The Role of Servant Leadership in Project Management in Kenya

Abednego Oswald Gwaya, Sylvester Munguti Masu, Walter Odhiambo Oyawa

Abstract-Leadership is believed to be important to project success despite a limited number of studies on the topic. Servant leadership, for example, has never been studied in the context of the project environment or project success. Servant leadership does, however, include a number of skills that have been found to be important to the management of projects such as: Listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people and community building. For that reason, the research herein will contribute new knowledge to the study of leadership in project management. The study investigated the relationship between servant leadership and project outcomes. The project management profession is undergoing tremendous growth worldwide as officials of corporations, governments, academia and other organizations recognize the value of common approaches and educated employees for the execution of projects (Ives, 2005). Ives (2005) acknowledged that implementation of strategic change has been a business problem for decades and still is a problem. The discipline of project management is a key strategy to manage change in organizations (Kloppenborg & Opfer, 2002). Project management techniques may be a partial solution to the problem of implementing of strategic change. Construction projects globally have often failed to achieve expected results. In Kenya, for instance we have been experiencing cost and time overruns on projects which are further compounded with quality issues. This even when professors are involved in projects execution (Muchungu, 2012). Even when teams are disassembled and reassembled with a different team leader and or project manager results have varied. Since the latter years of the 1980s, the links between the implementation of change and project management has been strengthened (Ives, 2005). Organizational systems are open, complex, and political, creating a greater level of uncertainty and contributing to an unstable and changing project environment (Ives, 2005; Thomas & Bendoly, 2009). The high level of uncertainty and change challenges traditional systematic approaches to project management. The emphasis of the traditional approach was more on project processes, tools and techniques and less on the leadership of projects. This study determines to what extent servant leadership can contribute to project success. The outcome of this study indicates that servant- leadership is present in a majority of successful projects. The results from this study could benefit project management practitioners by providing specific constructs that can be applied towards improving the current approaches to project management leadership. The study will add to the body of knowledge on leadership in project management.

Keywords: Servant leadership, Project Management, Project Success, Project Leaders, Project execution, Project Human Resources.

Manuscript Received on November 2014.

Dr. Abednego Oswald Gwaya, Lecturer, Department of Construction Management, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya.

Prof. Sylvester Munguti Masu, Assoc. Prof., Department of Construction Economics & Management, Technical University of Kenya, Nairobi, Kenya.

Prof. Walter O. Oyawa, Professor, Department of Civil Engineering, Jomo Kenyatta University of Agriculture And Technology, Nairobi, Kenya.

I. INTRODUCTION

A. Introduction to the Problem

Within project management, researchers have studied the concept of leadership extensively (Berg & Karlsen, 2007; Dainty, Cheng & Moore, 2005; Gehring, 2007; Hyvari, 2006; Schmid & Adams, 2008; Muchungu, 2012). The researchers sought to highlight the importance of project leadership as a key aspect of project successes. Their findings suggested that more demanding market conditions required a stronger focus on leadership, knowledge and skills to ensure project success. They also believed that successful project outcomes would require an increased emphasis on the organizational and human aspects of project management. Despite the plethora of research, project managers continue to face many challenges and problems concerning leadership, for example, leadership style, stress, uncertainty, motivation, learning and teamwork (Berg & Karlsen, 2007). Hauschildt et al. (2000) reported that the success of a project depended more on human factors, such as project leadership, top management support, and project team, rather than on technical factors. Muchungu, (2012) also confirms that Human Resource has a direct correlation on the performance of construction projects in Kenya. The researchers established that the human factors increased in importance as projects increased in complexity, risk and innovation. They also found that the critical role of the project manager's leadership ability had a direct correlation to project outcomes. While leadership may be singled out as an individual contributor to failure, it transcends all other organizational factors (Roepke, Agarwal & Ferratt, 2000). Leadership affects corporate culture, project culture, project strategy, and project team commitment (Shore, 2005). It also affects business process reengineering, systems design and development, competency level, implementation and maintenance. Without appropriate leadership, the risk of project failure increases (Shore, 2005). Although researchers in project management have identified leadership as critical to the success factors of projects (Finch, 2003; Zimmerer & Yasin, 1998), the topic of leadership in relation to project success has not been adequately studied.

Determination of a successful project outcome is measured by the extent to which the project accomplished complex endeavors that met a specific set of objectives within the constraints of resources, time and performance objectives (Thilmany, 2004). Indications of successful project outcomes are the accomplishment of the specific objectives of the project as defined by the project stakeholders and are dependent on the combined efforts of project management and the project team (Johnson, 1999). Essential to the successful outcome of projects are the project manager and the project team (Berg & Karlsen, 2007; Blackburn, 2002; Cleland, 2004; Kerzner, 2013). The project manager is

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

responsible for leading the project team towards achieving the desired outcome of the project (Cleland, 2004; Kerzner, 2013). The role of project manager combines human and technological resources in a dynamic, temporary organization structured to deliver results that include social as well as technological aspects (Blackburn, 2002). Leadership in a project environment requires the project manager to integrate and lead the work of the project team (Berg & Karlsen, 2007). Project management is not an isolated activity, but rather a team effort (Johnson, 1999). A team requires leadership in order to function effectively (Cathcart & Samovar, 1992).

