



**INFLUENCE OF MONITORING AND EVALUATION PRACTICES ON SUCCESS OF GATED RESIDENTIAL HOUSING PROJECTS IN NAIROBI COUNTY, KENYA**

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### ABSTRACT

*This study sought to establish the influence of monitoring and evaluation in project success of gated residential housing projects in Nairobi County, Kenya. The current study was limited to gated community projects in Nairobi County as over 75% of the gated community projects in Kenya were undertaken in Nairobi County, implying that the results of the study were more representative than the same study being carried in another part of the country. Towards realization of the objective, the research adopted a descriptive research design guided by survey. The population of the study was all the 89 gated community project contractors in Nairobi, Kenya. The research was a census and therefore all the firms participated in the research. The data collected was analyzed using descriptive statistics measures that included the mean and standard deviation. To establish the relationship, a regression was generated from the primary data collected. The finding of the study suggested that the gated community projects had put in place systems and strategies for raising monitoring budget that was separate from the main project being undertaken. Monitoring cost relates to costs incurred for consultants and physical non-contractual investments. With regard to monitoring tools, the research established that the common monitoring tools employed were logical framework matrix and input material schedule. The extent of stakeholder influence on the success of the projects was determined based on their degree of influence. It is therefore recommended contractors identify key stakeholders whose support is critical to a project success. With regard to the four variables, the research established that stakeholder evaluation and establishment of a monitoring budget had the greatest influence on the success of the gated community projects established that project success is influenced by among other the monitoring and evaluation practices adopted by a construction firm.*

**Key Words:** Monitoring Budgeting, Project Tools, Stakeholder Analysis, Project Evaluation

## INTRODUCTION

Every organization exists to achieve specific organizational goals to which the management will be entrusted to come up with strategies on how to achieve them. After organisations set their strategy and vision on how to realize the same, the management develops individual projects or programmes, to deliver the business strategy. As Turner and Muller (2008) highlight, organizational projects are entities required to be organized to enable positive and evidently defined developments in the business and if properly implemented, it will lead to an increase in the organizational value. However, Amason (2015) note that companies do not have unlimited resources to put in on the set projects so they select those projects that have a higher chances of delivering the most significant results for the business strategy implementation in the most efficient and effective manner. Successful completion of projects will lead to increased chances of realizing organization goals and therefore, any move that will increase the success rate of projects before, during and implementation of the project program need to be supported by all organizational stakeholders (Clarke, 2011). One of the strategies employed to increase project success in organizations is adoption of effective program monitoring and evaluation systems.

Clarke (2011) asserts that organizations that had put in place comprehensive operational plans for managing their projects seemed to have made the most progress and success with regular monitoring of their work. Many organizational stakeholders were also found to have supported projects that had continuous monitoring programs in place since such organizations seemed at ease to meet reporting requirements and also to reflect on their own progress meaningfully. Wells (2014) suggest that effective Monitoring and Evaluation (M&E) systems in an organization is able to track what is being done and whether the projects making a difference. Further, M & E programs allow project managers to determine how to allocate resources

to achieve the best overall result since different monitoring tools enables effective management and achievements of the project goals within a prescribed budget, deliverables and timeframes (IFAD, 2012). Similarly, Shapiro (2011) suggest that M&E provide the management with relevant information that will influence positively the process of decision making relating to organizational projects because it facilitates identification of specific areas within the project cycle that needs some adjustments or replacements.

The projects' monitoring and evaluation process of is increasingly becoming an essential program management tool in the present day business environment whereby efficiency and effectiveness of projects as become synonymous with projects being able to meet the goals of a business. Though monitoring and evaluation has become as if they represent the same project program, Bamberger and Eleanor (2012), cautions that these are actually special category of organizational activities, interrelated but not very similar. According to Dyason (2010), Monitoring is a continuous process that entails collection and analysis of data pertaining a particular intervention or program whereas evaluation is an appraisal that endeavor to answer definite questions relating to a given intervention or program. Thus, evaluation of a project can be happening throughout the organization or project life, with the purpose of enhancing the policy or approach of organization or project functioning. Conversely, monitoring is an ongoing process mainly derived from the set targets and all the tasks intended to be accomplished set at some juncture in the project planning stages.

