Influence Of Project Planning on The Performance of Rural Electrification Projects in Trans Nzoia County

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Abstract- A project is a temporary endeavor which utilizes specified human and financial resources. Each project has its specific and set objectives. Monitoring on the other hand is the assessment of a project status against planned deliverables and inputs among other things. It is achieved through continuous data gathering, collection, assessment and analysis. The main purpose of this study was to assess the influence project planning as a technique on the performance of Rural Electrification projects in Kenya: a case study of Trans Nzoia County. Descriptive survey is used for collecting information by use of questionnaires or conducting interviews to specific sampled individuals. The target population will be the project management department, marketing department, county business manager and the ward managers. Quantitative data gathered from closed ended questions will be post-coded, entered and analyzed using the Statistical Package for Social Sciences (SPSS version 22.0); tabulated and presented using descriptive statistics and correlational analysis. The descriptive analysis established that there is adequate planning in the part of the company and that there is adequate staff to implement the rural electrification projects in the county. Regression analysis revealed that the negative estimate coefficient value of -3.194 indicated that for every one unit increase in the project planning, there is a predicted decrease of -3.194 in the log-odds of being on a higher level on the performance of rural electrification projects in Trans Nzoia County

Indexed Terms- project planning, performance of Rural Electrification projects

I. INTRODUCTION

Globally, the science of engaging monitoring in project management was introduced in the 1980s. In the recent past it has gained popularity and is now a must in every project's strategy for a project to perform well. Project monitoring has become a key component in the implementation of projects and continues to grow in popularity in the implementation of large scale government projects. It has become so significant that it must be included in project reports that form the basis for making project decisions (Kumar et. al, 2009).

According to Mentis et al., (2015) African countries have been awakened and have noted the importance of effective project monitoring. Monitoring has been cited as the only means of preventing government projects from performing poorly and even collapsing in some incidences. In Nigeria the project monitoring concept was adopted in the 1980s. It was after years of military rule as a result of military rule.

According to (Welime, 2019) monitoring is therefore a key activity that is crucial for any project to perform. The disadvantage in Kenya is that many monitoring activities are disconnected and isolated. The management does not consider them when making crucial decisions. Many projects in Kenya just as the RE are driven and implemented using preset actions and targets. The teams implementing see the preset targets as a burden. Monitoring is done for the sake of fulfilling reporting requirements by the government and not for the project performance.

Mugo (2014) did a study on Monitoring and Evaluation of Development Projects and Economic Growth in Kenya and the study revealed that the amount of budgetary allocation for monitoring and evaluation was also found to be a positively significant determinant of M&E system implementation in development projects. An additional amount of budgetary allocation on monitoring and evaluation in development project is likely to increase the

probability of M&E system implementation significantly by 13.13% holding other factors constant. This implied that an extra amount of money allocated for project M&E leads to an increase in the likelihood of M&E system implementation in development projects.

2.5.1 Project Planning

A study by Muhammad et al (2012) on project performance, with the variables, Project Planning, Implementation and Controlling Processes in Malaysia College of Computer Sciences and Information, Aljouf University, noted project management offers an organization with control tools that advance its capability of planning, implementing, and controlling its project activities.

The study was to identify those project performance enhancements through planning, implementation and monitoring processes. Variable models used to identify how each stage is helpful in the process of managing project performance. To achieve this objective, information relating to different projects and models related to project planning, execution, control, and project of project performance explored; the findings showed project-planning processes contribute to the project performance.

A study that was conducted by Singh, Chandurkar and Dutt, (2017) highlighted that monitoring and evaluation was the major driving factor in development projects. The objective of this study was to determine the effect of monitoring and evaluation on development projects. However, the recommendation that was given in this study was that the management should provide full support and should fully engage themselves in the monitoring and evaluation process as this will help them in coming up with sound and well informed decisions.

Clarke (2011) noted that organizations that had developed comprehensive strategic/operational plans made the most progress with frequent monitoring of project work. It seemed much easier for them to meet the reporting requirements and reflect on the progress meaningfully.

Organizations that grasped and implemented planning and monitoring systems enjoyed working with them

(Clarke, 2011). Monitoring and evaluation systems is tracking tool to check what is being done and whether the project/program is making a difference. These systems allow project /program managers to calculate how to allocate resources to achieve the best results (IFAD, 2012). Project management is hence acknowledged as being the most successful approach of managing changes brought about by projects. This entails techniques along with tools that facilitate the control and the delivery of the activities of a project within predetermined deliverables, timeframes as well as budget (Shapiro, 2011). Monitoring and evaluation forms one of the critical elements assist the project managers to determine whether the project goes as planned. They furnish the management with the information that is used in decision making. Monitoring and evaluation (M & E) is essential to all projects, regardless of the size since it highlights areas that need improvement.

The subject of planning and pre-construction planning is central to project control process.

According to Gyorkos (2011) planning is a process of decision making derived in advance of execution, meant to craft a future that is desired with ways of implementation where in planning answers questions what, how, by who, with what and when. The purpose of planning is to assist the manager to fulfil his primary functions of direction and control in the implementation of project components, coordinate and communicate with the many parties.