In the project environment, possessing management skills is not sufficient to be successful (Thite, 2000). Project management practices require that managers have knowledge and experience in management and leadership and the relationship to project success (Berg & Karlsen, 2007). In a business environment it is believed that a manager makes sure tasks and duties are completed, while a leader is sensitive to the needs of people and what followers need to be exceptional employees (Maccoby, 2000). Thite (2000) suggested that integrating leadership concepts allows project managers to apply logic and analytical skills to project activities and tactics. Thite (2000) further suggested that project managers can integrate leadership concept by being sensitive to and working with project team members as individuals with needs and desires related to their work and careers. The discussion in this study, viewed leadership as the ability to make strategic decisions, using communication (Bennis and Nanus, 1985), and the human resource skills of interpersonal relationship, motivation, decision making and emotional maturity, to mobilize project team members (Zimmerer & Yasin, 1998). There are, however a variety of leadership styles that may be applicable for dealing with the many challenges faced by project management. Situational leadership, for example, is based on the premise that the style of leadership, which may be appropriate for one situation, may not be appropriate for another (Hersey & Blanchard, 1988). New wave leadership, a concept of team-based leadership, reduces the focus on top executives and allocates responsibility for organizational success across all sectors of the organization (Lapp, 1999). Transformational leadership is based on the notion of followership to a higher cause; that is, to focus on the goals of the organization rather than self (Northouse, 2004). Transactional leadership is the social exchange between the leader and follower (Bass, 1990). A leadership style that has been found to enhance the human resource skills of interpersonal relationship, motivation, decision making and emotional maturity, required to mobilize project team members is participative leadership (Kezar, 2001; Schmid & Adams, 2008). Leary-Joyce (2004) refers to participative leadership as servant-leadership, which incorporates the leader's ability to "include, discuss, take ideas, look for ways to help people come on board and celebrate every success that comes along". Servant-leadership represents a model of leadership in which the leader assumes a supportive, service orientated role among stakeholders and followers. The leader serves by building the skills of followers, removing obstacles, encouraging innovation, and empowering creative problem solving (Spears, 2004). The characteristics associated with servant leadership include incorporating active listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people, and community building (Spears, 2002). An examination of servant leadership relative to project performance may provide project managers information with which to improve leadership acumen and project outcomes. To that end, this study investigated the relationship between project outcomes and servant leadership. Despite the use of project management methodologies the number of failed projects is still high (Finch, 2003; Chabursky, 2005; Hyvari, 2006). It is believed that leadership is a needed competency for successful project outcomes (Kerzner, 2013), yet there is limited empirical research linking leadership to project performance. It is believed that servant leadership enhances the human resource skills necessary to mobilize project teams (Schmid & Adams, 2008). The call for a study of these areas led to this research.

II. REVIEW OF RELATED LITERATURE

A study by Hauschildt et al. (2000) concluded that a project's technical components make up only 50% of the challenge of executing and completing a project. The authors further contended that the other 50% of the challenge involved the organizational and human aspects of leadership and team building/collaboration, with the majority of the human element being ascribed to leadership. Neuhauser (2007) asserted that project managers have a dual responsibility when managing a project: (a) managing the technical components of the project (plans, schedules, budgets, statistical analysis, monitoring and control involved in the various knowledge areas and processes), and (b) managing the people in such a way to motivate the team to successfully complete the project goals. Srica (2008) argued that since the late 1990s project management has experienced a shift towards a stronger emphasis and focus on the organizational and human aspects of project work. This is in comparison to the past, where the emphasis was more on the technical aspects of project accomplishment. Kloppenborg and Opfer (2002), in a detailed review of project management research, found that the focus of project management research in the 1960s to 1990s concentrated on the elements of planning and scheduling. In the 1990s the emphasis was in the area of scheduling, control and automated tools, which led to research in the area of life cycle costing and risk management planning. In the late 1990s research into team building and leadership emerged (Shenhar & Dvir, 2007). The emphasis placed on leadership and human relations contributed to increased efficiency in addressing the problems encountered in the project process (Johnson, 1999). The development of better processes and the organizing of teams more effectively resulted from an increased emphasis on leadership and human resources (Kloppenborg & Opfer, 2002). Achieving successful project outcomes require the combination of technical and leadership competencies (Zimmerer & Yasin, 1998). Many project management processes and techniques (planning, scheduling, control and automated tools) exist for tracking and measuring the technical elements of projects. The processes and methods do not, generally, track or measure human elements of managing people such as communication, building relationships, resolving conflict, and team engagement or motivation (Kloppenborg & Opfer, 2002). It is believed that leadership competencies are required