Gudiené, *et al.* (2013) opines that successfulness of a project is dependent upon the timely strategies that the management has put in place to distinguish failure and success of a project. Nevertheless, they argue that latest analysis of studies published between 1986 and 2010 in the Project Management Journal and International Journal of Project Management have discovered 30 articles enumerating the concept of project success, but

without a consensual description. In accordance with Iska (2009), the argument is due to the absence of industry- standardized or accepted definition regarding project success since individual project teams locate themselves in different circumstances, meaning that their definition regarding the idea of success will be unique from the one of a different project team.

Residential housing projects are defined as residential structures with more than two separated family house or residential apartment units. These structures are estranged from the outer surroundings by walls or gates. However, in most cases, there is restrictions on gaining access into these housing units specifically for non residents who have the intentions of visiting the apartments. Therefore, as a way of implementing management mandate, there are some specific rules and conducts that are expected to be adhered to by the residents. The concept of residential housing projects is often seen as a paradoxical one where the word “gated” is usually used to refer to steps taken to keep the unwanted outside an area therefore encouraging marginalization and segregation. The term “community” on the other hand, generally implies a common way of life and beliefs which are supposed to enhance social interaction (Atkinson *et al*, 2015).

Nairobi County is among the 47 constitutional counties of Kenya. However, it is densely populated despite of its small geographical area. In addition, the capital city of Kenya, Nairobi, is located in the county. The establishment of the county dates back in 2013 on similar boundaries as the former Nairobi Province, after the promulgation of the new constitution which divided geographically the 8 provinces into 47 counties. Nairobi, the capital city of Kenya, is a cosmopolitan city with a population of 3,138,369 (Kenya Census, 2015). The entire county is urban. Nairobi County consists of eight sub counties specifically; Kamukunji, Embakasi, Starehe, Dagoretti, Kasarani, Westlands, Langata and Makadara. Whose residents are of diverse ethnic groups and nationalities – all referred

to as “Nairobians”. While a good number of the wealthy Kenyans live in the up market areas of Nairobi, the largest numbers of the residents of Nairobi are middle class living in the estates and the poor living in the slums. Nairobi is a host of many government Ministries Departments, businesses, Non-governmental organizations (NGOs), companies, and Agencies (MDAs), international companies and organizations.

### **Statement of the Problem**

According to the World Population Review (2018), Nairobi has witnessed an average population growth rate of 8% pa with the metro-city areas having an approximate population of 6.5M persons while the Nairobi City has 3.5M persons. As a consequence of this population growth, the demand for secure and affordable housing units has become necessary which has led to both private and government agencies to venture into the construction sector. As a result, the Central Bureau of Statistics (2018) notes that over the next five years, the construction sector in Kenya is expected to witness increased growth considering that the government program in the next 5 years is to provide 500,000 housing units per annum. Further, the other three ‘big four projects’ - food security, manufacturing and universal healthcare, will involve construction of different forms of projects, necessitating the understanding of the role of monitoring and evaluation in project success. Thus, in order for the government vision to be met and also meet the demands of good housing units in Nairobi, there is need for all the concerned stakeholders to work towards successful completion of housing projects because according to a World Bank report (2017), Kenya currently face a housing shortfall of 2 Million housing units. The housing challenge is exacerbated by an urbanization rate of 4.4% that is equivalent to 0.5 million new city dwellers annually. In this regard, in order to address the housing project deficit through the construction, of among others, gated community housing units, it becomes necessary to understand

the role of monitoring and evaluation on the success of the housing projects.

Despite the importance of monitoring and evaluation of housing projects to its successful completion few studies have been undertaken locally to this regard. Instead, many studies have been undertaken in the NGO world. A research study conducted by Muzinda (2012) on 'M&E Practices and problems of NGOs based in Gaborone incorporating HIV/AIDS Projects in Botswana,' found that the M&E activities of the local NGOs in Gaborone were faced with challenges of properly planned and execution procedures. However, some of the best available practices were erroneously implemented while some were not implemented fully. Further, the study found that preparation for M&E strategies was erratically and poorly done by respondents. Indeed, as evidenced by the limited studies, conducted find out the application of the Monitoring and Evaluation frameworks in determining the success of housing construction in gated. This study sought to establish how monitoring and evaluation affect project success of gated residential housing projects in Nairobi County, Kenya.

