<section-header><section-header>

RISK MANAGEMENT PRACTICES AND PERFORMANCE OF CIVIL SERVANT HOUSING PROJECTS IN KENYA

JANUARIU MUTISYA KIMILU



RISK MANAGEMENT PRACTICES AND PERFORMANCE OF CIVIL SERVANT HOUSING PROJECTS IN KENYA

¹ Kimilu, J. M., & ² Juma, D.

¹ MSc Project Management Candidate, Department of Business, School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

² PhD, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

Accepted: May 15, 2024

DOI: http://dx.doi.org/10.61426/sjbcm.v11i2.2971

ABSTRACT

The successful performance of a project holds great value, particularly because it emphases the need for continuous improvement. The primary objective behind project performance is to increase the success of the project's outcome. Organizations tend to face a number of challenges which may require them to constantly monitor so as to enhance the quality of their work. Among the many areas they need to focus on is to improve their identification and management of risks so that they do not negatively impact the performance of such projects. The main aim of this study was to assess the role of risk management practices on the performance of civil servants housing projects in Kenya. The study adopted the resource mobilization theory. The study used the descriptive survey design. The targeted population included the management staff of all the civil servant projects. A census was adopted to identify 20 respondents who participated in the study. A semi-structured questionnaire used to collect primary data. Descriptive statistics and multiple regression were utilized to analyze the quantitative data. The results from the study revealed that project risk management significantly influences the performance of civil servants housing the risks associated with projects so as to ensure a seamless completion of construction projects in Kenya.

Key Words: Project Performance, Risk Management Practices, Risk Appetite, Risk Aversion

CITATION: Kimilu, J. M., & Juma, D. (2024). Risk management practices and performance of civil servant housing projects in Kenya. *The Strategic Journal of Business & Change Management*, 11 (2), 1090 – 1098. http://dx.doi.org/10.61426/sjbcm.v11i2.2971

INTRODUCTION

Kumar (2014) observed that risk management tools and techniques have been developed in order for project team to successfully deliver the project on time, within budget and in order to meet client desired quality. However, these project management practices are not widespread and most of the project managers have failed in applying them thus resulting to project failure. Macharia (2016) established the effect of risk management strategies on performance of public schools in Nairobi the study findings implicated that among four risk management practices risk avoidance had the major influence on completion of the construction and it concluded that risk reduction, risk sharing and risk retention practices positively influenced the completion of the construction projects.

All entities are faced with risk however the challenge of the management is the determination of how much risk it is prepared to accept so as it to strive to grow the value of the stakeholders (Musyoka, 2012). Lam and Lee (2015) Conducted a study in Canada on risk management practices on energy contracting projects performance the study established that uncertainty such as baseline measurement and increase in overrun costs and project complexity arises due to failure of project managers to identify risks at the initiation phase of the project.

Ahmed (2023) aimed to enhance understanding of project performance measures and metrics from a project management perspective. He noted that several challenges have been faced by organizations in their attempts to measure project performance due to the non-availability of a performance standardized framework. To overcome these challenges, a comprehensive framework for the measurement of project performance was proposed based on performance criteria and critical dimensions of project performance.

Molaei (2019) assessed extending the view on project performance through an extensive review of literature and validation through expert judgment, a framework consisting of 33 factors increasing the likelihood of success was developed. The study helped to grasp the subjectivity of practitioners' viewpoints regarding the potential ways to enhance project performance by understanding the similarity and differences of these viewpoints. Al-Nabae and Sammani (2021) looked at factors that influencing project management performance. The outcome of this study introduces a literature review for project performance according to the previous studies in the field of project management.

Gashaahun (2020) studied causes and effects of delay on African construction projects. A thorough literature review has been done following the content analysis method. They identified a number of factors that included change/variations order by the client, contractors' infective project planning and scheduling, consultants' delay in approving the major change, design team's insufficient site investigation, resources shortage and price fluctuation, poor communication among parties and unfavorable weather conditions.

A survey carried out by Price Waterhouse Cooper pointed to the fact that 50% of the reasons why projects fail were due to poor practices for managing projects. In their findings, the public sector had the lowest project management levels compared to other sectors. Equally, the findings further state that project management practices increase the likelihood of project success (PWC, 2012). Magagan and Ngugi (2021) studied influence of project management practices on performance of projects in Unilever Kenya limited. The study findings showed that project risk management had a positive influence on project performance. Further. communication Project positively influenced project performance. Project leadership have a positive influence on project performance.

