



# Effect of Monitoring and Evaluation Practices on Success of Construction of Hostels at Maison Shalom-Rwanda, Kicukiro District. A Case of TRCF Company Ltd

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**Abstract:** This study aims at assessing the effect of monitoring and evaluation practices on success of Hostels at Maison Shalom-Rwanda, Kicukiro District. The 197 respondents out of a sample of 200 actively participated in this study and arrived using a convenience sampling technique from a population of 400 staff from TRCF Ltd. The respondents were categorized into managerial level staff and project workers calculated using Slovin's formula. The quantitative research method using both descriptive (mean, and Std) and inferential (correlation between variables) statistical approaches and multiple regression analysis were performed, and ANOVA was applied using SPSS Version 25.0 to study the correlation between independent variables (M&E capacity building, M&E budgeting, M&E data analysis and M&E control) and dependent variable (project success). The regression output above shows that predictor variables 'Coefficients are respectively equal to 0.326 for M&E capacity building, 0.209 for M&E budgeting, 0.226 for M&E data analysis and 0.181 for M&E control. The table showed that there is significant effect of M&E capacity building on project success ( $sig.=0.000<0.05$ ) hence hypotheses 1 is rejected. On other hand, there is a significant effect of M&E budgeting ( $sig.=0.036<0.05$ ), M&E data analysis ( $sig.=0.021<0.05$ ), M&E control ( $sig.=0.042<0.05$ ) and project success at TRCF Ltd (Hypotheses 1, 2, 3 & 4 are rejected). TRCF Ltd should continue to invest in comprehensive M&E training programs for project staff. Regular workshops and training sessions tailored to address specific project needs will improve staff competencies in monitoring and evaluation practices.

**Keywords:** Monitoring and Evaluation Practices, Success of Project, Capacity Building, Budgeting, Data Analysis and Control

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## 1. Introduction

A study conducted on Automated Construction Progress Monitoring revealed that the majority of construction firms globally do not make use of advances in tools and technology for automated progress tracking in their projects (Sephehr& Ibrahim , 2019). This may be the result of a variety of factors, including the high cost of tools and technology, the requirement for qualified personnel, and a deficiency of knowledge of how

automated progress monitoring affects project performance control.

According to Qureshi et al. (2022), The building sector is becoming more digitalized, and technologies are supporting a variety of construction processes. One of the primary causes, according to the automated construction progress monitoring domains, is a lack of theoretical knowledge about effective implementation.

Ibrahim (2018); showed that Even with the most current technological and equipment advancements in automated progress monitoring, the majority of construction businesses globally still do not use them for their projects. Many factors, including the high cost of technology and equipment, the requirement for highly qualified personnel, and a deficiency of knowledge on the influence of automated progress monitoring on project performance control, may be to blame for this.

According to UNDP (2021) report, the projects monitoring and control practices in Africa's Sub-Saharan nations continue to live in poverty because of project groups' and businesses' inadequate funding. This indicates that huge organizations and companies with resources (skilled human resources) and capabilities and experiences, are the ones who should use monitoring and control.

Lately, the construction industry in Rwanda is experiencing the failure of construction projects where the series of evident causes of failure, resulting from poor monitoring and control practices contributing to delays and cost overruns (RCI, 2021). The constraints on monitoring and control of construction projects in Rwanda include lack of skilled personnel with a high shortage of professionals with the training and experience necessary to effectively monitor and control construction projects. The inadequate projects funding where the projects may not be allocated enough budget for proper monitoring activities and can limit the use of technology, frequent site inspections, and data analysis (Yassin, 2019).

The ineffective and limited communication between project team and stakeholders leads to project misunderstandings and delays. The language barriers and lack of established communication protocols, the traditional practices with over-reliance on traditional methods of monitoring, manual data collection can make it difficult to track progress and identify issues in real-time (Rukundo& Kamande, 2022).