### **Objectives of the Study**

To assess the influence of monitoring and evaluation in project success of a gated residential housing projects in Nairobi Count, Kenya. The specific objectives were:-

The subsequent specific objectives provided a guide towards the success of the project:

- To establish the effect of monitoring budget on the success of gated residential housing projects in Nairobi, Kenya
- To find out how monitoring tools affect the success of gated residential housing projects in Nairobi, Kenya
- To determine how the effect of evaluation of stakeholder affect the success of gated residential projects in Nairobi, Kenya
- To establish the effect of evaluation design on the success of gated residential projects in Nairobi, Kenya

## **LITERATURE REVIEW**

### **Theoretical Framework**

#### **Program Theory**

The program theory has been incorporated in diverse research studies to facilitate the achievements of respective study objectives for a very long time and depicts the ability of a project system to provide solutions to specific challenge through evaluation of need assessment. Additionally, the theory provides a platform of identifying areas of great impacts from evaluation of projects (Sethi & Philippines, 2012). Majority of firms focus on human service delivery programs that are structured to enhance the status of the society that are at times structured and restructured in a specified time. The program theory therefore applies rational framework technique as its methodology to accomplish a particular project. Unlike other project sequences, the program theory advocates the representation of a project in a graphical and in a detailed version of the logic model. The logical model of the project is used in directing engagement of stakeholders, evaluation and management of results (Hosley, 2013).

#### **Stakeholder Theory**

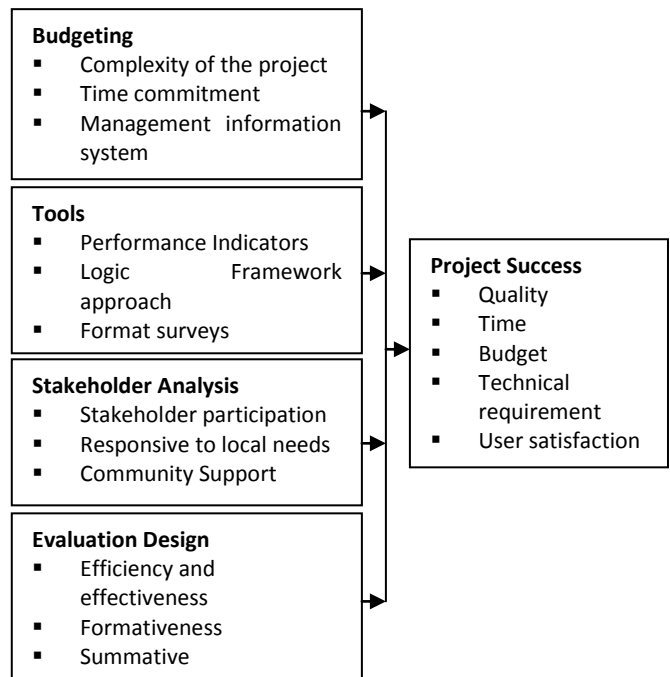
Stakeholder theory was advanced by Freeman (1994) and suggests that firms have both implicit and explicit contracts with a variety of components and are accountable of respecting all contracts if it has to realize its objectives. Consequently, the capacity of firm to manage organizational relationships is a firm's very important resource which in absence of the same, it cannot acquire the supplies it needs, solve customer problems and generate revenue. As recognized by Hsiao, Tsai and Lee (2012) in the current competitive market environments, organizations should progressively focus on the establishment of important knowledge to sustain its competitiveness and since an individual firm has inadequate set of resources in its capacity to establish such knowledge, it is imperative that it develops appropriate alliances

with other firms to leverage on each other's strengths. Therefore, firms may gain advantage from working together with other players in the industry to establish unique knowledge throughout the process of innovation, for instance. Although the stakeholder theory is entrenched in strategic management, the idea has been functional to various research fields, for example project management.

