

PROJECT GOVERNANCE AND PERFORMANCE OF AFFORDABLE HOUSING PROJECTS IN KENYA

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PROJECT GOVERNANCE AND PERFORMANCE OF AFFORDABLE HOUSING PROJECTS IN KENYA

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ABSTRACT

This study established the effect of governance on project performance: A case of affordable housing projects in Kenya. The specific goals were to determine the effect of stakeholder management, project control, project monitoring and project accountability on project performance. The study used Agency theory and supported by Stakeholder theory. A descriptive research design was employed. The population was 165 project managers, project lead and project team members in charge of the affordable housing projects in Kenya. Stratified sampling method was employed to get the sample. The study sample size was 117 respondents. A semi-structured questionnaire was utilized to obtain primary data. Descriptive statistics like mean, percentages, frequencies, and standard deviation was used to analyse the data. To demonstrate the variables relationship multiple linear regression analysis was used. The Statistical Package for the Social Sciences (SPSS) version 23 was used. Tables and figures were used to present the data. The study conformed to ethical considerations such participant voluntariness, confidentiality, and anonymity. The study revealed that stakeholder management had a significant and positive relationship with project performance. Project control had a significant and positive association with project performance. Project monitoring had a significant and positive association with project performance. Project accountability had a significant and positive association with project performance. The study recommended monitoring and evaluating the stakeholder engagements in order to make improvement to the available methods used in stakeholder management. Monitoring of stakeholder engagement is essential as it helps in determining whether stakeholder management during the project impacts the project performance positively or whether there is need for review. Project stakeholders may make the best decisions at the right time with the help of timely insights that come from connecting project control with the rest of project management. Project performance and project monitoring had a substantial and favourable link. The study suggested careful project monitoring to assist project managers in gathering important information about how a project is doing and in using the information to make informed decisions. Project success was significantly and favourably correlated with project responsibility. According to the study, accountability should be improved by clearly stating objectives so that project team members are aware of who is in charge of which project components.

Key Words: Stakeholder Management, Project Control, Project Monitoring, Project Accountability

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INTRODUCTION

Infrastructural projects such as affordable housing projects are instrumental in the growth and development of the economy in nations due to is role in improving socio-economic development, alleviating poverty and improving life expectancy (Davronov, 2021). Infrastructural projects increase capacities, create productive employment opportunities, increase national Gross Domestic Product (GDP), facilitate trade and transfer of technologies (Sachs, Kroll, Lafortune, Fuller & Woelm, 2021). It is worth noting that infrastructure projects offer vital services like waste management, water, transport systems, energy telecommunications services. In light of this, governments worldwide endeavour to undertake infrastructural projects to improve economic wellbeing of their constituents.

Peformance in relation to projects is viewed as project completion within set timelines, within budget and specifications (Clegg, 2019; Gichimu & Mutuku, 2022). It is common to measure performance on the basis of efficiency in terms of cost management, meeting the set deadlines, efficiency of team members in delivering the project, meeting stakeholders goals, gauging return on investment, customer satisfaction and value of the final product (Ibrahim, Hanna & Kievet, 2020). Measuring project performance is important because by measuring the level of success achieved, the management are able to gauge the project's contribution to the overall organizational performance, it helps in determining areas for further improvement and finally, the management may rely on project performance to determine other business decisions.

Project governance are rules and regulations, policies and processes used in decision making and management of projects. Governance provides ae framework for decision making in projects and determination of project success (Turner & Müller, 2017). Project Management Institute (PMI) (2016) regards project governance as a structure that offers the project manager and team the resources

they need to support and oversee the project through specified processes, reporting hierarchies, decision-making responsibility, and project management tools. According to Müller (2016) project governance is multidimensional comprising accountability, relationships, authority, controlling, and monitoring to projects. Miterev, Mancini and Turner (2017) posit that governance mechanisms in projects are supposed to support the operational control procedures, and to oversee the relationship of project teams and their clients.

Project governance outlines the structure where the goals of the project developed, the ways of achieving those goals and ways of performance monitoring are determined (Turner, 2016). Hence, governance of project is one of the most vital facets of project performance. According to Derakhshan, Turner and Mancini (2019), project governance relates to the infrastructure dealing with responsibility and accountability that surrounds a particular project. It is the framework adopted by project developers for making decisions in the development and implementation of projects. From this argument, project governance outlines who is responsible for what, and reports to who. The relevance of project governance in a project cannot be overemphasised since it provides mechanisms and structures for decision making, implementation monitoring and oversite throughout the project's lifecycle (Alvi, 2019). As a result, there is need for clear structures and responsibilities with outlined deliverables.

Affordable Housing Programme (AHP) was coined by the Kenyan government in 2017 as one of the four pillars (big agenda) of promoting development in the economy. The AHP programme aim was to develop 500,000 house units for low and middle income individuals by 2022 with a price ranging from Kshs. 600,000 to Kshs. 3 million. The government's housing development approach under the AHP is based on joint integration of the public and private sectors, and motivations to encourage investment in inexpensive housing by the private sector (Republic of Kenya, 2017).

Though the government promised 500,000 affordable housing units by 2022, the units that have been constructed since 2018 are 2,613. This is only 0.5% of the set target an indication of poor project performance since it has failed to meet the time set for its implementation.