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

to enable project management to effectively use human resource skills to improve project outcomes (Schmid & Adams, 2008). Despite the recent emphasis on leadership, the numbers of projects that fail to achieve successful outcomes are still alarmingly high (Shenhar & Dvir, 2007; Skaistis, 2007) often ranging between 66% and 90% (Zhang & Faerman, 2007). Many projects continue to fail despite the use of established project methods and techniques as the leadership competency required for successful project outcomes have been found lacking (Belassi & Tukel, 1996; Finch, 2003; Hyvari, 2006; Zimmerer & Yasin, 1998). Yet, previous research has stopped short of identifying leadership as a factor that has affected or influenced project outcomes. Project managers draw on a variety of leadership approaches that are not necessarily effective, due to the absence of formal leadership training among project managers (Shenhar, 2001;). The basic principles and methodology that defines the approach to project management are defined by the Project Management Body of Knowledge, but this body does not provide guidelines for leadership in a project environment (Pomfret, 2008). The successful attainment of organizational goals and objectives is largely determined by the quality of relationship that exists between the organization's leaders and followers. Leaders are usually at the forefront of directing activities yet a leader's success is heavily reliant on the level of support obtained from followers (Scandura, 1999). The early theories exploring the relationship of leaders and followers were more focused on the leader, particularly how leadership behavior influenced follower attitudes, motivation, and how such behavior affected group effectiveness (Bass, 1990). Later theories sought to more strongly identify the importance of the follower in supporting leaders in the accomplishment of organizational goals (Bennis, 1999; Dirks, 2000; Scandura, 1999). Burns, (1978) sought to establish that leadership can be viewed as either a transactional or transformational process. Transactional leaders tend to focus more on accomplishing tasks, influencing followers through goal setting, defined outcomes and feedback while providing rewards for achieving the desired results (Dvir, Edin, Avolio & Shamir, 2002). Burns conceptualization of transformational leadership refers to the practice of effecting a transformation in the assumptions and thoughts of followers and creating a commitment for the strategies, objectives and mission of the firm, company or corporation. Bass (1990) recognized as being responsible for the expansion and the refinement of the theory of transformational leadership, argued that unlike transactional leaders which operated in an exchange of value between leader and follower the transformational leader acted on "deeply held personal value systems" In transformational leadership, focus on the leader is directed toward the organization, and the leader's behavior builds follower commitment toward the organizational objectives through empowering followers to accomplish those objectives (Yukl, 1998). While transactional leaders focus on exchange relations with followers, transformational leaders inspire followers to higher levels of performance for the sake of the organization (Yukl, 1998). The very definition of transformational leadership states the building of commitment to the organizational objectives (Yukl, 1998). The primary focus of the transformational leadership styles is on the organization, with follower development and empowerment secondary to accomplishing the organizational objectives. In contrast, the servant leader is one where the leader focuses on the followers (Patterson, 2003). Servant leaders do not have particular affinity for the abstract corporation or organization; rather, they value the people who constitute the organization. This is not an emotional endeavor but rather an unconditional concern for the well-being of those who form the entity. The relational context is where the servant leader actually leads. Harvey (2001) stated that, "chasing profits is peripheral; the real point of business is to serve as one of the institutions through which society develops and exercises the capacity for constructive action". According to Patterson (2003), leadership theories, such as transformational leadership or transactional leadership, focused on the organization and were inadequate to explain behavior that was altruistic in nature, or follower focused. The acceptance of servant-leadership, which is follower focused better explains the altruistic behavior that is displayed by the leader (Patterson, 2003). The virtues of servant leadership are regarded as qualitative characteristics that are part of one's character (Whetstone, 2001) and incorporate the ethical values of being good, excellent or trustworthy. These ethical constructs defined servant-leaders and shaped attitudes, characteristics and behavior (Patterson, 2003). The available material on servant leadership addresses primarily organizational leadership and not specifically project leadership. The literature and empirical documentation specifically applying servant-leadership to project management is nonexistent or at best very limited in Kenya. Much of the current work on leadership in project management relates to leadership as a subset of management (Gehring, 2007). In addition, research of management and leadership conducted in corporate and general management rarely included project management (Schmid & Adams, 2008).

III. STATEMENT OF THE PROBLEM

Despite advances in project management methodologies many projects continue to fail for a number of reasons. One of the main causes of failure is the lack of effective leadership and / or the style of leadership applied by project managers (Berg & Karlsen, 2007). The need for effective leadership is accepted among academicians and practitioners of project management. Despite some study in the area of project management leadership, the extent to which leadership influences project success is not clear, nor is the style of leadership apparent. The problem is that projects continue to fail due to ineffective leadership. Empirical evidence suggests servant-leadership as a model that could contribute to overcoming many of the leadership challenges faced by project leaders. The objective of this study is to add to the existing body of project management leadership research by investigating whether or not servant leadership can be an appropriate style of leadership for improving project success. The study used a quantitative descriptive approach to determine whether a relationship exists between successful project outcomes and servant-leadership.

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

IV. PURPOSE OF THE STUDY

The purpose of the study was to identify to what extent servant leadership approaches contribute to successful project outcomes. The objective was to add to the existing body of project management leadership research. The study investigated the factors that contribute to successful project outcomes as well as analyzed how servant-leadership relates to a selection of project management competencies.

V. PROJECT MANAGEMENT FOR THE CONSTRUCTION INDUSTRY IN KENYA

In Kenya, despite the need for Project Management services; it is yet to take a structured and recognized approach. Most of the professionals including Architects, Engineers, Quantity Surveyors and Construction Managers are doubling as construction project managers albeit without proper rules and regulations. It is only in 2009 that the Institution of Construction Project Managers of Kenya (ICPMK) was formed. The objects of the institution include: promote the general advancement of the practice of construction project management and its application in Kenya including facilitating the exchange of information of the Institution and otherwise; develop and advance a standardized body of knowledge for Construction Project Management; set and develop qualification and registration criteria for Construction Project Managers; set regulation and control standards of Construction Project Management Practice; pursue the incorporation of practice objectives into legal framework through an Act of Parliament.; keep and maintain a register of members and cooperate with universities, in the furtherance of education and training in construction project management. Project management in the construction industry in Kenya still remains rudimentary. A study done in Kenya for public building projects established that out of one hundred (100) of the projects, seventy three (73) experienced time overruns compared to thirty eight (38) out of one hundred (100), which suffered cost overruns (Mbatha,1986). Another study undertaken for both public and private building projects came up with a similar conclusion (Talukhaba, 1989). The overall implication is that national resources are significantly wasted. The observations also do imply that project risks are not adequately examined prior to the award of contracts (Gichunge, 2000). According to Gichunge (2000) the most serious source of cost and time risks in building projects during the construction period is 'extra work' (technically termed as variations), which normally occurs in 73.50% of the building projects in the population whereas defective materials accounted for 38.20% for observed unacceptable quality work cases. There is evidence that construction projects performance in Kenya is inadequate. Time and Cost performance of projects in Kenya are poor to the extent that, over 70% of the projects initiated are likely to escalate in time with a magnitude of over 50%. In addition over 50% of the projects are likely to escalate in cost with a magnitude of over 20%. Studies have shown that, although cost performance was not better, time performance was comparatively the worst (Masu, 2006). The latter recommended that efforts should be directed to the training of the key participants in construction resource management. Work-studies on construction resources, application of resource optimization techniques, Just-in-time philosophy and project information management strategies should be embraced. The quality of leadership would therefore influence greatly on the overall project delivery results.

