 4.2: Distribution of respondents by gender

From the findings, the study involved both male and female respondents and out of the 69 respondents, majority were male, representing 62.32% while the female counterparts were 37.68%.

## 4.3.2 Age of the Respondents

The study sought to establish the respondents' ages and the findings are shown on Table 4.3.

| Age            | Frequency | Percentage (n=33) |
|----------------|-----------|-------------------|
| Below 20 years | 0         | 0.00%             |
| 20-29 years    | 20        | 28.99%            |
| 30-39 years    | 34        | 49.28%            |
| 40-49 years    | 12        | 17.39%            |
| Above 50 years | 3         | 4.35%             |
| Total          | 69        | 100%              |

## Table 4.3: Distribution of respondents by age

From the findings, out of the 69 respondents, there were no respondents below the age of 20 years; 28.99% were between 20-29 years old; 49.28% were between 30-39 years old; 17.39% were between 40-49 years, while 4.35% were above 50 years old. The age distribution of the respondents revealed different levels of job experience in their respective functional areas.

## 4.3.3 Level of education

Table 4.4 indicates the levels of education attained by the respondents.

| Education Level | Frequency | Percentage (n=33) |
|-----------------|-----------|-------------------|
| O- Level        | 0         | 0.00%             |
| Diploma         | 5         | 7.25%             |
| Undergraduate   | 40        | 57.97%            |
| Postgraduate    | 24        | 34.78%            |
| Total           | 69        | 100%              |

#### Table 4.4: Distribution of respondents by level of education

From the findings, none of the respondents was an O-level drop out; 7.25% had a college diploma, 57.975% had a university degree while 34.78% had a postgraduate degree.

## 4.3.4 Job title

Respondents were drawn from various capacities in which they work in as shown on Table 4.5.

| Job Title            | Frequency | Percentage (n=33) |
|----------------------|-----------|-------------------|
| Senior Managers      | 5         | 7.25%             |
| Project Managers     | 15        | 21.74%            |
| Project team members | 19        | 27.54%            |
| Consultants          | 30        | 43.48%            |
| Total                | 69        | 100%              |

#### Table 4.5: Distribution of respondents by job title

From the stratified sampling conducted, 7.25% of the respondents were senior managers; 21.74% were project managers; 27.54% were project team members while 43.48% were consultants.

## **4.3.5 Length of service at Fintech Kenya**

The respondents' length of service/tenure was expressed in terms of number of months/years and the focus was on permanent-full time basis employees. This is as shown on Table 4.6.

| Length of service  | Frequency | Percentage (n=33) |
|--------------------|-----------|-------------------|
| Less than 6 months | 3         | 4.35%             |
| 6 months - 1 year  | 4         | 5.80%             |
| Between 1-3 years  | 15        | 21.74%            |
| Between 3-5 years  | 16        | 23.19%            |
| Above 5 years      | 31        | 44.93%            |
| Total              | 69        | 100%              |

Table 4.6: Distribution of respondents by length of service

The findings indicate that 4.35% of the respondents had worked in the organization for less than 6 months; 5.80% had worked for 6 months to 1 year; 21.74% had worked for 1-3 years; 23.19% had worked for 3-5 years while 44.93% had worked for over 5 years. The findings indicate a population with an even spread of age and experience.

## 4.3.6 Participation in Project Implementation

The findings of whether or not the respondents had participated in project implementation are presented on Table 4.7.

| Table 47. Distribution of real | spondonts by portio  | notion in pro | iants Implementation |
|--------------------------------|----------------------|---------------|----------------------|
| Table 4.7: Distribution of res | sponucius by partici | pauon m pro   | Jetts implementation |

| Participation | Frequency | Percentage (n=33) |
|---------------|-----------|-------------------|
| Yes           | 64        | 92.75%            |
| No            | 5         | 7.25%             |
| Total         | 69        | 100%              |

The findings indicated that majority of the respondents representing 92.75% of the population had participated in project implementation, while 7.25% had not participated in project implementation.

## 4.4 Performance of IT projects

The following statements were presented to the respondents to establish the extent to which they agreed with the statements on performance of IT projects at Fintech Kenya. The findings are presented on Table 4.8.

| Statement  | Mean | SD    |
|--|------|-------|
| Extent of organizations growth (revenue/profit margin) | 1.57 | 0.606 |
| Degree of competitive advantage                        | 1.49 | 0.558 |
| Customer satisfaction levels                           | 1.99 | 1.014 |
| Utilization of resource (Time, finances, technology)   | 2.10 | 0.843 |
| Number of projects completed on time                   | 2.27 | 1.123 |
| Number of projects completed on budget                 | 2.06 | 0.983 |
| Number of projects tested and signed off by client     | 1.77 | 0.819 |
| Projects successfully closed and billed                | 1.55 | 0.744 |

#### **Table 4.8: Influence of Performance of IT projects**

From the study's findings, the respondents agreed with all the statements with means of between 1.57 and 2.27. However, the findings indicate that the respondents were not uniformly in agreement, as deduced from the standard deviations. On the first three statements, the respondents strongly agreed that there is improved organizations growth; the organization has gained a competitive advantage and there is increased customer satisfaction with means of 1.57, 1.49 and 1.99. The variance from the means was smallest at 0.606, 0.558 and 1.014 respectively. On proper utilization of resource (Time, finances, technology), the respondents moderately agreed with a mean of 2.10 with the corresponding standard deviation of 0.843. On timely completion of projects, respondents agreed with a mean of 2.27 with a standard deviation of 1.123. They also agreed on completion of projects on budget with a mean of 2.06 with a standard deviation of 0.983. The study further established that the respondents strongly agreed with means of 1.77 and 1.55, and standard deviations of 0.819 and 0.744 respectively.