The project was initiated on the premise that Kenya has 80% annual deficit with an estimated annual demand for housing of 250,000 against the approximated annual supply of 50,000 houses, most of which are high-end market houses. Additionally, only percent of officially built homes are intended for the market's lower income sectors, which make up the majority of demand (Republic of Kenya, 2017). Further the project was justified by the fact that buyers do not have adequate finance to take up completed houses, lack mortgages qualifications due to low cash flows and inconsistent incomes as well as the fact that the existing mortgages are too costly for normal citizens, partly because of high interest rates and short periods for repayment. As a result, there was need to construct affordable houses especially for majority of people who live in slums. The affordable housing projects are spread out in the cities Nairobi, Mombasa, Nakuru and Kisumu as well as in counties such as Machakos Kitui and Kiambu.

The project targeted to complete a total of 177,640 units in year one, 155,000 in year two, 125,000 year three 115,000 in year four and 105,000 in year five (Republic of Kenya, 2017). However, the project has been facing many challenges which include inadequate funding, lack of land for this project, high cost of construction and low adherence to ethical standard leading to construction of substandard buildings (Nzau, 2018). These challenges have highly affected the performance of affordable housing projects leading to lagging behind of the projects in terms of time plan.

The affordable housing programme was in line with Kenya's vision 2030 aimed to change Kenya in to a middle income level through industrialisation. To achieve this goal infrastructure development

such as roads, rail, ports and indeed affordable housing were earmarked (Republic of Kenya, 2017). The masterplan aimed at achieving high quality of life for Kenyans through development of 200,000 decent and affordable housing units annually, particularly in urban areas for lower income Kenyans. The Kenya's vision 2030 was based on Millennium Development Goals (MDGs) and Sustainable SMDGs. MDG 7 sought to guarantee environmental sustainability through among others increasing the proportion of population by use of enhanced sanitation facility and reducing the percentage of urban individuals living in slums. Therefore, the current study is of utmost importance since it is based on the housing program and impacts on the ability of the government and Kenya to achieve SMDGs, vision 2030 and the Big 4 agenda.

Statement of the Problem

Affordable housing is a government initiative by the Kenyan government to provide housing units for low- and middle-income population. Since the inception of the affordable housing project in 2017, the project lagged behind and fallen short of its expectation. It is noted that by 2020 the government had achieved only 0.5% of the set target. This increased by 0.3% in 2021, where the five-year plan had borne only 431 units or 0.8% of the target. By Oct 2022 only an approximate 1.0% of the housing units had been delivered. This shows that there has been a problem in the performance of the project. The affordable housing projects face performance challenges due to lack of adequate funds, there are numerous authorities involved in approving and licensing of housing development suggestions, making the process time-consuming, costly, and convoluted.

The numerous legislations and rules governing building construction also impede the success of construction projects. Further, the lack of proficiency to govern projects equally affect project performance (Kieti, 2015; Khisa & Mutuku, 2023). Previous scholars have attempted to explain factors that affect performance of housing projects like

planning (Alasfour and Mirzal, 2021), monitoring and control (Ledin, 2022), communication (Saad, 2022), technology (Ingle and Mahesh, 2022) among others, the study has noted that little effort has been dedicated to determining the project governance role on performance of construction projects. Abed (2017) investigated project governance impact on success of projects UN international firms in Gaza and found a positive effect of governance on success of projects. However, this response variable was on success of a project while the present study was on performance of a project

Elsewhere, Ul Haq, Gu, Liang and Abdullah (2019) researched on governance techniques on projects and software development projects performance in Pakistan and found that governance significantly impact performance of project. This study adopted contractual and relational governance as measures of project governance while the current study used project control and accountability as measures of project governance. Ekung, Agu and Iheama (2017) studied project governance impact on performance of projects in Nigeria and found that project governance enhances the performance of mega projects. This study was focused in Nigeria, while the present study focus is in Kenya. Kaumbulu (2021) researched on project governance and youth project sustainability in the County of Makueni and found that governance significantly impacted on youth empowerment projects sustainability. This study about youth projects while the present study focus is on affordable housing projects.

The reviewed studies show conceptual gaps; Abed (2017) focused on project success, UI Haq, Gu, Liang and Abdullah (2019) measured governance in terms of contractual and relational governances and Kaumbulu (2021) focused on sustainability of projects. Contextual gaps; Abed (2017) was on UN projects, UI Haq, Gu, Liang and Abdullah (2019) was on software development projects in Pakistan and Kaumbulu (2021) study was on youth empowerment projects in Makueni County. The

study aimed to fill the gaps by establishing the effect of governance on project performance based on affordable housing projects in Kenya.

Objectives of the Study

The general objective of this study was to establish the effect of governance on project performance: A case of affordable housing projects in Kenya. The study was guided by the following specific objectives;

- To determine the influence of stakeholder management on performance of affordable housing projects in Kenya.
- To examine the influence of project control on performance of affordable housing projects in Kenya.
- To determine the influence of project monitoring on performance of affordable housing projects in Kenya.
- To examine the influence of project accountability on performance of affordable housing projects in Kenya.

LITERATURE REVIEW

Theoretical Review

Agency Theory

Jensen and Meckling (1976) and Alchian and Demsetz (1972) advanced this theory. The theorists regard organizations as links for contracting associations among individuals. The agency theory describes firm behaviour in terms of contracts between agents and principals. In this theory, managers are agents while the shareholders are principals. The agency theory postulates that firm value would be achieved if proper incentives or adequate monitoring are not in place to discourage managers from focusing on achieving their own interests (Jensen & Meckling, 1976).