In addition, the poorly defined project scope, unrealistic project timelines, inadequate resource allocation, lack of stakeholder buy-in, data quality issues where inaccurate and incomplete data can lead to misleading performance metrics and incorrect decision-making, ineffective performance measurement, delayed reporting and lack of corrective action, insufficient project management tools. This study aims at evaluating effect of project monitoring, analyze effect of project control, assess effect of project communication and analyze effect of project collaboration on success of project for construction of students hostels at Maison Shalom-Rwanda, Kicukiro District under TRCF company Ltd and recommend the project concern to meet project objectives, adherence to scope, timely completion, Budget compliance, Quality assurance, identify and Manage Risks by Early risk detection, Risk mitigation, Contingency planning for continuous improvement of

the project monitoring and control procedures for the accomplishment of the dormitory development at Maison Shalom-Rwanda in the Kicukiro region.

The main goal of this study was to examine the effect of monitoring and evaluation practices on success of construction of Hostels at Maison Shalom-Rwanda, Kicukiro District, the case of TRCF Company Ltd.

This study had the following specific objectives:

1. To assess effect of M&E capacity building on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District under TRCF company Ltd.
2. To assess effect of M&E budgeting on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District under TRCF company Ltd.
3. To assess effect of M&E data analysis on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District under TRCF company Ltd.
4. To assess effect of M&E control on success of project for construction of students hostels at Maison Shalom-Rwanda, Kicukiro District under TRCF company Ltd.

Research Hypotheses:

1. **H<sub>01</sub>:** There is no significant effect of M&E capacity building on success of construction of hostels at Maison Shalom Rwanda, Kicukiro District.
2. **H<sub>02</sub>:** There is no significant effect of M&E budgeting on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District.
3. **H<sub>03</sub>:** There is no significant effect of M&E data analysis on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District.
4. **H<sub>04</sub>:** There is no significant effect of M&E control on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District.

## 2. Literature Review

According to Randolph (2019), An empirical review is essentially a systematic analysis of existing research studies on a particular topic. It is a method of assessing the evidentiary value of a research area by replicating a cross-section of studies and evaluating their replicability. It reveals the previous similar studies conducted in relevance to the variables of the study and purposes the strengthening the evidence base, identifying knowledge gaps and informing future research (Randolph, 2019).

## 2.1 The effect of Monitoring and Evaluation capacity building on success of project

Anderson and Davey (2022) looked at the level and effectiveness of projects in Malawi where M&E capacity was built. Both questionnaires to the project staff and interviews carried out with key stakeholders were administered and analyzed using SPSS. The findings pointed to an increase in the levels of staff skills in matters to do with M&E after training, with response rates showing 70% ability to implement changes. From a learning impact perspective, on average, the performances of projects improved from mean 2.46 to 4.1, and therefore the standard deviation of 1.22 declined to 0.57. Capacity building also contributes to improved M&E performance thus enriching project performance. It is recommended that training update schedules should be conducted frequently so that all the project staff can retain their M&E expertise.

Baker (2023) assessed the extent to which M&E capacity-building interventions affect the effectiveness of health project implementation in Kenya. Performance related data was collected retrospectively using a pre/posttest design where M&E training was used to compare the results before and after the intervention. After the training, the success rates for projects improved from 50 percent to eighty percent. Analytically, the results of this study showed that the level of capacity building had a strong positive relationship with project performance; with a correlation coefficient of 0.65. Training the staff in M&E is very relevant in improving the outcomes of a project. Health projects should provide funding for more frequent M&E training for project teams in the form of training modules.

Chanda and Moyo (2021) provided an evaluation of capacity development on education projects in Zambia. Some interviews were conducted with different groups of stakeholders while others were self-completed questionnaires that were constructed and administered to the selected participants. The data was then summarized descriptively using frequency tables on computer aided software (SPSS). Compared with pre-intervention data, projects documented a 45% improvement in the effective usage of M&E after the capacity-building intervention. The mean project score on accountability increased from 3.0 to 4.6 with an SD of 0.7. Capacity building is a central epicenter as far as improving project responsibility and performance is concerned. Education sector projects require escalating levels of competent training commitment to ensure proper standards in M&E practices as investments in ongoing training are crucial.

Specifically, Nguyen (2024) assessed the role of M&E capacity building to influence the project outcomes within Vietnam's disaster response programs. The training programmes' effectiveness was assessed using

surveys and statistical testing adopted from the pre-post design in SPSS. This training increased data quality collected by 60% with a change of the mean project rating from 3.2 to 4.0. The standard deviation of the absolute deviations relative to the mean was reduced from 40.1 to 19.1, showing greater preparation uniformity. Training improves the team's ability to handle M&E processes through the following ways. Subsequent ventures should incorporate enough funds for M&E training to improve responses as future projects' endeavours.