VI. CONTINGENCY THEORY OF LEADERSHIP

Fiedler's (1974) contingency theory of leadership, though a theory within itself, impinges on situational leadership in that it suggested a fully articulated model dealing with both leader traits and situational variables. He divided leaders into relationship-motivated and task-motivated groups by means of their relatively favorable or unfavorable description of the leader's least preferred coworker on a set of bipolar adjectives (Fiedler & Chemers, 1984). Fiedler considered the relative effectiveness of these two types of leaders in eight different situational types created by a combination of three contrasting variables:

(a) leader-member relation,
(b) follower-task structure, and
(c) leader-position power.

Leader-member relations are concerned with the confidence levels and atmospheres within followers as well as their attraction and loyalty to the leader. A good leader-member relationship exists where followers like, trust and enjoy a positive rapport with the leader. The reverse is true where follower hostility exists and the atmosphere is unfriendly. Task structure refers to how routine and predictable the task of the follower may be. Clearly structured tasks have definite accomplishment goals, limited solution alternatives, and lend more control to the leader. Vague and unclear task reduces the leader's control. Position power is concerned with the degree to which the position enables the leader to get his followers to comply with and accept his leadership and decisions (Vroom, & Jago, 2007). Fiedler found that the relationship-motivated leader outperformed the task-motivated leader in four of the eight situations but that the reverse was true in the other four situations. He further contended that leadership motivation is a rather enduring characteristic that is not subject to change or adaptation. According to the Fiedler (1974) these situational factors determine the degree to which situations within organizations will be favorable. It is suggested that situations where there exists good leader-follower relations, defined tasks and strong leader position power will be most favorable. On the other hand situations with poor leader-follower relations, unstructured tasks and weak leader position power would be least favorable. Moderately favored situations would fall somewhere between the other two situations. The contingency theory of situational leadership suggests that situations vary according to the level at which they are favorable to the leaders (Fiedler & Chemers, 1984).

VII. RESEARCH METHODOLOGY

The study was a quantitative descriptive inquiry examining whether the application of servant-leadership will influence project successes. The severity of project implementation failure and the potential for leadership to help improve the problem directed this study. The following research question guided the proposed study: What is the relationship, if any, between successful project outcomes and the application of servant leadership? A survey approach covering 500 members was utilized with 312 or 62.4% responding to the research.

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

The following hypotheses were used to test the research question.

Ho1: There is no relationship between successful project outcomes and the project manager listening intently to project team members. The reverse is true for alternate hypothesis HA1.

Ho2: There is no relationship between successful project outcomes and the project manager being aware of the needs of project team members. Otherwise supports HA2 as alternate hypothesis.

Ho3: There is no relationship between successful project outcomes and the project manager being committed to the growth of project team members. Otherwise supports HA3 as alternate hypothesis.

A. Research Design

The study was a quantitative descriptive inquiry examining whether a relationship exists between successful project outcomes and servant-leadership. Creswell & Plano Clark,(2007), suggested that research methodology must consider the context of the research and the desired results in order to achieve meaningful research outcomes. A quantitative descriptive approach was chosen for this study as it allows for the exploration of relationships between variables through the testing of hypotheses (Gall, Gall, & Borg, 2007). The study used three hypotheses aimed at seeking to identify if a relationship exists between the study's independent and dependent variables. The results from the study were used to address the hypotheses, tentative propositions surrounding the relationship of the theoretical constructs, derived from the research question. A quantitative descriptive approach also minimized the potential for researcher bias as well as minimizes the need for subjective evaluation of data (Creswell & Plano Clark, 2007). One of the major concerns regarding the use of qualitative research in studies involving social or behavioral content is the possibility of researcher bias and influence induced by human persuasion. Quantitative approaches, using numerical methods, on the other hand rely on objective means for collecting data, distancing the researcher from human influences (Neuman, 2003). This study took the form of a structured survey approach using a Likert-scale. This type of survey is known to have a short turnaround in results, creates the possibility to do numerous surveys in a short time and is practically inexpensive to administer. The data was analyzed in SPSS version twenty using descriptive statistics and Principal Component Analysis.

VIII: FACTORS AFFECTING PROJECT PERFORMANCE FUNCTIONS

All factors are considered to be critical in the performance of project management functions with leadership style, legislation support requirements and training & competences being rated as the most important factors, Table 1.1.

Table 1.1: Factors affecting project performance functions in (%)

Factors affecting project management functions	Least important	Less important	Uncertain	Important	Very Important
Culture	6.3%	6.3%	6.3%	37.5%	43.8%
Leadership style				12.5%	87.5%
Legislation support requirements				18.8%	81.3%
Personality traits	6.3%		12.5%	31.3%	50%
Procurement methods			6.3%	25%	68.8%
Project management approach			6.3%	12.5%	81.3%
Project management policies		6.3%		25%	68.8%
Project risk management			6.3%	12.5%	81.3%
Training and Competencies				12.5%	87.5%

Figure 1.1 below illustrates the strength of rating against individual factors, leadership style, Legislation, and training competencies constituted 100% with culture being rated the least at 81.3%. The data has a high correlation to the reporting that was reported by the practitioners in the construction industry hence showing the reliability of the data collected. Project leadership is crucial in execution of construction projects. Training and competencies do have a positive influence on leadership and therefore in the performance of projects.

