



PROJECT SPONSORSHIP AND PERFORMANCE OF ROADS CONSTRUCTION PROJECTS IN KENYA

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ABSTRACT

Roads projects in Kenya have been characterized by low rates of budget absorption. There also have been cost overruns, the quality of the road works has also suffered leading to shortened life (sustainability) of public works. This has been ascribed to inadequacies in the system for supervising the construction projects. This study therefore sought to investigate the influence of project sponsorship on the performance of roads construction projects in Kenya. The following theoretical lenses was used in literature to discuss project sponsorship: Stewardship Theory. This study adopted a descriptive design approach. The unit of analysis was national government roads projects from the year 2007 to date while the unit of observation was senior management staff per project. Therefore, the target population for the study was 523 respondents. The overall sample size for this study was determined using a formula by Krejcie and Morgan (1970) which obtains 222 respondents. This study employed stratified random sampling to select study sample. Primary data was used and was collected using a semi structured questionnaire. Samples of questionnaire were pilot tested to 22 respondents to test for reliability and validity. Data was analyzed using the Statistical Package for Social Sciences (SPSS) version 23 software. Qualitative data collected was analyzed using content analysis and presented in prose form. Quantitative data was analyzed using descriptive statistics and presented in tables and figures. The study also computed correlation and regression analysis to test the relationship between study variables and test the research hypothesis. The study concludes that project sponsorship has a positive and significant influence on the performance of roads construction projects in Kenya. Based on the findings, this study recommends that the management of road implementation agencies should ensure provision of resources, structural Arrangements and regular communication. In addition, the management of road implementation agencies should ensure effectiveness in process management and continuous improvement.

Key Words: project sponsorship, performance, roads construction projects

INTRODUCTION

Performance of road infrastructure projects is essential for the economic growth and development of any country. These projects play a critical role in the economy in terms of wealth creation and provision of employment opportunities. Infrastructure covers a range of services, from public utilities such as power, telecommunications, water supply, sanitation and sewerage, solid waste collection and disposal, and piped gas; to public works such as roads, dams and canal works, railways, urban transport, ports, waterways and airports (World Bank, 2012). Massive investments are put into infrastructure projects.

Throughout the world, the business environment within which construction firms operate continues to change rapidly. Firms failing to adapt and respond to the complexity of the new environment tend to experience survival problems (Lee, 2009). With increasing users' requirements, environmental awareness and limited resources and high competition, contractors have to be capable of continuously improving their performance (Samson & Lema, 2011).

There are several factors that impact on performance of projects, complexity of the project, Shortage of skills of manpower, weaknesses in organizational design and capabilities, poor supervision and poor site management, unsuitable leadership, shortage and breakdown of equipment among others cause delays in the United Arab Emirates (Faradic & El-Saying, 2010). Conflict, poor workmanship and incompetence of contractors had also negative impact on project performance in sub-Saharan Africa (Carter, 2012). Carter further noted that project managers should be given full authority to implement the projects. Harries and Ryman (2010) noted that on average 65 percent of road projects constructed by local firms in Africa were considered to have failed. These projects were suspended and later contracted to other firms. Therefore, performance of projects is a subject many scholars have discussed with the objective of ensuring that projects are undertaken within the stipulated cost, time schedule and meet the desired quality. However, little attention has been focused on road projects constructed by local firms. There is need therefore to understand the effects of project monitoring on the performance of road infrastructure projects

A road project is said to have performed if it is accomplished within the required time, cost and quality. Measurement and evaluation of performance of projects can be done using performance indicators such as time, cost, quality, client satisfaction, client changes, business performance, health and safety (Cheung, 2010). Time, cost and quality are however the three key performance indicators. In Europe, Mabin and Baldrestone (2015) indicated that improved road construction technology and methodologies can help execute projects more efficiently and in lesser time. Construction technologies such as fabricated and modular construction and innovative construction materials can further help execute road projects with reduced resources.

KPMG-PMI (2014) report indicated that 25 percent of ongoing projects in India are delayed due to inadequate planning and inadequate use of modern technology. Furthermore, lack of adequate number of trained workforce and sufficient construction equipment do contribute to road project delays.

