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Abstract

The aim of this research was to determine the effect of project management practices on project performance in One Acre Fund Projects, with the following specific objectives: To evaluate the relationship of project business case and performance of One Acre Fund Project, to examine the contribution of project brief on performance of One Acre Fund Project, to investigate the relationship of creating project plan and performance of projects especially in One Acre Fund Project. This study was structured as an analysis of the project management methods on the performance of the One Acre Fund Project. It requires close observation of a situation and involves both qualitative and quantitative analysis. The responses to research surveys drawn from One Acre Fund Project workers. To gather data, the researcher used questionnaires to collect the data. 150 employees of One Acre Fund Project made up the population for the purposes of this study to refer to the study's target population as the area of concentration from which generalizations about the research findings were formed. The sample size was chosen by applying the Slovin's formula. Therefore, 109 respondents. The stratified sampling technique used to determine the appropriate sample size to select from each stratum. Both primary and secondary data were required to support this investigation. Descriptive and inferential statistics used to analyze the quantitative and qualitative data. Multi-stage and purposive sampling method Quantitative data analysis calculated using SPSS version 25.0, while information gathered through interviews and thematically analyzed using content analysis. The results indicate that a favorable correlation (r = 0.727, p=0.000< 0.05) was found between Project business case and performance of One Acre Fund Projects. The quality of the Project brief has a favorable relationship with the outcome of One Acre Fund Projects (r = 0.774, p=0.000< 0.05). In-depth project plan creation is positively correlated with the performance of One Acre Fund Projects, as shown by the data (r = 0.789, p=0.000< 0.05). One Acre Fund Rwanda should invest in well-structured, strategically aligned project business cases, regularly updating them to adapt to changing circumstances, and fostering improved project performance. Standardized guidelines for project briefs and monitoring their adherence are advised to enhance project initiation and goal consistency. Additionally, enhancing project planning processes, emphasizing adaptability through regular reviews and adjustments, is essential for optimizing project execution and performance.



1. Introduction

In developing countries, numerous projects and programs intended to address socio-economic challenges of their beneficiaries have faced significant obstacles in achieving their overarching objectives, despite securing funding from various internal and foreign donors. A considerable portion of these challenges can be attributed to deficient project management techniques (Kaluai, 2020). Research conducted in the past has revealed that projects in Rwanda encounter a myriad of issues that lead to failure, including inadequate risk management, resource limitations, and poor communication. This research has emphasized that success in project outcomes hinges on the meticulous consideration of key performance such as stakeholder engagement, monitoring, and decision-making. indicators, Mukeshimana's study (2021) underscores the critical role of implementing tools and procedures designed to avert project failures.

Though several studies have explored project management techniques and project performance in the region, there remains a substantial gap in the literature concerning the influence of the project business case, the development of a project brief, and the creation of a project plan on the performance of One Acre Fund Projects in Rwanda. While previous research by Gahigana (2019), Samuel (2018), Kobusingye *et al.* (2017), and Sibonama et al. (2020) has shed light on various factors affecting project success and performance, they did not specifically delve into these critical aspects. Therefore, the current study seeks to address these information gaps and contribute to a better understanding of how these specific project management elements impact the performance of development projects in the Rwandan context.

By examining the role of project business cases, project brief development, and project planning in the context of One Acre Fund Projects in Rwanda, this research aims to provide valuable insights that can inform more effective project management practices, ultimately facilitating the sustainable and successful achievement of socio-economic objectives in the region.

1.2 Objectives of the Study

The general objective was to determine the effect of project management practices on project performance in One Acre Fund Projects.

Specific Objectives

- i. To evaluate the effect of project business case on the performance of One Acre Fund Projects.
- ii. To examine the effect of project brief on performance of One Acre Fund Projects.
- iii. To investigate the effect of creating a project plan on performance of One Acre Fund Projects.

1.3 Research Hypotheses

The following hypotheses guided this study:

- i. There is no significant effect of project business case on the performance of One Acre Fund Projects.
- ii. There is no significant effect of project brief on performance of One Acre Fund Projects.
- iii. There is no significant effect of creating project plan on performance of One Acre Fund Projects.



2. Literature review

The literature review is an important part of this research because it helped to understand how much is already known about a topic and show where research could go next.

2.1 Theoretical Literature

To gain a better understanding of the key concepts of the research topic, the researcher reviewed several pieces of literature to arrive at an accurate definition.

