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Influence of Project Organizational Risk Management Policy on Performance of Mombasa County Government Projects, Kenya

Patricia Juma Ogolla

Part-Time Lecturer, Department of Entrepreneurship, Technology, Leadership and Management, Jomo Kenyatta University of Agriculture and Technology, Kenya

Dr. Fred Mugambi

Lecturer, Department of Entrepreneurship, technology, learning and management Jomo Kenyatta University of Agriculture and technology, Kenya

Dr. Joseph Obwongi

Administrative Registra, Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract:

The main objective of this study was to investigate the Influence of project organizational risk management policy on performance of Mombasa County Government projects. The findings showed that the respondents were in agreement that risk attitude mean of 3.9714 and risk communication mean of 3.8619 can enhance project performance. The findings also showed that both were reliable with coefficient of 0.799 and 0,826 which exceed the proposed threshold of 0.70. According to the findings, there are positive average relationships between attitude and both measures of performance with correlation coefficients of 0.405 and 0.423 respectively. The relationships are also significant at 5% level of significance (since the p value is less than 0.05). Correlation analysis was used to measure the strength of the relationship between the measures of project organizational risk management policy and performance. The findings show that there are positive average relationships between risk attitude and both measures of performance with correlation coefficients of 0.405 and 0.423 respectively. The relationships are also significant at 5% level of significance (since the p value is less than 0.05). There were weak positive relationships between risk communication and both measures of performance with correlation coefficients of 0.277 and 0.263 respectively. However, the relationships were significant at 5% level of significance. From the findings project organizational risk management policy has a positive influence on performance of Mombasa county government projects. The study therefore recommends that, the personnel in charge of policy formulation in Mombasa County Government should incorporate project risk management in their policies this will enable them manage project risks. Policies should address risk communication, risk attitude and risk culture of the project team members. Communication plays an important role in risk mitigation. It provides opportunities for clarification; for making sense of the organization's progress, and thus members should be given ample time to discuss how to improve the organization and the influence of using different risk mitigation strategies. Mombasa County government project team should view risk management as an inherent part of decision making and not just a reporting tool. This will help the project team members to change their attitude from being risk averse to risk tolerant.

Keywords: Project performance, project risk management, organizational risk management, risk policy

1. Introduction

1.1. Background of the Study

A risk does not just happen but rather has a cause and its occurrence will definitely have an effect on cost, schedule and quality of the project. According to studies done by De Meyer et al, Max Wideman was credited as one of the scholars who made the concepts of risk to be understood. Max Wideman is recognized for setting the limits of the field of uncertainty by opposing the elements of the unknown and uncertainty. In Wideman's view, uncertainty is considered as a conceptual field that delimit between what is known and what is uncertain (Carvalho & Rabacheni, 2015). The concept of risk management is not new in Kenya However the development of Enterprise Risk Management and addressing risks beyond financial aspects the traditional financial aspects is still considered weak (Yegon, 2014). The financial sector in Kenya is perhaps the leader in development and introduction of ERM in organizations profiles. This is understandable given the high risk posed by government debts, consumer spending, employment levels, fluctuating commodity prices, security threats and reduced investments resulting from global credit crisis influencing project performance resulting in failed and installed projects. By the year 2030, it is envisaged that Kenya will have transparent, accountable, and ethical and result-oriented government institutions and county governments. Recent trends in public sector management of projects have laid emphasis on transparency and accountability. This has resulted in increased focus in governance of public institutions projects and inclusion of risk management practices and financial controls on projects. It is on this basis

that Kenya National Bureau of Statistics (KNBS) has developed the risk policy. KNBS is committed to managing risk to an acceptable level across all areas of operations to achieve the projects goal. All staff members are involved and play their roles in risk management, This risk commitment extends to third party interaction for example with data producer, users and suppliers and suppliers, service providers and contractors. KNBS acknowledges the importance of project risk management. It is an essential part of the risk management process of projects and wants this to become part of the culture of the institutions (Yegon, 2014)

1.1.1. Project Performance

Today there is increased emphasis for the development of multi-dimensional approaches for measuring project performance. Other recommended measures of project performance include ability to satisfy the expectations of all stakeholders, extent to which the projects promote personal growth of project team members, their impacts on users and their implications on future projects. Hillson (2016) argued that a project can only be considered successful if it meets the technical performance specifications or the objectives which it was intended to achieve. And if there is a high level of satisfaction among stakeholders regarding the project outcomes. Odhiambo and Ngungi (2014), states that successful projects need more than proper planning and tight control. It is also important for project to generate energy, commitment and creativity among stakeholders. Project risk management help projects to generate this commitment and creativity by inspiring confidence among the project team members. Puscasu (2015) stated that the most important practice leading to project performance are quality controls of the contract document, quality of response perceived and extent of changes to the contract

