



STRATEGIC MANAGEMENT PRACTICES AND IMPLEMENTATION OF ROAD CONSTRUCTION PROJECTS IN KISII COUNTY GOVERNMENT, KENYA

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ABSTRACT

When organizations' projects are not implemented successfully, a gap is created that makes it difficult to achieve success, the study aimed at identifying factors that affects implementation of road projects in County Governments in Kenya with regard to Kisii County Government. The specific objectives of the study were to; assess how staff competency, management support affect implementation of road projects in Kisii County. The previous studies related to implementation of road construction projects were reviewed which included theoretical review, empirical review and conceptual framework. The research adopted descriptive survey design. The population of the study was 45 completed road projects in Kisii County. The target comprised of 30 County road engineers, 50 county technical staff and 10 road contractors making a total of 90 target population. The sample size was 73 respondents identified using Yamane sampling formula. The study used primary data which was collected through self-administered questionnaires to the target respondents. Data was analysed using statistical package for social sciences based on the questionnaires. Descriptive statistics formed the basis of the research and included frequencies and percentages. Inferential statistics included use of multiple linear regression model. Data was presented using frequency distribution tables. The study found that all factors under study positively affect project implementation. The study recommends that there is need to hire staff who are highly qualified well trained and with requisite work experience. This enabled the staff to be more productive and also have timely completion of projects. There is need for management to have enough capacity to carry out their duties and also there is need to have effective project coordination by management. Management should also ensure that there is motivation to other staff so as to deliver their mandate adequately.

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Background of the Study

Strategic management practice refers to how management performs a continuous appraisal of the business (Barbosa, Castañeda-Ayarza & Ferreira, 2020). It also involves the definition of an organization's strategy. Strategy is seen as a plot of action stating how an organization will attain its long-term objective (Teece, 2019). Strategic management is long-term oriented, focused towards future development potentials, substantial, holistic, and predominantly associated with the highest management level which determines the vision, mission, and culture of the organization. According to Nag, Hambrick and Chen (2017), the field of strategic management deals with (a) the major intended and emergent initiatives (b) taken by general managers on behalf of owners, (c) involving utilization of resources (d) to enhance the performance (e) of the firms (f) in their external environments. Hence, these six elements make up the consensual definition of the strategic management field.

The history of strategy and strategic management covers a broad timeline from ancient Greece to the twenty-first century. Organizations, practitioners, and researchers from every sector of the professional world have focused on strategy as a primary topic at some point (Hill, 2017). As a central component of long-term planning, the development of strategies is integrated into every face of business organizations (Michael, Storey & Thomas, 2017). However, the development of these strategies does not occur instinctively. The development of strategic concepts requires an environment that fosters strategic thinking and focus. However, in contrast to manufacturing organizations that focus on the long-term viability of a product, the construction industry is generally focused on the production of a single and unique end product (Ferreira, Mueller & Papa, 2018). While project-based focus receives significant consideration from construction professionals, less attention is paid to strategic, or enterprise wide, management issues.

In most African countries road building has been given a higher priority than road maintenance, with scant attention to the imperatives of recurrent costs of road Organizational Top Management once the road has been constructed. In a study on road deterioration in developing countries, Harral and Faiz (2009) estimates the annual maintenance expenditure required to prevent road deterioration. On average, expenditures for 1986–1990 varied from 0.2% of GDP for countries in East Asia and the Pacific to 1% for countries in West Africa. The estimated backlog of maintenance work varied from 1.6% of GDP in East Asia and the Pacific to 3.5% in South Asia.

In Kenya, the existence of good and road network is important for economic growth, eradication of poverty,

and job creation. Thus the Ministry of Roads plays an important role in the attainment of “Kenya vision 2030” goals and Millennium Development Goals (MDGs). The Government has given a priority to ensure that the main road projects under the ‘economic pillar’ are implemented. According to the Ministry of Roads’ Service Charter (2008), there is a need for improvement of roads to a convenient transport condition because the road transport contributes to about 80% of all passenger and cargo transport in the country.

Statement of the Problem

Previous research carried out in this field reveals that, the sector faces various problems (Kaliba, Maya & Mumba, 2009; Makk & Pickken, 2010). These problems occur as a result of improper of construction operations while others a result of indirect, marginal activities. Major problems are not construction related issues but need to be addressed and solved to ensure project success. It is important for the project manager to understand the anticipated challenges that he or she might face in the planning and control of construction operations. Korir (2013) established that poor implementation of road construction projects in Kenya leads to project delays of up to 184.7% and cost overruns of up to 152.3%.