### Resource Dependence Theory

Resource Dependency Theory (RDT) was advanced by Pfeffer (1981) and provides that the survival strategy of an organization depends upon its capacity to acquire and maintain fundamental resources within the organization. However, the theory further states that the chances of organization's survival and progress can be enhanced by the managers through proper decision making process involving joining or forming an alliance with appropriate partners enriched with resources that the organization will benefit economically or maintain its autonomy nature. However, strategies that satisfy acquisition of both the external and internal resources must be established and implemented. Organizations normally venture into alliances due to the mutual benefit of resources leading to interdependence among firms. Consequently, resources empowers organizations, which changes the status of relationships by prioritizing the interests of shareholders, working towards escalating their significance and revising compensation activities to enhance performance and dividend shared (Pfeffer & Salancik, 1978). The theory emphasizes on measures that an organizations adopt in order to stabilize transaction costs and enhance ways in which resources can be acquired efficiently from all spheres of influence.

### Conceptual Framework



Independent Variables      Dependent Variable

**Figure 1: Conceptual Framework**

Source: Author (2018)

### Empirical Literature Review

This section analyses the previous studies and literature that have been done in respect of the variables. Serra and Kunc (2015) investigated the advantage of effective management and its impact on the success of a project as well as implementation of organizational strategies. While utilizing questionnaires for primary data collection and analytical survey instruments for data analysis, the study discovered that effective management practices have a positive predicting ability of project success on proper implementation of strategic business activities. Thus, it is evident that effective management practices are efficient supporting approach towards successful implementation of business strategies. Further, as a result of weak relationship between the concept of project success and value creation, effective management strategies have not clearly predicted the real potential extent of project success as compared to high capacity they have on a balanced combination of scope. They suggest that based on the study findings, countries or organizations should attempt

to prioritize a number of projects or practices, according to the composition of individual project and expected benefits.

Similarly, Joslin and Müller (2015) conducted an investigation to establish the nature of relationship between project success and project management in various project management practices in France. Cross-sectional research design was adopted to attract responses from global perspective, in that online survey that covered 254 responses was done. Moderated hierarchical regression and Factor analysis were the methods of analysis used by the researchers to obtain statistical findings. Consequently, the study findings established that adoption of a PMM was at 22.3% of the variance in success of a project, and PMMs that are sufficiently considered to comprehensively manage the activities of a project results into higher likelihood of project success compared with PMMs that require complements in order to be applicable. Further, they found that project management acts as a quasi-arbiter in this relationship.

Gudienė, Banaitienė and Banaitis (2013) investigated the fundamental factors that facilitates success of Construction Project activities in Lithuania based on a survey of 171 construction firms and review of the literature in the country identified ten factors involving competence of project manager, and team players in a project management. In addition, the skills of a coordinating project manager was found to affect the success of projects, project value, competence of team players in a project management, the precise goals of the customer, effectiveness of project manager and well-timed conflict resolution. Beringer, Jonas and Kock (2013) in an attempt to validate the Stakeholder theory examined the characteristics of internal stakeholders in a project management portfolio and its influence on organizational success in Germany, Austria and Switzerland. The study adopted mailing system to collect data in which a total of 1455 managers of organizations were contacted; they gave detail explanation on individual returns and objectives of each organization. The study found that the

portfolio line managers and individual project line managers were found to affect the success of the projects.

Guyo and Hassan (2017) studied the determinants of completion of Government Funded Urban Construction Projects in Nairobi City County, Kenya. The study adopted descriptive survey and sample of 68 was considered for the study. Conversely, the sources of secondary data comprised of periodicals, journals, reports and magazines to complement the primary data. The study variables were regressed at 5% level of significance and 95% confidence level to determine direction and strength of their relationship. There is need to enhance project design specification and project procurement procedures through the tendering systems, and monitoring and evaluation to reduce the project cost especially on the material cost, labor cost, equipment cost, control cost overruns and deficiencies on cost estimates on implementation of projects to enhance performance of the projects.

Karani, Bichanga and Kamau (2014) examined the impacts of effective implementation of monitoring and evaluation strategies on an attempt to manage projects relating to HIV/AIDS among the NGOs in Kenya. By using research instruments such as questionnaires, observation and interviews, the researchers managed to distribute questionnaires to 24 project assistant managers and interviewed respective managers. The study findings demonstrated that while conducting environment evaluation at which the HIV/AIDS projects are situated, there is adequate availability of resources that will enhance proper management on implementation of these monitoring and evaluation strategies.

