

International Journal of
**Supply Chain
Management**
(IJSCM)

**INFLUENCE OF PUBLIC PRIVATE PARTNERSHIPS ON
PERFORMANCE OF PROJECTS AMONG STATE
CORPORATIONS IN KENYA**

Stephen Mutiso and Dr. Patrick Mwangangi



INFLUENCE OF PUBLIC PRIVATE PARTNERSHIPS ON PERFORMANCE OF PROJECTS AMONG STATE CORPORATIONS IN KENYA

^{1*} STEPHEN MUTISO

1*Professional Diploma Student,
Certified Procurement And Supply Professional Of Kenya
Kenya Institute of Supplies Examination Board
Corresponding Author's E-mail: stephen.mutiso89@gmail.com

^{2*} DR. PATRICK MWANGANGI

Supervisor

Kenya Institute of Supplies Management and Head of Procurement, Nairobi City County

Abstract

Purpose: The purpose of the study was to determine the influence of public private partnerships on performance of projects among state corporations in Kenya with an aim of making recommendations to other institutions.

Methodology: The researcher reviewed both theoretical and empirical literature and proposed to use the research methodology that addressed the gaps identified in literature as well as answer the stipulated research questions. This research study adopted a descriptive research design approach. The study prefers this method because it allows an in-depth study of the subject. The study employed stratified random sampling technique in coming up with a sample size of 127 respondents from a total of 187 target population. Structured and semi structured questionnaires were used to collect data. Data gathered from the questionnaires administered was analyzed by the help of Ms Excel and SPSS version 22, while output was presented inform of frequency tables and charts. The study used both descriptive and inferential statistics to show the relationship between variables

Results and conclusion: The response rate of the study was 87%. The coefficient of determination also called the R² was 0.634. R² value of 0.634 means that 63.4% of the corresponding variation in performance of commercial building projects registered by National Construction Authority in Kenya can be explained or predicted by (information technology adoption, strategic partnerships, customer experience management, team management) which indicated that the model fitted the study data. The findings of the study indicated that information technology adoption, strategic partnerships, customer experience management and team management have a positive relationship with performance of commercial building projects registered by National Construction Authority in Kenya. The findings of the study indicated that legal framework, stakeholder involvement, value for money and risk management have a positive relationship with performance of projects among state corporations in Kenya

Policy recommendation: The study recommended that public institutions should embrace public private partnerships so as to improve performance of projects among state corporations and further

researches should to be carried out in other public institutions to find out if the same results can be obtained.

Keywords: *legal framework, stakeholder involvement, value for money and risk management*

1.1 Introduction

According to the Public Procurement and Disposal (Public Private Partnerships) Regulations, (2013), a Public Private Partnership (PPP) is an agreement between a procuring entity (government ministries and parastatals) and a private party under which the private party undertakes to perform a public function or provide a service on behalf of the procuring entity. The private party receives a benefit for performing the function, either by way of compensation from a public fund, charges or fees collected by the private party from users or customers of a service provided to them or a combination of such compensation and such charges or fees. Simply put, a PPP is a long-term contractual agreement between a public body and a private partner (or a consortium of private firms) in which the private party provides a public service and assumes substantial risk in the project for a return on their investment. The terrain of public project procurement is gradually changing in many countries as a result of innovative procurement approaches that include PPPs (Dada, 2009). The traditional procurement method has been the most common it has, however, suffered criticisms as a result of perceived drawbacks and limitations (Ojo, 2009).

In general, PPPs involves the transfer of responsibility (from the public sector to the private sector) for the design, building, finance and operation of public sector assets, such as buildings, infrastructure, equipment and other associated facilities, according to an agreed concession period (normally 25 to 30 years). The private party will raise its own funds to finance all or part of the assets that will deliver the services based on the agreed performance specification. In turn, the public sector will compensate the private party for these services through a monthly lease payment, or, in some PPP projects, part of the payment may flow from the public users directly (Ismail, 2013).

This uptake in PPPs by governments especially in developing countries can be attributed to increasing pressure from their citizens, civil society organizations, and the media to provide sufficient infrastructure services such as transportation, energy and communications (Udechukwu, 2012). The pressure is also felt from the United Nations (UN) Millennium Development Goals (MDGs), under which country development and progress is monitored. Hence, confronted with limited funds but growing demand for infrastructure services, governments in both developed and developing countries have begun to view PPPs as a way to expedite critical infrastructure that may otherwise not be built (Agere, 2010).

1.2 Statement of the Problem

Kenya's long term development agenda spelt out in the vision 2030, targets an annual growth rate of above 10% with an investment rate of 30%, state corporations are key drivers in this projected growth. State corporations accounted for 20% of the country's GDP, provided employment to about 4 million persons (GoK, 2016). However, state corporations in Kenya have been experiencing a myriad of problems including misappropriation and blatant mismanagement of the meager resources (Regional Economic Outlook, 2013). At least 30 out of the 46 countries in Sub-Saharan Africa are currently facing a debilitating infrastructural crisis (IMF, 2015). The crisis is fuelled in part by growing demand for infrastructural facilities such as electricity, roads and sewer

systems consumption expected to grow at a yearly rate of 2.6% (IEA, 2016). At the same time, rates of urbanization have been increasing at 3.5% a year, industrial and manufacturing sectors expanding as well, thus adding to the growing demand for infrastructural facilities (UNEP, 2014).

According to an annual Kenya Power customer satisfaction survey of 2012 and 2013, carried out by a contracted vendor, it is notable that the satisfaction percentage index has been fluctuating towards more and more dissatisfaction, that is, 69% and 66% respectively (Makau, 2014). On the other hand, Kenya Power faces a major challenge in controlling the overall sourcing costs because of the constant increase due the lack of much needed PPPs input; this is evident by Kenya Power posting a decrease in profit prior to tax of Ksh.6 Billion compared to Ksh.8 Billion noted in the previous year (OECD, 2010). The problem of poor productivity and the absorption of excessive portion of the budget among state corporations represents a drain on the exchequer meager resources and also results into non delivery on intended services (Africa Infrastructure Country Diagnostic, 2009). This has a negative implication on the welfare of Kenyan citizens and may also imply that Vision 2030 is not met, this where the PPPs specialized input should come in (KIPPRA, 2016).

Studies have done world over, in the UK, previous research by Griffin, Foster and Halpin (2014) on the survey of the influence of PPPs usage in public projects shows that global state corporations' use of the PPPs is high, while in Kenya, previous research by Githumbi (2013) on usage, show that only 33% of state corporations have implemented PPPs as a strategy to improving services. This has left an evident knowledge gap, which the study intends to bridge by determining the influence of public private partnerships on performance of projects among state corporations in Kenya. It is against this back drop that this study sets out to investigate the influence of public private partnerships on performance of projects among state corporations in Kenya.