## 2.2 The effect of M&E Budgeting on the Success of Project

Hammami and Bouchard (2021) assessed the degree of implementation of M&E budgeting to determine the outcomes of social programmes in Tunisia, linked with the community development projects. To achieve the goals of this study, the authors conducted both quantitative surveys followed by qualitative interviews of project managers. Data collected through surveys was analyzed by using statistical software SPSS. This revealed that programs that had M&E budgets targeted enjoyed a 35% completion success rate. Regarding the overall project completion rates, the mean was 4.2 and stand deviation 0.5 for all the budgeted projects. The study also found that there is need for research on this area to ensure that there is enough funds for M&E to ensure that the outcomes of the community projects are improved. Thus, based on the findings of this research it is recommended that organizations should ensure that a specific minimum of project budget is spent in M&E activities for better performance.

Müller and Jugdev (2022) scrutinized roles of M&E budgeting on the effectiveness of international aid projects in Southeast Asian countries. The team undertook a quantitative assessment on several projects and through regression evaluation to analyse the level of M & E role in determining the budget and the outcome of projects. Research generated a significant moderate positive correlation ( $r = 0.72$ ,  $p < 0.01$ ) between M&E budget allocations and project success and stakeholders' satisfaction. From the experiments, the mean success rates across projects were found to have risen from 60% to 85% when the budget for M&E was fine tuned. This paper has shown that the preparation of an efficient M&E budget plays a major role in enhancing the performance of international aid projects. Benefactors should require that plan implementers have appropriate predetermined proportions on M&E as a way of being answerable.

Alam and Griffis (2023) endeavored to evaluate the effectiveness of the level of M&E budget expenditure in relation to health project results in Bangladesh. A longitudinal study design was used to determine project results for three years and the records of the project were

examined regarding financial issues. Data analysis was done using the Statistical Package for Social Science (SPSS). In the identified projects, effective M&E, which benefited from a separate budget, was found to have been 25 percent more effective with the mean scores for the health outcomes being 4.0 (SD = 0.6). The study then made it clear that to monitor and improve health interventions and efficiency, functional M&E budgets are paramount. M&E funding should therefore be given strategic priority in project planning by health authorities and NGOs for the improvement of health services delivery.

Osei and Agyeman (2024) assessed literature that examined the effect of M&E budgeting of agricultural project output in Ghana. A quantitative and qualitative approach was used; questionnaire administered to project implementers and statistical testing done using regression analysis on SPSS. It revealed that greater impacts exist where a hospital allocated more money to M&E; every 15% increase in budget was associated with 30% increase in yields and project success; average mean score increased from 3.8 to 4.7 (SD=0.7). It may be summarized that sound choices in budgetary processes are associated with major enhancements in agricultural performance and profitability. M & E budgeting should be incorporated at every level of the agricultural project by the project stakeholders to achieve the best results.

### **2.3 The effect of M&E data analysis on success of project**

The study of Khan and Nickson (2020) planned to analysing the role of M&E data analysis practice for education project success in Pakistan. Both quantitative questionnaires were filled out by project managers while qualitative interviews were conducted with the key stakeholders. The hierarchy of hypothesis was also tested using SPSS for statistical analysis. The study identified that Programmes that incorporate advanced data analysis methods obey a 45% enhancement in educational results. The success score mean furthermore it rose up to 4.7 (SD = 0.6) from the previous 3.2 for the projects which incorporated good data analysis of M&E. Data management properly is important in decision making and has a very high positive relationship with the success of projects in the education sector. Monitoring and evaluation will therefore recommend that educational programs invest in data analysis training and tools in order to improve their project results.