1.2. Statement of the Problem

Like majority of countries in Africa with ailed projects, Kenya has failed and stalled projects. A case in point is the Kenya Meat Commission (KMC), which collapsed in the early 1990s and it was only in 2006 that it was revived by the government which pumped in Kshs. 500 million. The Agricultural Finance Corporation (AFC) is another corporation which was on the verge of collapse due to huge portfolio of nonperforming loans until the government came to its rescue to support its mandate of facilitating the growth of agricultural industry by giving low interest loans to farmers. The Government extended Kshs.900million grant to AFC to lend to farmers and this has been effectively utilized through good practices of managing projects. Part of the reason for these deficits may be lack of effective risk management systems and risk policy in these sectors (Odoyo et al, 2014). Statistics in Kenya shows that 68% of the projects experience failure despite enactment of risk management strategies (KPMG, 2013).The Communications Commission of Kenya (CCK, 2012) also indicated that almost 48% of the projects left forcing firms to decline in performance.

This has been despite increase in the investment on technology projects. Statistics from Mombasa County Government shows that among the 111 projects that were to be implemented, only 60 projects were completed within time and budget representing 54%. Auditor General (2016). Some projects were stalled and some projects were not started at all while some were behind schedule. Among the 10 departments which undertook the projects only 3 departments completed their projects within time and the stipulated budget. That was department of Tourism, department of Youth and Gender and department of county planning, Land and Housing at 100%. Department of education had 11 projects but only 2 projects were completed representing 18%, department of health had 17 projects but only 6 were completed representing 35%, department of water and environment out of 16 projects only 8 were completed representing 50%,department of trade and Energy out of out of nine projects only 5 were completed representing 56%, while department of transport and infrastructure had 29 projects and only 13 were completed representing 45% and department of Agriculture and livestock had 7 projects and 5 five were completed representing 71%. In completed projects deny the public crucial services, further due to inflationary factors project cost may escalate in the near future making the Mombasa County Government to spend more on the same projects.

Njagi & Mugambi (2016) conducted a study on the effects of risk management practices in performance of hotels in Mombasa County. The purpose of the study was to evaluate the effect of the risk management practices on hotels performance in Mombasa. Descriptive survey design was adopted. The target population was 3, 4 and 5 star hotels in Mombasa County. Stratified random sampling was used to arrive at a sample of 13 with 26 participants. Data was collected by the use of self-administered questionnaires. Correlation analysis was used to determine the magnitude and direction of the relationship between risk management practices and performance of hotels while descriptive statistics were used to organize the findings. These studies focused mainly on how to manage risk in organizations. Little has been done on the influence of project risk management practices on performance of Mombasa County Government Projects. This study therefore investigated the influence of Project organizational risk management Policy on performance of Mombasa County Government projects.

1.3. Objective of the Study

The main objective was to investigate the influence of organizational risk management policy on performance of Mombasa county government projects.

1.4. Research Hypothesis

- H_{01} : Organizational Risk Management policy has no significant influence on performance of Mombasa County Government projects

2. Literature Review

2.1. Theoretical Review

2.1.1. Enterprise Risk Management Theory

Enterprise Risk Management (ERM) is a theory that advocates for the measurement and management of all significant risks facing a given entity holistically rather than dealing with each risk independently (Lam, 2014). ERM seeks to aggregate the risk management silos within an organization into one comprehensive and holistic framework. The ERM framework of managing risk emphasizes the active involvement of top management and all employees of the organization in the risk management process of identifying, assessing, analyzing and responding to a wide range of project risks (Larson & Gray 2014).

This concept of ERM encourages entities to shift from the paradigm where the exercise for managing risks is left to one or few members of the organization to a paradigm where all members are involved and work as a team in managing the organizational risks. The ERM also emphasizes the need for clear policies and processes for managing risks. The theory contends that institutions can improve their risk management capacity by having formal policies that define their risk appetite and tolerance, strategic goals and objectives and systematic processes for identifying, analyzing, treating and controlling risks in organizations to enhance project performance (Hillson, 2014). It also emphasizes the creation of a risk management culture where all stakeholders are mutually accountable and empowered to manage risks. ERM practices are associated with increased stakeholder confidence, increased competitive advantage and long term viability of organizations (Cormican, 2014). Although the ERM model was developed for use in managing company risks, it has become popular in the project management sphere. This theory proposes that when examining the project risk management practices that enhance performance among organizations, the researcher should pay attention to the extent to which organizations have created common policies, structures and approach for managing risks, thus this theory supports the study's objective on the influence of project organizational risk management policy on performance of Mombasa County Government projects.