1.3 Objectives of the Study

1. To examine the influence of legal framework on performance of projects among state corporations in Kenya.
2. To determine the influence of stakeholder involvement on performance of projects among state corporations in Kenya.
3. To assess the influence of value for money on performance of projects among state corporations in Kenya.
4. To examine the influence of risk management on performance of projects among state corporations in Kenya

2.0 LITERATURE REVIEW

2.1 The Stakeholder Theory

Stakeholder theory originated by Freeman (1984) is defined as .any group or individual who can affect or is affected by the achievement of the organization's objectives.. Unlike agency theory in which the managers are working and serving for the stakeholders, stakeholder theorists suggest that managers in organizations have a network of relationships to serve that include the suppliers, employees and business partners.

The public organization, which enters into a PPP contract, cannot achieve its objectives if it works contrary to the expectations of the public and thereby risking its very existence. However, stakeholder theory needs some refinements before it can be applied to hybrid projects such as PPP, which combine governance of both sectors in one PPP contract setting. Where the refinement is absent or too minimalistic, critics and opponents will accuse the government of surrendering to capitalist pressure in the provision of public services to benefit business corporations. The attempt to customize stakeholder's management theory to fit into PPP environment requires an understanding of the unique nature of PPP governance that the dynamics and multiplicity of roles, influences and power of the public can be addressed.

2.2 Public Private Partnerships

2.2.1 Legal Framework and Performance of Projects

Mulama and Muchelule (2016) conducted a study on challenges facing implementation of PPP projects in Nairobi County with a target population of 194 respondents that were responsible for PPP formulation. The finding indicated that PPP policy and regulation framework were not adequate enough to permit effective implementation of PPP projects. The study recommended that a revision of the current policy, institutional and legal framework needs to be done to be in line with the current requirements of implementing PPP projects.).

2.2.2 Stakeholder Involvement and Performance of Projects

A number of studies have found that PPPs accelerate the project delivery process for infrastructure projects by consolidating the responsibilities for infrastructure financing, design, construction, and operations with a single private provider (Garvin, 2010). Yet, PPPs are politically volatile, and opposition from elected leaders or the public at large can derail a development process, delaying project schedules, or even cancelling a project long into the development process.

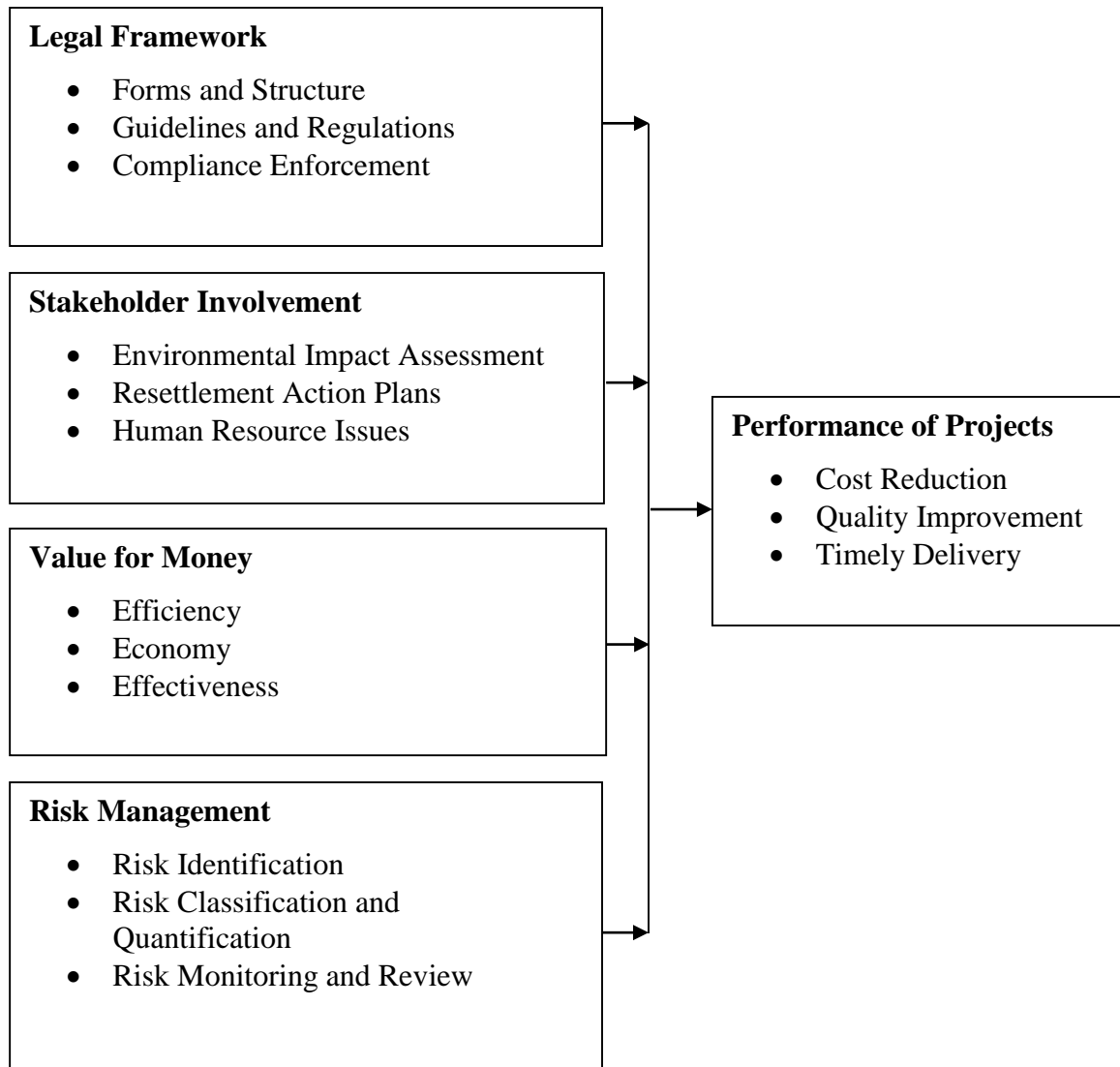
2.2.3 Value for Money and Performance of Projects

According to Grimsey and Lewis (2015) value for money is therefore the best price for a given quantity and standard of output, measured in terms of relative financial benefit. The National Audit Office (2010) introduced the concept of whole-life cost into the definition and argued that value for money is all about optimizing how much is spent and the quality of what is received to meet the object of the procurement. Value for money is not equivalent to cost reduction and efficiency savings, as they can affect value for money positively or negatively (Jackson, 2012).

