INFLUENCE OF PUBLIC PRIVATE PARTNERSHIP ON IMPLEMENTATION OF RAILWAY TRANSPORT PROJECT: A CASE OF STANDARD GAUGE RAILWAY IN NAIROBI COUNTY

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Abstract
All over the world, the growing demands for transport infrastructure is on its high and with it comes overstretched and widened fiscal constraints, leading to governments to seek specialized financing cooperation between the public and private sectors, known as Public-Private-Partnership (PPP). The study variables were project financing, private consortium, contract models and risk transfer. Descriptive survey and interview research designs were used. The study adopted purposive and stratified random sampling techniques. Descriptive data was analysed using mean and standard deviation, with the variables attaining a composite mean ranging between 3.885 and 4.195 and standard deviation ranging between 0.864 and 0.932. The study concluded that project financing, private consortium, contract models and risk transfer influence implementation of railway transport project.

Keywords: Implementation, Private Consortium, Project Financing, Public Private Partnership, Standard Gauge Railway

1. Introduction

Developing economies face increasing needs for investments in and expansion of infrastructure development projects so as to achieve economic development objectives, Human Development Report (2011). The classic on balance sheet falls short of the investment needs and therefore, there is need for resolution of transport infrastructure and development projects' financing issues, Asian Development Bank (2012). As the gap between the growing demands for transport infrastructure and fiscal constraints constantly widens, public private partnership has become the emerging and preferred financing alternative to conventional financing of infrastructure projects. This special mechanism is a cooperation between public and private parties, thus Public Private Partnership (PPP) scheme. PPP concept, according to Ramsey and Asmar (2015) is a long-term contract amongst government and private organizations engaged in the planning, funding, development, management and maintenance of infrastructure facilities. The main reasons for PPP agreement are to increase the performance and quality of the public service provision project and boost investments for capital intensive projects. According to Daniel and Paula (2019), this shows that PPPs are instrumental in the implementation of infrastructure projects since they can accelerate a country's development.

> In 2014, Kenya's government signed a regional protocol with other neighboring countries to develop a seamless railways transport system within the framework of regional connectivity, hence the implementation of Standard Gauge Railway (SGR) projects meant connecting Kenya with East and Central Africa's regions. The project was billed at USD3.6 billion making it the largest post-independence transport project in the country. The fiscal budget allocation for the railway construction was limited. SGR project finance was completed in May of 2014. China's Export and Import Bank (EXIM) extended a debt loan of 90% of project costs and 10% being provided by the Kenyan government (Railway Gazette, 2014). According to Railway Gazette (2014), Kenya was lagging behind in innovation, cutting-edge engineering, expertise, machineries and equipment needed for the construction and implementation of the SGR project, prompting the government to enter into concession agreement with EXIM Bank for the Design, Build, Finance, Operate and Transfer scheme.

2. Research Methodology

Cross-sectional survey research design was used in this study. It involved collecting data at a specific point in time and from one or more population, so as to describe the current characteristics of a sample population. The strength of a cross sectional survey is its ability to produce quick, inexpensive, efficient and accurate means of collecting data about the sample population (Cooper and Schindler, 2006). The researcher collected qualitative data through conducting interviews.

The study's target population were the staff from Kenya Railways, SGR Contractor, SGR Private Consultant and the PPP Unit of the National Treasury, totaling to100 respondents. The sample size indicative of the study population was 94, derived from Krejcie and Morgan (1970) Table. Purposive and stratified random sampling techniques were adopted. Closed ended questionnaires were used to collect quantitative data while an interview guide was used to collect qualitative data. Pearson Moment Correlation' inferential analysis was used to establish the relationship between project financing and private consortium and implementation of railway transport projects.

3. Results

Quantitative data was analyzed using arithmetic mean, standard deviation, frequencies and percentages. Qualitative data obtained from interviews were analyzed using content analysis.