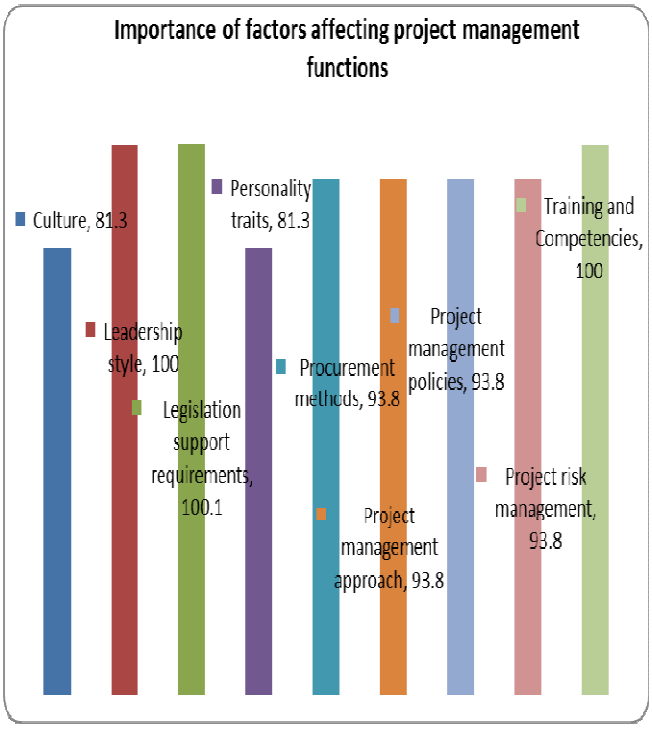


Figure 1.1: Project management functions factors

Source: Field survey 2013

IX. TESTING OF HYPOTHESES

Three non-parametric tests of significance, using chi-square tests, were performed. For each null hypothesis, focused on testing the characteristics of servant leadership, one test was performed. These procedures were used to test for significant

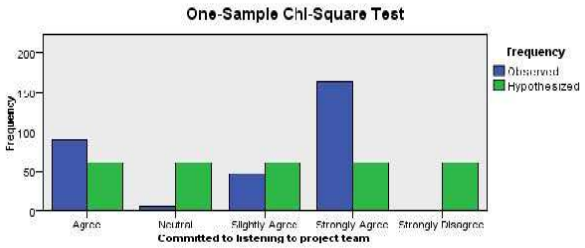
Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

differences between the observed distribution of the data among the characteristics of servant leadership and the expected distribution based on the null hypotheses (Cooper & Schindler, 2003). The deviations of the actual frequencies in each category were compared with the hypothesized frequencies. A confidence level of 95% was used to accept or reject the study's hypothesis. To achieve 95 % confidence an asymptotic significance level of .05 or less must be achieved. Chi-square tests were performed to determine the relationship between the dependent variable, successful project outcomes and the independent variable, servant leadership. These statistical tests allowed for the measuring of any discrepancy between the cell counts and what would be expected if the rows and columns had no relationship. Two sided asymptotic significance of the chi-square statistic was used to identify the significance of the relationship between the variables, the significance level was 0.05. Directional measures using Lambda, Goodman and Kruskal tau and Uncertainty Coefficient were used to determine the reduction of error of predicting the row and column variables. Symmetric measures using Phi, Cramer's V and Contingency Coefficient were applied to determine the strength of the relationship between the variables.

X. SURVEY FINDINGS

Hypothesis 1

Ho1: There is no relationship between successful project outcomes and the project manager listening intently to project team members.



Total N	308
Test Statistic	296.578
Degrees of Freedom	4
Asymptotic Sig. (2-sided test)	.000

1. There are 0 cells (0%) with expected values less than 5. The minimum expected value is 61.600.

Figure 2: One sample test on listening skills to a project manager: Source own survey, 2013

The Pearson one-sample chi-square test of significance revealed a significance level of .000 (see Figure 2). The observed distribution of data when compared to the expected distribution, based on the null hypothesis indicates the existence of significant differences between observed and expected. The linear-by-linear association significance value (Asymp. Sig) is .000 in the factor committed to listening to project team; since this is less than 0.05 the null hypothesis was rejected. A scatter plot of the data measuring hypothesis 1 and the corresponding linear regression is shown in Figure 3.

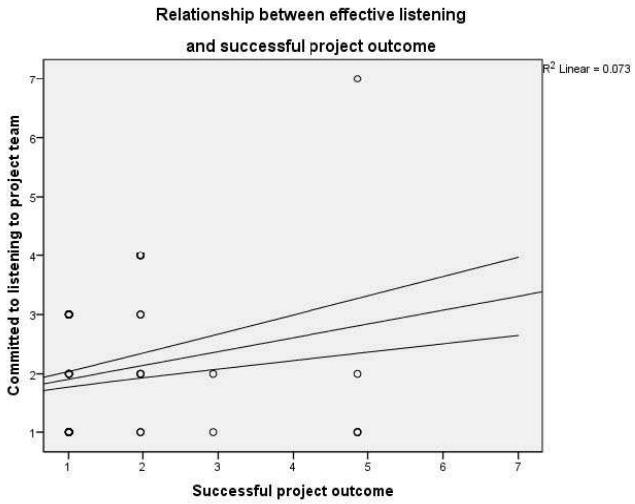


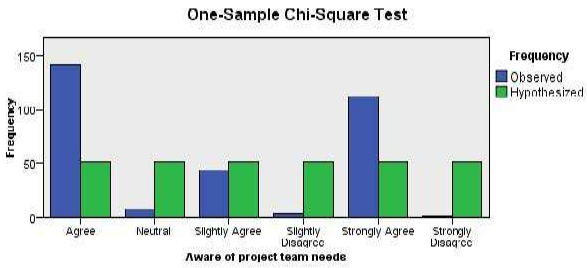
Figure 3: Scatter Plot of Hypothesis 1 Data

The mean scores on the horizontal axis represented the dependent variable and scores on the vertical axis represented the independent variable. The scores range from 1 strongly agreed to 7 strongly disagreed. Regression calculations were conducted to determine whether a linear relationship existed between the variables of hypothesis 1. The R2 linear value explains 0.73% of the data variation, which is significant to suggest the presence of a linear relationship.

Hypothesis 2

Ho2: There is no relationship between successful project outcomes and the project manager being aware of the needs of project team members.