2.2.4 Risk Management and Performance of Projects

Yougjian, Shouquig and Albert (2011) conducted a study on equitable risk allocation of PPP projects in China with the purpose to elaborate on the preferred risk allocation for PPP projects. The study collected data from 38 managers using face to face interviews to identify actual risk allocation in recently completed PPP projects by comparing the preferred and actual risk allocation. The findings indicated that a great degree of conformity between the preferred and actual risk allocation to be considered for equitable risk allocation in PPP projects. The findings further indicated that it's important for the private party to have a better understanding of the risk in PPP projects before engaging in the projects

2.3 Conceptual Framework



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

3.0 METHODOLOGY

This research study adopted a descriptive research design approach. The study preferred this method because it allows an in-depth study of the subject. The study employed stratified random sampling technique in coming up with a sample size of 127 respondents from a total of 187 target population. Structured and semi structured questionnaires were used to collect data. Data gathered from the questionnaires administered was analyzed by the help of Ms Excel and SPSS version 22, while output was presented inform of frequency tables and charts. The study used both descriptive and inferential statistics to show the relationship between variable

The research used a multiple regression model.

The research used a multiple regression model.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Performance of Projects

β_0 = Constant Coefficient

X1 = Legal Framework

X2 = Stakeholder Involvement

X3 = Value for Money

X4 = Risk Management

ε = Random Error Term

4.0 RESULTS FINDINGS

4.1 Response Rate

A sample of 127 respondents were approached using questionnaires that allowed the researcher to drop the questionnaire to the respondents and then collect them at a later date when they had filled the questionnaires. A total of 127 questionnaires were distributed to the sampled heads of procurement. Out of the population covered, 110 were responsive representing a response rate of 87%. This was above the 50% which is considered adequate in descriptive statistics according to (Cooper, 2016).

Table 1: Response Rate of Respondents

Response	Frequency	Percentage
Actual Response	110	87%
Non-Response	17	13%
Total	127	100%

4.2 Reliability Analysis

The cronbach's alpha was computed in terms of the average inter-correlations among the items measuring the concepts. The rule of thumb for cronbach's alpha is that the closer the alpha is to 1 the higher the reliability (Trochin, 2013). A value of at least 0.7 is recommended. Cronbach's alpha is the most commonly used coefficient of internal consistency and stability. Consistency indicated how well the items measuring the concepts hang together as a set. Cronbach's alpha was used to measure realibility. This was done on the four objectives of the study. The higher the coefficient, the more reliable is the test.

Table 2 Reliability Results

Variable	No of Items	Respondents	α =Alpha	Comment
Legal Framework	9	13	0.893	Reliable
Stakeholder Involvement	9	13	0.987	Reliable
Value for Money	9	13	0.974	Reliable
Risk Management	9	13	0.976	Reliable

4.3 Demographics

4.3.1 Distribution of Respondents by Gender

The study determined the gender distribution of the respondents. The results summarized in the table below. The result in figure 4.1 revealed that majority of the respondent (58%) indicated that they were male, while only (42%) of the respondent indicated that they were female. The statistics may raise the issue of gender equity in public private partnership among state corporations in Kenya, but that is outside the scope of this study. A study on South African organizations found that women and men do not differ in their ability to perform tasks, but rather bring a different perspective to performance of projects (Associate, 2017).

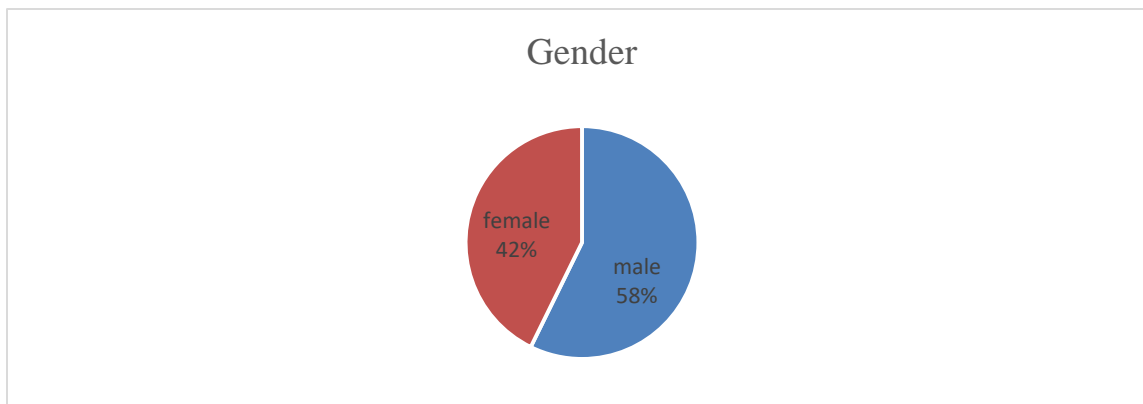


Figure 2: Distribution of Respondents by Gender

4.3.2 Distribution of Respondents by Age

The study also determined the age of the respondents. The results are submitted in figure 4.2 where the majority 58% were 31-40 years. Respondents aged between 41-50 years were 29%. Respondents above 50 years accounted years accounted for 13%. Again this shows that those interviewed are adults capable of making independent judgments and the results of a research process involving them is deemed to be valid.

The findings are in agreement with those of Dunn (2010) who established that there are two natural age peaks of the late 30s to early 40s which correlated to employee performance and the performance of public private partnership projects among state corporations.

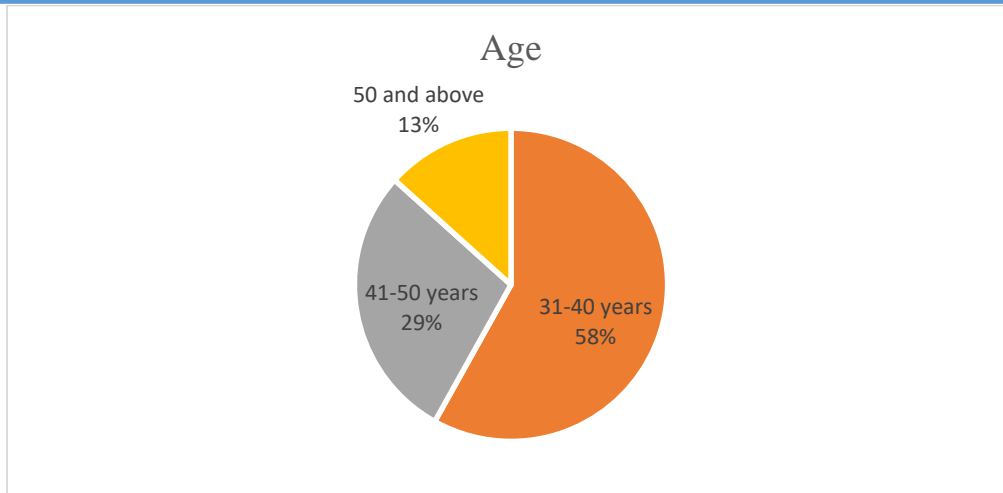


Figure 3: Distribution of Respondents by Age

4.3.3 Distribution of Respondents by Level of Education

The respondents were asked to state their highest level of education and the results were as captured in figure 4.3. The result further revealed that (87%) of the respondent indicated that their academic qualification was up to degree level. The result also showed that only (13%) of the respondent had masters level. These findings concur those of Syuhaida (2009) who established that majority of who run public private partnership projects in the state corporations are highly educated and that there is evidence linking education and performance of public private partnership projects.