2.3. Conceptual Framework

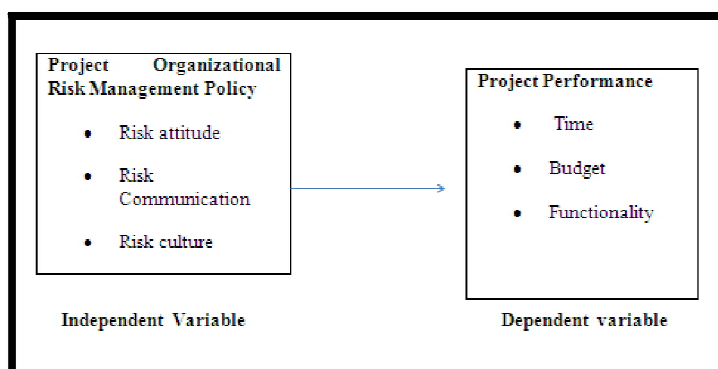


Figure 1: Conceptual Framework

2.4. Review of Literature on Study Variables

2.4.1. Project Organizational Risk Management Policy and Project Performance

Organizational policies are guidelines that outline and guide actions within a business or project organization. The exact types of policies will vary from one organization to another and can include policies such as directions, laws, principles, rules or regulations. Organizational risk culture refers to the attitudes and behavior found within an organization associated with risk management. This includes elements such as whether an organization views risk management as an inherent part of good decision making, or simply as a reporting requirement, whether an organization tends to be risk averse or views risk as including potential opportunities and whether risk management is embedded at all levels of an organization, or is a top-down process only (Junior & Calvalho, 2014).

Based on their attitudes, different individuals behaved differently in similar scenarios. Risk averting individuals are considered to be oversensitive and aware of threats looming around them, whereas the risk seeking individuals underestimate the importance of these threats. Their actions, in accordance with their attitudes also vary. Geert Hofstede characterized high-Uncertainty Avoidance Index states with a higher anxiety level; people in these countries seem more preoccupied with the concerns of their future. These individuals resist change and seem to seek consensus early on, which pushes the fear of failing into them and thus they tend to commit to the hierarchical structures (Lundqvist, 2014). The attitude of individuals and organizations has a significant influence on whether uncertainty and risk management delivers what it promises. Risk management cannot be undertaken mechanically. Human factors represent an important aspect of the process (Hillson, 2016). Recent research on project failures emphasizes that the vocabulary of systematic biases could prove very useful in understanding how project risk management can be derailed by the decision making process (Kerzner, 2017). It is therefore critical to understand the effects which the attitudes of individuals can have on the

risk process. Risk attitudes exist on a spectrum, ranging from risk-averse (those who are very comfortable in the presence of uncertainty) to risk-seeking (those who view uncertainty as a welcome change). David Hillson and Ruth Murray identified four basic risk attitudes, namely; Risk averse, Risk tolerant, Risk neutral and risk seeking (Hillson, 2016).

These can be assessed and described, allowing for sources of bias to be diagnosed, exposing their influence on the risk process. Risk attitudes occur at a corporate/ organizational level as well. Hillson (2016) established that group risk attitude has a significant influence on both the decision process and the outcome and if it is left unmanaged the consequences can be unpredictable. The literature on an individual's risk behavior is extensive; however, few studies investigate the risk propensity of an organization (Chapman & James, 2014). Hillson & Murray-Webster provides some useful insights into risk attitude. Furthermore, it provides a useful practitioner framework, with explicit steps enabling group risk attitude in the decision-making context to be managed proactively.

Risk communication is the exchange of information and opinions, and establishment of an effective dialogue, among those responsible for assessing, minimizing, and regulating risks and those who may be affected by the outcomes of those risks. Communication plays an important role in risk mitigation. It provides opportunities for clarification, for making sense of the organization's progress, and for members to discuss how to improve the organization and the impact of using different risk mitigation strategies (Kerzner, 2017). The communication process provides opportunities for members to understand their roles and responsibilities as the structure of the organization changes. In case, the wide range of people from a broad cross-section of the business. There is involved in the risk identification and assessment process and if there are no subjects who prevent conventional wisdom within the organization being challenged when necessary. Financial institutions need to consider the concept of verifiability. If a different group of members were making the same decision about the importance of risks, it would come to the same conclusion (Kerzner, 2017).