Munyao (2016) focused on critical success factors on project performance: a case of the national transport and safety authority of Kenya. The findings revealed that project performance is determined by leadership sponsorship, goal orientation and communication orientation. Mathenge (2015) studied project management practices and performance of the public projects in Mombasa County. The study sought to explore effect of planning, financial management practices (FMP), stakeholders' involvement, project team competence and monitoring and evaluation on public projects performance.

Cagliano *et al,* (2015) risks should be continuously evaluated and monitored in order to identify new risks and effectiveness of risk control and feedback. Wallace and Blumkin (2007) argues that control activities at the planning phase includes risk profiling, architect and engineer selection process, architect and engineer contract review, site selection and validation, need identification and validation and preliminary budget and schedule development.

Statement of the Problem

Any project's performance is its main concern, and guarantee improved in order to project performance, various tactics are typically used. Numerous studies have tried to look into how various project management techniques impact the success of residential construction projects over time. Time and money are two of the most important measures of a project's success. Nevertheless, research shows that 9 out of 10 projects have cost overruns (Flyvbjerg et al., 2014), and that these overruns can reach up to 183% (Odeck, 2014; Love et al., 2012), indicating ineffective project management techniques. The management practices, specifically project planning, resource scheduling, communication, and monitoring and evaluation have a substantial influence on the performance of affordable housing Implementation of projects. building and construction projects have remained poor. According to the economic survey conducted by Kenya National Bureau of Statistics (2022), the ratio of completed building projects reduced from 32.9% in 2020 to 24.7% in 2021. Further, the economic survey of 2018 indicated that the value of building project completed in 2018 decreased from Ksh 3.8 billion in 2017 to 2.3 billion. The report also

indicated that 52% of the projects were not completed within the projected budget and 33% were not completed within the planned schedule. In addition, 22% of the projects had errors identified during the first and second phases. This therefore is an indication of ineffective implementation of building construction projects in Kenya. This indicates that the projects do not deliver the expected outcomes which need to be addressed by the management of such firms who are responsible for the implementation of the projects

In the past few years in Kenya, there has been an increase in the number of property developers bringing in different models of GC housing to the real estate sector. However, there exist several critical elements that have arisen concerning the project performance executed by the developers (Kihoro & Waiganjo, 2015). Studies have been conducted on the performance of construction projects but few have been conducted on the effect of project management practices on the effective implementation of building construction projects in Kenya. According to Musyoka (2017), the success of the GC housing project often depends on the project management practices employed in particular projects. The lack of proper project planning, effective resource scheduling, effective project communication, and project monitoring and evaluation has continually led to the poor performance of GC construction projects. Nyaga (2014) conducted a study on the role of project management skills on performance of construction projects: a case of selected construction firms in Mombasa County, Kenya. The study focused on performance of construction projects in Mombasa County. Enshassi, Mohamed, and Abushaban (2016) conducted a study on factors affecting the performance of construction projects in the Gaza Strip. Love (2015) also attributed causes of overruns to inadequate project formulation, poor planning implementation, lack of proper contract planning and implementation, lack of project management during execution, manipulation by project

champions, and natural calamities and the environment within which the project lies. Literature review reveals that several public construction projects and housing construction projects still register poor performance. It is against this backdrop of lack of enough knowledge on ways in which risk management affects project performance that this study meant to unearth.

Literature Review

Theoretical Framework

Theories are formulated to explain, predict, and understand phenomena either to challenge or extend existing knowledge within the limits of critical bounding assumptions. The theoretical review introduces and describes the theory which attempts to explain the research under study. This study adopted the resource mobilization theory to explain the relation between risk factors and project performance.

Resource Mobilization Theory

The resource mobilization theory of social developments holds that a social development emerges from the extension of institutional actions due to institutional change that attempt to change the elements of social structure and the reward of distribution of society (Jenkins, 1983).

The resource mobilization hypothesis, includes an action orientation towards clearly defined and fixed goals with a centralized organisational control over the resources and assets and very clearly demarcated outputs that can be evaluated in the form of tangible gains. This co-operation between social developments and institutional actions gives a view of a person's decisions about the of investments and management assets (Klandermans, 1984). Resource mobilization hypothesis of social developments clarifies how social developments assemble assets, from inside and outside their development, to achieve objectives (Jenkins, 1983).

Resource mobilization hypothesis contends that social developments prevail through the compelling assembly of assets and the advancement of political doors for individuals. Social developments can assemble both tangible and non-tangible/human assets. Tangible assets incorporate cash, associations, labour, innovation, methods for correspondence, and broad communications, while non-tangible assets incorporate authenticity, reliability, social connections, systems, individual associations, open consideration, specialist, moral responsibility, and solidarity (Fuchs, 2006).