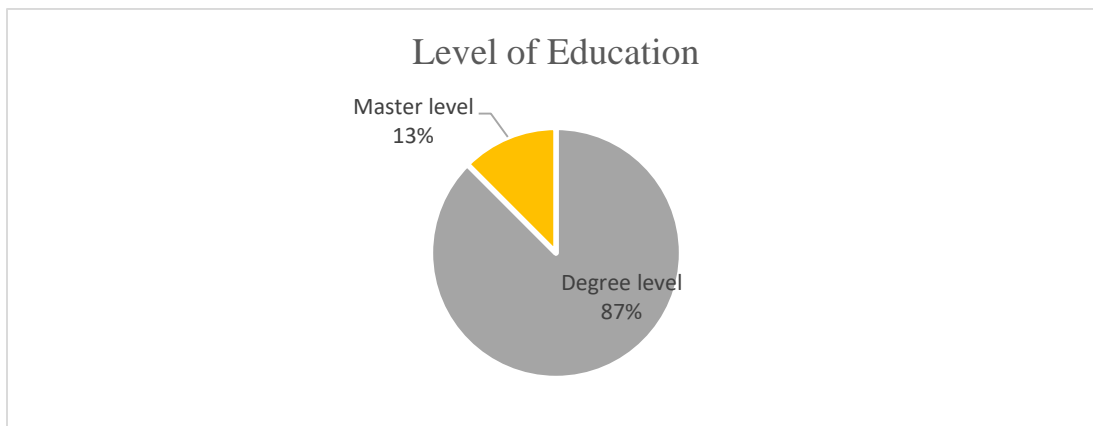


Figure 4: Distribution of Respondents by Level of Education

4.3.4 Distribution of Respondents by Length of Service

The study determined the number of years the respondents had good performance in public private partnership in projects among state corporations in Kenya. The respondents were asked to indicate their work duration. The result revealed that majority of the respondents (50%) indicated that their work duration was 5-8 years. The result also showed that (27%) of the respondent indicated that

their work duration was 9 years and above. The result further revealed that (23%) of the respondent indicated that their work duration was 3-5 years. The findings of the study are in tandem with literature review by Pitt (2016) who indicated that a duration and experience of employee helps him or her to have better knowledge and skills which contribute to better performance in public private partnership projects.

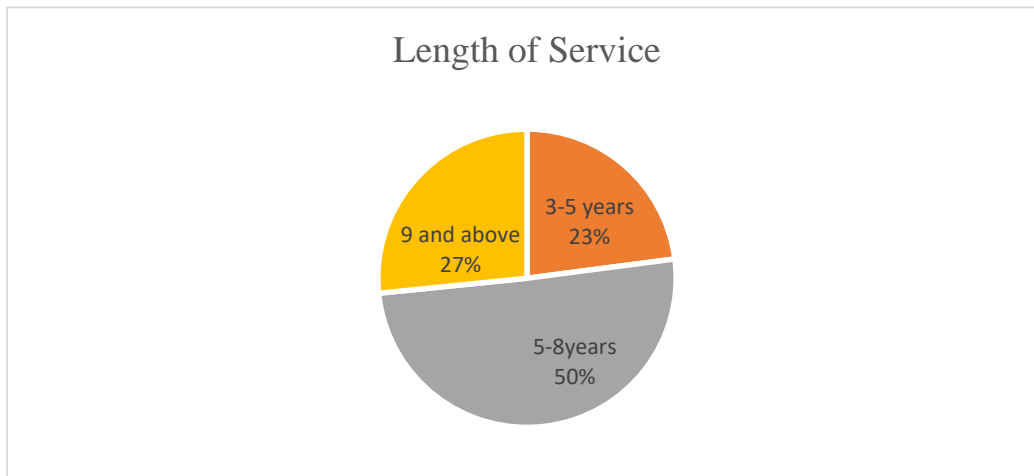


Figure 5: Distribution of Respondents by Length of Service

4.4 Descriptive Statistics

4.4.1 Legal Framework

The first objective of the study was to examine the influence of legal framework on performance of projects among state corporations in Kenya. The respondents were asked to indicate to what extent did legal framework influence performance of projects among state corporations. Results indicated that majority of the respondents 46% agreed that it was effective, 41% said that it was very effective, 8% said it was ineffective, somehow effective was at 5%.