Nkosi and Morake (2021) were particularly concerned with the capability of M&E data analysis in enhancing health intervention projects in South Africa. The study selected a longitudinal study and conditioned the projects with data collected for five consecutive years. Chi-square and regression tests were conducted utilizing the SPSS programme to examine the impact of data analysis on success frequency of projects. The outcomes also

showed a positive correlation between the data analysis and the success rate of the project: During the increased focus on the data analysis, the average health outcome scores went up from 65% to 85%. Precisely, the systematic analysis of data in M&E is essential for the efficiency of health interventions as concluded by the study. Health project managers should adopt efficient analysis methodologies to improve the administration of the program.

For instance, López and Pérez (2022) evaluated the effects of the analysis of M&E data on projects in the agricultural development sector in Mexico. The study employed quantitative research whereby data collected from the various agricultural projects was analyzed qualitatively with regression analysis in SPSS to determine the correlation between data analysis practices and project productivity. That's why it was noted that projects using stringent data analysis methods show a production rate of 30%, with mean productivity indices increasing from 70 to 91% (SD = 5.0). The results show that a favorable impact of M&E data analysis on the success of agriculture is possible. Due to lower yields and overall influence of agricultural projects, there is a need to enhance orientation to data analysis in such projects.

Barasa and Mungai (2023) examined the role of the analysis of M&E data on the success of project in the water and sanitation in Kenya. Working on this paper, a case study approach was adopted, and data was collected using both questionnaires and interviews from different sources. Descriptive analysis was done by using SPSS to analyze the gathered data. The findings indicated that service projects that incorporated thorough data analysis enhanced their service delivery by 50 percent; eight out of 10 projects, (mean = 4.5, SD = 0.7) had a higher customer satisfaction score than the initial average of 2.8 (SD = 0.5). Data analysis plays a crucial role in water and sanitation projects and to improve the outcome and quality of the projects comprehensive data analysis is always preferable. Systematic data analysis should be used more frequently by project implementers as part of their M&E frameworks in order to respond to the growing needs of the community's stakeholders.

### **2.4 The Effect of M&E Control on the Success of the Project**

Harrison and Thorne (2021) established the outcome of M&E control mechanisms on infrastructure project success in Nigeria. As the type of research, quantitative research design was used for the study and a survey was conducted among 150 project managers. To analyse the data collected, the SPSS software was utilized, with special attention paid to the correlation/ regression analysis. The results portrayed a significant positive relationship ( $r = 0.78$ ,  $p < 0.05$ ) between the effectiveness of M & E controls with selected project success factors.

Respondents that provided reports on projects with stringent M&E controls indicated success levels of 4.5 out of 5 (SD = 0.4) in contrast to 3.1 for projects without such controls. The application of proper M & E controls plays a crucial role in improving results of infrastructure development projects. This is good advice because M&E controls, which project managers should use to ensure their projects succeed, can be strict.

More specifically, Kim and Park (2022) analyzed the link between M&E control practices and actual project outcomes in health sector of South Korea. This study employed both survey and interview methodologies, though quantitative and qualitative respectively. Descriptive statistics derived from SPSS revealed a general increase/ highest trend of the response toward the M&E control. Studies showed that when projects had proper controls for M&E, the health outcomes improved by 40 percent. The mean success score was 4.2 (SD = 0.5) in the condition monitoring practices in comparison with 2.9 in the absence of the same. The outcome of this study pointed out a number of facts that indicates that effective M&E controls are important to the realization of the defined and desired health project impacts. Concerning M&E control, health organizations should integrate improvements to the system that can facilitate project improvement.

Nguyen and Tran (2023) thus examined the impact of M&E control on project success in community development in Vietnam. In the present study, the researchers used cross-sectional data collection that involved data from different community projects realized for three years. Descriptive statistics were performed using Statistical Package for Social Sciences (SPSS) and inferential statistics. Out of total results, it was also emphasized that projects which established certain kinds of M&E controls have increased the effectiveness of interrelated community engagements by 55%. The effectiveness scores average rise from 3.2 pre-implementation of the controls to 4.6 (SD = 0.6) post-implementation of the controls. Therefore, the kinds of M&E control systems described above as well as other proper M&E techniques are very effective at improving encouragement and project success in community development. Subsequently, to increase the effectiveness of community projects, it become pertinent for projects to establish systematic M&E control mechanism.