## 4.5 Leadership skills and performance of IT projects

The study sought to establish whether project management leadership skills influence the performance of IT projects at Fintech Kenya. This is presented on Table 4.9.

|       |           | ( <b>n=33</b> ) |  |
|-------|-----------|-----------------|--|
| Scale | Frequency | Percentage      |  |
| Yes   | 56        | 81.2%           |  |
| No    | 13        | 18.8%           |  |
|       | 33        | 100             |  |

#### Table 4.9: Leadership skills on performance of IT projects

Findings indicate that majority of the respondents, (81.2%), agreed that leadership skills influences performance of IT projects, while 18.8% indicated that leadership skills does not influence the performance of IT projects.

The following statements were presented to the respondents to establish the extent to which they agreed with the statements on leadership skills influence on performance of IT projects at Fintech Kenya. The findings are presented on Table 4.10.

| Statement   | Mean | SD    |
|---|------|-------|
| Value of leadership skills in the organization                          | 2.07 | 0.922 |
| Different leadership skills required at different levels of management  | 1.91 | 0.794 |
| Leadership skills developed following a cluster approach                | 2.19 | 0.952 |
| Effectiveness of leaders with strengths in multiple competencies/skills | 2.50 | 1.087 |
| Conceptual skills are more important at higher levels                   | 2.36 | 1.077 |
| Technical skills more important at lower levels.                        | 2.39 | 1.101 |
| There are superior skills to the other                                  | 2.34 | 1.141 |
| Employees' effectiveness defined by ability to apply leadership skills  | 2.16 | 1.163 |

From the findings, the respondents agreed that leadership skills are important in the performance of IT projects; different skills are required at different levels of management; and effective leadership skills are developed following a cluster approach with means of 2.07, 1.91 and 2.19 respectively; with the corresponding standard deviations computed as 0.922, 0.794 and 0.952. With the statements that leaders with strengths in multiple competencies/skills are most

effective; conceptual skills are more important at higher levels; and technical skills more important at lower levels, the respondents agreed with means of 2.50, 2.36 and 2.39 respectively; with corresponding standard deviations computed as 1.087, 1.077 and 1.101. The findings also established that the employees agreed that some skills are needed at every level of IT project management; and that an employee's effectiveness is defined by ability to apply leadership skills; with means 2.34, and 2.16 with corresponding standard deviations of 1.141 and 1.163 respectively. From standard deviations, the study observed a significant variation on the means on the level of agreement.

To gauge the extent to which the respondents agreed with project management leadership skills influence on performance of IT projects, the findings are presented on Table 4.11.

| Responses         | Frequency | Percentage |
|-------------------|-----------|------------|
| Very great extent | 47        | 68.11%     |
| Great extent      | 15        | 21.73%     |
| Moderate extent   | 7         | 10.14%     |
| Little extent     | 0         | 0.00%      |
| No extent         | 0         | 0.00%      |
| Total             | 69        | 100        |

Table 4.11: Extent of Influence of leadership skills and performance of IT projects

From the findings, 68.11% of the respondents acknowledged, that the influence was to very great extent; 21.73% indicated that the influence was to a great extent, while 10.14% indicated that the influence was to a moderate extent. It can be deduced that all respondents thus agreed that project management leadership skills influences performance of IT projects at Fintech Kenya.

### 4.6 Leadership experience and performance of IT projects

The study sought to establish whether project management leadership experience influences performance of IT projects at Fintech Kenya as shown on Table 4.12.

| 65 | 94.2%   |
|----|---------|
|    | · ··-·  |
| 4  | 5.8%    |
| 69 | 100     |
|    | 4<br>69 |

#### Table 4.12: Leadership experience and performance of IT projects

Findings indicate that majority of the respondents (94.2%), agreed that leadership experience influence performance of IT projects, while 5.8% indicated that leadership experience does not influence performance of IT projects.

The following statements were presented to the respondents to establish the extent to which they agreed with the statements on leadership experience influence on performance of IT projects at Fintech Kenya. The findings are presented on Table 4.13.

| Statement  |      | SD    |
|--|------|-------|
| A minimum years of experience is required for implementation of IT projects            | 2.33 | 1.032 |
| Expertise and knowledge is critical for the performance of IT projects.                | 2.51 | 1.139 |
| Expansive experience is important for planning and supervising projects execution      | 2.50 | 1.213 |
| Leadership experience is more desirable for effective performance of IT Projects       | 2.16 | 1.044 |
| Experience gained over time leads to effective performance of IT projects              | 2.23 | 1.169 |
| Employees serving in lower supervisory job first before moving to managerial positions | 2.39 | 1.219 |
| Managers with expansive experience are better placed to design project teams           | 2.38 | 1.279 |
| Experience provides accumulation of both technical and workforce knowledge             | 2.29 | 1.092 |

#### Table 4.13: Influence of Leadership experience on performance of IT projects

The respondents agreed with all the statements with means between 2.16 and 2.39, with significant standard deviations ranging from 1.032 to 1.279. From the findings it can be deduced that the levels of agreement were spread away from the recorded means.

To gauge the extent to which the respondents agreed with project management leadership experience influence on performance of IT projects, the findings are presented on Table 4.14.

| Responses         | Frequency | Percentage |
|-------------------|-----------|------------|
| Very great extent | 40        | 57.97%     |
| Great extent      | 17        | 24.64%     |
| Moderate extent   | 8         | 11.59%     |
| Little extent     | 0         | 0.00%      |
| No extent         | 4         | 5.80%      |
| Total             | 69        | 100        |

Table 4.14: Extent of Influence of leadership experience on performance of IT projects

Table 4.14 tabulates responses on the extent to which leadership experience influences performance of IT projects. The response was: 57.97% to very great extent; 24.64% to a great extent, while 11.59% to a moderate extent, while 5.80% no extent. We can deduced that majority of the respondents (57.97%), thus agreed that project management leadership experience influences performance of IT projects.