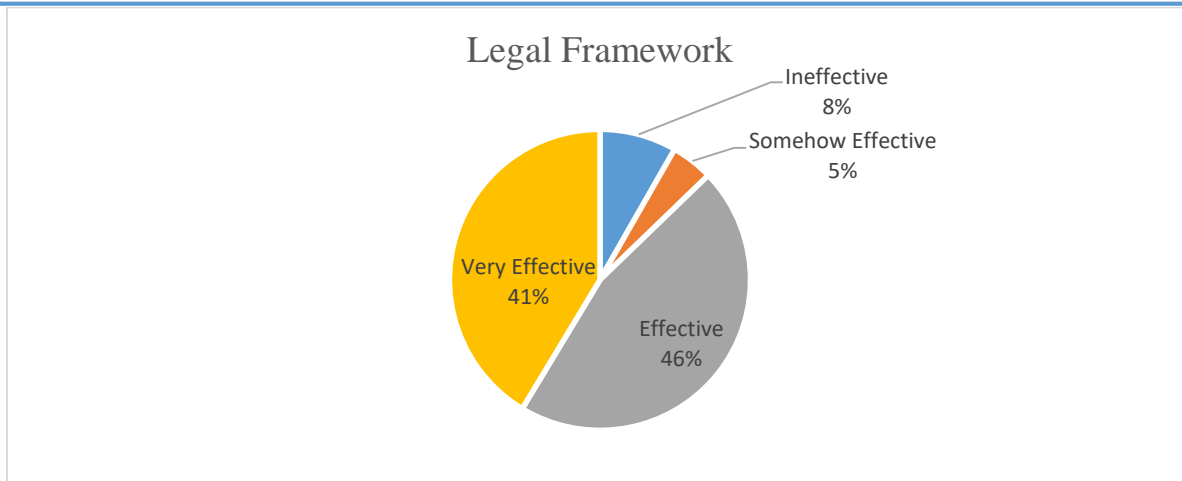


Figure 6: Legal Framework

The respondents were also asked to comment on statements regarding legal framework influence on performance of projects among state corporations in Kenya. The responses were rated on a likert scale and the results presented in Table 4.3 below. It was rated on a 5 point Likert scale ranging from; 1 = strongly disagree to 5 = strongly agree. The scores of ‘strongly disagree’ and ‘disagree’ have been taken to represent a statement not agreed upon, equivalent to mean score of 0 to 2.5. The score of ‘neutral’ has been taken to represent a statement agreed upon, equivalent to a mean score of 2.6 to 3.4. The score of ‘agree’ and ‘strongly agree’ have been taken to represent a statement highly agreed upon equivalent to a mean score of 3.5 to 5.

The result in table 3 revealed that majority of the respondents with a mean of (3.86) agreed with the statement that forms and structures of PPPs have a significant influence on cost reduction. The measure of dispersion around the mean of the statements was 0.928 indicating the responses were varied. The result revealed that majority of the respondents as indicated by a mean of (3.85) agreed with the statement that guidelines and regulations of PPPs have a significant influence on cost reduction. The standard deviation for the statement was 0.883 showing a variation. The result revealed that majority of the respondent (3.83) agreed with the statement that compliance enforcement of PPPs rules have a significant influence on cost reduction. The results were varied as shown by a standard deviation of 0.906.

The result revealed that majority of the respondents as shown by a mean of (4.47) indicated that they agreed with the statement that forms and structures of PPPs have a significant influence on quality improvement. The responses were varied as measured by standard deviation of 0.501. The result revealed that majority of the respondents with a mean of (4.44) indicated that they agreed with the statement that guidelines and regulations of PPPs have a significant influence on quality improvement. The responses were varied as measured by standard deviation of 0.656. The result revealed that majority of the respondents (4.47) indicated that they agreed with the statement that compliance enforcement of PPPs rules have a significant influence on quality improvement. The responses were varied as measured by standard deviation of 0.544.

The result revealed that majority of the respondents (4.44) indicated that they agreed with the statement that forms and structures of PPPs have a significant influence on timely delivery. The responses were varied as measured by standard deviation of 0.752. The result showed that majority of the respondents (4.02) indicated that they agreed with the statement that guidelines and

regulations of PPPs have a significant influence on timely delivery. The responses were varied as measured by standard deviation of 0.826. Further, the results indicated that a majority of the respondents (4.4) agreed with the statement that compliance enforcement of PPPs of rules have a significant influence on timely delivery. There was a standard deviation of 0.717 indicating a variation of responses. The average response for the statements on legal framework was 4.19. The findings agree with Montanheiro, (2008) that a good legal framework is necessary for the performance of public private partnerships.

Table 3: Legal Framework

Statements	Mean	Std. Deviation
Forms and structures of PPPs have a significant influence on cost reduction	3.86	0.928
Guidelines and regulations of PPPs have a significant influence on cost reduction	3.85	0.883
Compliance enforcement of PPPs rules have a significant influence on cost reduction	3.83	0.906
Forms and structures of PPPs have a significant influence on quality improvement	4.47	0.501
Guidelines and regulations of PPPs have a significant influence on quality improvement	4.44	0.656
Compliance enforcement of PPPs rules have a significant influence on quality improvement	4.47	0.544
Forms and structures of PPPs have a significant influence on timely delivery	4.44	0.752
Guidelines and regulations of PPPs have a significant influence on timely delivery	4.02	0.826
Compliance enforcement of PPPs of rules have a significant influence on timely delivery	4.4	0.717
Average	4.19	0.745

4.4.2 Stakeholder Involvement

There was also need to examine the influence of performance of projects among state corporations in Kenya. The respondents were also asked to comment on statements regarding stakeholder involvement influenced performance of public private partnership projects in Kenya. Results showed that 49% of respondents indicated it was effective, 36% that it was very effective, 9% ineffective while 6% somehow effective.

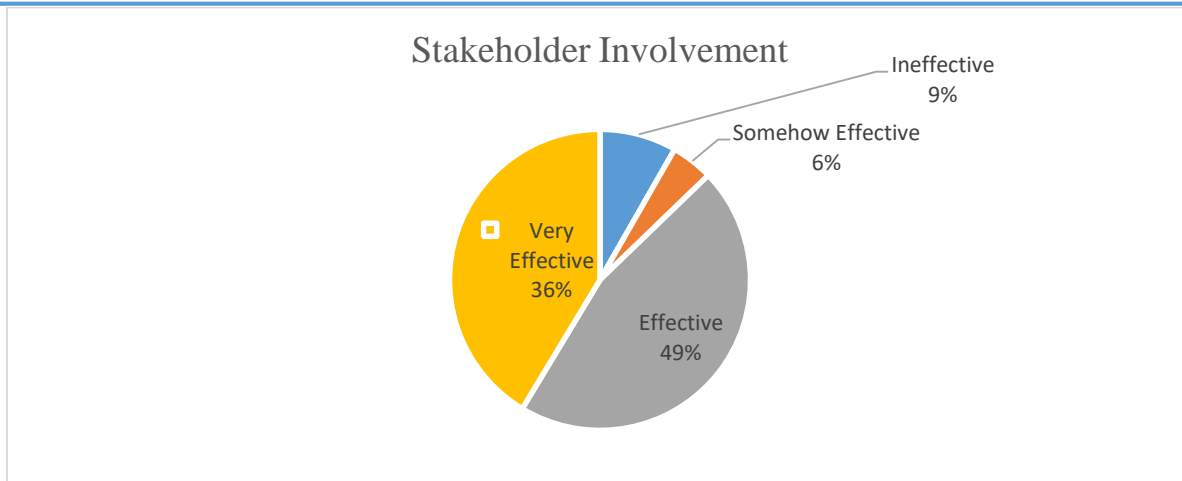


Figure 7 Stakeholder Involvement

The result in table 4.4 revealed that majority of the respondent (4.56) agreed with the statement that environmental impact assessment has a significant influence on cost reduction. The responses were varied as shown by a standard deviation of 0.499. The result revealed that majority of the respondent (4.48) agreed with the statement that resettlement action plans have a significant influence on cost reduction. The responses were varied as shown by a standard deviation of 0.502. The result revealed that majority of the respondent (4.39) agreed with the statement that human resource issues have a significant influence on cost reduction. The responses were varied as shown by a standard deviation of 0.672.