Statement of the Problem

Roads projects in Kenya have been characterized by low rates of budget absorption with only about 60% of the budget spent in 2006 (World Bank, 2017). There also have been cost overruns of as much as 80% over the original contract amounts, and completion periods of twice the initial contract implementation period. The quality of the road works has also suffered leading to shortened life (sustainability) of public works. This has been ascribed to inadequacies in the system

for supervising the construction projects (World Bank, 2017). Consistent with these findings, the Kenya Roads Board submits that 76% of the 29 roads projects under implementation by KeNHA in 2014-15 Financial Year, were behind schedule. The KRB recommended preparation of regular progress report for progress monitoring and overall improvement of supervision of works to ensure timely delivery of projects (KRB, 2015).

The construction of Thika Super Highway in Kenya was estimated to cost Ksh. 26.44 billion but the final cost escalated to Ksh. 34.45 billion, a 30% increase. In addition, the completion of the project was delayed by two years with the initial completion date of July 2015 being revised to July 2017 (Nyandika & Ngugi, 2017). A report by the Office of the Auditor General (KeNAO, 2016) on management of road projects by the Ministry of Transport and Infrastructure established that there were contract variations in 44% of the 34 projects selected for review which resulted in increased cost and delayed completion of the projects. The KeNAO report attributed this to weak project management practices (KeNAO, 2016). The poor performance of the roads projects has also attracted the attention of the Parliamentary Budget Office (PBO) which has recommended screening, appraisal, selection/rejection, budget allocation and, monitoring and evaluation to improve project performance (PBO, 2016).

According to the Kenya Urban Roads Authority (KURA) December 2018 projects progress report, 9 out of 24 projects which is equivalent to 37.5% of road construction projects that were expected to be completed by December 2018, had exceeded their set contractual completion dates. The Nairobi Outering Road improvement project, for example, was scheduled to be completed in July 2018 but had achieved 94% completion by December 2018 while its cost had escalated from an initial contract sum of Ksh. 7,395,183,298 to Ksh. 9,585,543,413 which reflects a 29.6 % increase (KURA, 2018). To address these challenges, the National Treasury has developed a policy that recommends that each ministry and state agency dedicate one per cent of their development budget to monitoring and evaluation (Igadwah, 2018). Mwaniki (2020) citing an International Monetary Fund (IMF) report indicates that half of the 1,000 public projects most of which comprise of roads have stalled and will require a staggering Ksh. 1 trillion to complete. This situation is ascribed to lack of effective screening of the projects allowed to enter the budget line (portfolio direction) creating challenges in financing ongoing projects. This study therefore sought to establish the influence of project sponsorship on performance of roads construction projects in Kenya.

Research Question

- i. How does project sponsorship influence the performance of roads construction projects in Kenya.

LITERATURE REVIEW

Theoretical Framework

Stewardship Theory

The stewardship theory is a subset of the agency theory (Derakhshanlavijeh et al., 2019). It differs from agency theory by stating that stewards' interests and utility motivations are directed by a pro-organization behavior, holding that there are no conflict of interests between managers and owners (Derakhshanlavijeh et al., 2019). Stewardship theory arose in response to the criticism regarding the generalization of the agency theory. It takes a psychological perspective towards governance and states that the actors (managers) are stewards whose motives are aligned with the higher level objectives of their principles rather than their own, short term utility maximizing objectives (Donaldson and Davis, 1991). This behavior is associated with the Maslow's (1970) hierarchy of needs. The steward differs from the agent in that the steward is trustworthy and will make decisions

in the best interests of the organization, whereas an agent needs to be incentivized and/or controlled to do this (Davis et al., 1997b) Robert Joslin, Ralf Müller, 2016.

Under stewardship theory, monitoring structures tend to empower stewards because they can be trusted (Maria, 2014). However, stewardship theory has been criticized, because it views the organization in a static way and does not account for stewards resorting back to an agent position when their positions are threatened (Joslin & Müller, 2016). Stewardship theory will be used to identify the influence of project sponsorship on the performance of roads construction projects in Kenya.