#### 4.7 Leadership control and performance of IT projects

The study sought to establish whether project management leadership control influences performance of IT projects at Fintech Kenya as illustrated on Table 4.15.

#### Table 4.15: Leadership control and performance of IT projects

|       |           | ( <b>n=33</b> ) |  |
|-------|-----------|-----------------|--|
| Scale | Frequency | Percentage      |  |
| Yes   | 68        | 98.55%          |  |
| No    | 1         | 1.45%           |  |
|       | 69        | 100             |  |

Findin

gs indicate that majority of the respondents, (98.55%) agreed that leadership control influences

performance of IT projects, while 1.45% of the respondents indicated that leadership control does not influences performance of IT projects.

The following statements were presented to the respondents to establish the extent to which they agreed with the statements on leadership controls' influence on performance of IT projects at Fintech Kenya. The findings are presented on Table 4.16.

| Statement   |      | SD    |
|---|------|-------|
| Project staff roles/responsibilities are clearly defined              | 1.71 | 0.859 |
| Team members participate in projects processes                        | 1.63 | 0.802 |
| Control resulting to better quality management                        | 2.74 | 1.348 |
| Focus on longstanding approach on control                             | 1.91 | 0.944 |
| Effective and efficient utilization of resources                      | 2.56 | 1.235 |
| Control ensure satisfactory progress in implementation of IT projects | 2.81 | 1.254 |
| There are clear lines of authority and process                        | 2.91 | 1.260 |
| Members take ownership/responsibility of the IT projects              | 2.77 | 1.374 |

#### Table 4.16: Influence of leadership control and performance of IT projects

The respondents agreed that project staff roles/responsibilities are clearly defined with a mean of 1.71 and a standard deviation of 0.859. They also strongly agreed that team members participate in projects processes with a mean of 1.63, with a standard deviation of 0.802.On statements regarding control resulting in better quality management; effective and efficient utilization of resources; control ensures satisfactory progress in implementation of IT projects; there are clear lines of authority and process; and team members take ownership/responsibility of the IT projects, the respondents agreed with means of 2.74. 2.56, 2.81, 2.91 and 2.77 respectively. The corresponding standard deviations were 1.348, 1.235, 1.254, 1.260, and 1.374, suggesting a notable variance in the degree of agreement.

To gauge the extent to which the respondents agreed with project management leadership control influence on performance of IT projects, the findings are presented on Table 4.17.

## Table 4.17: Extent of Influence of leadership control on performance of IT projects

| Responses         | Frequency | Percentage |
|-------------------|-----------|------------|
| Very great extent | 46        | 66.66%     |
| Great extent      | 12        | 17.39%     |
| Moderate extent   | 6         | 8.70.%     |
| Little extent     | 4         | 5.80%      |
| No extent         | 1         | 1.45%      |
| Total             | 69        | 100        |

From the findings, 66.66% of the respondents acknowledged, that the influence is to very great extent; 17.39% indicated that the influence is to a great extent, while 8.70% said the influence is to a moderate extent, 5.80% indicated that there little influence, while 1.45% indicated that leadership control does not influence performance of IT projects. We can deduced that majority of the respondents (66.66%), thus agreed that project management leadership experience influences performance of IT projects.

## 4.8 Leadership style and performance of IT projects

The study sought to establish whether project management leadership style influences performance of IT projects at Fintech Kenya as illustrated on Table 4.18.

|       |           | ( <b>n=33</b> ) |  |
|-------|-----------|-----------------|--|
| Scale | Frequency | Percentage      |  |
| Yes   | 62        | 89.86%          |  |
| No    | 7         | 10.14%          |  |
|       | 69        | 100             |  |

Table 4.18: Leadership style and performance of IT projects

Findings indicate that majority of the respondents, (89.86%) agreed that leadership style influences performance of IT projects, while 10.14% of the respondents indicated that leadership style does not influences performance of IT projects.

The following statements were presented to the respondents to establish the extent to which they agreed with the statements on leadership styles' influence on performance of IT projects at Fintech Kenya. The findings are presented on Table 4.19.

| Statement  | Mean | SD    |
|--|------|-------|
| Effective leadership styles facilitate performance of IT projects              | 2.36 | 1.204 |
| Transactional leaders help organizations achieve their current objectives more | 2.80 | 1.368 |
| Visionary leaders create environments that hence performance                   | 2.96 | 1.469 |
| Different leadership styles have positive/negative correlation on performance  | 2.91 | 1.558 |
| Leadership style leads to sustained competitive advantage.                     | 2.27 | 1.123 |
| Team leads shape collective norms and coordinate collective action             | 2.06 | 0.983 |
| Team leaders combines people and processes                                     | 1.77 | 0.819 |
| Employees receive clear rewards/punishments                                    | 1.55 | 0.744 |

On statements regarding effective leadership styles facilitate performance of IT projects; transactional leaders help organizations achieve their current objectives more; visionary leaders create environments that hence performance; different leadership styles have positive/negative correlation on performance; leadership style leads to sustained competitive advantage; and team leads shape collective norms and coordinate collective action; the respondents agreed with means 2.36, 2.80, 2.96, 2.91, 2.27 and 2.06 respectively. The corresponding standard deviations were 1.204, 1.368, 1.469, 1.558, 1.123 and 0.983 suggesting a notable variance in the degree of agreement. The respondents further strongly agreed that team leaders combine people and processes and employees receive clear rewards/punishments with a mean of 1.77 and1.55 and standard deviations of 0.819 and 0.744 respectively.