The result further revealed that majority of the respondent (4.44) agreed with the statement that environmental impact assessment has a significant influence on quality improvement. The responses were varied as shown by a standard deviation of 0.742. The result further revealed that majority of the respondent (4.51) agreed with the statement that resettlement action plans have a significant influence on quality improvement. Responses were varied as shown by a standard deviation of 0.502. The result further revealed that majority of the respondent (4.47) agreed with the statement that human resource issues have a significant influence on quality improvement. Responses were varied as shown by a standard deviation of 0.501.

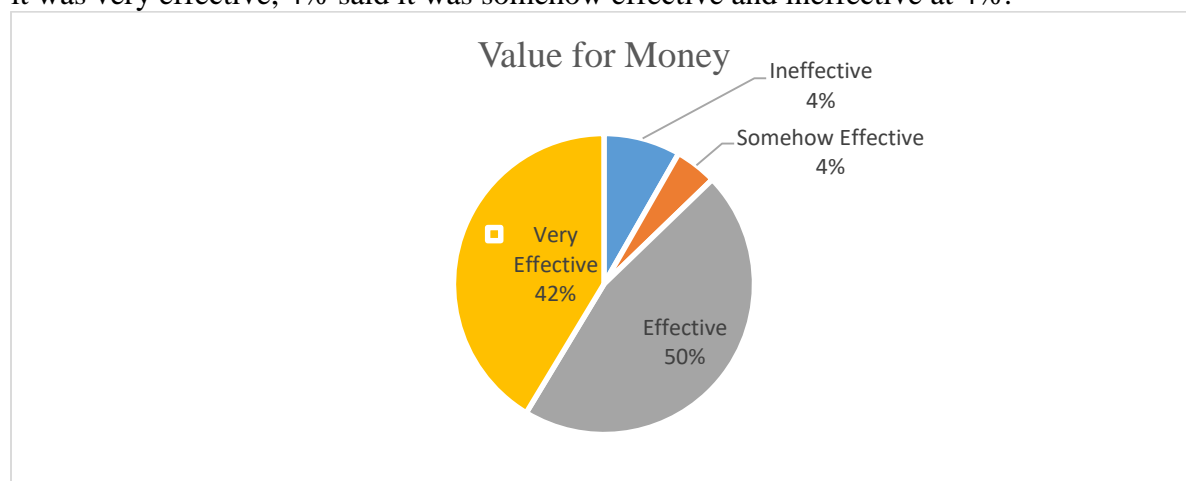
The result revealed that majority of the respondent (4.37) agreed with the statement that environmental impact assessment has a significant influence on timely delivery. The responses were varied as shown by a standard deviation of 0.691. The result revealed that majority of the respondent (4.5) agreed with the statement that resettlement action plans have a significant influence on timely delivery. The responses were varied as shown by a standard deviation of 0.502. The result revealed that majority of the respondent (4.51) agreed with the statement that human resource issues have a significant influence on timely delivery. The responses were varied as shown by a standard deviation of 0.502. The average response for the statements on stakeholder involvement was 4.47. The findings agree with Mwaengo (2012) that stakeholder involvement is necessary for the performance of public private partnerships projects.

Table 4: Stakeholder Involvement

Statements	Mean	Std. Deviation
Environmental impact assessment has a significant influence on cost reduction	4.56	0.499
Resettlement action plans have a significant influence on cost reduction	4.48	0.502
Human resource issues have a significant influence on cost reduction	4.39	0.672
Environmental impact assessment has a significant influence on timely delivery	4.44	0.742
Resettlement action plans have a significant influence on timely delivery	4.51	0.502
Human resource issues have a significant influence on timely delivery	4.47	0.501
Environmental impact assessment has a significant influence on quality improvement	4.37	0.691
Resettlement action plans have a significant influence on quality improvement	4.5	0.502
Human resource issues have a significant influence on quality improvement	4.51	0.502
Average	4.47	0.56

4.4.3 Value for Money

There was also need to assess the influence of value for money on performance of projects among state corporations in Kenya as the third objective. The respondents were asked to comment on extent of value for money influence on performance public private partnership projects in Kenya. Results indicated that majority of the respondents 50% agreed that it was effective, 42% said that it was very effective, 4% said it was somehow effective and ineffective at 4%.

**Figure 8: Value for Money**

The respondents were asked to indicate their levels of agreement on statements regarding value for money. The results in table 4.5 revealed that majority of the respondent (4.14) agreed with the statement that efficiency in public private partnerships has a significant influence on cost reduction. The responses were varied as shown by the standard deviation of 0.818. The result revealed that majority of the respondent (3.87) agreed with the statement that economy in public private partnerships has a significant influence on cost reduction. The measures of dispersion around the mean were 0.783. The result revealed that majority of the respondent (3.86) agreed with the statement that effectiveness in public private partnerships has a significant influence on cost reduction. The measures of dispersion around the mean were 0.955.

The result revealed that majority of the respondent (3.98) agreed with the statement that efficiency in public private partnerships has a significant influence on quality improvement. The measures of dispersion around the mean were 0.802. The result revealed that majority of the respondent (3.82) agreed with the statement that economy in public private partnerships has a significant influence on quality improvement. The measures of dispersion around the mean were 1.029. The result revealed that majority of the respondents as shown by a mean of (4) indicated that they agreed with the statement that effectiveness in public private partnerships has a significant influence on quality improvement. The responses were varied as measured by standard deviation of 0.816.

The result revealed that majority of the respondents with a mean of (2.86) indicated that they agreed with the statement that efficiency in public private partnerships has a significant influence on timely delivery. The responses were varied as measured by standard deviation of 1.476. The result revealed that majority of the respondents (4.44) indicated that they agreed with the statement that economy in public private partnerships has a significant influence on timely delivery. The responses were varied as measured by standard deviation of 0.498. The result revealed that majority of the respondents (4.53) indicated that they agreed with the statement that effectiveness in public private partnerships has a significant influence on timely delivery. The responses were varied as measured by standard deviation of 0.501. The average response for the statements on participative style of leadership was 3.94. The findings agree with Lakomy-Zinowik (2017) that observing if each activity has value for money is necessary for the performance of public private partnerships projects.