Resource mobilization theory holds that social development associations with powerless or asset poor beneficiaries require outside help and financing. There are two sorts of individuals having a place with social development associations: conscience constituents and beneficiary constituents. Social developments frequently search out and acquire assets from conscience constituents. Conscience constituents allude to people or gatherings outside of the social development that have an ethical organization together with the social development's motivation, objective, or mission. The social development and the mass media are in charge of defining the social movement's message and character. Resource mobilization theory research scholars have discovered that conscience constituents have a tendency to contribute more when beneficiary constituents are encircled, by the social development itself or mass media, to emphasize shared goals with conscience constituents (Paulsen and Glumm, 1995).

Resource mobilization scholars trust that the results of social developments are affected by vital decisions, the positions and activities of elites, the help of compelling associations, and representing coalitions and administrations. There are four results for social association: full achievement, acknowledgment without advantages or picks up, advantages and picks up without acknowledgment, and disappointment. The mass communications is a vital piece of the political support exertion by social movements. It impacts the governmental issues of social developments by educating the elites and open about the activities of social developments and in addition, translating these activities (Jenkins, 1983).

Risk Management and Performance of Construction Projects

Wanyonyi (2015) determined the influences of risk management on the performance of projects based on a case of selected international development organizations in Nairobi County, Kenya. The study revealed a statistically significant link between avoidance, transference, reduction, and acceptance of risk response plans and the achievement of international development organization-funded projects. Risk management strategies were a major focus of this study. The current study sought to assess the influence of risk management on the performance of programs.

Gitau (2015) examined the effect of the risk project planning phase on the performance of Rwandese construction projects. The data collection used was both qualitative and quantitative. The study found that consulting engineers and architects were often chosen before the project's development stage. The consultants were selected before project planning for only 14.3% of the projects. The study was limited to the management of risk effects at the planning phase of the project alone. The current study sought to assess the influence of risk management on Performance of the Women and Girls Economic Empowerment projects in Kiambu and Nairobi city counties in its entirety.

Kisaka and Musomi (2017) studied Nairobi's risk management effect on the performance of investment firms in Kenya. Using a descriptive research design, the study surveyed 26 investment firms at the NSE to illuminate the nexus between risk management and firm value. The results showed that risk identification tools such as audit, the examination of employee experience, SWOT analysis, interviews, focus groups, judgment, and process analysis have a critical influence on a firm's performance. The study was limited to investment firms, while the current study looked into women and Girls Economic empowerment programs. Maghanga (2019) focused on the effect of the project risk management practices on the performance of cement-manufacturing firms' projects in Nairobi County, Kenya. Purposive sampling was adopted in this study. There is evidence of project performance being influenced by project risk management practices; project risk avoidance, project risk retention, project risk transfer and project risk control. In addition, the relationship among the variables (independent and dependent) is significant. The study focused on cement-manufacturing firms' projects. The current study sought to assess the influence of risk management on the success of Women and Girls Economic Empowerment programs.

Aduma and Kimutai (2018) studied strategies for project risk management and the project's performance at the NHIF in Nairobi County, Kenya. The survey found that risk reduction has the greatest impact on NHIF projects' performance and risk management and risk tolerance, while risk transfer has the least effect on the NHIF project performance. This research was based on NHIF. The current study focuses on influence of risk management on Women and Girls Economic Empowerment projects in Kiambu and Nairobi city counties.

METHODOLOGY

The descriptive survey design was used in this study. When attempting to depict the characteristics of particular groups, gauge the proportion of people possessing particular traits, and create projections, descriptive research is useful (Cooper & Schindler, 2011). The four Kenyan public servant housing program projects were the focus of the study. This study adopted the use of the census approach on all the management of the four (4) civil servants housing scheme projects. Census sampling was the most appropriate since the target population was both accessible and small as recommended by Kothari (2004). This study gathered primary data using questionnaires. The questionnaires were dropped and later be picked from the respondents after duly filling them. The

instrument was tested to establish both its validity and reliability. Descriptive statistics were utilized to analyze quantitative data (Muathe, 2010). Multiple linear regression was also adopted to assess the relationships between each of the variables.

RESULTS AND DISCUSSIONS

Descriptive Results for Risk Management Practices

Table 1: Descriptive Statistics on Risk Management	Table 1: Descri	ptive Statistics on	Risk Management
--	-----------------	---------------------	-----------------

The study sought to assess the extent to which project risk management influenced performance of civil servants housing projects in Kenya The respondents were supposed to indicate their level of agreement or disagreement as presented on the 5-point Likert scale as 5= strongly agree 4= Agree 3= neither agree/disagree 2= Disagree 1= Strongly Disagree as shown in table 1 below.