To gauge the extent to which the respondents agreed with project management leadership style influence on performance of IT projects, the findings are presented on Table 4.20.

| Responses         | Frequency | Percentage |  |
|-------------------|-----------|------------|--|
| Very great extent | 52        | 75.36%     |  |
| Great extent      | 10        | 14.49%     |  |
| Moderate extent   | 5         | 7.25%      |  |
| Little extent     | 1         | 145%       |  |
| No extent         | 1         | 1.45%      |  |
| Total             | 69        | 100        |  |

Table 4.20: Extent of Influence of leadership style on performance of IT projects

From the findings, 75.36% of the respondents acknowledged, that the influence is to very great extent; 14.49% indicated that the influence is to a great extent; 7.25% indicated the influence is to a moderate extent; while 1.45% indicated that there is little influence and no influence performance of IT projects. We can deduced that majority of the respondents (75.36%), thus agreed that project management leadership style influences performance of IT projects.

#### **4.9 Correlation Analysis**

To test the association between independent variables and dependent variables, Pearson's product moment of correlation was used. The study assessed the independent variables' influence on performance of IT projects at 99% level of confidence. The Pearson's correlation is given as : -1 < r + 1; where 0 to 0.29 is considered weak positive correlation; 0.3 to 0.49 is moderately positive correlation; and 0.5 to 1 corresponds to strong positive correlation. Conversely, 0 to -0.29 is considered weak negative correlation; -0.3 to -0.49 is moderately negative correlation; and -0.5 to -1 corresponds to strong negative correlation.

Findings on table 4.21 presents the association between leadership skills, experience, control, style and performance of IT projects.

|                               |   | Skills               | Experience           | Control              | Style                | Performance of<br>IT projects |
|-------------------------------|---|----------------------|----------------------|----------------------|----------------------|-------------------------------|
| Skills                        | Pearson Correlation<br>Sig. (2-tailed)<br>N | 1<br>70              | .810**<br>.000<br>70 | .672**<br>.000<br>70 | .514**<br>.000<br>70 | .453**<br>.000<br>70          |
| Experience                    | Pearson Correlation<br>Sig. (2-tailed)<br>N | .810**<br>.000<br>70 | 1<br>70              | .817**<br>.000<br>70 | .619**<br>.000<br>70 | .534**<br>.000<br>70          |
| Control                       | Pearson Correlation<br>Sig. (2-tailed)<br>N | .672**<br>.000<br>70 | .817**<br>.000<br>70 | 1<br>70              | .704**<br>.000<br>70 | .607**<br>.000<br>70          |
| Style                         | Pearson Correlation<br>Sig. (2-tailed)<br>N | .514**<br>.000<br>70 | .619**<br>.000<br>70 | .704**<br>.000<br>70 | 1<br>70              | .732**<br>.000<br>70          |
| Performance<br>of IT projects | Pearson Correlation<br>Sig. (2-tailed)<br>N | .453**<br>.000<br>70 | .534**<br>.000<br>70 | .607**<br>.000<br>70 | .732**<br>.000<br>70 | 1<br>70                       |

Table 4.21: Test of Variable Association

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

The results imply an existence of moderate and positive correlation between leadership skills and performance of IT projects with a magnitude of 0.453. The results also indicate strong positive correlation of magnitude 0.534, 0.607, 0.732 between leadership experiences; leadership control and leadership style respectively. The observation is further reinforced by the predictor variables' p-values of 0.000, signaling statistically significant positive correlation, at an alpha of 0.01. This implies that the independent variables and dependent variables have a close association.

## 4.10 Regression Analysis

Multiple regression analysis was carried out to test the influence among predictor variables. The results are presented on Tables 4.22, 4.23 and 4.24.

 Table 4.22: Model Summary

| Model  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |  |  |
|--|-------------------|----------|-------------------|----------------------------|--|--|
| 1  | .744 <sup>a</sup> | .553     | .525              | .346                       |  |  |
| a. Predictors: (Constant), Leadership skill, leadership experience, leadership control and |                   |          |                   |                            |  |  |
| leadership style   |                   |          |                   |                            |  |  |

The study presents R-squared which is a statistical measure of the closeness of the observed data to the fitted regression line. It defines the percentage of the dependent variable variation as explained by a given model. Hence, the model indicates that 55% of the changes in performance of IT projects can be attributed to the predictor variables. The implication is that 45% per cent of the changes in project performance can be attributed to other factors.

 Table 4.23: ANOVA Results

| Model  |            | Sum of Df |    | Mean   | F      | Sig.              |  |
|--|------------|-----------|----|--------|--------|-------------------|--|
|  |            | Squares   |    | Square |        |                   |  |
| 1  | Regression | 9.608     | 4  | 2.402  | 20.090 | .000 <sup>b</sup> |  |
|  | Residual   | 7.772     | 65 | .120   |        |                   |  |
|  | Total      | 17.379    | 69 |        |        |                   |  |
| a. Dependent Variable: Performance of IT projects                  |            |           |    |        |        |                   |  |
| b. Predictors: (Constant) Leadership skill, Leadership experience, |            |           |    |        |        |                   |  |
| Leadership control and Leadership style)                           |            |           |    |        |        |                   |  |

The probability of 0.000 indicates that the model is significant in predicting the influence of project management leadership aspects which include skills, experience, control and style on performance of IT projects. The critical F-value is 3.622 at 99% level of confidence. Thus, with F calculated (=20.090)> F critical (=3.622); the model is generally statistically significant.