In the governance of projects, this theory is utilized to describe the interactions between managers (agent) and project owners (principal). Muller (2009) notes that the theory helps in addressing probable conflicts between managers and project owners. Further, the theory helps to address the

project managers authority level and it is associated to managers risk attitude and decision making (Eisenhardt, 1989). This theory explains the manner in which the short-term goals of the principal can be achieved by developing systems for monitoring and controlling that govern the behaviour of project managers. Hence, contracts govern the association of project managers and project owners hence influencing the performance of projects.

Stakeholder Theory

Freeman (1984)advanced this theory. Stakeholders are persons with rights or interests in a company's business and operations, and they also performance. Suppliers, creditors, employees, community and competitors are examples of stakeholders. In this theory, managers duties are beyond profit maximization, they ought to deliberate interest of other persons who have stakes in business activities. Managers should guarantee that the stakeholder's ethical rights are balanced and not infringed, and also their interests are put into consideration in decision making.

Further, project organizations are responsible to a larger number of stakeholders, and the structure of the firms must reflect this inclusive method (Freeman, 1984). This originates from the normative development of this theory, which recognizes a moral right of every stakeholder within and outside of the firm. The structure of project governance ought to make room for representation of stakeholders and manage their engagement in decision making as well as handle their concerns and demands.

Balanced Score Card model

This was popularized Kaplan and Norton (1992) and (1996) as a performance measurement tool. The model covers overall performance of a firm by integrating financial and non-financial measures. The non-financial aspects seen in the model include consumer perspectives, internal business procedures, learning and innovation as well as firm growth (Rompho, 2020). The financial aspect provides for the financial success of the firm. This is

the perspective that is most widely used in measuring performance. This measure relates to firm's ability to meet shareholder's requirements through delivery of metrics like the financial ratios, efficiency and cash flow metrics (Balaji, Dinesh, Kumar & Ram, 2021). This perspective therefore enables project managers to measure project's performance in terms of efficiency by completing projects within set budget.

The customer perspective is concerned with meeting customers' demands. This viewpoint typically pertains to timing how long it takes to resolve customer concerns, such as how fast orders are handled, questions are answered, and how quickly grievances are resolved. Additionally, it implies that the firm ought to carry out survey for customer satisfaction regularly and act on the findings (Dias & Tenera, 2020). Consequently, this perspective is applicable in this study in measuring projects performance in terms of meeting quality standards which translates to meeting customer's satisfaction.

Empirical Literature Review

The study has reviewed numerous previous studies aimed at establishing the existence of study gaps. For instance, in Pakistan, Alvi (2019) study concerned effects of good project governance on performance of construction projects using risk management as the mediating factors. From the 190 replies from Pakistan's construction industry, good governance of projects is highly linked to performance of the projects. It was discovered that risk management can help to mediate effective project governance and performance of projects. The study mediated the relationship with risk management indicating presence of methodological gap. The findings could not be inferred on the current study.

Ul-Haq, Gu, Liang, and Abdullah (2019) conducted study on project governance systems and software development firms' performance in Pakistan. The study was quantitative and data was gotten from 318 participants. The hypotheses were examined utilizing Structural Equation Modelling

(SEM) and SPSS. According to the findings, contractual and relational governances show a considerable impact on performance of projects and are effective in preventing speculation. Furthermore, it was evident that risk requirements help to minimize the effect of relational and contractual governances of performance of projects. This study was conducted on software development project while in the current study construction projects was the focus and therefore there exists contextual gap.

Ekung, Agu, and Iheama (2017) evaluated the governance impact of projects on outcomes of Nigeria's mega construction projects. Data was gathered utilizing a standardized questionnaire and a review of project archives. The mean score was used to analyse respondents' assessments of project performance using Kerzner's criteria, time and cost overruns, and the test of hypothesis utilized the Spearman correlation test. According to the findings, project governance improves the performance of megaprojects. The study focused on Nigeria a much bigger economy than Kenya in terms of resource mobilisation. Therefore, there exists an empirical gap. The study used Spearman rank correlation while the current study used Pearson's product moment correlation. Thus, there exists a methodological gap.

Njogu (2017) investigated the impact of governance of projects on success in community-based HIV interventions in Kiambu, Kenya. A descriptive survey approach and stratification to find 151 respondents from a target group of 249 NPOs doing HIV programmes across Kiambu's 12 sub-counties. Primary data was acquired by utilization of questionnaires. In the analysis, correlation and regression were applied. Findings depicted that governance of projects have a substantial positive link with the project outcomes. The focus was on community-based projects while the present study was conducted on construction projects and therefore there is an empirical gap.

Keya (2020) concentrated on the governance and performance of Kenyan CDF. A census was

conducted on all 290 NG-CDFs performance. A positivistic philosophy was adopted, as well as a descriptive cross-sectional design. Questionnaires were utilized in obtaining data. Secondary data was acquired from KNBS, National Treasury, reports for general Auditor's, and the NG-CDF website from 2014 to 2018. At a 95% confidence level, regression method was adopted. It was discovered that a significant association was there amid governance and NG-CDFs projects outcomes. The study was conducted on NG-CDFs project performance which are mainly smaller projects compared to affordable housing projects and therefore there exists a contextual gap.