Conceptual Framework

In a conceptual framework, descriptive categories are systematically placed in a broad structure of explicit propositions, statements of relationships between two or more empirical properties to be accepted or rejected (Parsons & Shils, 2016).

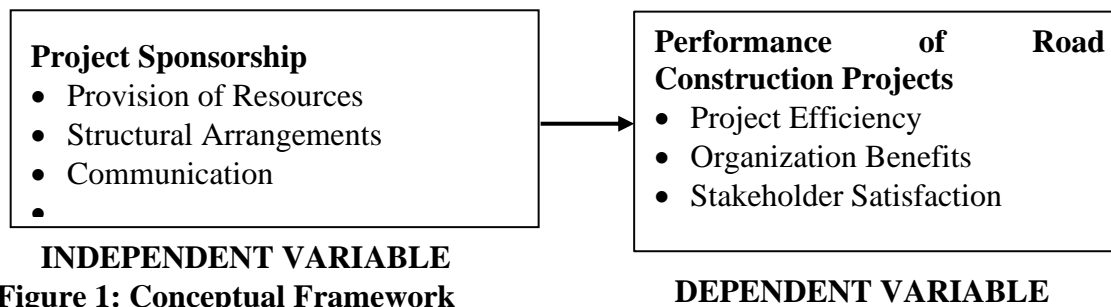


Figure 1: Conceptual Framework

Project Sponsorship

According to the Project Management Book of Knowledge (APM, 2017) a project sponsor is defined as “the person or group that provides the financial resources, in cash or in kind, for the project.” (APM, 2017). Project sponsorship is one of the four dimensions of project governance, and is an important link between the organization's senior management level and the management of the project with decision making, directing, and representational accountabilities. The sponsor is responsible for ensuring that effective governance framework is established in the project (Louw, Wium, Steyn, & Gevers, 2018). The project sponsor is “generally accountable for the development and maintenance of the project business case document” and is responsible for the realization of the benefits enumerated in the business case (Louw *et al.*, 2018; PMI, 2017).

In all kinds of governance, top management and sponsors have played a significant role, and they have ensured the necessary support and the governance requirement for project governance (Maria, 2018). According to (Ziemba & Obła, 2017) top management support is one of the most vital success factors that can negatively affect the implementation of projects. Top management is generally the individuals functioning in the capacity of Chief Executive Officer, President, Chairman/Chairperson, Director or other official positions at senior management level (Ahmed, Mohamad, & Ahmad, 2018).

Empirical Review

Gitagia (2015) undertook a study to establish the influence of management strategies on success of projects undertaken by construction companies in Mombasa, Kenya. The study established that level of top management support including holding of regular meetings, support in risk identification and involvement in solving conflicts and mediating between groups were the greatest

roles of the top level management. This was however a case study that focused on only one company and therefore the findings cannot be generalized.

Ahmed *et al.* (2018) undertook a study to examine the effect of multidimensional top management support on project success. Cross-sectional data was collected from 208 project management professionals across the world. The study revealed that 'provide resources' and 'power' dimensions of top management have significant influence on project success.

In Norway, the Norwegian Centre of Project Management has established a research and development project to gain a better understanding of the role of the project owner and contribute to more professional project owners in the future (Andersen, 2016). The survey was based on a convenience sampling from amongst students on part-time executive master's programmes in project management. In-depth interviews were carried out with eleven project owners and fourteen project managers from six enterprises in Norway. Early findings of the study are that project owners are rather weak by not fulfilling the role as prescribed by theory. The interviews however introduced a different perspective showing a rather satisfactory performance by the project owners.

In Kenya, Nestor (2018) undertook a study to establish the effect of quality management practices on Organizational performance with a case study of KIRDI in Kisumu County. The study adopted a descriptive survey design. The findings indicate that top management commitment, continuous improvement and customer focus had positive have a significant effect on project performance.