**Table 4.24: Regression Coefficients** 

| Model   |                       | Coefficient |            | Standardized<br>Coefficients | Т     | Sig. |
|---|-----------------------|-------------|------------|------------------------------|-------|------|
|   |                       | В           | Std. Error | Beta                         |       |      |
| 1   | (Constant)            | .798        | .167       |                              | 4.784 | .000 |
|   | Leadership skills     | .029        | .125       | .032                         | .229  | .820 |
|   | Leadership experience | .007        | .120       | .010                         | .055  | .956 |
|   | Leadership control    | .091        | .093       | .155                         | .970  | .336 |
|   | Leadership style      | .375        | .073       | .599                         | 5.101 | .000 |
| a. Dependent Variable: Performance of IT projects |                       |             |            |                              |       |      |

The regression model is derived from the formula;

 $Y = 0.798 + 0.029X_1 + 0.007X_2 + 0.091X_3 + 0.375X_4$ 

The regression model provides statistical control through which the study established the influence of each predictor variable. Holding all variables at zero will result in a positive performance of IT projects equal to 0.798. In a similar way, reducing all other independent variables to zero, a unit change in leadership skill will result in 0.029 increments in positive performance of IT projects. The findings indicate 0.007 increments in performance of IT projects when all other independent variables are reduced to zero with only a unit change in leadership experience, while a unit change in leadership control while holding the rest of independent variables constant would lead to a 0.91 increments in favourable performance of IT projects. Finally, a unit change in leadership style will yield 0.375 increments in performance of IT projects. Finally, a unit change in leadership style will yield 0.375 increments also show that the coefficients for each variable are non-zero. This therefore means that all the independent variables influence the response variable. However, since the p-values for leadership skills, leadership experience and leadership control are greater than 0.05, these predictors are not very significant. On the other hand, leadership style is a significant predictor of performance of IT projects with a p value of less than 0.05.

#### **CHAPTER FIVE**

# SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

## **5.1 Introduction**

This chapter presents the discussions on key data findings, conclusions drawn and recommendations. These discussions, conclusions and recommendations were focused on the four objectives of the study, which were: establishing the influence of project management leadership skills, experience, control and style on performance of IT projects at Fintech Kenya.

#### **5.2 Summary of findings**

The summary of findings will follow the order of research objectives and data as presented in Chapter Four. The purpose of the study is to establish the influence of project management leadership aspects on performance of IT projects at Fintech Kenya.

#### 5.2.1 Leadership skills and performance of IT projects

Based on the study, majority of the respondents, (81.2%) agreed that leadership skills influences performance of IT projects, while 18.8% of the respondents cited out that leadership skills does not have an influence on performance of IT projects at Fintech Kenya. The study established that leadership skill is considered important and different skills are required at different levels of management for effective performance of IT projects in the organization. The respondents acknowledged that effective leadership skills are developed following a cluster approach and that leaders with strengths in multiple competencies/skills are most effective. They agreed that there is no one skill superior to the other; conceptual skills are more important at higher levels, technical skills more important at lower levels and some skills are needed at every level of management for effective performance. The study further revealed that an employee's effectiveness is defined by his/her ability to apply leadership skills to ensure effective performance of IT projects at Fintech Kenya; 68.11% indicated to very great extent, 21.73% indicated to great extent, while 10.14% indicated to a moderate extent.

#### 5.2.2 Leadership experience and performance of IT projects

Based on the study, majority of the respondents, (94.2%) agreed that leadership experience influences performance of IT projects, while 5.8% of the respondents indicated that leadership experience did not influence the performance of IT projects at Fintech Kenya. The study established that at Fintech Kenya, there is minimum years of experience required for effective performance of IT projects; expertise and knowledge is critical and that expansive experience is important for effective performance of IT projects. The respondents acknowledged that leadership experience is a more desirable for effective performance of IT projects, especially when gained over time. The respondents further indicated that at Fintech Kenya, employees serve in a lower supervisory job first before moving to managerial positions and managers with expansive experience are better placed to design performing project teams. They also indicated that experience provides accumulation of both technical and workforce knowledge. When asked to indicate the extent to which leadership experience influences performance of IT projects 57.97% of the respondents acknowledged, that the influence is to a great extent, while 11.59% said the influence is to a moderate extent, while 5.80% indicated that there is no influence.

#### 5.2.3 Leadership control and performance of IT projects

As far as leadership control and performance of IT projects was concerned, majority of the respondents, (98.55%) agreed that leadership control influences performance of IT projects, while 1.45% of the respondents indicated that leadership control does not influences performance of IT projects. The study established that, project staff roles/responsibilities are clearly defined, team members participates in project processes making control result in better quality management and effective performance. The respondents agreed that a longstanding approach to focus on control, and effective and efficient utilization of resources ensures satisfactory progress in performance of IT projects. The respondents further acknowledged that at Fintech Kenya, there are clear lines of authority and process and members take ownership/responsibility of the IT projects. When asked to indicate the extent to which leadership control influences performance of IT projects at Fintech Kenya; 66.66% of the respondents acknowledged, that the influence is to very great extent; 17.39% indicated that the influence is to a great extent, while 8.70% said the influence is to a moderate extent, 5.80%

indicated that there little influence, while 1.45% indicated that leadership control does not influence performance of IT projects.

## 5.2.4 Leadership style and performance of IT projects

Based on the study's findings, majority of the respondents, (89.86%) agreed that leadership style influences performance of IT projects, while 10.14% of the respondents indicated that leadership style does not influences performance of IT projects. The study established that effective leadership styles facilitate effective performance of IT projects, transactional leaders help the organization achieve its current objectives more, visionary leaders create environments that hence performance and that different leadership styles have positive/negative correlation on performance of IT projects at Fintech Kenya. The respondents acknowledged that effective leadership styles lead to sustained competitive advantage, shape collective norms and coordinate collective action, combine people and processes thereby ensuring effective performance of IT The respondents further agreed that employees need clear projects in the organization. rewards/punishments in order to perform optimally. When asked to indicate the extent to which leadership style influences performance of IT projects 75.36% of the respondents indicated that the influence is to very great extent; 14.49% indicated that the influence is to a great extent, 7.25% said the influence is to a moderate extent, while 1..45% indicated that there is little influence and no influence performance of IT projects respectively.