Rwingo (2021) conducted study on risk governance and building project performance in Makueni County, Kenya. Descriptive design was utilized, which looked at 24 construction projects completed in 2018/2019 in the county. Respondents included the contractor, project manager and supervisors. Data was obtained utilizing a semi-structure questionnaire. The descriptive and inferential methods were utilized in analysis. Resources risk management, management of budget control risks, and lawsuit risk all have a favourable performance effect of Makueni County building projects. Nevertheless, the study concerned risk governance only while the present study was on other aspects of governance such as stakeholder management, project control, project monitoring and project accountability which were not considered in the current study. Thus, a conceptual gap exists.

Stakeholder Management and Project Performance

In Brazil, national and international enterprises participated in a quantitative study by De Oliveira and Rabechini (2019) on shareholder management impact on project trust. The study's research methodology was descriptive. Primary data obtained from 130 project team members was analysed through partial least squares path modelling to conclude that shareholder management significantly impact on trust in project

management. Specifically, the study resolved that prescriptive and relational stakeholder significantly influence trust. However, the aim was to determine the shareholder management and project trust. Thus, there is need to focus on the influence that stakeholder management has on project performance. In addition, the study relied on partial least squares path modelling in arriving at the conclusion while the current study used least squares regression model in drawing conclusions.

Kenya, Gichimu and Mutuku (2022) researched on stakeholder management impact on project performance in the government in Nyeri county. The preferred research design was descriptive design. Anchored on expectancy and stakeholder theories, targeting all 53 projects funded by County Government of Nyeri between 2016 and 2018. Data was obtained from members of project officers, project staffs, contractors and the general public. Using both descriptive and inferential analysis, primary data gathered through questionnaires was analysed. The outcomes demonstrated that the performance of projects was considerably and favourably influenced by the management of contracts, communications, and conflicts. However, the conclusions were based on data gotten in one county only and therefore may not be generalised on other counties such as Nairobi County. Thus, an empirical gap exists.

Project Control and Project Performance

In a study on suitability of project control ways to enhance knowledge incorporation in varied uncertainties Lin, Müller, Zhu and Liu (2019) examined multiple case studies from software, engineering, infrastructure and machinery industries to determine project control designs successfully handling high uncertainties. Results revealed that the various elements of control such as behaviour, self, clan and outcome controls improve knowledge incorporation effectiveness under uncertainties associated to complexity of computation, novelty of projects, user needs ambiguity and technology complexity respectively. However, the study sought to establish which

project control modes are appropriate to enhance the knowledge incorporation in varied uncertainties. Thus, there is need to conduct another study to show how project control impacts on project performance. As a result, there exists an empirical gap.

A study in Kenya by Orgut, Batouli, Zhu, Mostafavi, and Jaselskis (2020) was on the essential elements for enhancing the accuracy of project control metrics over the course of a project. To identify 15 essential reliability improvement variables and 85 indicators with precise application time and milestones, the study conducted a survey of 10 in-depth case studies. A panel of experts then approved this sturdy structure for enhancing the dependability of project controls throughout the course of a project. Although the study gives a framework for enhancing the project controls reliability, the model was not empirically tested and therefore the results thereof cannot contextualised leaving both contextual and empirical gaps. Additionally, the study only identified the critical factors for improving project control but did not show their impact on project performance.

Project Monitoring and Project Performance

Crawford and Bryce (2018) researched on monitoring and evaluation of projects aimed at improving aid project execution. The study tested the suitability of logical framework approach (LFA). The framework comprises strategy, problem, objective and stakeholder analysis which was however found to be in adequate in project monitoring and evaluation and therefore an extension to the model that considers other areas of project management like time dimension and project accountability is required to enhance project performance. Therefore, a conceptual gap exists in literature.

In another study in Kitui county, Kathongo, Ragui and Kirui (2021) evaluated the effect of monitoring and evaluation in performance of project rural electrification programme. A survey approach was adopted where 75 respondents were considered

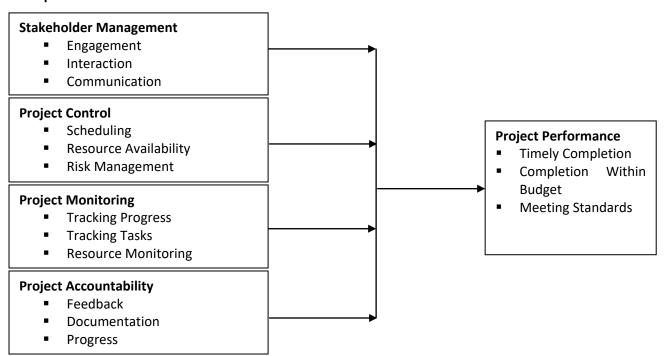
from a total of 125 rural electrification projects. Questionnaires coupled with face to face interviews were used to obtain primary data which was analysed descriptively. It was established that M&E is critical for project success. However, it was noted that outsourcing of monitoring and evaluation function is key to project implementation and performance. This study focussed on projects of rural electrification but the current study is based in housing projects that are scatted around the whole country. Thus, a contextual gap exists. Secondly, the study relied of descriptive statistics only which is inadequate. This study will address methodological gap by utilising multiple regression analysis to evaluate project monitoring effect on project performance.