Tuble 1. Descriptive statistics on hisk manufement							
	Ν	Mean	Std. Deviation				
Risk mitigation	20	4.22	1.001				
Risk identification	20	2.35	9.267				
Risk control	20	1.52	1.039				
Level of risk awareness	20	2.54	1.386				

The findings, depicted in Table 1 above reveals that respondents had a positive stand by a mean of 4.22 and a standard deviation of 1.001 that they had been properly involved in risk mitigation activities within the firm. The findings concur with a study done by Burke, (2018) who suggested that learning about the existing risks helps individuals plan better on how to manage the risks. This therefore puts one in a position to create impact with the gained knowledge or skill implementation of what was learnt or innovating new ideas for future situations

On the second indicator, the majority of the respondents were in agreement that risk identification is well maintained and implemented within the organizations by a mean of 2.35 and a standard deviation of 9.267. This finding is backed up by Franzel, et al. (2015) that risk identification and transfer have been proven to be effective approaches in ensuring increased risk management output especially when learnt from a colleague and benefits can be seen.

With regards to risk control, majority of the respondents disagreed with the statement by a mean of 1.52 and a standard deviation of 1.039. This indicated that respondents did not fully participate in risk control activities very frequently. This corresponds with a study done by Franzel et al., (2013) in Kenya that revealed approximately 40 percent of knowledgeable workers were not very skilled in risk control practices.

The last indicator measured level of risk awareness and majority reported a neutral feedback aligning more to positivity with a mean of 2.54 and a standard deviation of 1.386. This backs up Kiptot and Franzel, (2014) study who noted that engaging empowered community members is an effective way to disseminate knowledge and skills on mitigation of any firm risks.

Regression Results on Risk Management

In order to explore the relation between project risk management and performance of civil servants housing projects in Kenya. The results of the regression are as shown in table 2 below:

Table 2:	Model Su	mmary⁰							
Model	R	R	Adjusted	Std. Error	Change Statistics				
		Square	R Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.667 ^a	.445	.441	.968	.445	111.584	1	139	.000
a Prodic	tors (Con	stant) nroig	ct rick manage	omont					

a. Predictors: (Constant), project risk management

b. Dependent Variable: Performance of Housing projects in Kenya

.

From the results of table 2 above, R= 66.7%, implying that independent variable, project risk management can predict the dependent variable, performance of civil servants housing project in Kenya at 66.7%, Also the variation between dependent and independent variable is explained by 66.7%, study with a significance level of 0.001<0.05. This study therefore rejected the null hypothesis risk management has no significant influence on performance of civil servants housing projects in Kenya. This shows a variation of 66.7%, of project performance is largely contributed by risk management while 33.3% were influenced by other factors that were not covered by this study. This finding concurs with study done by Selener, et al., (1997) who observes that risk management positively influences project performance.

CONCLUSIONS

The results from the study findings reveals that project risk management significantly influences the performance of civil servants housing projects in Kenya This study concurs with the study findings done by Franzel, et al (2015) that identifying and addressing project risks has a significant influence on the overall performance of the project. The risk management approach was able to predict 0.667 (66.7%) of the variation in performance of civil servants housing projects in Kenya This study therefore rejected the hypothesis risk null management has no significant influence on performance of civil servants housing projects in Kenya.

The study concludes, therefore, that risk management for projects is a requirement in order to have the desired outcomes especially in the aspect of performance of housing projects. Timely extension support provided bv the risk management model, enhanced capacity building sessions and implementation of the demonstration sites was a determinant toward improved productivity and performance of projects.

RECOMMENDATIONS

This study recommends that more risk management practices should be adopted by all construction projects as a complementary role of organizations in promoting capacity building, adoption relevant technologies and ensuring there is real time technical support at the community level to realize successful project performance. However, the government extension agents should conduct backstopping to provide supportive supervision to project managers in order to maintain their commitment and motivation, refresh their skills as well as well support in replacing those who cannot continue in this role.

The study also recommended that the management of the projects need to ensure the risk management practices are integrated in project implementation as many of the risk management practices had been adopted by the project managers but were not effectively employed to ensure peak performance.