RESEARCH METHODOLOGY

This study used a descriptive design approach. The unit of analysis was national government roads projects implemented by KeRRA, KENHA and KURA and from the year 2007 to date while the unit of observation was senior management staff per project (the Project Engineer, Resident Engineer and the Assistant Resident Engineer). There are 243 national government roads projects from the year 2007 to date. The study targeted senior management staff per project as they have governance mandate in the projects. There are a total of 523 senior management staff who were targeted. Krejcie and Morgan (1970) was used to arrive at a sample of 222 respondents. This study employed stratified random sampling to select study sample. In this study, primary data was collected using a semi structured questionnaire because they are cost effective and convenient to collect and summarise responses (Zikmond, 2013). Samples of questionnaire were administered or pilot tested to 22 respondents in the three Roads Authorities.

Qualitative data collected (through the open ended section of the questionnaire) was coded, and repeated themes (responses) or concepts recorded until saturation is achieved (Jennings, 2001). Quantitative data was analysed using descriptive statistics including frequency, percentages and means, summary graphs, pie charts and frequency distribution tables were employed to portray the sets of categories formed from the data. This study conducted inferential statistics through correlation analysis. Multiple regression Analysis was used in this study because it uses the independent variables in predicting the dependent variable.

RESEARCH FINDINGS AND DISCUSSIONS

The researcher distributed 523 questionnaires to the respondents by the researcher during data collection process and 511 were fully filled and returned to the researcher. Thus the response rate of was 91%. Kothari (2012) argues that a response rate which is more than 50% is considered adequate while excellent response rate is usually above 70%. This implies that the response rate in this research is good for making conclusions as well as recommendations.

Descriptive Statistics

Project Sponsorship and Project Performance

The second specific objective of the study was to identify the influence of project sponsorship on the performance of roads construction projects in Kenya. The respondents were requested to rate various statements on project sponsorship and the performance of roads construction projects in Kenya. A 5 point Likert scale was used where 1 symbolized no extent, 2 symbolized little extent, 3 symbolized moderate extent, 4 symbolized great extent and 5 symbolized very great extent. The results were as presented in Table 1.

From the results, the respondents agreed that projects sponsorship influences performance of road construction projects. This is shown by a mean of 3.905 (std. dv = 0.722). In addition, with a mean of 3.886 (std. dv = 1.063). The respondents agreed that provision of resources enhances performance of road construction projects. Further, the respondents agreed that structural arrangements play essential role on performance of road construction projects. This is shown by a mean of 3.828 (std. dv = 0.937).

The respondents also agreed that communication channels influence the effectiveness of project implementation. This is shown by a mean of 3.811 (std. dv = 0.920). In addition, with a mean of 3.763 (std. dv = 0.880). The respondents agreed that they are satisfied with the established communication channels.

Table 1: Project Sponsorship and Project Performance

	Mean	Std. Deviation
Projects sponsorship influences performance of road construction projects	3.905	0.722
Provision of resources enhances performance of road construction projects	3.886	1.063
Structural arrangements play essential role on performance of road construction projects	3.828	0.937
Communication channels influence the effectiveness of project implementation	3.811	0.920
Am satisfied with the established communication channels	3.763	0.880
Aggregate	3.881	0.871

Performance of Roads Construction Projects in Kenya

The respondents were requested to rate various statements on performance of roads construction projects in Kenya. A 5 point Likert scale was used where 1 symbolized no extent, 2 symbolized little extent, 3 symbolized moderate extent, 4 symbolized great extent and 5 symbolized very great extent. The results were as presented in Table 2.

From the results, the respondents agreed that projects sponsorship influences performance of road construction projects. This is shown by a mean of 3.908 (std. dv = 0.980). In addition, with a mean of 3.808 (std. dv = 0.561), the respondents agreed that provision of resources enhances performance of road construction projects. Further, the respondents agreed that structural arrangements play essential role on performance of road construction projects. This is shown by a mean of 3.755 (std. dv = 0.869). The respondents also agreed that communication channels influence the effectiveness of project implementation. This is shown by a mean of 3.727 (std. dv

= 0.935). In addition, with a mean of 3.707 (std. dv = 0.788), the respondents agreed that they are satisfied with the established communication channels.