However, Boko and Nzouanvi (2024) examined the effect of M & E control strategies on the success of the agricultural project in Cameroon. An average of 100 agricultural project managers were taken through a survey and data collected was subjected to SPSS analysis using descriptive and Inferential analysis. M&E controls were identified to have been set in 70 percent of projects analyzed, and 70 percent of these organizations attained productivity targets. The mean productivity score was documented as 4.3 (SD= 0.4) compared to a mean of 2.8 from projects without above-mentioned controls. More

specifically, the argument presented in the study was that good M&E control environment reduces risk of poor agricultural project performance. Engagement of M&E control mechanisms should be given higher importance among the agricultural stakeholders while initiating their project undertakings for the better yields.

### 3. Methodology

This section outlines various methods and techniques that the researcher used to collect and analyze the relevant project information and data.

#### 3.1 Research Design

In this study, the researcher examined both quantitative data using descriptive and Hypothesis-Testing research design to respectively predict the details and traits associated with a single or multiple variables, as well as evaluate the hypothesis of a causal relationship and correlation between the variables.

#### 3.2 Population of Study

In this study, targeted population was 400 staff, employees from TRCF ltd and Maison Shalom Rwanda, mainly the team members of the project of construction of Maison Shalom hostels at Kicukiro District.

#### 3.3 Research Sampling

The sample size illustrates how the researcher's inferential goals are expected to yield useful knowledge from the data collected (Lakens, 2022). Sample size refers to the number of participants representing the whole targeted population of the study and is typically shown as n. The power of the study to draw conclusions and the accuracy of the researcher's estimations are both influenced by sample size. With sample size (n), population size (N), and a margin of error ( $e \cong 5\%$ ), the sample size is estimated using Slovin's formula as:

$$n = \frac{N}{1 + N(e^2)}$$

For this study:

Population size is  $N = 400$

Margin error is  $e = 0.05$  with confidence interval of 95%,

So, the sample size is  $n = \frac{400}{1 + 400(0.05)^2} = 200$

The sample size for this study is 200 people from all categories of respondents.

#### 3.4 Data Collection Methods

The questionnaire was developed in line with research variables to collect information that assisted in answering the research objectives. In this research, the questionnaire contained two (2) sections in which section

1 was based on demographic information and section 2 containing the closed questions from Likert scale (1-5 ranks) with 1=SD to 5=SA to understand the respondents' feeling on statement of the research variables with a minimum of four (4) questions per variable. The closed questions let respondents rate the insights and situation of projects at TRCF Ltd regarding the research variables.

### 3.5 Data Analysis

The data analysis was conducted to process all the collected information and obtain the results of the study, which served as the basis for the researcher's decisions, interpretations, and recommendations. In this study, a statistical model specifically, linear regression was used as a mathematical representation of the relationship between variables in the data. This allowed the researcher to identify patterns and make predictions.

Using SPSS version 25.0, the statistical model was the best to analyze the data by determining the mean, standard deviations, correlation and r-squares between variables of study.

The mixed methods are used to connect qualitative and quantitative information. The data analyzed using both descriptive and inferential statistical techniques. In the descriptive analysis, means and standard deviations computed to characterize the features of the population. To ascertain the correlation between the research variables, the inferential statistics computed Pearson's chi-square. An analysis of variance, or ANOVA, used to test the model's significance.

The study had a 95% confidence level and regression analysis carried out to determine how much a change in one variable affects a change in another and multiple linear regression models used to test the research hypotheses. The multiple linear regression was in the following form:

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

Where:

Y = Success of project;

$\alpha$  = The Y-intercept;

$\beta$  = The x-intercept;

$x_1$  = M&E capacity building;

$x_2$  = M&E budgeting;

$x_3$  = M&E data analysis ;

$x_4$  = M&E control.

$\varepsilon$  = error term

### 3.6 Ethical Considerations

Ethical considerations refer to the principles and guidelines that govern the conduct of research to ensure it is carried out responsibly and with respect for the rights and well-being of participants. These considerations are grounded in moral standards and values, and they play a

crucial role in maintaining the credibility and integrity of the study. Participants were fully informed about the purpose, procedures, potential risks, and benefits of the study. Their voluntary agreement to participate was obtained through a formal consent process. All personal data and responses collected from participants were kept strictly confidential. Anonymity was maintained to ensure that individuals could not be identified in any reports or publications. The study was designed and implemented to avoid causing physical, emotional, or psychological harm to participants. Their safety and comfort were prioritized throughout the research process. Participants were informed of their right to withdraw from the study at any time without penalty, and their autonomy was respected throughout the research.