REFERENCES

- Augustine, I. E., Ajayi, J. R., Ade, B. A., & Edwin, A. A. (2013). Assessment of risk management practices in Nigerian construction industry: Toward establishing risk management index. *International Journal of Pure and Applied Sciences and Technology*, 16(2), 20.
- Burtonshaw-Gunn, S. A. (2017). Risk and financial management in construction. London, Routledge.
- Cagliano, A. C., Grimaldi, S., &Rafele, C. (2015). Choosing project risk management techniques. A theoretical framework. Journal of Risk Research, 18(2), 232-248.
- Alaloul, W. S., Liew, M. S., Amila, N., & Abdullah, W. (2016). Identification of coordination factors affecting building projects performance. *Alexandria Engineering Journal*, 55(3), 2689–2698. <u>https://doi.org/10.1016/j.aej.2016.06.010</u>

- Anantatmula, V. S. (2015). Strategies for Enhancing Project Performance. *Journal of Management in Engineering*, 31(6), 04015013.
- Anderson, K., & Lannon, J. (2019). Project Management Performance Assessment in the Non-Profit Sector. *Project Management Research and Practice*, 5(2018), 1–20.
- Bhanugopan, R., Wang, Y., Lockhart, P., & Farrell, M. (2017). Managerial skills shortages and the impending effects of organizational characteristics. *Personnel Review*, 46(8), 1689–1716. <u>https://doi.org/10.1108/PR-04-2016-0093</u>
- Bjorvatn, T., & Wald, A. (2018). Project complexity and team-level absorptive capacity as drivers of project management performance. *International Journal of Project Management*, 36(6), 876–888.
- Das, D., & Ngacho, C. (2017). Critical success factors influencing the performance of development projects : An empirical study of Constituency Development Fund projects in Kenya. *IIMB Management Review*, 29(4), 276–293.
- Demirkesen, S., & Ozorhon, B. (2017a). Impact of integration management on construction project management performance. *International Journal of Project Management*, 35(8), 1639–1654. https://doi.org/10.1016/j.ijproman.2017.09.008
- Demirkesen, S., & Ozorhon, B. (2017b). Measuring Project Management Performance: Case of Construction Industry. *Engineering Management Journal*, 29(4), 258–277.
- Diethelm, S., Pellicer, E., Fernando, L., & Acu, D. (2016). Strategies for improving safety performance in construction firms. *Accident Analysis and Prevention Journal*, 94, 107–118.
- Gitau, L. M. (2015). The effects of risk management at project planning phase on performance of construction projects in Rwanda. *Master of Science in Project Management Thesis*, Jomo Kenyatta University of Agriculture and Technology.
- Ikediashi, D. I., & Ogwueleka, A. C. (2016). Assessing the use of ICT systems and their impact on construction project performance in the Nigerian construction industry. *Journal of Engineering, Design and Technology*, 14(2), 238–251.
- Khameneh, A., Taheri, A., & Ershadi, M. (2016). Offering a framework for evaluating the performance of project risk management system. *Procedia Social and Behavioral Sciences*, 2 (5), 82–90.
- Kinyua, E., Ogollah, K., & Mburu, D. K. (2015). Effect of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi, Kenya. *International Journal of Economics, Commerce and Management*, 3(2), 1-30.
- Lindhard, S., & Larsen, J. K. (2016). Identifying the Key Process Factors Affecting Project Performance. Engineering, *Construction and Architectural Management*, 23(5), 657–673.
- Macharia, K. P. (2017). Risk Management Strategies and Performance of Construction Projects in Public Secondary Schools in Murang'a County, Kenya (Doctoral Dissertation, Kenyatta University).
- Miklosik, A. (2015). Improving project management performance through capability maturity measurement. *Procedia Economics and Finance*, 30(15), 522–530.
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: Linking Project Management Performance and Project Success. *International Journal of Project Management*, 32(2), 202–217.

- Mohammadi, A., Tavakolan, M., & Khosravi, Y. (2018). Factors in fl uencing safety performance on construction projects: A review. *Safety Science*, 109(7), 382–397.
- Musyoka, B. S. (2012). Project Risk Management Practices and Success of Capital Projects in Kenya (Doctoral dissertation, School of Business, University of Nairobi).
- Ofori-kuragu, J. K., Baiden, B. K., & Badu, E. (2016). Key Performance Indicators for Project Success in Ghanaian Contractors. International Journal of Construction Engineering and Management, 5(1), 1–10
- Okumu, J. M., & Wanjira, J. (2017). Risk Mitigation Strategies and Performance of Insurance Industry in Kenya: A Case of Motor Insurance Companies. American Journal of Strategic Studies, 1(1), 22-43.
- Rugenyi, F., & Bwisa, H. (2016). Effects of triple constraints on the management of projects in nairobi: the project managers' perspective. *The Strategies Journal of Business & Change Management*, 3(2 (16)), 344–367.
- Zidane, Y. J., Hussein, B. A., & Ørn, J. (2016). Categorization of organizational factors and their impact on project performance. *Procedia Social and Behavioral Sciences*, 226(1877), 162–169.