The Pearson one-sample chi-square test of significance reflects a significance level of .000 (see Figure 4). The observed distribution of data when compared to the expected distribution, based on the null hypothesis indicates the existence of significant differences between observed and expected. The linear-by-linear association significance value (Asymp. Sig) is .000 in the factor aware of project team needs; since this is less than 0.05 the null hypothesis was rejected.



Total N	308
Test Statistic	360.961
Degrees of Freedom	5
Asymptotic Sig. (2 sided test)	.000

1. There are 0 cells (0%) with expected values less than 5. The minimum expected value is 51.333.

Figure 4: Chi- Square Test Measuring Awareness of Project Team Needs: Own Survey, 2013

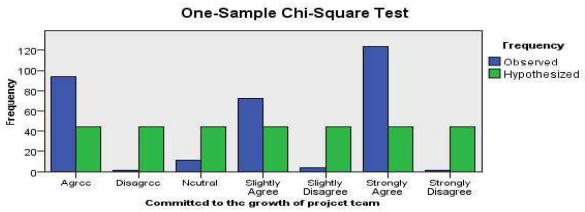
Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

A scatter plot of the data measuring hypothesis 2 and the corresponding linear regression had mean scores on the horizontal axis representing the dependent variable and scores on the vertical axis representing the independent variable. The scores range from 1 strongly agreed to 7 strongly disagreed. Regression calculations were conducted to determine whether a linear relationship existed between the variables of hypothesis 2. The *R*2 linear value explains 1.29% of the data variation, which is significant to suggest the presence of a linear relationship.

Hypothesis 3

Ho3: There is no relationship between successful project outcomes and the project manager being committed to the growth of project team members.

The one-sample chi-square test of significance reflects a significance level of .000 (see Figure 5). The observed distribution of data when compared to the expected distribution, based on the null hypothesis indicates the existence of significant differences between observed and expected. The linear-by-linear association significance value (Asymp. Sig) is .000 in the factor committed to the growth of project team members; since this is less than 0.05 the null hypothesis was rejected.



Total N	308
Test Statistic	361.455
Degrees of Freedom	6
Asymptotic Sig. (2-sided test)	.000

1. There are 0 cells (0%) with expected values less than 5. The minimum expected value is 44.

Figure 5: Chi Square Test Measuring Commitment to the Growth of People

The scores range from 1 strongly agreed to 7 strongly disagreed. Regression calculations were conducted to determine whether a linear relationship existed between the variables of hypothesis 7. The *R*2 linear value explains 1.73% of the data variation, which is significant to suggest the presence of a linear relationship.

XI. SUMMARY OF FINDINGS

The empirical information presented in the literature review suggested servant-leadership as a model that could contribute to overcoming many of the challenges faced by project leaders. Three hypotheses focusing on the part of characteristics of servant leadership were identified to address the research objective. Each of the hypotheses was geared to determine whether a relationship existed between the study's independent variable of servant leadership and dependent variable of successful project outcomes. The factors that contribute to successful project outcome were recognized as:

a. the project being completed on schedule,
b. the project being completed within budget,
c. scope effectively managed,
d. end product met end users requirements,
e. accomplished stakeholder's objectives,
f. improved end user performance,
g. positively impacted on finished product/service and
h. met the satisfaction of stakeholders.

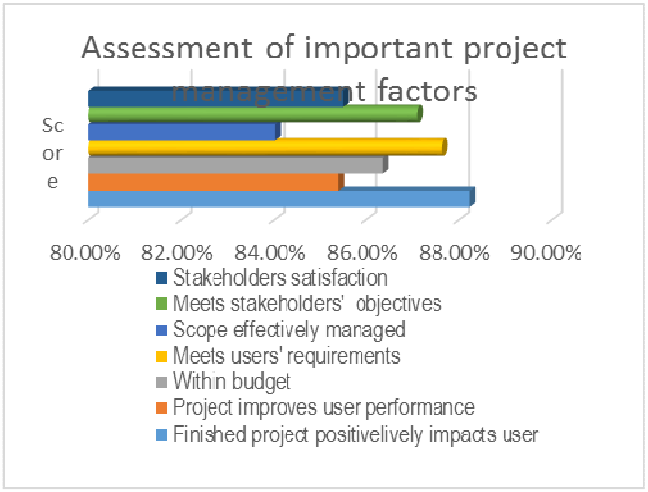


Figure 6: Assessment of important project management factors. Source, own study, 2013

From figure 6 all the above factors received a rating of more than 84% meaning they are very important. Pearson one-sample Chi-Square tests of significance were performed to determine the relationship between successful project outcomes and the characteristic traits of servant leadership. The data provided by the sample population indicated a significant relationship between the variables. The rationale for this view is addressed in the discussions of each of the hypothesis below.

Hypothesis 1

Focused on identifying whether a relationship existed between successful project outcomes and the servant leadership characteristic of effective listening, the empirical analysis led to the rejection of the null hypothesis. The results revealed positive correlations between the project manager's commitment to listening to the project team and the factors for successful project outcomes. The correlation of the independent variable with all eight dependent variables was positive being beyond the required asymptotic significance level of < .05. The reliability of the data and the results were ascertained using the directional measures of Lambda, Goodman and Kruskal Tau and Uncertainty Coefficient. The reduction in miscalculation scores from these statistics ranged from .013 on the variable of positive impact on the user to a high of .656 on the variable of meeting the satisfaction of stakeholders.

Hypothesis 2

Focused on identifying whether a relationship existed between successful project outcomes and the servant leadership characteristic of the leader being aware of team members' needs; the empirical analysis led to the rejection of the null hypothesis. The results revealed positive correlations between the project manager being aware of the project team needs and the factors for successful project outcomes. The

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

correlation of the independent variable with all eight dependent variables was positive being beyond the required asymptotic significance level of < .05. The reliability of the data and the results were ascertained using the directional measures of Lambda, Goodman and Kruskal Tau and Uncertainty Coefficient. The reduction in miscalculation scores from these statistics ranged from .000 on the variable of improving end user performance and that of scope being effectively managed to a high of .379 on the variable of project being completed on schedule.