3.1 Analysis of Likert Type of Data

The study sought to determine the extent to which the respondents agreed with statements relating to project financing and private consortium and implementation of railway transport project. The participants were requested to indicate with: Strongly Disagree = 1; Disagree =2; Neutral =3; Agree =4; Strongly Agree =5;

Project Financing and Implementation of Railway Transport Project

The results are as indicated in Table 4.5

Table 4.5: Project Financing and Implementation of Railway Transport Project

Statements	1	2	3	4	5	Mean	S. D
PPP is an infrastructure project finance solution	5 (6.10)	6 (7.32)	3 (3.66)	17 (20.73)	51 (62.20)	**4.418**	**0.959**
Projects face delays in disbursement of funds by financiers	8 (9.76)	5 (6.10)	24 (29.27)	12 (14.63)	33 (40.24)	**4.066**	**1.001**
Innovative financing approaches in the project are not clear	1 (1.22)	1 (1.22)	5 (6.10)	29 (35.37)	46 (56.10)	**3.988**	**1.207**
PPP project financing has return on investments	21 (25.61)	11 (13.41)	15 (18.29)	19 (23.17)	16 (19.51)	**3.925**	**0.932**
PPP projects are faced by cost over runs	30 (36.59)	12 (14.63)	16 (19.51)	9 (10.98)	15 (15.29)	**3.636**	**0.838**
PPP bring together a pool of investments	4 (4.88)	1 (1.22)	2 (2.44)	7 (8.54)	68 (82.93)	**3.912**	**1.022**
PPP projects have unrealistic budget allocations	9 (10.98)	13 (15.85)	44 (53.66)	12 (14.63)	5 (6.10)	**4.363**	**0.948**
PPP projects have poor funds management	14 (17.03)	25 (30.49)	19 (23.17)	17 (20.73)	7 (8.54)	**3.594**	**0.770**
Composite Mean and Standard Deviation						**3.901**	**0.905**

The statements regarding project financing and implementation of railway transport project attained a composite mean of 3.901 and a composite standard deviation of 0.905

Private Consortium and Implementation of Railway Transport Project

The results are as indicated in Table 4.6

Table 4.5: Project Financing and Implementation of Railway Transport Project

Statements	1	2	3	4	5	Mean	S. D
Private consortium brings diverse technical skills	4 (4.88)	16 (19.51)	4 (4.88)	19 (23.17)	39 (47.56)	**4.018**	**0.864**
Private consortium has capacity required to manage the challenges	6 (7.32)	2 (2.44)	12 (14.63)	9 (10.98)	53 (64.64)	**4.101**	**0.883**
Local private consortium lacks project technical capacity	36 (43.90)	18 (21.95)	6 (7.32)	17 (20.73)	5 (6.10)	**3.757**	**0.717**
Private consortium has rich project experience	3 (3.66)	4 (4.88)	13 (15.85)	20 (24.39)	42 (51.22)	**3.902**	**0.698**
Private consortium's members are from multiple disciplines	8 (9.76)	14 (17.03)	0 (0.00)	31 (37.80)	29 (35.37)	**3.962**	**0.862**
A private consortium's organization culture is complex	19 (23.17)	8 (9.76)	27 (32.93)	10 (12.20)	18 (21.95)	**3.872**	**0.799**
Organization culture is not related to successful projects	43 (54.44)	23 (28.05)	7 (8.54)	6 (7.32)	3 (3.66)	**2.010**	**0.929**
Cultural differences create project conflicts	9 (10.98)	4 (4.88)	2 (2.44)	11 (13.41)	56 (68.29)	**4.192**	**1.201**
Composite Mean and Standard Deviation						**3.911**	**0.855**

The statements regarding private consortium and implementation of railway transport project attained a composite mean of 3.911 and a composite standard deviation of 0.855

3.3 Inferential Analysis

The data on project financing and private consortium were analysed using Pearson Correlation Coefficient and averages for each factor calculated into single variables. Pearson 's study of correlation was performed at a confidence interval of 95% and a 2-tailed confidence level of 5% significance.