Project Accountability and Project Performance

A study of the role of accountability on development cooperation projects in India by Chatterjee and Verma (2022) examined the influence of accountability of finances, compliance, performance, stakeholders, and constitutional on performance of World Bank and Asian Development Bank projects in India. Stratified sampling technique was used to select states whose projects were evaluated. Based on review of secondary data, the study established that project accountability significantly contributed to Project performance.

In Kenya Nyamori (2019) conducted a review of accountability of systems for the Constituency Development Funds in Kenya aimed at establishing if project accountability influence project performance. Secondary data was adopted gotten form newspaper. It was revealed that a direct link exists between project accountability and performance. The conclusions made on this study were based on newspaper commentaries and reports that may not necessarily show accurate information since they are based on personal opinion of the author. This study utilised primary data. Thus, there exists a methodological gap.

Conceptual Framework



Independent Variables

Figure 1: Conceptual Framework

Dependent Variable

METHODOLOGY

Research Design: The study considered descriptive research design as the most preferred design whose aim is to explain situations as they are without any manipulation from the researcher. Since this study was quantitative, this design was suitable as it helps to use of quantitative data. Hence, it helped to establish the influence that governance exert on project performance of affordable housing projects in Kenya.

Target Population: The study targeted the project managers, project lead and team members in charge of the affordable housing projects in Kenya. These individuals were targeted since they were the once responsible for execution and governance of the project. According to the Ministry of Housing (2020), there were 165 project managers, project lead and project team members in charge of the affordable housing projects in Kenya. Therefore, a population of 165 respondents was used in the study.

Sample Size and Sampling Design: Sampling is a way of picking a large group of people for study in a manner that ensures they represent a larger number where they were chosen (Saunders, Lewis & Thornhill, 2016). The study made use of stratified sampling to determine the participants. In this approach the populace is divided into smaller groups. Stratified sampling eliminates bias and ensures proper coverage of the population. Hence, it was a suitable method in this study. To determine the sample size of 117, the Yamane (1967) formula was used.

Data Collection Instruments: The study made use of primary data gotten via questionnaire. The questionnaire was utilized since it had the capacity to reach out to many respondents quickly, be able to provide respondents enough time to respond, give respondents a sense of security, and be an objective method since bias coming from personal traits is not present (Creswell, 2013).

Data Analysis and Presentation: Data obtained was cleaned and edited. The study used the SPSS version 23.0 for analysis of the data. Quantitative technique was deployed in analysing the data. The descriptive and inferential methods was employed. The descriptive mean, percentages, frequencies and standard deviation were utilized in analysing quantitative data. Presentation was by use of pie charts and tables. Data was also analysed using multiple linear regression analysis to determine the project governance effect of on project performance. The regression model was as follows;

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

Where Y - Project Performance

X₁ – Stakeholder Management

X₂ - Project Control

X₃ - Project Monitoring

X₄ – Project Accountability

e - Error Term

Qualitative data was analysed thematically using conceptual analysis while prose form was used to present data.

RESULTS AND FINDINGS

Descriptive Statistics

This section presented results on descriptive analysis. The statistics included mean score and standard deviation.

Stakeholder Management

Table 1: Stakeholder Management

Aspects of Stakeholder Management	1	2	3	4	5	Mean	Std. Dev
We invite concerned parties when modification in plan is required	4	6	10	49	29	3.949	0.892
We have communication centre where stakeholders seek clarification	3	8	12	43	32	3.949	0.835
The project has a website where all information relating to the project is available				38	35	3.947	0.819
Stakeholders are entitled to visit sites anytime				52	26	3.929	0.907
We are in constant communication with all stakeholders	7	8	11	34	38	3.898	0.835
We often hold consultative meetings with stakeholders	5	9	12	43	29	3.837	0.790
We invite our stakeholder regularly to give their input	5	8	11	50	24	3.816	0.851
We have several modes of communication such mobile phone numbers, emails and social media platforms that may be used by stakeholders to reach us	6	11	11	41	29	3.776	0.759
We invite our stakeholders to update them on project progress	7	10	13	38	30	3.755	0.730
We organize stakeholder's open days to interact with project team		10	14	45	23	3.704	0.748
Our stakeholders are entitled to recommendations in the project	9	9	15	35	30	3.694	0.691
Aggregate						3.841	0.805

The aggregate mean score for stakeholder management was 3.841 showing that to a great extent participants were in agreement on stakeholder management practices the affordable housing projects they represented. The standard deviation of 0.805 suggested that there were low deviations in their responses. Also, to a large extent, the participants agreed that concerned parties are invited any time a modification in the plan is required as shown by a mean of 3.949, the project has a communication centre where stakeholders can seek clarification as shown by a mean of 3.949, the project has a website where all information relating to the project is available as shown by a mean of 3.947 and stakeholders are entitled to visit sites anytime as shown by a mean of 3.929.

There is constant communication with all stakeholders as shown by a mean of 3.898, project managers often hold consultative meetings with stakeholders as shown by a mean of 3.837, stakeholders are regularly invited to give their input as shown by a mean of 3.816, the project have several modes of communication such mobile

phone numbers, emails and social media platforms that may be used by stakeholders to reach u as shown by a mean of 3.776, project stakeholders are invited to update them on project progress as shown by a mean of 3.755, open days are organized for stakeholders to interact with team in the project by a mean of 3.704 and stakeholders are entitled to make recommendations in the project by a mean of 3.694.