Mwangi (2016) established that project cost overrun is a continuous problem in the road sector and recommended that measures be taken to control project cost overruns. A study by Wickliffe & Kagiri, (2017) revealed that most of the road projects suffer from poor quality finishing, schedule and cost overruns. Githanya and Ngigi (2014) found that project control measures positively affects implementation of construction projects with a correlation coefficient of 86.6%. Their study findings recommended that project managers should take adequate control measures over every aspect of the project.

Discussion in previous studies seems to have suggested a number of factors that may affect implementation of road construction projects. Lack of adequate strategic management practices continues to raise question of whether County Governments are well equipped with requisite skills, knowledge and resources to implement road projects in their Governments. This despite the fact that County Governments are considered as engine drive for implementation of devolved road units in Kenya. A part from the allocation of funds from the National Government to the county governments that have been allocated every financial year, there is need to enhance strategic management practices within county governments. Therefore, the present study tried to fill the identified gaps so as to strengthen strategies on road project implementation in Kisii County Government, Kenya.

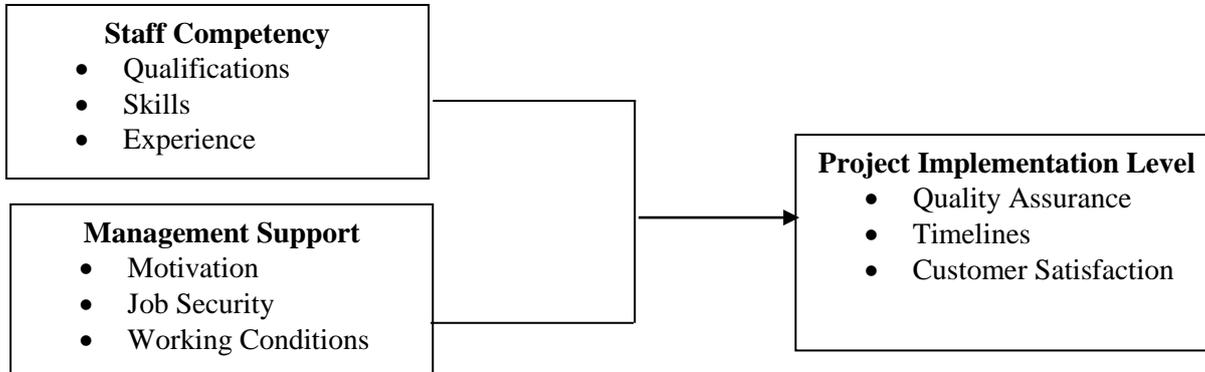
Objectives of the Study

Specifically, the research study intended to:

- i. To establish how staff competency affects implementation of road projects in Kisii County.

- ii. To assess how management support affects implementation of road projects in Kisii County.

Conceptual Framework



Staff Competency

Project manager (PM) is the one who is responsible for execution of project tasks and activities. A project manager has a specific role to achieve business objectives and within the time and to budget with resources signed to project. The project manager controls day-to-day management of the project activities. Project managers should have methodology where they can demonstrate their skills, knowledge, and experiences from different types of industries. Different projects will require different levels of skills and it will require for different levels of project management as well (Maylor, 2005).

The project managers take a major interest in organizations and NGO'S are not excluded. Due to these important roles the interest in which competencies are necessary to successfully manage project grows. This growth of interest has led to growth of standards and certification programs that describe the disciplines practices, offers definition of main terms and processes, explain the main techniques and serves as the basis for assessing project manager competences (Crawford, 2004).

The need for project managers to possess various qualities is stressed by Schmitt and Kozar (1978). According to the authors, poor project management was at that time the most common reason why projects fail to reach their goals. Mullaly's (2003) identified the lack of formal 18 training as a key reason why projects fail to realize their expected results and continue to be completed late and over or under budget. Following this argument without formal training project managers are not able to acquire the necessary competencies to accomplish their job. Technical experience is emphasized during selection but they do not possess project management competencies which are necessary for dealing with projects. With the arguments the project manager need to possess a set of project

management competencies to achieve project success. Butt which competencies are needed?