Hypothesis 3

This hypothesis focused on identifying whether a relationship existed between successful project outcomes and the servant leadership characteristic of the leader being committed to the growth of the project team. The empirical analysis of the data provided by the population sample led to the rejection of the null hypothesis. The results revealed positive correlations between the Project Manager being committed to the growth of the project team and the factors for successful project outcomes. The correlation of the independent variable with all eight dependent variables was positive being beyond the required asymptotic significance level of < .05. The reliability of the data and the results were ascertained using the directional measures of Lambda, Goodman and Kruskal Tau and Uncertainty Coefficient. The reduction in miscalculation scores from these statistics ranged from .000 on the variables of project end product meeting end users requirements, improving end user performance, meeting the satisfaction of stakeholders, improving end user performance, and positively impacting on finished product/service, to a high of .496 on the variable of the project scope being effectively managed.

XII. CONCLUSION

Previous research has indicated that being technically competent in the principles of project management is not adequate for projects to have successful outcomes (Berg & Karlsen, 2007; Thite, 2000). Many projects continue to fail despite the use of established project methods and techniques as the leadership competency required for successful project outcomes have been found lacking (Chabursky, 2005; Finch, 2003; Hyvari, 2006). At the same time there exists limited methods within project management to track and control the integrative human elements required to manage people, stress, maintain communication, build relationships, resolve conflict and motivate the project team for successful project outcomes (Kloppenborg & Opfer, 2002). The study found an interesting correlation between the belief that servant leader behaviors applied to successful project managers and factors of project success.

REFERENCES

[1] Bass, B. M. (1985). Leadership: Good, better, best. *Organizational Dynamics, 13*(8), 26-40.

[2] Belassi, W., & Tukel, O. I. (1996). A new framework for determining critical success/failure factors in projects. *International Journal of Project Management, 14* (3), 141-151.

[3] Bennis, W., & Nanus, B. (1985). *Leaders: The strategies for taking charge*. New York. Harper Perennial.

[4] Berg, M. E., & Karlsen, J. T. (2007). Mental models in project management coaching. *Engineering Management Journal, 19*(3), 3-14.

[5] Blackburn, S. (2002). The project manager and the project-network. *International Journal of Project Management, 20*(3), 199-204.

[6] Blanchard, K. (1998). Servant-leadership revisited. In L. C. Spears (Ed.), *Insights on leadership: Service, stewardship, spirit, and servant-leadership* (pp. 21-28). New York. Wiley.

[7] Burns, J. M. (1978). *Leadership*. New York: Harper & Row.

[8] Cathcart, R. S., & Samovar, L. A. (1992). *Small group communication: A reader* (6th ed.). Dubuque, IA: Wm. C. Brown.

[9] Chabursky, L. (2005). Dramatically increase project success with radical QA: A guide to managing expectations and results. *Journal of Quality Assurance Institute, 19*(3), 29-36.

[10] Cleland, D. I. (2004). The evolution of project management. *IEEE transactions on engineering Management, 51*(4), 396-397.

[11] Cooper, D. R., & Schindler, P. S. (2003) *Business research methods* (8th ed.). Boston: McGraw Hill Irwin.

[12] Creswell, W. & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications.

[13] Dainty, A., Cheng, M., & Moore, D. (2005). Competency-based model for predicting construction project managers' performance. *Journal of Management in Engineering, 21*(1), 2-9.

[14] Dvir, T., Edin, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance; a field experiment. *Academy of Management Journal, 45*(4), 735-744.

[15] Fiedler, F. E., & Chemers, M. M. (1984). *Improving leadership effectiveness: The leader match concept* (2nd ed.). Hoboken, NJ: Wiley.

[16] Fiedler, F. E. (1974). How do you make leaders more effective? *Organizational Dynamics*. 1974 (2), 1-18. Retrieved on September 10, 2009 from the ABI/Inform Global database

[17] Finch, P. (2003). Human resource management practices in project management. *Project Management Journal, 34*(3), 32-39.

[18] Gall, M. D., Gall, J. P., & Borg, W. A. (2007), *Educational Research: An Introduction.* (8th ed.). New York, NY. Pearson Publication.

[19] Gehring, D. R. (2007). Applying traits theory of leadership to project management. *Project Management Journal, 38*(1), 44-54.

[20] Gichunge, H. (2000). **Risk Management in The Building Industry in Kenya**. Unpublished PhD. Thesis. University of Nairobi.

[21] Harvey, M. (2001). The hidden force: A critique of normative approaches to business leadership. *SAM Advanced Management Journal, 66*(4), 36-48.

[22] Hauschildt, J., Gesche, K., & Medcof, J. (2000). Realistic criteria for project managers. *Selection and Development, 31*(3), 23-32.

[23] Hersey, P., & Blanchard, K. H. (1988*). Management of organizational behavior: Utilizing human resources*. Englewood Cliffs, NJ: Prentice Hall.

[24] Hyvari, I. (2006). Success of projects in different organizational conditions. *Project Management Journal, 37*(4), 31-41.

[25] Ives, M. (2005). Identifying the contextual elements of project management within organizations and their impact on project success. *Project Management Journal, 36*(1), 37-50.

[26] Johnson, J. (1999). Turning chaos into success. *Software Magazine, 19*(3), 30-41.

[27] Kerzner, H. (2013). *Project management: A systems approach to planning, scheduling and controlling.* Hoboken, NJ: Wiley.

[28] Kezar, A. (2001). Investigating organizational fit in a participatory leadership environment. *Journal of Higher Education Policy & Management, 23*(1), 85-101.

[29] Kloppenborg, T., & Opfer, W. (2002). The current state of project management research: Trends, interpretations, and predictions. *Project Management Journal, 33*(2), 5-27.