Kalali, Ali and Davod (2011) recognized what is widely known the usual midterm planning horizon for development projects in terms of promoting sustainable benefits, predominantly when behavioural and institutional transformation is included in the goals especially so when there are multiple local agencies involved. Open-ended requirements are not appropriate; however, phasing project activities over a longer period is a project strategy to support sustainable benefits. Phasing approach requires clear goals and objectives, from the beginning and well-articulated decision points at each project end phase. Where there is ambiguity about local policy, capability or guarantee then an initial pilot phase, leading on to a number of subsequent phases, should move the

business case than the exception (Kalali, Ali & Davod, 2011).

II. RESEARCH METHODOLOGY

Bryman and Bell, (2015) opine a design is a strategy for data collection and analysis to generate answers to the research problem. This study used a descriptive research design. Descriptive design is used for collecting information by use of questionnaires or conducting interviews to specific sampled individuals. The study targeted project management department (19), marketing department (6) county business manager (2) and the ward managers (39). Yamene (1967) formula was used to sample 161respondents to represent the population in data collection process. Questionnaires were used a tool of collecting data from the respondents. The quantitative data collected was analyzed both descriptively and through regression analysis amd findings presented through means and standard deviations and

III. FINDINGS OF THE STUDY

• Project Planning and Organizational Performance
The study sought to assess the influence of project planning on the performance of rural electrification projects in Trans Nzoia County. A response rate of 123 respondents fully filled the questionnaire and returned on whose analysis this study is based. Responses were based on a 4-item 5-point scale and mean scores were interpreted using the mean ranges: .3-5=Strongly Disagree; 3.5-4.2=Disagree; 2.6-3.4=Undecided; 1.9-2.6=Agree and 1-1.8=Strongly Agree. Table 4.5 shows the mean scores and standard deviations obtained by the respondents on emphasis placed on various aspects of instructional management.

Table 1: Project Planning and Organizational Performance

	N	Min	Max	Mean	SD
Adequate planning influences the performance of rural electrification project.	123	1	5	2.48	1.467
Having the required number of personnel to work on the project influences its performance	123	1	5	2.51	1.490
Regular reporting influences project performance	123	1	5	2.62	1.576
Employing qualified project managers to work on the rural electrification project influences the project performance	123	1	5	2.85	1.592
Overall Mean				2.601	1.531

Table 1 revealed that majority of respondents were in agreements that there is adequate planning influences the performance of rural electrification project with a mean of 2.48 (SD=1.467). Further, majority of the respondents with a mean of 2.51(SD=1.490) were in agreement that Kenya power have required number of personnel to work on the project which ordinarily should influences its performance. However majority of the respondents were not sure whether there is regular reporting influences project performance and whether employing qualified project managers to work on the rural electrification project influences the project performance with the means of 2.62 (SD =1.576) and 2.85(SD =1.592) respectively. This data implied therefore that adequate planning and having enough number of the work force would influence project performance at the implementation of the rural electrification programme in Trans Nzoia County. The overall mean of 2.601(SD=1.531) indicated that majority of the respondents were in agreement that project planning influences project performance.

• Inferential Statistics
Before running regression, it was important to establish the normality tests of the data set generated. To obtain this, the tests of normality were conducted and finding recorded in Table 2.

Table 2: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ProjPlann	.179	123	.000	.854	123	.000

Table 2 indicates that the respondents were more than one hundred and hence to interpret the normality test for data set was based on the Kolmogorov-Smirnov probability value. Therefore, since the P-value for all the four variables were statistically significant with all the p-value being <0.05, it showed that that the data set was not normally distributed unlike the rule of the thumb that states that for data to be normally distributed, the data set should not be statistically significant.

Table 3 Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	521.215			
Final	.000	521.215	3	.000
Link function: Logit.				

Table 3 revealed that the model fitting information was statistically significant with a p-value <0.05 implying a good fitting model.

Table 4: Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	28.865	453	1.000
Deviance	42.129	453	1.000
Link function: Logit.			

Table 4 revealed that the Pearson and deviance were both non-significant with a p-value >0.05 implying that the model meets test of goodness-of-fit.

Table 5: Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	.000			
General	.000[b]	.000	33	1.000
The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.				
a. Link function: Logit.				
b. The log-likelihood value is practically zero. There may be a complete separation in the data. The maximum likelihood estimates do not exist.				

Table 5 is the test of proportional odds which reveals that the null hypothesis states that the location parameters (slope coefficients) are the same across

response categories indicating that the test are proportional or the same across different thresholds of the outcome variable. The model not to have violated this test of parallel lines, the p-values ought to be not statistically significant. Since the p-value is 1.000 being meets this thresholds given that the p-value is >0.05. Given that the model has not violated the test of parallel lines, the study proceeds to interpret the parameter estimates in the Table 6.

Table 6: Parameter Estimates explained

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[DV = 2.75]	1.679	.529	10.076	1	.002	.642	2.715
Location	Project Planning	2.759	1.122	6.044	1	.014	.559	4.959
Link function: Logit.								

Table 6 revealed that project planning is a significant predictor of performance of rural electrification projects in Trans Nzoia County. This is evident since the estimates reveals that for every one unit increase in the project planning there is a predicated increase in the independent variable of 2.759 in the log-odds of being at a higher level of the performance of rural electrification projects in Trans Nzoia County.

CONCLUSION

The study further concludes there is a correlation between project planning and project performance in the implementation of the electrification project in Trans Nzoia County.

RECOMMENDATIONS

Based on the findings that project planning has a correlation with project performance, the study here by recommends that a well thought out monitoring plan needs well-articulated and cut out by the company long before executing the plan in the

implementation stage if project performance is to be enhanced.

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