The project management standards present their essential competencies required for project managers, focus has been on the 'hard' technical skills, like the ability to create a work break down structure, a project budget, Gantt charts neglecting the soft interpersonal skills Crawford (2004). Recently more attention has been given to the 'soft' interpersonal competencies it is necessary to manage projects (Cowie, (2003), Muzio et al. (2007) Pollack, (2007). The soft skills include things like: interpersonal communication, commitment to success, negotiation, decision making, problem solving, leadership, motivation, team working, flexibility and alertness, human resource management, negotiation and conflict management, positive attitude and ability to influence people. The 'hard' skills are the mechanical or technical skills of planning, estimating, scheduling and controlling a project (Gardiner, 2005). These hard skills are project integration management, project scope, time, cost, risk and quality management, and finally project procurement management.

Pollack (2007) noted that much of the project managers' time will be spent in coordination steering and integrating the activities of some departments and relying on others for information or supporting services. The project managers should thus not be placed in or organizationally inferior positions to the departmental managers. In addition Crawford, 2004 noted that the project managers should display competence, make clear decisions, give precise achievable instructions, delegate well, listen to and accept sound advice, is enthusiastic and confident and thus generally commands respect by example and qualities of leadership.

Management Support

A leader is a person who sees something that needs to be done, knows that they can help make it happen, and gets started (Kevin, 2007). Essential to the successful outcome of projects are the project manager and the project team (Berg & Karlsen, 2007). The project manager is responsible for leading the project team towards achieving the desired outcome of the project (Kerzner, 2006). 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. A team requires leadership in order to function effectively.

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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. It is believed that leadership is a needed competency for successful project outcomes, 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).

A research study by Cambridge University's School of Business and Economics concluded that 80% of projects failed because of poor leadership (Zhang & Faerman, 2007). The findings further suggested that poor leadership skills reflected limited or no teamwork, inadequate communication, and an inability to resolve conflicts as well as other human related inefficiencies. Kumar (2000), in a study of reengineering projects, found that failure was primarily linked to the organizational context and could attribute

to the lack of leadership, organizational culture, the lack of integration, and the lack of commitment by senior management.

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Empirical Review

A study by Wickliffe and Kagiri, (2017) found that staff competency affects project implementation. The study sought to investigate the association of leadership roles' competencies, managerial effectiveness profile with gender and job outcomes (job satisfaction and performance). The study also established the effect of leadership competencies on individual effectiveness of managers and the course for action toward managerial excellence. The study proposed the following types of competencies: (1) specific competencies that refer to clusters of cognitive prerequisites that an individual need to acquire to perform adequately in a given substantive domain (Wickliffe & Kagiri, (2017).

A study by Wickliffe and Kagiri, (2017) revealed 'Specific' competence refers to the profession or field specific knowledge and skills relevant to the tasks realized at the work environment (Weinert, 2001). Thompson et al (1997) argued that 'generic' competencies or skills like the ability to learn, communicate and teamwork skills should be developed. Generic competencies are advantageous in that they facilitate the transfer of existing specific competencies and the acquisition of specific competencies that can be used in new work

environment. Abraham et al (2001) argued that all organizational functions require a set of essential managerial, generic and technical or functional competencies in order to be performed effectively.

Wanyoike (2015) established that the success or failure of a project is dependent on the top management support. Kwak and Ibbs (2002) established that projects fails to achieve the intended goals due to several problems that could be termed either managerial or organizational. The challenges stated by the study are imperfect project design, poor stakeholder management, delays between project identification and start-up, delays during project implementation, cost overruns and coordination failures.

Wanyoike (2015) proposed four key elements to improve the performance of the project and creation of value for the organizations. Management of projects and programmes is a measure of an effective governance system. The aim of the study was to provide guidance to organizations in the development of effective project governance to optimize the management of projects. Adequate support from the top management will lead to motivation and proper guidance and hence effective implementation of projects.

METHODOLOGY

This study adopted a descriptive research design. The study focused on 45 road projects in Kisii county funded in the FY 2019/20. The projects formed the study unit of analysis. The unit of observation was all County technical staff, road engineers and road contractors. The population of interest was all 30 County road engineers, 50 county technical staff and 10 road contractors making a total of 90 target population. Yamane 1967 formula sampling formula was used to obtain the sample of 73 respondents. The main tool of data collection was questionnaires which were self-administered to the selected respondents. The researcher used statistical package for social scientists (SPSS) version 27.0. Data was analyzed, tabulated and presented using descriptive and inferential statistics and presented in form of frequency distribution tables with percentages, means and standard deviation. Qualitative data was organized and presented in themes based on the study objectives. The findings obtained were discussed and forms the basis for the research findings, conclusion and recommendations. The regression equation was used.