3. Research Methodology

The study used a combination of cross-sectional and descriptive survey. A cross-sectional survey sought to measure the relationship of variables at a specified time, either to describe the incidence of a phenomenon or how variables are related (Cooper & Schindler, 2014). Descriptive research gives a thorough and accurate description survey by determining the –how or –why the phenomena came into being and also what is involved in the situation (Mugenda & Mugenda, 2014).

4. Research Findings and Discussion

4.1. Factor Analysis for Project Organizational Risk Management Policy

To check on the sample adequacy of the data of project risk organization policy, KMO was used. Ali *et al* (2016) showed that KMO value is between 0 and 1 with a value of more than 0.5 considered ideal. The Bartlett's test should have a p value of less than 0.05 for it to be considered significant. Results given by Table 1 shows that KMO was 0.516 and Bartlett's test of Sphericity had a p value of 0.003 which is less than 0.05. Therefore the data is considered ideal for factor analysis

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.6+ \-		.516
Bartlett's Test of Sphericity	Approx. Chi-Square	37.727
	Df	10
	Sig.	.003

Table 1: KMO and Bartlett's Test for Project Organizational Risk Management Policy

The main objective of factor analysis is to regroup data into non overlapping clusters so that relationships and patterns can be easily interpreted and understood (Yong & Pearce, 2013). Principal component analysis was used to reduce components of project organizational risk policy. All the measures of project risk organization policy were subjected to factor analysis and results given in Table 2

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.772	35.437	35.437	1.772	35.437	35.437
2	1.399	27.985	63.422	1.399	27.985	63.422
3	.819	16.381	79.803			
4	.627	12.542	92.344			
5	.383	7.656	100.000			

Table 2: Total Variance Explained for Project Organizational Risk Management Policy

From Table 2 it can be seen that two factors accounted for 63.422% of all the variation in project risk organization policy. Factor one accounted for 35.437% of all the variations and factor two accounted for 27.985% of all the variation. These factors are the only factors which are being retained for further analysis. These factors had Eigen values of more than one and had the greatest influence on project risk analysis policy

4.1.1. Rotated Component Matrix For Project Organizational Risk Management Policy

Table 3 presents the rotated component factor loadings for determinants of measures project organizational risk management policy. Two factors were retained. Factor one can be identified to be attitude while factor two can be seen to be communication.

Statement	Component	
	Attitude	Communication
Simply as a reporting requirement		.851
Risk is top-down process only		.732
Opportunity or threat	.756	
Value Correction	.8506+\-	
Improvement of control and process	.689	

Table 3: Rotated Component Matrixes for Project Organizational Risk Management Policy Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation Converged in 3 Iterations

Only Factors With Loading Of More Than 0.4 Are Retained, Rusuli Et Al., (2013). These Factors Are Interrelated

4.2. Descriptive Results of Project Organizational Risk Management Policy

Project Organizational Risk Management Policy was assessed by two measures namely, risk attitude and risk communication. The descriptive results of these two measures are given by Table 4.24 on a scale of 1 to 5 (where 5 = Strongly Agree and 1 = Strongly Disagree).

Variable	Mean	Std. Deviation	Cronbach's Alpha
Risk Attitude	3.9714	.76266	.799
Risk communication	3.8619	.64952	.826

Table 4: Descriptive Results of Project Organizational Risk Management Policy

From Table 4 it can be seen that the respondents were in agreement that attitude (mean of 3.9714) and communication (mean of 3.8619) can enhance project performance. Cronbach's alpha was used to check on the reliability of the retained constructs (Ali *et al.*, 2016). It can be seen that both were reliable with a reliability coefficients of 0.799 and 0.826 respectively which exceed the proposed threshold of 0.70.

4.3. Correlation Results between Organizational Risk Management Policy and Project Performance

Correlation analysis was used to measure the strength of the relationship between the measures of project organizational risk management policy and project performance. Table 4.31 presents the correlation results

		Functionality (Performance Sub Variable)	Budget(Performance Sub Variable)	Risk Attitude(Organizational Risk Policy Sub Variable)	Risk Communication(Organizational Risk Policy Sub Variable)
Functionality(Project Performance Sub Variable)	Pearson Correlation	1			
	Sig. (2-Tailed)				
	N	71			
Budget(Project Performance Sub Variable)	Pearson Correlation	.460**	1		
	Sig. (2-Tailed)	.000			
	N	71	71		
Risk6+\- Attitude(Organizational Risk Management Policy Sub Variable)	Pearson Correlation	.277*	.263*	1	
	Sig. (2-Tailed)	.020	.028		
	N	70	70	70	
Risk Communication(Organizational Risk Management Policy Sub Variable)	Pearson Correlation	.405**	.423**	-.004	1
	Sig. (2-Tailed)	.000	.000	.971	
	N	70	70	70	70