Kanda and Mugambi (2013) sought to find out factors that influence efficacy of monitoring and evaluation of community based projects that are donor and government funded. The study employed desk research whereby books, journals and other research documents on M&E were analyzed in fine points to establish a number of determinants of efficient M&E strategy

implementation of the said projects. In the event that prevailing M&E activities are timely, reliable and accurate, they suggested that existence of these three determinants will facilitate timely completion of projects as well as effective coordination among project activities. In addition, they suggest the interests and demand of stakeholders should be prioritized all along the process of M&E. The study recommends that researchers should elaborate more on the problems that project field officers face when carrying out M&E activities.

Wachiayu (2012) conducted study in an attempt to investigate factors that influence efficacy of monitoring and evaluation on development projects success: a case of Starehe sub-county, Kenya. The study adopted a descriptive survey design and targeted 231 respondents and a sample of 144 respondents from the target population. Additionally, the researcher employed stratified sampling technique in which questionnaires were designed to provide a guide on how characteristics of interest were to be gathered. In order to test reliability and credibility of research instruments, the researcher conducted a pilot study. The study revealed that strength of monitoring team, budgetary allocation, M&E plan and selection of tools and techniques played an important role in determining the success of development projects. M & E is important for success of any project, yet in most development projects it has not been adopted effectively.

## METHODOLOGY

This study adopted a descriptive research design guided by a survey. The design was deemed strategic because the major interest will be to establish the viable link and define how the features support matters under study. According to Mugenda and Mugenda (2008) a descriptive research design can be defined as a methodical, practical analysis into which direct control of independent variable by the researcher is not visible as their manifestation has already occurred or because it cannot be altered. The population of

the study was all the housing units' contractors registered with the National Construction Authority (NCA) and operating in Nairobi. There were 89 contractors registered with NCA and this formed the population of the study. The researcher targeted those construction firms that had their headquarters in Nairobi. The longer the duration that the firms had operated, the most likely it would have established effective monitoring and evaluation capabilities to guide the firm through the changing business environment. The questionnaire was administered following the total design method generally with pre-notification correspondence and the questionnaires will be dropped and picked later. This study used multiple linear regressions.

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ . Where;

Y= Project Success

X<sub>1</sub> = Budgeting

X<sub>2</sub> = Tools

X<sub>3</sub> = Stakeholder Analysis

X<sub>4</sub> = Evaluation Design

## RESULTS

### Monitoring Budget

The findings on how the construction firms undertook their monitoring budget function is presented in Table 1. Monitoring budget is concerned with the manner in which allocation of resources is done and a firm should focus on time commitments, complexity and scope of the evaluation. Majority of the respondents agreed that financiers of projects emphasize on ensuring that monitoring and evaluation cost is budgeted before approving any proposals for funding (M=4.048) and the projects have strategies and systems for creating appropriate amount of finance and proper resource management before, during and after project implementation (M=3.491, SD=1.058). However the higher statement deviation among the respondents indicates that there was high variation in their responses. On the lower side of the continuum, the results show that there is a low extend on the adherence to the Budget during project implementation services (M=2.981) and that budget cost of a project was to a low extent



being delineated from the overall project budget with an aim to define the critical role it plays in the overall project success (M= 2.301).

Monitoring budgeting practice is concerned with allocating resources to the projects. The study found that when undertaking the gated community projects, financiers of various projects emphasize that sufficient funds and resources is budgeted to facilitate the process of monitoring and evaluation. This was identified as a key step in project implementation by Mauricas (2013) when he noted that budgeting process acts to facilitate the actual strategy of a company that is evident via

**Table 1: Monitoring Budget**

Statement	Mean	Std deviation
Budget for proposals	4.048	.908
Adequate levels of finance	3.491	1.058
Provision for monitoring budget finance usage	3.148	.737
There is adherence to the Budget	2.981	.829
Budget cost of a project is delineated from the overall project budget	2.401	.705
<b>Overall mean</b>	<b>3.214</b>	

### Monitoring Tools

The respondents were asked to indicate the extent to which the construction firms make use of different monitoring tools used during project implementation. The result findings are as shown in Table 2 below. The findings showed that as a monitoring tools, the most popular technique applied include the evaluation of time schedule of project outcomes on a continuously basis based on the prevailing project state (M=3.851). Similarly, to a moderate extent, Logical Framework Matrix was being adapted by the firms (M=3.648). In addition, to a low extent, performance Indicators were used by the construction firms (M=2.306).