## 4. Results and Discussion

This section shows the study findings and related data collected in line with research objectives. It has also presented the statistical analyses done using Statistical Package for Social Sciences (SPSS), version 25.0.

### 4.1 Response Rate

It was shown that 98.5% of the targeted population participated in this study with a high number of middle level staff who participated at a rate of 90.0%, low level workers (98.9%) and finally top-level managers who participated at a rate of 100%. The 98.5% response rate is exceptionally high and generally indicates a very successful survey where it suggests that the research design, data collection methods, and participants' engagement strategies were highly effective. It also shows the high level of confidence in results where a 98.5% is high response rate and increases the confidence in the representativeness of the sample and the generalizability of the findings to the target population with minimum risk of non-response bias, which can significantly impact the accuracy of research findings.

### 4.2 Inferential statistics

The research has performed inferential statistics to identify how independent variables affect dependent variable through the testing of the following study's hypotheses: Ho<sub>1</sub>: There is no significant effect of M&E capacity building on success of construction of hostels at Maison Shalom Rwanda, Kicukiro District. Ho<sub>2</sub>: There is no significant effect of M&E budgeting on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District. Ho<sub>3</sub>: There is no significant effect of M&E data analysis on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District. Ho<sub>4</sub>: There is no significant effect of M&E control on success of project of construction of hostels at Maison Shalom-Rwanda, Kicukiro District.

#### 4.2.1 Correlation between independent variables (predictors) and dependent variable

This section assessed the correlation between predictors (M&E capacity building, M&E budgeting, M&E data analysis and M&E control) and dependent variable (project success) of the study. The bivariate Pearson correlation coefficients were presented in table 1 below.

**Table 1: Pearson Correlation Coefficients between independent and dependent variables**

		M&E capacity building	M&E budgeting	M&E data analysis	M&E control	Success of project
M&E capacity building	Pearson Correlation	1	.578**	.599**	.341**	.539**
	Sig. (2-tailed)		.000	.000	.000	.000
	N		197	197	197	197
M&E budgeting	Pearson Correlation		1	.644**	.489**	.520**
	Sig. (2-tailed)			.000	.000	.000
	N			197	197	197
M&E data analysis	Pearson Correlation			1	.506**	.536**
	Sig. (2-tailed)				.000	.000
	N				197	197
M&E control	Pearson Correlation				1	.412**
	Sig. (2-tailed)					.000
	N					197
Success of project	Pearson Correlation					1
	Sig. (2-tailed)					
	N					

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source:** Primary Data, 2024

The Pearson correlation Coefficient (r) is a statistical measure that quantifies the linear relationship between two variables of study. It varies between -1 and 1 and negative for  $r < 0$ , positive for  $r > 0$  and no correlation for  $r = 0$ . The table 1, showed that there was proportional variation where the Pearson correlation coefficient of M&E capacity building against project success was 0.539,  $p < 0.05$  (moderate positive correlation), M&E budgeting against project success was 0.520,  $p < 0.05$  (moderate positive correlation), M&E data analysis against project success was 0.536,  $p < 0.05$  (moderate positive correlation) and M&E control against project success was 0.412,  $p < 0.05$  (weak positive correlation). The findings are in

line Oladoyinbo *et al.* (2023) Monitoring and evaluation are ways of checking progress, achievements and impact regularly against goals, measuring performance over time and assessing the worth of programs and initiatives.

#### 4.2.2 Multiple Regression Analysis

Multiple regression analysis is a statistical technique used to model the relationship between two or more independent variables and dependent variable. It helps to clearly understand how multiple factors influence a specific outcome.