Table 5: Correlation Results between Organizational Risk Management Policy And Project Performance

** Correlation Is Significant At the 0.01 Level (2-Tailed)

* Correlation Is Significant At the 0.05 Level (2-Tailed)

Table 5 shows that there are positive average relationships between risk communication and both measures of performance with correlation coefficients of 0.405 and 0.423 respectively. The relationships are also significant at 5% level of significance (since the p value is less than 0.05).

There were weak positive relationships between risk attitude and both measures of performance with correlation coefficients of 0.277 and 0.263 respectively. However, the relationships were significant at 5% level of significance.

4.4. Regression Results

To measure the specific objective linear regression model was fitted between the independent variable and the dependent variable. The results obtained have been used to test the hypothesis in chapter one. The results are presented in the subsections that follow:

4.4.1. Regression Model between Organizational Risk Management Policy and Project Performance

The first objective of this research was to determine the influence of project organizational risk management policy on performance of Mombasa County Government Projects. To achieve this, multiple regression models was fitted between the sub variables of project organizational risk management policy and performance. The results are given by Tables 4.6, 4.7 and 4.8.

Models	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.492 ^a	.242	.219	.30442
2	.499 ^a	.249	.227	.29921

Table 6: Regression Model Summary between Projects Organizational Risk Management Policy and Project Performance

- Mode1 predictors risk attitude and risk communication; dependent variable functionality
- Mode1 predictors: risk attitude and risk communication; dependent variable budget

Table 7 presents the model summary which gives the predictive power of the model. It can be seen that in model 1, risk attitude and risk communication contribute 24.2% of all the variations in functionality other factors not in the variable explains 75.7% of all the variations in functionality. Mean while in model 2, risk attitude and risk communication contribute 24.9% of all the variations in budget other factors not in the model explains 75.6% of all the variations in budget.

		Sum of Squares	df	Mean Square	F	Sig.
Model 1	Regression	1.983	2	.991	10.698	.000 ^b
	Residual	6.209	67	.093		
	Total	8.192	69			
Model 2	Regression	1.989	2	.994	11.107	.000 ^b
	Residual	5.998	67	.090		
	Total	7.987	69			

Table 7: Analysis of Variance between Project Organizational Risk Management Policy and Project Performance
Dependent Variable: Functionality, Budget
Predictors: (Constant), Risk Communication, Risk Attitude

Table 7 presents the ANOVA results which show that there is at least one significant variable in both model (since the P value is less than 0.05). The actual significant variables are identified in Table 4.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.493	.258		9.666	.000
	Functionality(project performance sub variable)	.100	.038	.279	2.621	.011
	Budget(project performance sub variable)	.216	.056	.407	3.823	.000
2	(Constant)	2.455	.254		9.684	.000
	Risk attitude(project organizational risk management policy sub variable)	.094	.037	.265	2.500	.015
	Risk communication(project organizational risk management policy sub variable)	.222	.055	.424	4.006	.000

Table 8: Regression Coefficients between Project Organizational Risk Management Policy and Project Performance

5. Summary of Findings, Conclusion and Recommendation

5.1. Project Organizational Risk Management Policy

The main objective of this study was to investigate the influence of organizational risk management policy on performance of Mombasa County Government projects. The study results revealed that there was a positive significant relationship between organizational risk management policy and project performance. The respondents were in agreement that risk attitude (mean 3.9714) and risk communication (mean 3.8617) were very influential on performance of Mombasa county government projects.

The study concluded that project organizational risk management policy influences the performance of Mombasa County Government projects. This is through the teams risk attitude and risk communication. The study results in general concluded that there was a statistically significant influence of project Organization risk policy and performance of Mombasa County Government projects

5.2. Recommendations

Based on the findings of this study the following recommendations were proposed in relation to each objective of the study on influence of project risk management practices on performance of Mombasa County Government practices.

5.2.1. Project Organizational Risk Management Policy

The personnel in charge of policy formulation in Mombasa County Government should incorporate formal ways of managing project risks. Policies should address risk communication and risk attitude of the project team members. Every member in a development project should be given an opportunity to share their perceived risks in projects. During project meetings, project risk management should be a default agenda

5.3. Suggested Areas for Further Studies

Further studies need to be done on influence of project risk contingency planning on project performance.

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