Table 5: Value for Money

Statements	Mean	Std. Deviation
Efficiency in public private partnerships has a significant influence on cost reduction	4.14	0.818
Economy in public private partnerships has a significant influence on cost reduction	3.87	0.783
Effectiveness in public private partnerships has a significant influence on cost reduction	3.86	0.955
Efficiency in public private partnerships has a significant influence on quality improvement	3.98	0.802
Economy in public private partnerships has a significant influence on quality improvement	3.82	1.029
Effectiveness in public private partnerships has a significant influence on quality improvement	4	0.816
Efficiency in public private partnerships has a significant influence on timely delivery	2.86	1.476
Economy in public private partnerships has a significant influence on timely delivery	4.44	0.498
Effectiveness in public private partnerships has a significant influence on timely delivery	4.53	0.501
Average	3.94	853

4.4.4 Risk Management

The last objective of the study was to determine the influence of risk management on performance of projects among state corporations in Kenya. The respondents were asked to indicate to what extent did risk management influenced performance public private partnership projects in Kenya. Results indicated that majority of the respondents 48% agreed that it was very effective, 44% said that it was effective, 5% said it was ineffective, while somehow effective was at 3%.



Figure 9: Risk Management

The respondents were also asked to comment on statements regarding risk management influenced performance of public private partnership projects in Kenya. The respondents were asked to indicate descriptive responses for risk management. The result in table 4.6 revealed that majority of the respondents as indicated by a mean of (3.98) indicated that they agreed with the statement that risk identification has a significant influence on cost reduction. The responses were varied as measured by standard deviation of 0.83. The result revealed that majority of the respondents as shown by a mean of (3.9) indicated that they agreed with the statement that risk classification and quantification has a significant influence on cost reduction. The responses were varied as measured by standard deviation of 0.815. The result revealed that majority of the respondents with a mean of (4.05) indicated that they agreed with the statement that risk monitoring and review has a significant influence on cost reduction. The responses were varied as measured by standard deviation of 0.847.

The result revealed that majority of the respondents (4.46) indicated that they agreed with the statement that risk identification has a significant influence on quality improvement. The responses were varied as measured by standard deviation of 0.5. The result revealed that majority of the respondents (4.58) indicated that they agreed with the statement that risk classification and quantification has a significant influence on quality improvement. The responses were varied as measured by standard deviation of 0.496. The result showed that majority of the respondents (2.99) indicated that they agreed with the statement that risk monitoring and review has a significant influence on quality improvement. The responses were varied as measured by standard deviation of 1.459. The result revealed that majority of the respondents as shown by a mean of (2.96) indicated that they agreed with the statement that risk identification has a significant influence on reducing delivery time. The responses were varied as measured by standard deviation of 1.489. The result revealed that majority of the respondents with a mean of (3.56) indicated that they agreed with the statement risk classification and quantification has a significant influence on reducing delivery time. The responses were varied as measured by standard deviation of 1.117. The result revealed that majority of the respondents (3.71) indicated that they agreed with the statement that risk monitoring and review has a significant influence on reducing delivery time. The responses were varied as measured by standard deviation of 1.07. The average response for the statements on risk management was 3.79. The findings agree with Marques (2011) that

exemplary risk management is necessary for the performance of public private partnerships projects.

Table 6: Risk Management

Statements	Mean	Std. Deviation
Risk identification has a significant influence on cost reduction	3.98	0.83
Risk classification and quantification has a significant influence on cost reduction	3.9	0.815
Risk monitoring and review has a significant influence on cost reduction	4.05	0.847
Risk identification has a significant influence on quality improvement	4.46	0.5
Risk classification and quantification has a significant influence on quality improvement	4.58	0.496
Risk monitoring and review has a significant influence on quality improvement	2.99	1.459
Risk identification has a significant influence on reducing delivery time	2.96	1.489
Risk classification and quantification has a significant influence on reducing delivery time	3.56	1.117
Risk monitoring and review has a significant influence on reducing delivery time	3.71	1.07
Average	3.79	0.958

4.5 Inferential Statistics

4.5.1 Correlation Analysis

Correlation analysis was used to determine both the significance and degree of association of the variables and also predict the level of variation in the dependent variable caused by the independent variables. The results of the correlation analysis are summarized in Table 7

Table 7: Summary of Pearson's Correlations

Correlations		Legal Framework	Stakeholder Involvement	Value for Money	Risk Management	Performance of Projects
Legal Framework	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	110				
Stakeholder Involvement	Pearson Correlation	.558**	1			
	Sig. (2-tailed)					
	N	110	110			
Value for Money	Pearson Correlation	.532**	.546**	1		
	Sig. (2-tailed)					
	N	110	110	110		
Risk Management	Pearson Correlation	.570**	.845**	.613**	1	
	Sig. (2-tailed)					
	N	110	110	110	110	
Performance of Projects	Pearson Correlation	.714**	.728**	.714**	.737**	1
	Sig. (2-tailed)	0	0	0	0	
	N	110	110	110	110	110

** Correlation is significant at the 0.05 level (2-tailed).

The correlation summary shown in Table 7 indicated that the associations between each of the independent variables and the dependent variable were all significant at the 95% confidence level. The correlation analysis to determine the association between legal framework and performance of public private partnerships projects among state corporations in Kenya, Pearson correlation coefficient computed and tested at 5% significance level. The results indicate that there was a positive relationship ($r=0.714$) between legal framework and performance of public private partnerships projects among state corporations in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level ($p=0.000, <0.05$). The correlation analysis to determine the relationship between stakeholder management and performance of public private partnerships projects among state corporations in Kenya, Pearson correlation coefficient computed and tested at 5% significance level. The results indicated that there was a positive relationship ($r=0.728$) between stakeholder management and performance of public private partnerships projects among state corporations in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level ($p=0.000, <0.05$). The correlation analysis to determine the relationship between values for money and performance of public private partnerships projects among state corporations in Kenya, Pearson correlation coefficient computed and tested at 5%

significance level. The results indicate that there was a positive relationship ($r=0.714$) between value for money and performance of public private partnerships projects among state corporations in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level ($p=0.000$, <0.05). The correlation analysis to determine the relationship between risk management and performance of public private partnerships projects among state corporations in Kenya, Pearson correlation coefficient computed and tested at 5% significance level. The results indicate that there was a positive relationship ($r=0.737$) between risk management and performance of public private partnerships projects among state corporations in Kenya. In addition, the researcher found the relationship to be statistically significant at 5% level ($p=0.000$, <0.05).

4.5.2 Regression Analysis

In this study multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. Regression analysis was conducted to find the proportion in the dependent variable (performance of projects) which can be predicted from the independent variables (legal framework, stakeholder involvement, value for money and risk management). Table 4.8 presented the regression coefficient of independent variables against dependent variable. The results of regression analysis revealed there was a significant positive relationship between dependent variable and the independent variable. The independent variables reported R value of 0.796 indicating that there was perfect relationship between dependent variable and independent variables. R-Square is a commonly used statistic to evaluate model fit. R^2 is 1 minus the ratio of residual variability. The adjusted R^2 , also called the coefficient of multiple determinations, is the percentage of the variance in the dependent explained uniquely or jointly by the independent variables. The coefficient of determination also called the R^2 was 0.634. R^2 value of 0.634 means that 63.4% of the corresponding variation in performance of PPP projects can be explained or predicted by (legal framework, stakeholder involvement, value for money and risk management) which indicated that the model fitted the study data. The results of regression analysis revealed that there was a significant positive relationship between dependent variable and independent variable at ($\beta = 0.634$), $p=0.000 <0.05$).