RESEARCH FINDINGS

Project Implementation Factors

Staff Competency

Respondents were required to indicate the degree to which they agreed to various aspects on staff

competency their influence of project implementation. Items that were measured on a five point Likert-Type scale ranging from 1 being "Strongly Disagree" to 5 being "Strongly Agree". The findings are as presented in Table 1.

Table 1: Staff Competency

Aspect	Mean	Std. Dev.
Staff are well educated	3.17	0.747
Staff needs are well catered for	2.83	0.791
Staff have enough work experience	3.10	0.923
Staff are fully involved in the road projects	2.83	0.950
Terms of project are well understood by staff	2.77	0.858
Staff are well trained	3.00	0.910
Staff competency is well utilized	2.37	0.928
Staff are being involved in decision making	2.27	0.944

Source: Research Data 2022

The study findings show that majority of the respondents indicated that staff are well educated with a mean of (3.17). They further indicated that staff have enough work experience with a mean of (3.10). However, it was clear from the research findings that the respondents are not being involved in decision making with a mean of (2.27).

Management Support

Respondents were further required to indicate the degree to which they agreed to various aspects on the management support and its influence on projects implementation. Items that were measured on a five point Likert-Type scale ranging from 1 being "Strongly Disagree" to 5 being "Strongly Agree". The findings are as presented in Table 2.

Table 2: Management Support

Aspect	Mean	Std. Dev.
There is motivation from County management	2.67	0.844
There is always upfront planning efforts	2.30	0.794
Management develop an appropriate project structure	2.30	0.651
There is effective project coordination	2.47	0.900
There is effective decision making	2.17	0.834
Management normally develop standard procedures	2.30	0.915
There is enough technical capacity	2.40	0.814
There is risk identification mechanism in place	1.90	0.759

Source: Research Data 2022

The study findings show that majority of the respondents indicated that they were being motivated

by county management with a mean of (2.67). They further indicated that there is effective project coordination with a mean of (2.47). However, it was clear from the research findings that majority of the respondents were of the opinion that there is no risk identification mechanism in place with a mean of (1.90).

Project Implementation

Respondents were finally required to indicate the degree to which they agreed to various aspects on implementation of road projects. Items that were measured on a five point Likert-Type scale ranging from 1 being “Strongly Disagree” to 5 being “Strongly Agree. The findings are as presented in Table 3.

Table 3: Project Implementation

Aspect	Mean	SD
I am directly involved in project implementation process	2.27	0.980
I am fully aware of project implementation process	2.30	1.088
Adequate budget influence implementation of road projects	2.93	1.143
Technical skills influence project	3.10	1.155
Proper planning influence project implementation	3.30	1.119
Management support influence project implementation	3.33	1.155
Resource identifications influences project implementation	3.33	1.124
Resource planning influences project implementation	3.20	1.126
Monitoring and evaluation influences project implementation	3.07	1.202

Source: Research Data 2022

The study findings therefore shows that majority of the respondents indicated that management support influence project implementation and resource identifications influences project implementation with a mean of (3.33). They further indicated that proper planning influence project implementation with a mean of (3.30). On the contrary, it was clear from the research findings that majority of the respondents were of the opinion that they are not directly involved in project implementation process with a mean of (2.27).

Regression Analysis

Regression Model

The multiple linear regression analysis models shows the relationship between the dependent variable which was project implementation level and the independent variables which were staff competency, management support, stakeholder’s involvement and project planning. Table 4.11 shows the results of regression

coefficients which shows that a positive effect was reported for all the budget process aspects under study.

Table 4: Coefficients

	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error Beta		
(Constant)	.903	.510		1.184.011
Staff Competency	.035	.028	.018	1.021.031
Management Support	.016	.021	.013	1.115.015

Source: Research Data 2022

The equation for the regression model is expressed as:
 $Y = 0.903 + 0.035X_1 + 0.016X_2 + 0.510$

From this study it was evident that at 95% confidence level, the variables produce statistically positive values for this study (high t-values, $p < 0.05$). A positive effect is reported for all the project implementation process aspects under study hence influencing implementation of road projects in Kisii County positively. The results of the regression equation shows that for a 1- point increase in the independent variables, project implementation is predicted to increase by 0.903, given that all the other factors are held constant.

Coefficient of Multiple Determination

The coefficient of determination (R^2) and correlation coefficient (R) shows the degree of association between project implementation and project management aspects under study. The findings are as shown in Table 4.12.