Application of monitoring tools was the second M & E practices that are applied by construction firms to enhance project success. Application of Logical

**Table 2: Monitoring Tools**

Statement	Mean	Std. Deviation
Evaluation of time schedule	3.851	.633
Logical Framework Matrix	3.648	.855
Format surveys	3.320	1.004
Performance Indicators	2.306	.770
<b>Overall Mean</b>	<b>3.251</b>	

introduction of new processes, products, services and achievement of a particular level of outcomes in which resources are channeled. The monitoring budget was found by Chan and Chan (2004) to have a significant effect on project as measured by time, cost and safety. Similarly, the findings was that there is adequate provision for monitoring budget finance usage during the project implementation because as Mbachu and Nkado (2007) inadequate financing of monitoring finances constitute one of the controllable factors that affects the success of construction projects.

Framework Matrix in relation to strategic plan was found to be popular monitoring tool applied by the gated community contractors in Nairobi. Further, the results showered that logical framework was used in the monitoring phase of project evaluation. The adoption of logical framework in project management within the gated community projects in Nairobi is in line with the findings by Milika (2011) who found that logical framework facilitates analysis of current circumstance such as, recognition of the needs of stakeholders and the definition of associated objectives, determine a causal relationship between activities, inputs and outcomes.

### Stakeholder Evaluation

This practice involves the project managers analyzing the project set up involving all organizations, and respective links between them, that are likely to influence the ongoing projects. The respondents were asked to indicate the extent to which stakeholder evaluation was undertaken by the firms before and during implementation of the projects. The results in Table 3 showed that with regard to stakeholder evaluation, the contractors identifies all the stakeholders especially the key ones that will affect the success of the projects (M=4.027) and that key stakeholders are identified and various stakeholders in the site that the project is undertaken to rope in their support and achieve project success (M=3.932). To a low extent, the finding show that stakeholders avail to the monitoring and evaluation team sufficient and

relevant information useful for the project success (M= 2.038).

The importance of stakeholder’s involvement in the project success is based on the realization that the success of a project is not a simple unitary concept to be undertaken by a firm but rather depends on the stakeholder who is assessing that success (Baccarini, 2009). In recognition of the importance of stakeholder involvement, different groups of stakeholders were identified in the project. These included government institutions, local communities and opinion leaders in the locality. The results shows that with regard to stakeholder evaluation, the contractors identify all the stakeholders especially the key ones that affect the success of the projects and are incorporated in the project implementation with their opinion being considered.

**Table 3: Stakeholder Evaluation**

Statement	Mean	Std. Deviation
The contractor identifies all the stakeholders	4.027	.687
The contractors involves various stakeholders	3.932	0.937
The demands of the stakeholders change and the firm keeps on adjusting to the needs	3.484	1.005
Different strategies are employed by different stakeholders	3.168	1.091
Stakeholders avail to the M&E team sufficient and relevant information	2.038	0.892
<b>Overall Mean</b>	<b>3.330</b>	

### Evaluation Design

The respondents were asked to indicate the extent to which the construction firms employ evaluation design strategy during project evaluation. The results were presented in Table 4.

The study found that with regard to evaluation design, the company found that the construction firm continuously identifies gaps during implementation stage to align the actual and

planned activities and reduce the variance (M=3.682), as well as the determination of needs assessment and an all inclusive process whereby both the client and contractor are involved in relevant decision (M=3.723). Similarly, the study found that resources are adequately allocated to project implementation (M=3.364). However, the study found that to a lower extent, the respondents indicated that the firms have skilled personnel who can fulfill the monitoring and evaluation functions (M=2.762).