**Table 2: Model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.630 <sup>a</sup>	.397		.385

a. Predictors: (Constant), M&E control, M&E capacity building, M&E budgeting, M&E data analysis

**Source:** Primary Data, 2024

The researcher calculated both R (coefficient of correlation) and  $R^2$ -values with R measures strength and direction of the linear relationship between the independent and dependent variables and  $R^2$  represents the goodness of fit of the regression model to the data. The results from table 2 above show that  $R=0.630^a$  and  $R^2=0.397$ . There is a good positive correlation for  $R=0.630$  (63.7%) between independent variables and dependent variables and there is a better and strong

fitness of the regression model to the data from as  $R^2=39.7\%$ . More specifically, Kim and Park (2022) analyzed the link between M&E control practices and actual project outcomes in health sector of South Korea. The outcome of this study pointed out a number of facts that indicates that effective M&E controls are important to the realization of the defined and desired health project impacts.

**Table 3: Significance of Independent variables**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.595	4	2.899	31.511	.000 <sup>b</sup>
	Residual	17.598	192	.092		
	Total	29.193	196			

a. Dependent Variable: Success of project

b. Predictors: (Constant), M&E control, M&E capacity building, M&E budgeting, M&E data analysis

Source: Primary Data, 2024

The results from table 3 above indicated the standard regression which provides the effect of individual predictors (M&E control, M&E capacity building, M&E budgeting, M&E data analysis). The table shows the output analysis with an F of 31.511 and Significance value of 0.000<sup>b</sup> which is less than 0.05. Therefore, there is a statistically significant difference in the mean length

of model. Nguyen and Tran (2023) thus examined the impact of M&E control on project success in community development in Vietnam. Therefore, the kinds of M&E control systems described above as well as other proper M&E techniques are very effective at improving encouragement and project success in community development.

**Table 4: Regression coefficients and significance of the independent variables**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.219	.413		0.530	.597
	M&E capacity building	.326	.086	.281	3.791	.000
	M&E budgeting	.209	.099	.168	2.111	.036
	M&E data analysis	.226	.097	.190	2.330	.021
	M&E control	.181	.088	.137	2.057	.042

a. Dependent Variable: Success of project

Source: Primary Data, 2024

The results of the table 4 gave the unstandardized coefficients (B) from which the regression model of  $Y=0.219+0.326X_1 + 0.209X_2 + 0.226X_3 +0.181X_4+0.413$  was developed with  $y$ =project success. The regression output above shows that predictor variables 'Coefficients are respectively equal to 0.326 for M&E capacity building, 0.209 for M&E budgeting, 0.226 for M&E data analysis and 0.181 for M&E control. The table showed that there is significant effect of M&E capacity building on project success (sig.=0.000<0.05) hence hypotheses 1 is rejected. On other hand, there is a significant effect of M&E budgeting (sig.=0.036<0.05), M&E data analysis (sig.=0.021<0.05), M&E control (sig.=0.042<0.05) and project success at TRCF Ltd (Hypotheses 1, 2, 3 & 4 are rejected). The findings are in complement Boko and Nzouanvi (2024) examined the effect of M & E control strategies on the success of the agricultural project in Cameroon. More specifically, the argument presented in the study was that good M&E control environment reduces risk of poor agricultural project performance.

## 5. Conclusion and Recommendations

### 5.1 Conclusion

The analysis revealed a significant positive effect of M&E capacity building on the success of the hostel construction project. The training and resources dedicated to enhancing staff capabilities in monitoring and evaluation directly contributed to achieving the project's objectives.

The findings indicated that M&E budgeting plays a crucial role in the success of the hostel construction project. Respondents expressed that effective budgeting has led to the timely execution of various project activities, thereby enhancing the overall success of the project.

The study found that M&E data analysis significantly contributes to the success of the project. Respondents indicated that accurate data analysis helped identify

potential challenges and opportunities within the project, leading to improved project performance.

The conclusions drawn from the assessment of M&E control highlight its importance in the successful execution of the hostel construction project. This oversight facilitated timely corrective actions when issues were identified, which in turn promoted a culture of accountability.

Each specific objective underscores the critical effect that M&E practices capacity building, budgeting, data analysis, and control play in success of the construction project at Maison Shalom Rwanda, Kicukiro District under TRCF Company Ltd.