[30] Lapp, J. (1999). New models of leadership. *Executive Excellence, 16*(6), 20-22.

[31] Leary-Joyce, J. (2004). *Becoming an employer of choice: Make your own organization a place where people want to do great work.* London. Chartered Institute of Personnel and Development.

[32] Maccoby, M. (2000, January). Understanding the Difference Between Management and Leadership. *Research Technology Management, 43*(1), 57-61.

[33] Masu, S.M. (2006).**An Investigation Into The Causes and Impact of Resource Mix Practices in The Performance of Construction Firms in Kenya**. Unpublished Phd. Thesis. University of Nairobi.

[34] Mbatha, C.M. (1993). **An analysis of Building Procurement Systems, Features and Conception of An Appropriate Project Management Systems for Kenya**. PhD Thesis. University of Wuppertal, Germany.

[35] Muchungu, P. K.(2012). **The contribution of human factors in the performance of construction projects in Kenya**. Unpublished Phd. Thesis. University of Nairobi.

[36] Neuhauser, C. (2007). Project manager leadership behaviors and frequency of use by female project managers. *Project Management Journal, 38*(1), 21-31.

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.

[37] Neuman, W. L. (2003). *Social research methods*. (5th ed.). Upper Saddle River, NJ. Prentice Hall.
[38] Northouse, P. G. (2004). *Leadership: Theory and practice* (3rd ed.). Thousand Oaks, CA: Sage Publications.
[39] Patterson, K. (2003). Servant leadership: A theoretical model. (Doctorial dissertation, Regent University, 2003). *Dissertation Abstracts International*, *64*(02), 570.
[40] Pomfret, D. T. (2008). *Leadership in the project environment: A correlational study of leadership practices and project performance.* (Unpublished Doctorial dissertation). Phoenix University, Phoenix, AZ.
[41] Roepke, R., Agarwal, R., & Ferratt, T. W. (2000, June). Aligning the IT human resource with business vision: The leadership initiative at 3M. *MIS Quarterly*, *24*(2), 327-353.
[42] Scandura, T. A. (1999). Rethinking leader member exchange: An organizational justice perspective. *Leadership Quarterly*, *10*(1), 25-40.
[43] Schmid, B., & Adams, J. (2008). Motivation in project management: The project manager's perspective. *Project Management Journal*, *39*(2), 60-71.
[44] Shenhar, A. J. (2001). One size does not fit all projects: Exploring classical contingency domains. *Management Science*, *47*(3), 394-414.
[45] Shenhar, A. J., & Dvir, D. (2007). Project management research: The challenge and opportunity. *Project Management Journal*, *38*(2), 93-99.
[46] Shore, B. (2005). Failure rates in global IS projects and the leadership challenge. *Journal of Global Information Technology Management*, *8*(3), 1-5.
[47] Skaistis, B. (2007). IT project success rate up but still too low. *Enterprise Innovation*, *3*(5), 48.
[48] Spears, L. C. (2002). *Focus on leadership: Servant leadership for the 21st century*. New York: Wiley.
[49] Spears, L. C. (2004). Practicing servant-leadership. *Leader to Leader*, *2004*(34), 7-11.
[50] Srica, V. (2008). Social intelligence and project leadership. *The Business Review*, *9*(2), 189-200.
[51] Talukhaba, A.A. (1999). **An investigation into The Factors Causing Construction Project Delays in Kenya. Case Study of High-rise Building Projects in Nairobi**. Unpublished PhD. Thesis. University of Nairobi.
[52] Thite, M., (2000). Leadership styles in information technology projects. *International Journal of Project Management*, *18*(4), 235-241.
[53] Vroom, V., & Jago, A. (2007). The role of the situation in leadership. *American Psychologist*, *62*(1), 17-24.
[54] Whetstone, J. (2001). How virtue fits within business ethics. *Journal of Business Ethics*, *33*(2), 101-114.
[55] Yukl, G. A. (1971). Toward a behavioral theory of leadership. *Organizational Behavior and Human Performance*, 6(5). 414-440.
[56] Zhang, J., & Faerman, S. R. (2007). Distributed leadership in the development of a knowledge sharing system. *European Journal of Information Systems, 16* (4), 479-494.
[57] Zimmerer, T., & Yasin, M. M. (1998). A leadership profile of American project

Abednego Gwaya
A. Academic Professional Qualification
B.A (Bldg. Econ.) Hons; University of Nairobi, MSc. (Civil Eng.); Makerere, Ph.D (Constr. Eng. & Mngt.); Jomo Kenyatta University of Agriculture and Technology (JKUAT) M.A.A.K. (Q.S); C.I.Q.S.K; Registered Q.S.
B. Specialization
Construction Project Management, Civil Engineering Construction, Contract Documentation, Project Management Modelling, Project Procurement Systems and General Quantity Surveying.

Asst. Prof., Sylvester Munguti Masu
A. Academic Professional Qualification
B.A (Bldg. Econ.) Hons. M.A (Bldg. Mngt). Ph.D (Constr. Mngt.); University of Nairobi M.A.A.K. (Q.S); A.C.I. Arb; F.I.Q.S.K; Registered Q.S, (Q182). F.I.C.P.M (K).
B. Specialization
Construction Project Management, Construction Contract Documentation, Arbitration and Dispute Resolution, and General Quantity Surveying.

Prof. Walter Odhiambo Oyawa
A. Academic Professional Qualification
Professor, PhD, Structural Engineering (Kyoto University Japan) Msc. Civil Engineering, Bsc Civil Engineering (U.O.N); R. Eng., MIEK, MIABSE, Lead Expert-NEMA
B. Specialization
Professor of Civil Engineering, Civil Engineering materials, Project management and Structural Engineering.

Published By:
Blue Eyes Intelligence Engineering
& Sciences Publication Pvt. Ltd.