## 5.3 Discussions of Key findings

This section of the study discusses in detail the findings and compares them with literature reviewed in Chapter Two.

#### 5.3.1 Leadership skills and performance of IT projects

The study established that different competences mixes are needed at different managerial levels, with conceptual skills more important at higher levels and technical skills more important at lower levels. This concurs with Yukl (2006) observation that, different competences are needed at different levels but some like interpersonal skills are equally important at every level of management. The study also revealed that leadership skills are developed following a cluster approach, such that basic skills are learned first and then combined to form higher-order skills.

This concurs with Lord & Hall, 2005 findings that, leadership competencies can be developed and are not necessarily learnt in the same way. Skills are usually developed in an individual partly by the introduction of theory, but mainly by practice, that is learning by doing. The study established that leaders with strengths in multiple competencies/skills were most effective in the performance of IT projects at Fintech Kenya. This enriches the findings of researchers Zenger and Folkman (2002), who observed that a combination of leadership skills seemed to be more powerful predictors of effectiveness. The findings also coincides with Carter (1988), observation that, IT PMs' are faced with increasingly complex tasks which require more than a single set of skills. Indeed, majority of the respondents agreed that an employee's effectiveness is defined by his/her ability to apply leadership skills for effective performance, thus inferring that leadership skill has a direct impact on performance of IT projects.

## 5.3.2 Leadership experience and performance of IT projects

In the opinion of Cash and Fox (1992), "successful projects almost always have a "champion" who either by past experience or by persistent determination provides needed leadership to members of the project team to see that results are achieved". This harmonizes the study's findings that majority of the respondents strongly agreed that leadership experience influences performance of IT projects. According to Kaifi, Bahaudin and Mujtaba, (2010), in their study on Afghans and Americans, they observed that organizations especially IT companies recommend or prescribe a minimum of time which a PM must serve in a particular position before he can be considered for promotion. In fact, most advertisements and recruiters for top management positions stress previous experience in the similar jobs as a prerequisite. This concurs with the study's findings that at Fintech Kenya, there is a minimum years of experience required for one to participate in project implementation. Ehrenberg & Smith (2000), in their Human Capital Theory suggest that leaders make investments of experience in themselves, which enhance their ability to influence teams and eventually organizational performance. This corresponds to the study's findings that expertise and knowledge is critical, and expansive experience is important in enhancing effective performance of IT projects. McManus, (1997); Meredith and Mantel, (2011) in their works observed that, a leaders experience over the years would naturally be expected to reflect in the performance of the teams that they supervise. Harmonizes with the study's findings that leadership experience is more desirable, and experience gained over time

leads to effective performance of IT projects. The study further revealed that, employees serve in a lower supervisory job first before moving to managerial positions and managers with expansive experience were better placed to design performing project teams since experience provides accumulation of both technical and workforce knowledge, thereby enhancing performance of IT projects.

#### 5.3.3 Leadership control and performance of IT projects

According to Anthony (1995), leadership control ensures coordination and effective functioning of all activities, so that the formulated objectives are implemented and followed according to plan to enhance performance. The study established that at Fintech Kenya, project staff roles/responsibilities are clearly defined, team members participates in the projects processes, there are clear lines of authority and process, members take ownership/responsibility of their projects, thus making control result in better quality management ensuring effective performance. This corresponds to Anthony's early findings and leads to a certain substantial viewpoint that control should not be considered as a purpose in itself, but as a way of achieving a goal. Based on the study's findings, majority of the respondents agreed that leadership control influences performance of IT projects. They agreed that a longstanding approach to focus on control is efficient for gaining competitive advantage, ensuring effective and efficient utilization of resources thereby ensuring satisfactory progress on performance of IT projects. This concurs with Brevis et al. (2002) observation that leadership control is critically important to ensure satisfactory progress in attaining the organization's objectives and to make sure that the resources are used effectively.

#### 5.3.4 Leadership style and performance of IT projects

Fiedler (1969), postulates that leadership style refers to a kind of relationship whereby someone uses his ways and methods to make many people work together for a common task. This harmonizes with the study's findings where majority of the respondents agreed that effective leadership style facilitates effective performance of IT projects. The study's findings that transactional leadership helps organizations achieve their current objectives more efficiently, confirms the observation of Zhu, Chew and Spengler, (2005), that linking job performance to

valued rewards ensures employees have the resources needed to get the job done. The study further revealed that visionary leaders create environments that hence performance and this concurs to observations by some scholars like Zhu et al. (2005), who suggest that visionary leadership results in high levels of cohesion, commitment, trust, motivation, and hence performance in organizational environments. Prior research has shown that leadership style has a significant relationship on performance of IT projects, and from the study's findings, it is revealed that different leadership styles may have a positive correlation or negative correlation in the performance of IT projects. McGrath and MacMillan (2000), report that there is significant relationship between leadership styles and projects' performance, and that effective leadership style is seen as a potent source of management development and sustained competitive advantage. Team leads shape collective norms and coordinate collective action, combine people and processes thereby ensuring effective performance of IT projects at Fintech Kenya. This is as summed up by Sun, (2002), that leadership style has a considerable effect on the organizational performance.