Table 4.7 Correlation Matrix

Variables		**Implementation of Railway Transport Project.**	**Project Financing**	**Private Consortium**
Implementation of Railway Transport Project.	Pearson's (R) Sig. (2tailed)	1		
Project Financing	Pearson's (R) Sig. (2tailed)	.846 .026	1	
Private Consortium	Pearson's (R) Sig. (2tailed)	.753 .028	.873 .019	1

The results indicated that Project Financing had a value of 0. 846 and p-value of 0.26 and Private Consortium 0.753 and p-value of 0.28; implying there was a strong positive correlation between the variables and implementation of railway transport project.

4. Discussions

In relation to the objective of assessing the influence of project financing on implementation of railway transport project, most respondents strongly agreed that PPP bring together a pool of investments (82.93%) and PPP is an infrastructure project finance solution (62.20%). This is an affirmation of a statement by Republic of Kenya (2013), that GOK has been looking for alternatives financing models, aimed at increasing funding even from the private sector, introducing lower-cost technology, while priority being given to investments in infrastructure. The studies are revealed that PPP's Innovative financing approaches in the project are not clear (56.10%). This is in support of the views of Harris & Vellutini (2012), stated that lack of a common PPP definition makes it a difficult process to determine whether PPPs have been successful.

An interviewee was asked if PPP project financing contribute to better infrastructure solutions than an initiative that's wholly public, the response given was:

" *Adopting PPP on implementation of railway transport projects, and in this case, SGR project, is sought so as to relieve the government's budgetary pressure and fiscal deficit, rehabilitate ageing or poor infrastructure, the desire to introduce competition and curb the shortage of domestic experience, where need be"*

The statement echoes the views of Pedo, Kabare and Makori, (2017) that the influence of PPP has been recorded in countries that choose PPP for innovation and technology, financial innovation, its competitive bidding process, management capacity and stakeholders' engagement and management capacity.

As concerning the objective of determining the influence of private consortium on implementation of railway transport project, majority of the respondents (64.64%) strongly agreed that a PPP private consortium has capacity required to manage the challenges, Private consortium has rich project experience (51.22%) and Private consortium brings diverse technical skills (47.56%). PPP project involves selecting consortium with sound technological solutions for the proposed projects and providing value for money to the end users. This resonates with the statements by Mario, Marcello and Francesco (2016), that effective implementation of the PPP projects involves a knowledgeable, experienced, financially and technically stable consortium of the private sector and Alhashemi (2008), who noted that the private party should be able to perform contractual PPP positions both technologically and financially. 37.80% of the respondents disagreed that Private consortium's members are from multiple disciplines. This is a contrary study finding to a study finding by Ismail and Ajija (2013) on critical success factors of PPP implementation, who established that technological compatibility and complementary multidisciplinary skills of the consortium among the main parties and technological creativity in overcoming the difficulty of the project were determinants of the PPP project's success. This concludes that SGR private consortium had to put in experts with multidisciplinary personnel with broad capabilities in a wide variety of related areas.

When asked if SGR private consortium brought diverse technical skills and capacity into the project, an interviewee answered:

" *SGR private consortium has a wealth of project management expertise with the right management style fit for implementation of the mega project, with massive technical teams that has wide and varying technical skills and experience and enabled the projected to be completed well before the stipulated time*"

The findings are in line with the findings of a study carried out by Ismail and Ajija (2013) on critical success factors of PPP implementation in Malaysia. It was established that technological compatibility and complementary multidisciplinary skills of the consortium among the main parties and technological creativity in overcoming the difficulty of the project were determinants of the PPP project's success.

5. Conclusions

The study concluded that PPP's project financing positively influences implementation of railway transport project. This is through PPP acting as an infrastructure project finance solution, PPP bringing together a pool of investments, PPP projects implemented without experiencing cost over runs and PPP projects having proper funds management.

The study finding helped to draw conclusion that PPP's private consortium positively influence implementation of railway transport project, because it has the capacity required to manage project challenges, private consortium has rich project experience, private consortium brings diverse technical skills and technical capacity

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