Table 2: Performance of Roads Construction Projects in Kenya

	Mean	Std. Deviation
Projects sponsorship influences performance of road construction projects	3.908	0.980
Provision of resources enhances performance of road construction projects	3.808	0.561
Structural arrangements play essential role on performance of road construction projects	3.755	0.869
Communication channels influence the effectiveness of project implementation	3.727	0.935
Am satisfied with the established communication channels	3.707	0.788
Aggregate	3.837	0.871

Inferential Statistics

Correlation Analysis

This research adopted Pearson correlation analysis determine how the dependent variable (the performance of roads construction projects in Kenya) relates with the independent variables (portfolio direction, project sponsorship, project management capability and reporting and disclosure). The results were as depicted in Table 3.

As illustrated in table 3, project sponsorship has a positive and significant influence on performance of roads construction projects in Kenya ($r=0.750$, p value= 0.002). The p -value (0.002) was less than the significant level 0.05 hence making the association significant. The results are in agreement with the findings of Tsuma, Siringi, and Wambua (2020) that project sponsorship has a positive and significant influence on project performance.

Table 3: Correlations Coefficients

	Project Performance	Project Sponsorship
Project Performance	Pearson Correlation 1	
	Sig. (2-tailed)	
	N	511
Project Sponsorship	Pearson Correlation .750	1
	Sig. (2-tailed) .002	
	N	511

Regression Analysis

This research used regression analysis to determine the association between the independent variables (project sponsorship) and the dependent variable (the performance of roads construction projects in Kenya). The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where; Y = is the dependent variable (the performance of roads construction projects in Kenya), β_0 = Constant Term; β_1 - β_4 = regression coefficients; X_1 = project sponsorship; and ε = error term.

The research used R-squared to show the variation in dependent variable (the performance of roads construction projects in Kenya) that could be explained by independent variable. The R squared

was 0.861 and this implied that 87.6% of the dependent variable (the performance of roads construction projects in Kenya) could be explained by independent variables.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.936 ^a	0.876	0.877	0.16355

a. Predictors: (Constant), project sponsorship

The research used analysis of variance to determine if the model was good fit for the data. As depicted in table 4.8, the F calculated was 138.28 which is higher than the F critical value which was 2.389. Besides, the p value was 0.001 which is less than the significant level of 0.05. This implies that the model was a good fit for the data hence can be used to show the impact of independent variables (project sponsorship) on the dependent variable (the performance of roads construction projects in Kenya).

Table 5: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	75.222	4	18.806	138.28	.001 ^b
Residual	6.875	506	.0136		
Total	82.097	510			

a. Dependent Variable: the performance of roads construction projects in Kenya

b. Predictors: (Constant), project sponsorship,

The regression equation was;

$$Y = 0.779 + 0.176X_1$$

The results revealed that project sponsorship positively and significantly influence the performance of roads construction projects in Kenya ($\beta_2 = 0.176$, p value = 0.001). The p-value (0.001) was less than the significant level 0.05 hence making the relationship significant. The results are in agreement with the findings of Tsuma, Siringi, and Wambua (2020) that project sponsorship has a positive and significant influence on project performance.

Table 6: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.779	0.119		6.546	0.002
	project sponsorship	0.176	0.072	0.171	2.444	0.001

a. Dependent Variable: Project Performance

Conclusions

In addition, the study concludes that project sponsorship has a positive and significant influence on the performance of roads construction projects in Kenya. Findings revealed that provision of resources, structural Arrangements and communication influence performance of roads construction projects in Kenya

Recommendations

In addition, the study found that project sponsorship has a positive and significant influence on the performance of roads construction projects in Kenya. This study therefore recommends that the management of road implementation agencies should ensure provision of resources, structural Arrangements and regular communication.

Recommendation for Further Studies

The main purpose of the study was to examine the influence of project monitoring on performance of roads construction projects in Kenya. However, this study was limited to performance of roads construction projects in Kenya hence the findings cannot be generalized to performance of other projects in Kenya. Therefore, the study recommends that further studies should be conducted to examine the influence of project monitoring on performance of other projects in Kenya.

In addition, the study found that 87.6% of the performance of roads construction projects in Kenya could be explained by portfolio direction, project sponsorship, project management capability and reporting and disclosure. As such, further studies should be conducted to assess other factors that influence the performance of roads construction projects in Kenya.

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