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.796 ^a	0.634	0.622	0.203452

Predictors: (Constant), Legal Framework, Stakeholder Involvement, Value for Money and Risk Management

Dependent Variable: Performance of Projects

Table 9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.167	4	2.292	45.84	.000 ^b
	Residual	5.298	105	0.050		
	Total	14.465	109			

Predictors: (Constant), Legal Framework, Stakeholder Involvement, Value for Money and Risk Management

Dependent Variable: Performance of Projects

The significance value is 0.000 which is less than 0.05 thus the model is statistically significant in predicting how legal framework, stakeholder involvement, value for money and risk management influence performance of public private partnership projects in Kenya. The F critical at 5% level of significance was 25.65. Since F calculated which can be noted from the ANOVA table above is 45.84 which is greater than the F critical (value =25.65), this shows that the overall model was significant. The study therefore establishes that; legal framework, stakeholder involvement, value for money and risk management influence performance of public private partnership projects. These results agree with Jooste (2011) results which indicated a positive and significant influence of legal framework, stakeholder involvement, value for money and risk management on performance of projects.

Table 10: Coefficients of Determination

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.967	0.218		9.022	0.000
Stakeholder Involvement	0.358	0.049	0.568	7.327	0.000
Legal Framework	0.132	0.056	0.152	2.364	0.000
Value for Money	0.121	0.032	0.27	3.835	0.020
Risk Management	0.05	0.05	0.074	0.998	0.030

Predictors: (Constant), Legal Framework, Stakeholder Involvement, Value for Money and Risk Management

Dependent Variable: Performance of Projects

The research used a multiple regression model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

Y= Performance of Projects

β_0 = Constant coefficient

X_1 = Stakeholder Involvement

X_2 = Legal Framework

X_3 = Value for Money

X_4 = Risk Management

ε = Random error term

The regression equation is;

$$Y = 1.967 + 0.358X_1 + 0.132X_2 + 0.121X_3 + 0.05X_4$$

The regression equation above has established that taking all factors into account (legal framework, stakeholder involvement, value for money and risk management) constant at zero, performance of projects among state corporations will be an index of 1.967. The study found that a unit increase in stakeholder involvement will lead to a 0.358 increase in the performance of projects among state corporations. The P-value was 0.000 and hence the relationship was significant since the p-value was lower than 0.05.

The findings presented also shows that taking all other independent variables at zero, a unit increase in legal framework will lead to a 0.132 increase in the performance of projects among state corporations. The P-value was 0.02 which is less 0.05 and thus the relationship was significant. In addition, the study found that a unit increase in value for money will lead to a 0.121 increase in the performance of projects among state corporations. The P-value was 0.000 and thus the relationship was significant. The study also found that a unit increase in risk management will lead to a 0.05 increase in performance of projects among state corporations. The P-value was 0.03 and thus the relationship was significant.

5.0 Summary, Conclusion And Recommendations

5.1 Summary of Findings

The study sought to examine the influence of public private partnerships on performance of projects among state corporations in Kenya. The study targeted heads of procurement in the state corporations. A total of 110 employees participated. The study endeared to determine influence of public private partnerships on performance of projects among state corporations in Kenya. The regression results revealed that public private partnerships drivers identified in the study, that is, legal framework, stakeholder involvement, value for money and risk management combined could explain approximately 63.4% of the variations in the performance of projects among state corporations. The other 36.6% may be attributed to other strategies not explained by the model or the variables.

5.2 Conclusion

Based on the study findings, the study concludes that performance of projects among state corporations can be improved by legal framework, stakeholder involvement, value for money and risk management strategic partnerships, customer experience management and team management

5.3 Recommendations

Finally, the study recommended that public institutions should embrace public private partnerships so as to improve performance of projects among state corporations and further researches should to be carried out in other public institutions to find out if the same results can be obtained.

Existing literature indicates that as a future avenue of research, there is need to undertake similar research in other institutions in Kenya and other countries in order to establish whether the

explored aspects of public private partnerships herein can be generalized to influence performance of public private partnership projects in other institutions.

References

- Agree, S. (2010). Promoting good governance: Principles practice and perspective. *Journal of commonwealth Secretariat*, 2(2), 68-79.
- Associate, M.N. (2017). *Key challenges of Public Private Partnership in South africa*. Castalia Ltd.
- Dada 2009 the public-private partnership in Nigerian construction procurement projects. *Journal for centre for research and innovation*, 6(1), 426-442.
- Dunn, S. D. (2010). *Statistics and Data analysis for the Behavioral Science*: McGraw hill
- Freeman, R.E., Harrison, J.S., Wicks, A.C., Parmar, B., & De Colle, S. (2010). *Stakeholder Theory*. Stakeholder Theory. New York: Cambridge Press
- Garvin, M. J. (2010). Enabling development of the transportation public private partnership market in the United States. *Journal of Construction Engineering and Management*, 3(1), 402-411.
- Grimsey, D. (2015). Are public private partnership value for money? Evaluating alternative approaches and comparing academic and practitioner views. *Journal of Public Administration*, 3(2), 345-378
- Ismail, S. (2013). Critical success factors for public private partnership implementation in Malaysia. *Journal of Business Administration*, 5(2), 6-19.
- jooste, S. F. (2011). Beyond one size fits all: How local conditions shape PPP enabling field development *Project Organisation Journal*, engineering 3(3), 11-25
- Lakomy-Zinowik, M. (2017). *Public-private partnership as na alternative source of financeing of public task*. Retrieved from <http://dx.doi.org/10.12775/Eip.2017>
- Marques, R. (2011). Risks, contracts, and private sector participation in infrastructure. *ASCE Journal of Construction Enginneering and Management*, 5(2), 925-932.
- Montanheiro, L. (2008). Public private partnership and their economic contribution. *International Journal of Applied Public-Private Partnership*, 3(3), 1-18.
- Ojo, S.O. (2009). *Benchmarking the performance of construction procurements methods aganist selection creteria in Nigeria*. Civil Engineering Dimension.
- Pitt, N. (2016). The private finance initiative and value for money. *Journal of property syuhaida, I. (2009). The provision of infrastructure via private finance initiative. Theoretical Asia.and empirical research in urban management*
- Trochin, K. (2013). *Research methods. Knowledge base*. Kogan Page Ltd, London, UK.