**Table 4: Evaluation Design**

Statement	Mean	Std. Deviation
Gaps are continuously identified	3.682	0.961
Client and contractor are involved in needs assessment	3.723	0.632

Resources are allocated to project implementation	3.364	1.005
Training needs are identified	3.007	0.673
There are skilled personnel for evaluation	2..762	0.826
<b>Overall Mean</b>	<b>3.330</b>	

### Project Success

On Estimated Budget respondents were kindly requested to indicate the estimated budget of the projects undertaken by their organizations. Based on the study findings, majority of the respondents (45%) indicated the estimated budget to be between Ksh. 1-5 M, 30% indicated between Ksh. 5-10 M, 19% indicated between Ksh. 10-15 M while only 5% of the respondents who indicated Ksh. above 15 M. This implied that the estimated budget of the projects undertaken by most of housing units' contractors in Kenya firms was between Ksh. 1-5 M.

On completion Costs the study sought to establish from the respondents the completion costs of the projects undertaken by their organizations. Based on the study findings, majority of the respondents (39%) indicated the completion costs to be between Ksh. 1-5 M, 27% indicated between Ksh. 5-10 M, 23% indicated between Ksh. 10-15 M while only 11% of the respondents who indicated Ksh. above 15 M. This implied that the completion costs of the projects undertaken by most of housing units' contractors in Kenya firms is between Ksh. 1-5 M.

On estimated duration, respondents were kindly requested to indicate the estimated duration of projects in their organization. Based on the study findings, majority of the respondents (48%) indicated the estimated duration of projects that their organization have done to be above 90 days, 33% indicated between 61-90 days, 13% indicated between 31-60 days while only 6% of the respondents who indicated the estimated duration of projects in their organization be above 15

projects. This implied that estimated duration of projects in their organization ranges above 90 days.

On completion duration, the study sought to establish the completion duration of projects in their organization. Based on the study findings, majority of the respondents (45%) indicated the completion duration of projects that their organization have done to be above 90 days, 28% indicated between 61-90 days, 16% indicated between 31-60 days while only 11% of the respondents who indicated the completion duration of projects in their organization be above 15 projects. This implies that completion duration of projects in their organization ranges above 90 days.

### Relationship between Monitoring and Evaluation; and Project Success

The respondents were also to give their views on the relationship that exist between monitoring and evaluation practices and success of projects. This section aimed at establishing the link between the dependent and independent variables. The results indicated that budget monitoring had resulted in controlled cost, resulted in defined project completion and allocation of adequate resources ( $M = 4.032$ ,  $SD = 1.2.12$ ), though with the high standard deviation it implies that there was a high variation in responses. Similarly, the findings show that adoption of monitoring tools had resulted in realization of planned quality standard and meet client requirement ( $M = 3.851$ ). In addition, adoption of stakeholder evaluation practice had resulted in increased stakeholder support, adherence to health and risk assessment requirements ( $M = 4.202$ ).

**Table 5: Monitoring and Evaluation Practices**

Statement	Mean	Std. Deviation
Monitoring Budget:		
▪ Controlled project cost	4.032	1.212
▪ Defined project duration		
▪ Adequate funds and resources		
Monitoring Tools:		
▪ Planned quality standard	3.851	.716
▪ Meet client requirement		
▪ Meet project specification		
Stakeholder Evaluation:		
▪ Stakeholder support	4.202	.917
▪ Meet national profile		
▪ Health and safety standards		
▪ Timely Conflict resolution		
Evaluation Design:		
▪ Completed according to specification	4.081	.682
▪ Risk identification		
▪ Skilled personnel availability		
<b>Overall Mean</b>	<b>4.042</b>	

**Regression Analysis**

**Model Summary**

Table 6: below showed model summary of regressed variable of the study. The correlation coefficient (R) value represents the degree and strength of relationship between dependent variable and the independent variables. Coefficient of correlation ranges between -1 and 1 and in this model the coefficient of correlation is 0.692 which indicates a positive correlation between monitoring budget, monitoring tools, stakeholder evaluation

and evaluation design and project success. The R Squared is the coefficient of determination which indicates how much of the total variation in the dependent variable. From the above the R squared statistic gives the goodness of fit of the model which shows how good the regression model approximates the real data points. The R squared of this model is 0.479 which shows that the model is a good fit of the actual data. The coefficient of determination of 0.479 implies that 47.9 % of the variance in dependent variable is explained by changes in the independent variables.