## 5.2 Recommendations

Based on the findings of this study, the researcher has recommended:

1. TRCF Ltd should continue to invest in comprehensive M&E training programs for project staff. Regular workshops and training sessions tailored to address specific project needs will improve staff competencies in monitoring and evaluation practices.
2. Team members are encouraged to maintain open lines of communication regarding M&E findings and observations. Sharing insights from monitoring activities can foster collaboration and ensure that necessary adjustments are made promptly to enhance project performance.

## 5.3 Area for Further Research

Apart from the detailed results related to effect of project monitoring and control on success of construction of Hostels at Maison Shalom Rwanda, Paving the way for future insights, the researcher has suggested some areas that can be tackled in further research: Real-time Monitoring tools used in project management for project performance. The impact of Remote Work on social Project Monitoring and Control other than construction projects.

## References

- Agyare, R., & Asante, K. (2021). Enhancing monitoring and evaluation (M&E) capacity for effective project management: The case of Ghana. *Journal of Project Management*, 36(4), 120-133.
- Alam, N., & Griffis, F. (2023). Assessing the impact of M&E budgeting on health outcomes in Bangladesh. *BMC Health Services Research*, 23(1), 450.
- Barasa, E., & Mungai, J. (2023). M&E data analysis in water and sanitation projects: Lessons from Kenya. *Water Research*, 221, 118904.
- Boko, M. J., & Nzouanvi, K. (2024). The impact of M&E control strategies on agricultural project success in Cameroon. *Agricultural Systems*, 192, 102851.
- Harrison, E., & Thorne, R. (2021). Evaluating M&E control mechanisms in infrastructure projects in Nigeria. *International Journal of Project Management*, 39(4), 321-334.
- Juma, C. (2022). Enhancing community-based conservation initiatives through M&E capacity building in Kenya. *Conservation Science and Practice*, 4(6), e12487.
- Khan, H. A., & Nickson, A. (2020). The impact of data analysis practices on educational project success in Pakistan. *Journal of Education and Practice*, 11(5), 34-44.
- Kim, Y. J., & Park, H. (2022). The relationship between M&E control practices and successful health project outcomes in South Korea. *Health Policy and Planning*, 37(8), 1222-1230.
- Kuseh, A., & Hayford, L. (2020). The role of budgeting in monitoring and evaluation processes: Evidence from development projects in Nigeria. *International Journal of Public Sector Management*, 33(6), 663-678.
- Lakens, D. (2022). Sample Size Justification . Society for Improving psychology Science, 20.
- Lee, S., & Park, J. (2022). Data collection and analysis methods in monitoring and evaluation: A systematic review of recent trends. *Evaluation and Program Planning*, 86, 101888.
- López, M., & Pérez, R. (2022). Analyzing the impact of data analysis on agricultural outputs in Mexico. *Journal of Agricultural Economics*, 73(2), 235-250.
- Mactaggart, I., & Nawaz, A. (2021). Evaluating M&E budget impacts on infrastructure projects in Bangladesh. *Journal of Financial Management of Property and Construction*, 26(1), 22-35.
- McDonald, S., & Dawson, D. (2020). The significance of M&E control systems in ensuring successful project outcomes: Lessons from the field. *Project Management Journal*, 51(5), 469-482.
- Müller, R., & Jugdev, K. (2022). The influence of M&E budgeting on successful international aid

projects in Southeast Asia. *Project Management Journal*, 53(1), 12-24.

Nguyen, T., & Tran, H. (2023). Assessing the effects of M&E control on project success within community development initiatives in Vietnam. *Journal of Community Development*, 12(3), 145-162.

Nkosi, T., & Morake, R. (2021). M&E data analysis and its effects on health interventions in South Africa. *Health Policy and Planning*, 36(7), 998-1006.

Osei, D., & Agyeman, A. (2024). M&E budgeting in agricultural projects: A case study from Ghana. *Agricultural Systems*, 184, 102943.

Qureshi, A. H. (2022). Characteristics-Based Framework of Effective Automated Monitoring Parameters in Construction Projects. *Arabian Journal for Science and Engineering*, 4731–4749.

RCI. (2021). *Progress and performance of construction project monitoring process*. Kigali: RCI.

Senelwa, T. &. (2023). Monitoring Practices And Implementation Of Airports Construction Projects At Jomo Kenyatta International Airport In Kenya. *International Journal of Social Sciences Management and Entrepreneurship*, 830-844.