#### **5.4 Conclusions of the study**

On the basis of the study findings, the following conclusions were arrived at; the results indicate significant relationship between project management leadership and performance of IT projects. The nature of IT projects whose end user level of satisfaction is high, requires effective and efficient project management leadership. From the study findings, it can be concluded that leadership skills influences the performance of IT projects since it was established that there is no one superior leadership skill to the other, but different competences mixes are needed at different management. Due to complexity of IT projects, leaders with strengths in multiple competencies/skills were most effective. Of the four aspects, the findings indicated that skills had the least influence on the performance of IT projects. Secondly, the research results showed that leadership experience has a significant influence on performance of IT projects according to the regression model. The respondents further agreed that a minimum years of experience for one to participate in project implementation was very critical in achieving effective project and a longstanding approach to focus on control is efficient for gaining competitive advantage,

ensuring effective and efficient utilization of resources, thereby ensuring satisfactory progress on performance of IT projects. On this basis, the study concludes that leadership control influences project outcome to a large extent. Finally, the study concludes that leadership style has the greatest influence on performance of IT projects. The study established that effective leadership style is seen as a potent source of management development and sustained competitive advantage. The respondents strongly agreed that team leads shape collective norms and coordinate collective action, combine people and processes thereby ensuring effective performance of IT projects. The regression model indicated that leadership style had the largest magnitude on performance of IT projects at Fintech Kenya.

## **5.5 Recommendations**

On the basis of the study findings, the following recommendations were arrived at;

- 1. This study recommends adoption and application of effective project management leadership practices. Due to the complex nature of IT projects, the study recommends that project teams acquire effective multifaceted skills to moderate the impact of project complexity and familiarity on project performance. In many occasions, IT project teams will be faced with increasingly complex tasks which require more than a single set of skills, thus the need of "Hybrid" managers.
- 2. Secondly, the study suggests emphasis be given to the experience of project staff to ensure projects are effectively executed in order to fully meet set objectives. Project leaders need expansive experience in order to be better placed to design project teams that incorporate a mix of employees who are more capable of effectively executing projects, thus ensuring performance of IT projects.
- 3. The study suggests introduction of effective controls including processes and procedures and that organizations should focus on longstanding approach on control in order to gain competitive advantage, ensure effective and efficient utilization of resources and achieve satisfactory progress on performance.
- 4. Finally, the study recommends that performance of IT projects should be evaluated from the perspective of leaders and team members using their style to demonstrate concern, care and respect to other employees, in order to increase the employees' interest in their

work, thereby affecting their job satisfaction positively, enabling them put up better performance.

## **5.6 Suggestion for Further research**

- 1. From the results of the regression model, the study suggests that further research should be carried out to establish the other factors that are attributed to influencing 45% of the performance of IT projects, since the current study only examined four project management leadership aspects which are skills, experience, control and style.
- 2. The study focused on the performance of IT projects at Fintech Kenya from the employees' perspective, where the respondents were drawn from the organization only. It is recommended that this topic can be investigated from the customers' perspective where the Fintech Kenya clients constitute the sample population.

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# **APPENDICES Appendix I: Introduction Letter**

Lynet Kavenge Kiioh P.O. Box 307-00208, Ngong Hills.

# Dear Respondent,

# **Re: Data collection for research study**

I am a student at the UON. I am conducting an investigation on the Influence of Project Management leadership on performance of Information Technology projects at Fintech Kenya and I kindly request for your participation in this study. Your honest contributions to the best of your knowledge and objective feedback on the questions asked will be much appreciated. Note that all the information obtained will be treated with utmost confidentiality and will not be disclosed to any party. Please do not write your name on the questionnaire.

Thank you in advance for your support.

Yours faithfully,

Lynet Kavenge.

#### Appendix II: Questionnaire for Fintech Kenya Staff

Dear Respondent,

This questionnaire is designed to assist in making an objective assessment of the influence of leadership aspects on the performance of IT projects, using Fintech Kenya as a case study. The exercise is an academic requirement for the fulfilment of my Master of Arts degree course in Project Planning and Management at the University of Nairobi, and your answers would be treated with the utmost confidentiality they deserve. Your maximum co-operation is highly anticipated and thanking you in advance for your co-operation. Please express your views by ticking the circles appropriate to your response. Kindly note that there are no right or wrong answers and all that is needed is your opinion based on your personal experience.

### **A. Demographic Information**

- 1. Indicate you Gender
  - o Male
  - o Female
- 2. Indicate your Age.
  - Below 20 years
  - o 20-29 years
  - 30-39 years
  - 40-49 years
  - Above 50 years
- 3. What is your level of education?
  - Secondary
  - Tertiary College
  - Undergraduate
  - Postgraduate
- 4. What is your job title?
  - Senior Manager
  - Project Manager
  - Project team member
  - Consultant

- 5. How long have you been working for this organization?
  - Less than 6 months
  - Between 6 months 1 year
  - Between 1-3 years
  - o Between 3-5 years
  - o Above 5 years
- 6. Have you participated in project implementation?
  - o Yes
  - o No

#### PART B: The concept of performance of IT projects

 Based on the scale of 1 to 5 where 1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree and 5 is Strongly Disagree, this section seeks to explore various aspects of leadership which indicate the potential for project performance.

| Statement  | 5 | 4 | 3 | 2 | 1 |
|--|---|---|---|---|---|
| Extent of organizations growth (revenue/profit margin) |   |   |   |   |   |
| Degree of competitive advantage                        |   |   |   |   |   |
| Customer satisfaction levels                           |   |   |   |   |   |
| Utilization of resource (Time, finances, technology)   |   |   |   |   |   |
| Number of projects completed on time                   |   |   |   |   |   |
| Number of projects completed on budget                 |   |   |   |   |   |
| Number of projects tested and signed off by client     |   |   |   |   |   |
| Projects successfully closed and billed                |   |   |   |   |   |