**Table 6: Model Summary, Multiple Regression**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.692 <sup>a</sup>	.479	.345	0.0131

a. Predictors: (Constant), monitoring budget, monitoring tools, stakeholder evaluation and evaluation design

b. Dependent Variable: Project success

**ANOVA (Analysis of Variance)**

The model summary below indicated that the dependent variable (**project**) is significantly accurately predicted by the regression model. The regression model’s statistical significance that was conducted is shown by the F test. The P=0.001, implying it is less than 0.05 designates that,

generally the regression model significantly and statistically forecasts the expected variable outcome and that it is a good test of fit for the data.

The researcher also sought to determine the relationship existing between project success and M&E practices by establishing a regression

equation. The result was presented in the ANOVA Table 7:

**Table 7: Analysis of Variance (ANOVA), Multiple Regression**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6.942	4	2.314	6.51	.001 <sup>a</sup>
	Residual	26.98	64	0.355		
	Total	33.992	68			

a. Predictors: (Constant), monitoring budget, monitoring tools, stakeholder evaluation and evaluation design

b. Dependent Variable: Project success

**Table 8: Model Summary of Simple Regression for Project success(overall)**

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.168	.105		1.600	.663
	X <sub>1</sub>	.302	.198	.264	1.525	.23
	X <sub>2</sub>	.255	.233	.122	1.094	.481
	X <sub>3</sub>	.439	.115	.229	3.817	.000
	X <sub>4</sub>	.193	.151	.073	1.278	.000

a. Predictors: (Constant), monitoring budget, monitoring tools, stakeholder evaluation and evaluation design

b. Dependent Variable: Project success

The overall equation model for project success and predictor variables was as follows;

$$Y = 0.168 + 0.302X_1 + 0.255X_2 + 0.439X_3 + 0.193X_4$$

From the model, in any given time, the project success will be 0.168 when all the predictor values are zero. The model indicates that when monitoring budget changes by one unit the project success will increase by 0.302. Also, when monitoring tools are changes by one unit, the organization project success will increase by 0.055 units. In addition, when stakeholder evaluation is done during project evaluation, changes by one unit the success of a project by 0.439 and when evaluation design is incorporated in project implementation changes by one unit the organisation project success increases by 0.193.

## CONCLUSION

The success of the gated community units, just like all other projects is of importance to a contractor and therefore, the understanding of the factors that influence the success of the projects is of

importance to a contractor. The study findings established that project success is influenced by among other the monitoring and evaluation practices adopted by a construction firm. It was observed that having a budget set aside for monitoring the project implementation as well as adoption of the appropriate project tools influencing positively the success of a project. Employment of project tools such as a strategic plan, logical framework and budget had a significant effect on the success of gated community projects and is important therefore that a firm properly formulates and adheres to an M & E plan developed. Further, it can be concluded that to successful achieve a project intention, then the M&E plan should be part of strategic plan; the budget should be clearly defined in the strategic plan. From the findings, it can be concluded that M & E practice is critical to the successful achievement of project objectives and this indicate that the management team of a project and the manager have major role in contributing towards effective

construction projects implementation. The study also established that every project has unique type of stakeholders and the identification of stakeholders that will influence a project success should start before the construction, during the construction phase also till the completion stage.

### **RECOMMENDATION**

The study established that those entrusted with spearheading the monitoring and evaluation of the gated community projects should be knowledgeable on different kinds of monitoring tools and their specific application on different set-up of projects. It was recommended that training on the applicability of M & E tools should be carried out to equip the project staff on the usefulness of the tools to improve the project success rate.

The findings also reinforced the importance of gaining the stakeholders' support for a successful project success. It is therefore recommended contractors identify key stakeholders whose

support is critical to a project success and where necessary continuous consultation be carried throughout the implementation of projects.

### **Suggestion for Further Research**

The study established that majority of the respondents did not understand the different monitoring tools that can be adopted during the M & E process. It was found that monitoring tools such as strategic plan, logical framework and project matrix was utilized to a limited level and therefore, there is need to carry a research to determine process and components of logical framework and how they influence project success.

The study found that to a moderate extent, M & E in general affect the success of the gated community projects. Future research should seek to determine whether what moderating or mediating factors influence the relationship between monitoring and evaluation practices and the success of projects.

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