These findings are in agreement with those of Gichimu and Mutuku (2022) who found that the performance of projects was considerably and favourably influenced by the stakeholder management of contracts, communications, and conflicts. Chebichii (2021) found that participation of stakeholders in the safety automation project's inception, planning, implementation, monitoring, and assessment affects its performance.

Project Control

The participants were asked to indicate how much they agreed or disagreed with the following statements regarding various areas of project control. Results are shown in Table 2.

Table 2: Project Control

Aspects of project control	1	2	3	4	5	Mean	Std. Dev
Our team has specific tasks that they expected to undertake	2	5	14	39	38	4.082	0.888
Suppliers are always paid on time	4	5	12	38	39	4.051	0.899
We have developed a work plan for each activity in the project	3	5	16	42	32	3.969	0.822
Our staff have insurance cover in case of injury		4	14	41	35	3.961	0.822
We have mapped all the human capital requirement for the		6	10	54	25	3.939	0.934
project							
We always receive materials for the project on time		7	9	47	30	3.918	0.873
We have a developed budget within which we operate	4	8	12	45	29	3.888	0.822
We often evaluate our risk mitigation strategies	7	8	10	46	27	3.796	0.816
Our employees are always paid on time	7	10	13	38	30	3.765	0.730
We often meet to identify any hazards that have emerged	6	9	15	41	27	3.715	0.729
Each activity in the project has specific time lines	6	9	13	50	20	3.709	0.815
Our teams are properly trained on personal safety	5	7	13	60	13	3.704	0.984
Aggregate						3.875	0.845

Regarding project control, the study established that the aggregate mean score was 3.875 with an associated standard deviation of 0.845. These results suggested that to a large extent, there was agreement among respondents on project control measures in place on affordable housing projects they represented. The low standard deviation implied that there was congruence among their attitude toward the control measures. Results also show that to agree to a great extent, the participants agreed that the project team has specific tasks that they expected to undertake by a mean of 4.082 and suppliers are always paid on time by a mean of 4.051, they have developed a work plan for each activity in the project as shown by a mean of 3.969.

Staff have insurance cover in case of injury as shown by a mean of 3.961, the project has mapped all the human capital requirement for the project by a mean of 3.939, materials for the project are always received on time by a mean of 3.918, the project has a developed budget within which it operate as shown by a mean of 3.888, risk mitigation strategies are often evaluated as shown by a mean of 3.796, employees are always paid on time by a mean of 3.765, team members often

meet to identify any hazards that have emerged as shown by a mean of 3.715, each activity in the project has specific time lines as shown by a mean of 3.709 and teams are properly trained on personal safety by a mean of 3.704

The findings agree with those of Lin, Müller, Zhu and Liu (2019) who found that the various elements of control such as behaviour, self, clan and outcome controls improve knowledge incorporation effectiveness under uncertainties associated to complexity of computation, novelty of projects, user needs ambiguity and technology complexity respectively. Obare, Kyalo, Mulwa, and Mbugua (2016) suggested that systems of project control implementation process significantly impact on projects performance.

Project Monitoring

Those surveyed had to indicate how much they agreed or disagreed with the following statements regarding various areas of project monitoring. The outcomes are depicted in Table 3.

Table 3: Project Monitoring

Aspects of project monitoring	1	2	3	4	5	Mean	Std. Dev
We ensure that activities are completed within the stated time	2	3	14	44	35	4.092	0.902
Supervisors are required to ensure all planned activities are started and completed on time	5	8	10	37	38	3.969	0.868
We always evaluate any variance in the timelines for the project	4	5	10	52	27	3.949	0.921
Supervisors always take stock of works in the project	4	6	12	46	30	3.939	0.854
There are frequent meetings to evaluate project activities	3	5	13	55	22	3.898	0.926
We always ensure that we order materials in advance	5	7	15	39	32	3.878	0.779
We constantly evaluate the progress of the project	8	6	9	45	30	3.847	0.845
Our team has been provided with a schedule of activities and their timelines	6	8	12	43	29	3.827	0.792
We have a system to monitor material usage so that there is no shortage	3	7	14	59	15	3.776	0.967
Our teams often track the materials available for the tasks to be undertaken	6	9	11	51	21	3.735	0.843
Aggregate						3.891	0.870

The aggregate mean score for project monitoring was 3.841 showing that to a great extent respondents were in agreement on project monitoring practices in the affordable housing projects they represented. The standard deviation of 0.805 suggested that there were low deviations in their responses. Also, to a great extent, the participants agreed that they ensure that activities are completed within the stated time as shown by a mean of 4.092, supervisors are required to ensure all planned activities are started and completed on time by a mean of 3.969 and supervisors always evaluate any variance in the timelines for the project as shown by a mean of 3.949.

Supervisors always take stock of works in the project as shown by a mean of 3.939, there are frequent meetings to evaluate project activities by a mean of 3.898, the team always ensure that they order materials in advance as shown by a mean of 3.878, the team constantly evaluate the progress of the project by a mean of 3.847, project team has

been provided with a schedule of activities and their timelines as shown by a mean of 3.827, there is a system to monitor material usage so that there is no shortage as shown by a mean of 3.776 and teams often track the materials available for the tasks to be undertaken as shown by a mean of 3.735. The findings relate to those of Bohn and Teizer (2010) who concluded that project monitoring is positively correlated with project performance. Muchelule (2018) established that monitoring practices significantly contributes to project performance.