#### PART C. Leadership skills and performance of IT projects

 Below are statements on project management leadership skills in relation performance of IT projects. Please indicate the degree to which you agree using the scale: Strongly Agree (5); Agree (4); Neutral (3); Disagree (2) and Strongly Disagree (1).

| Statement   | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| Value of leadership skills in the organization                          |   |   |   |   |   |
| Different leadership skills required at different levels of management  |   |   |   |   |   |
| Leadership skills developed following a cluster approach                |   |   |   |   |   |
| Effectiveness of leaders with strengths in multiple competencies/skills |   |   |   |   |   |
| Conceptual skills are more important at higher levels                   |   |   |   |   |   |
| Technical skills more important at lower levels.                        |   |   |   |   |   |
| There are superior skills to the other                                  |   |   |   |   |   |
| Employees' effectiveness defined by ability to apply leadership skills  |   |   |   |   |   |

- 9. Of the skills listed below, which one do you think is most appropriate for effective performance of IT projects?
  - Conceptual skills
  - o Technical skills
  - Human skills
  - All of the above
- 10. In your own opinion, indicate the extent to which leadership skill influences performance
  - of IT projects?
    - Very great extent
    - Great extent
    - o Moderate
    - o Little extent
    - o No extent

# PART D: Leadership experience and performance of IT projects

11. The following are key statements that characterize leadership experience. Kindly indicate your level of agreement using the scale: Strongly Agree (5); Agree (4); Neutral (3); Disagree (2) and Strongly Disagree (1).

| Statement   | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| A minimum years of experience is required for implementation of IT      |   |   |   |   |   |
| projects  |   |   |   |   |   |
| Expertise and knowledge is critical for the performance of IT projects. |   |   |   |   |   |
| Expansive experience is important for planning and supervising projects |   |   |   |   |   |
| execution   |   |   |   |   |   |
| Leadership experience is more desirable for effective performance of IT |   |   |   |   |   |
| Projects  |   |   |   |   |   |
| Experience gained over time leads to effective performance of IT        |   |   |   |   |   |
| projects  |   |   |   |   |   |
| Employees serving in lower supervisory job first before moving to       |   |   |   |   |   |
| managerial positions  |   |   |   |   |   |
| Managers with expansive experience are better placed to design project  |   |   |   |   |   |
| teams   |   |   |   |   |   |
| Experience provides accumulation of both technical and workforce        |   |   |   |   |   |
| knowledge   |   |   |   |   |   |

- 12. To what extent do you think project management leadership experience influences performance of IT projects at Fintech Kenya?
  - Very great extent
  - Great extent
  - o Moderate
  - Little extent
  - No extent

# PART E: Leadership control and performance of IT projects

13. The following are key statements that characterize leadership control. Kindly indicate your level of agreement using the scale of: Strongly Agree (5); Agree (4); Neutral (3); Disagree (2) and Strongly Disagree (1).

| Statement   | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| Project staff roles/responsibilities are clearly defined              |   |   |   |   |   |
| Team members participate in projects processes                        |   |   |   |   |   |
| Control resulting to better quality management                        |   |   |   |   |   |
| Focus on longstanding approach on control                             |   |   |   |   |   |
| Effective and efficient utilization of resources                      |   |   |   |   |   |
| Control ensure satisfactory progress in implementation of IT projects |   |   |   |   |   |
| There are clear lines of authority and process                        |   |   |   |   |   |
| Members take ownership/responsibility of the IT projects              |   |   |   |   |   |

14. To what extent do you consider control as a key aspect of leadership that influences performance of IT projects?

- Very great extent
- Great extent
- o Moderate
- o Little extent
- $\circ$  No extent

# PART F: Leadership style and performance of IT projects

15. The following are key statements that characterize leadership style. Kindly indicate your level of agreement using the scale of: Strongly Agree (5); Agree (4); Neutral (3); Disagree (2) and Strongly Disagree (1).

| Statement   | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| Effective leadership styles facilitate performance of IT projects             |   |   |   |   | + |
| Transactional leaders help organizations achieve current objectives more      |   |   |   |   |   |
| Visionary leaders create environments that hence performance                  |   |   |   |   |   |
| Different leadership styles have positive/negative correlation on performance |   |   |   |   |   |
| Leadership style leads to sustained competitive advantage.                    |   |   |   |   |   |
| Team leads shape collective norms and coordinate collective action            |   |   |   |   |   |
| Team leaders combines people and processes                                    |   |   |   |   |   |
| Employees receive clear rewards/punishments                                   |   |   |   |   |   |

16. To what extent do you consider leadership style as a key aspect of leadership that influences performance of IT projects?

- Very great extent
- Great extent
- $\circ$  Moderate
- o Little extent
- $\circ$  No extent

| N = Population | S = Sample size |
|----------------|-----------------|
| 10             | 10              |
| 15             | 14              |
| 20             | 19              |
| 25             | 24              |
| 30             | 28              |
| 35             | 32              |
| 40             | 36              |
| 45             | 40              |
| 50             | 44              |
| 55             | 48              |
| 60             | 52              |
| 65             | 56              |
| 70             | 59              |
| 75             | 63              |
| 80             | 66              |
| 85             | 70              |
| 90             | 73              |
| 95             | 76              |
| 100            | 80              |
| 110            | 85              |
| 130            | 97              |
| 140            | 103             |
| 150            | 106             |
| 170            | 118             |
| 180            | 123             |
| 190            | 127             |
| 200            | 133             |
| 210            | 136             |
| 220            | 140             |
| 230            | 144             |
| 240            | 148             |
| 250            | 152             |
| 260            | 155             |
| 270            | 159             |
| 280            | 162             |
| 290            | 165             |

Appendix III: Krejcie & Morgan (1970) Table

#### **Appendix IV: Research Permit**