Table 4: Model Summary

R	Adjusted R Square	Std. Error of the Estimate	F	Sig.
.918	.843	.805	.51038	1.242
				0.011

Source: Research Data 2022

The research findings indicated that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R^2 equals 0.843, that is, project management process explains 84.3% of observed change in project implementation. The P-value of 0.011 (Less than 0.05) implies that the regression model is significant at the 95% significance level. From this study it is evident that at 95% confidence level, the variables produce statistically positively values and can be relied on to explain road project implementation in Kisii County.

Overall Significance of Regression Model
Table 5: Analysis of Variance (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	.852	2	.213	1.242	.011
Residual	20.35	42	.171		
Total	22.64	44			

Source: Research Data 2022

ANOVA test shows that the combined independent variables have positive effect on project implementation. This can be explained by high F values (1.242) and low p values (0.011) which is less than 5% level of significance. The R square value of, $R^2 = 0.805$, also indicates that the independent variables in the multiple linear regression model could explain for approximately 80.5% of the variations in the road project implementation in Kisii County. The study therefore establishes that staff competency, management support, stakeholder's involvement and project planning positively affects the implementation of road projects in Kisii County. All the variables were therefore positive. This means that all these were factors and are a notable difference in the project implementation. However there other factors other than the ones surveyed in the study that constitutes 19.5% which could not be explained by the study.

Hypothesis Testing

Statistical analysis was carried out to test if there were positive differences in the various variables stated in the hypotheses. T-test and ANOVA were used to analyze the hypotheses. For each of the analysis, the probability level was set at 0.05 (95%) confidence levels. If significance value $P > 0.05$, then it means that the null hypothesis was rejected. However, if significance value of $P < 0.05$, then it means that the null hypothesis was accepted.

The findings of the study shows that there is positive relationship between staff competency and the level of project implementation. The results of the inferential statistics such as unstandardized regression coefficients of 0.035 show a positive effect on project implementation. Based on the regression equation it can be concluded that the t-value for X_1 coefficient is 1.021 with a p-value of 0.031 which is less than 5% level of significance hence H_{01} is rejected. This means, staff competency affects project implementation.

The study findings shows that there is positive relationship between management support and the level of project implementation. The results of the inferential statistics such as unstandardized regression coefficients of 0.016 show a positive effect on project implementation. Based on the regression equation it can be concluded that the t-value for X_2 coefficient is 1.115 with a p-value of 0.015 which is less than 5%

level of significance hence H_{02} is rejected. This means, management support affects project implementation.

Table 6: Hypothesis Testing

Construct	Significance level	p-value	Significance	Hypothesis Decision
Staff Competency	0.05	0.031	Yes	Reject
Management Support	0.05	0.015	Yes	Reject

Source: Research Data 2022

Conclusion

The objective of this study was to establish factors affecting implementation of road projects in Kisii county government. The study findings indicate that, there is a positive relationship between the factors under study and road project implementation. The findings also indicate that staff competency, management support, stakeholder's involvement and project planning positively affects implementation of road projects in Kisii County. From the research findings, some conclusions can be, made about the study. There is positive relationship between staff competency and project implementation. Therefore staff competency affects road projects implementation. The project staff are well educated meaning that they are competent to carry out the roles allocated effectively. The project staff have enough experience which implies that they have been working on road projects for a considerable number of years. They are however rarely involved in decision making which may make them feel that they are side-lined during key decision making.

There is positive relationship between management support and project implementation. Therefore management support affects road projects implementation. The project management team make efforts to motivate the project team. Motivation enhances staff satisfaction and they become more productive. Motivated staff also spend more time at their work place which may enable them to observe project timelines. Management also support staff through showing them the way. They do not just show the staff what they do but they lead by example. They also encourage team work among the staff which may promote coordination and information sharing.

Recommendations

The study recommends that there is need to hire staff who are highly qualified well trained and with requisite work experience. This will enable the staff to be more productive and also have timely completion of projects. The staff capability should be improved through training, benchmarking to improve their competence in carrying out their roles in the projects. Project managers should hire skilled and experienced

project team members to ensure that the right team is employed to lead a process of successful project implementation.

There is need for project team managers to have enough capacity to carry out their duties and also there is need to have effective project coordination by management. Management should also ensure that there is motivation to other staff so as to deliver their mandate adequately. The management should ensure that the project sponsors/ financiers provide adequate funding to ensure that the project meet costs are met as required. This will facilitate project completion within set timelines.

Recommendations for Further Research

The study focused on roads projects in Kisii County. This research therefore can be replicated in all other counties and compare results. Further research can be undertaken on other projects other than road projects to establish level of implementation.

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