Project Accountability

The following statements about the aspects of project accountability were presented to the respondents, and they were asked to indicate how much they agreed with each. Results are shown in Table 4.

Table 4: Project Accountability

Aspects of project accountability	1	2	3	4	5	Mean	Std. Dev
Team members are expected to do their best to ensure that	3	8	17	35	35	3.929	0.781
the project is completed on time							
Every team member is required to give update on the progress	4	6	16	42	30	3.898	0.790
of their tasks							
All team members and stakeholders have been provided with	5	7	15	40	31	3.867	0.776
the roadmap for the project							
We encourage or team members to own the project	5	10	12	39	32	3.847	0.778
We often give update to project developers on the progress of	4	11	14	41	28	3.796	0.741
the project							
Proper record of materials and labour used are maintained	6	8	13	45	26	3.786	0.784
Every team member take responsibility for their actions	6	9	18	34	31	3.765	0.695
We endeavour to give feedback to all interested parties	7	9	15	43	24	3.694	0.725
promptly							
We document all activities of the project	8	10	16	36	28	3.673	0.669
Aggregate						3.806	0.749

The results show that the aggregate mean score for project accountability was 3.806 while the associated standard deviation was 0.749. This shows that to a great extent the participants consented on project accountability measures adopted in the project. Also, to a great extent the participants agreed that team members are expected to do their best to ensure that the project is completed on time (m = 3.929), every team member is required to give update on the progress of their tasks (m = 3.898), all team members and stakeholders have been provided with the roadmap for the project (m = 3.867) and members of the team are encouraged to own the project as shown by a mean of 3.847.

Updates are often given to project developers on the project progress (m = 3.796), proper record

of materials and labour used are maintained as shown by a mean of 3.786, every team member take responsibility for their actions as shown by a mean of 3.765, supervisors endeavour to give feedback to all interested parties promptly (m = 3.694) and all activities of the project are documented (m = 3.673). The findings concur with those of Chatterjee and Verma (2022) who established that project accountability significantly contributed to Project performance. Nyamori (2019) revealed that a direct link exists between project accountability and performance.

Project Performance

The level to which you agree with the following assertions about the performance of the project was a requirement for the responses. Figured out in Table 5.

Table 5: Project Performance

Aspects of project performance	1	2	3	4	5	Mean	Std. Dev
We often exceed the budget allocation for our houses	6	8	13	39	32	3.847	0.779
Our houses are often completed later than required	6	9	12	41	30	3.816	0.775
We stick to provided guidelines to ensure that our houses are	7	10	15	32	34	3.776	0.728
completed within standards							
We complete our houses within the budget	4	11	16	44	23	3.724	0.728
Our customers are often satisfied with the quality of our houses		12	14	49	20	3.724	0.792
Our houses are regularly inspected to ensure they are developed as		8	15	41	26	3.690	0.744
specified							
We often compete project phases within time	8	10	13	46	21	3.633	0.748
Aggregate						3.744	0.756

The results show that the aggregate mean score for project performance was 3.744 while the associated standard deviation was 0.756. Results suggest that to a great extent participants were in agreement with statements presented on project performance. Meaning that to a great extent the affordable housing projects achieved the metrics of completion on time, within budget and quality standards. However, there were variations on these observations as shown by a standard deviation of 0.756. This means that although majority of projects performed well, some did not. Also, project often exceed the budget allocation for houses as shown by a mean of 3.847 and houses are often completed later than required as shown by a mean of 3.816.

The project team stick to provided guidelines to ensure that our houses are completed within standards as shown by a mean of 3.776, We complete our houses within the budget as shown by a mean of 3.724, the houses are completed within the budget as shown by a mean of 3.724,

consumers are often contended with the quality of houses by a mean of 3.724, they often compete project phases within time as shown by a mean of 3.633 and the houses are regularly inspected to ensure thy are developed as specified as shown by a mean of 3.633.

Correlation Analysis

The Pearson product moment correlation was used to to test for strength and the direction of the association between the variables. The significant of the relationship was determined using P-values at 0.05 significance level. Results were summarized in table 6 below.

Table 6: Correlational Results

		Project Performance	Stakeholder Management	Project Control	Project Monitoring	Project Accountability
Project performance	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	98				
Stakeholder management	Pearson Correlation	.758**	1			
	Sig. (2-tailed)	.001				
	N	98	98			
Project control	Pearson Correlation	.781	.464	1		
	Sig. (2-tailed)	.001	.001			
	N	98	98	98		
Project monitoring	Pearson Correlation	.801	.516	.495	1	
	Sig. (2-tailed)	.001	.001	.001		
	N	98	98	98	98	
Project accountability	Pearson Correlation	.774	.538	.502	.461	1
·	Sig. (2-tailed)	.001	.001	.001	.001	
	N	98	98	98	98	98

The findings show that the correlation coefficient of stakeholder management and project performance was (0.758). This implies that

stakeholder management and project performance had a positive correlation. The p-value was 0.001<0.05, this means that stakeholder

management had a significant association with project performance.

Further, the correlation coefficient between project control and project performance was (0.781). This implies that project control and project performance had a positive correlation. The p-value was 0.001<0.05, this implies that project control had a significant association with project performance.

The correlation coefficient between project monitoring and project performance was (0.801). This implies that project monitoring and project performance had a positive correlation. The p-value was 0.001<0.05, this implies that project monitoring had a significant association with project performance.

Finally, correlation coefficient between project accountability and project performance was (0.774). This implies that project accountability and project performance had a positive correlation. The p-value was 0.001<0.05, this implies that project accountability had a significant association with project performance.

Regression Analysis

To ascertain the impact of project governance on the success of Kenya's affordable housing projects, multiple regression analysis was used. Using R-squared (R2), the model's predictive ability was calculated. The fitness of the model was determined.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the	
				Estimate	
1	0.748	0.559	0.553	0.36290	_

The model summary results show that adjusted R square was 0.270. This implies that there was a variation of 55.3% in project performance due to stakeholder management, project control, project, monitoring and project accountability. However,

the remaining 44.7% indicates that there are other factors influencing project performance that were not used in this study.

The ANOVA findings were as summarised in table 8.

Table 8: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5.421	4	1.355	9.969	0.000 ^b
	Residual	12.643	93	0.136		
	Total	18.064	97			

The results on ANOVA show that the data had a significance value of 0.000<0.005. This implies that the model significance. Further the F-calculated

(9.969) is more than the F-critical (2.450) from the F-distribution tables. This implies that the model was significant in predicting project performance of affordable housing projects in Kenya.

Table 9: Beta Coefficients

Model		Unstandardiz	zed Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.463	0.312		4.689	.001
	Stakeholder	0.302	0.105	0.269	2.876	.001
	management					
	Project control	0.325	0.108	0.278	3.009	.001
	Project monitoring	0.317	0.103	0.232	3.078	.001
	Project accountability	0.312	0.102	0.249	3.059	.001

The model results are as follows;

$$Y = 1.463 + 0.302X_1 + 0.325X_2 + 317X_3 + 312X_4$$

The equation shows that holding stakeholder management, project control, project monitoring and project accountability at a constant zero, project performance would be a constant at 1.463. Further, stakeholder management had a significant and positive connection with project performance (B = 0.302, P = 0.001). This is an indication that increase of stakeholder management by one unit would result to an upsurge in project performance of affordable housing in Kenya by 0.302 units.

Project control had a significant and positive connection with project performance (B = 0.325, P = 0.001). An indication that an increase of project control by one unit would result to an upsurge in project performance of affordable housing projects by 0.325 units. Project monitoring had a significant and positive connection with project performance (B = 0.317, P = 0.001). An indication that an increase of project monitoring by one unit would result to an upsurge in project performance of affordable housing projects by 0.317 units. Project accountability had a significant and positive connection with project performance (B = 0.312, P = 0.001). An indication that an increase of project accountability by one unit would result to an rise in project performance of affordable housing projects in Kenya by 0.312 units.

CONCLUSIONS AND RECOMMENDATIONS

The research revealed that stakeholder management had a significant and positive

connection with performance of projects. Hence, an increase of stakeholder management by one unit would result to improvement in project performance of inexpensive housing schemes. The conclusion was that stakeholder management positively influences project performance of affordable houses in Kenya. So, an increase of project control by one unit would result to a rise in project performance of affordable shelters in Kenya. The conclusion was that project control positively influence project performance of affordable shelter projects in Kenya.

The study found that project monitoring had a substantial and positive relationship with project performance. Hence, an increase of project monitoring by one unit would result to a rise in performance of affordable shelters projects. The conclusion was that project monitoring positively influence project performance of affordable shelters projects in Kenya.

It was revealed that project accountability had a significant and positive connection with project performance. Hence, an increase of project accountability by one unit would result to an upsurge in project performance of affordable shelters. The conclusion was that project accountability positively influences project performance of affordable shelters in Kenya.

The study revealed that stakeholder management had a significant connection with project performance. The study recommends monitoring and evaluating the stakeholder engagements in order to make improvement to the

available methods used in stakeholder management. Monitoring of stakeholder engagement is essential as it helps in determining whether stakeholder management during the project impacts the project performance positively or whether there is need for review.

Project control had a significant and positive relationship with project performance. It is suggested that project control activities ought to be integrated in the whole project life cycle from planning to monitoring. Linking project control with the project management gives understanding that allow stakeholders in the project to make decisions that are right at the required time.

Project performance and project monitoring had a substantial and favourable link. The study suggests careful project monitoring to assist project managers in gathering important information about how a project is doing and in using the information to make informed decisions. To make sure that tasks are being completed in accordance with project requirements, monitoring should be done often throughout the whole project lifecycle.

Project success was significantly and favourably correlated with project performance. It is suggested that accountability should be enhanced by defining objectives ensuring that project team members know their responsibilities in the project activities. To improve project accountability, there need to be clarity on individual tasks assigned and the manner the tasks align to the whole project.

Suggestions for Further Research

The aim of this study was to establish the influence of project governance on project performance: a case of affordable housing projects in Kenya. It is recommended studies should be conducted to determine the determinants of success in affordable housing projects. Also, studies can focus on challenges of implementing affordable housing.

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