Project Management Practices

Project Management Practices refer to the systematic methods, techniques, processes, and tools used to plan, execute, monitor, control, and close projects effectively. These practices are essential for ensuring that projects are completed successfully, meeting their objectives and delivering the desired outcomes. Project management practices encompass a wide range of activities and processes that facilitate the efficient management of resources, time, budget, risks, and stakeholders throughout the project lifecycle (Ahmed, 2021).

Building a business case for the project

According to the Association for Project Management, every project starts with a straightforward concept. But before you begin requesting financing, the project needs to be completely sketched and developed in order to transform it from a basic idea into an active campaign. Retire and gather your thoughts in one place if you want to launch your project quickly. Take into account the project's various requirements, the resources required, any barriers, and the procedures required to complete it (Evelyn, 2019).

Develop a project brief

According to Peter (2021) a project brief explains the purpose of a project, its methodology, and the management techniques that will be employed. Although it may not be as detailed as a project plan, it is still very important. The actors and the project team should get a brief but thorough presentation outlining the project. The project brief is a way of summarizing information and identifying the goals, deliverables, milestones, and schedule of the project. Making a thorough project brief can help everyone work together to effectively carry out the project's objectives. It will also open the door for a more effective plan and project timeline. The project summary is more effective at achieving the project's goals and objectives.

Create a project plan

According to Alex (2021), a project plan specifies exactly how each project phase must be carried out. This should provide a more detailed explanation of how you plan to manage the project and help your team achieve their goals. It is recommended that you consider the work duties of your colleagues when developing your project strategy. If problems arise, you can lose some momentum on your project. Despite the fact that the project plans may contain many changes, it is critical to consider the group's work while making decisions. When your strategy is complete, make sure you have the tools you need to identify problems, control labor costs, and monitor the project's overall progress.

Project performance

Project performance is a project's ability to meet its goals, objectives, and targets within the time, budget, and resources that are available. It is important to measure and manage project performance to make sure the project is finished successfully and gives the desired results. A



project's performance can be evaluated by various metrics, such as schedule variance, cost variance, quality, scope, and risk (Joslin & Muller, 2015).

2.2 Theoretical framework

For this study, theoretical framework is a thorough look at and evaluation of the existing theories and ideas about the topic under study. It is the process of systematically analyzing and putting together information from different sources in order to get a full picture of issue.

Goal setting theory

The goal-setting theory helped this research, which aims to improve project performance and get better results, by giving it a framework. The idea helped to make sure that everyone involved in a project is working toward the same goals and that resources are used in the best way possible by setting clear goals, creating motivation and commitment, and encouraging responsibility and ownership.

Theory of Change

In this study, the Theory of Change (ToC) used to help plan, carry out, and evaluate projects. The ToC method is especially useful for big, complicated projects where it is important to know what changes are happening and why, as well as how they are happening. The ToC method helped project managers get a better understanding of the environment in which their projects run and come up with strategies that are more in line with the results and goals of the project.

Results Based Management Theory

RBM emphasizes the importance of defining clear and measurable results and outcomes, and developing strategies and activities that are aligned with these objectives. It also emphasizes the importance of monitoring and evaluating progress towards these objectives, and using this information to adapt and improve programs and projects over time. RBM has evolved to include a range of tools and methodologies, such as logic models, performance indicators, and data management systems. RBM is widely used by governments, non-profit organizations, and private sector firms around the world to improve the effectiveness and accountability of their programs and projects (Segerstedt & Öhman, 2020).

Theory of Constraints

Project managers have to plan how those triple project constraints should be addressed as key to project performance. Early identification of project constraints/challenges helps in the selection of appropriate strategies to be used so that the project stay competitive regardless any factor that can hinder the project success. Each of those three limitations of the project (scope, cost and time) has its impacts on project s' execution yet since these components have some relationship, one imperative bears an impact on the other two, in the long run influencing ventures expectations to a more significant degree (Muchelule, 2018).

Most projects are difficult to manage because they involve uncertainty, and involve three different and opposing commitments (due date, budget, and content). Triple constraints criteria (time, scope and cost) in project management have been accepted as a measure of project success.



2.3 Conceptual Framework

The conceptual framework outlines the relationships between the independent variable, Project Management Practices, and the dependent variable, Project performance.

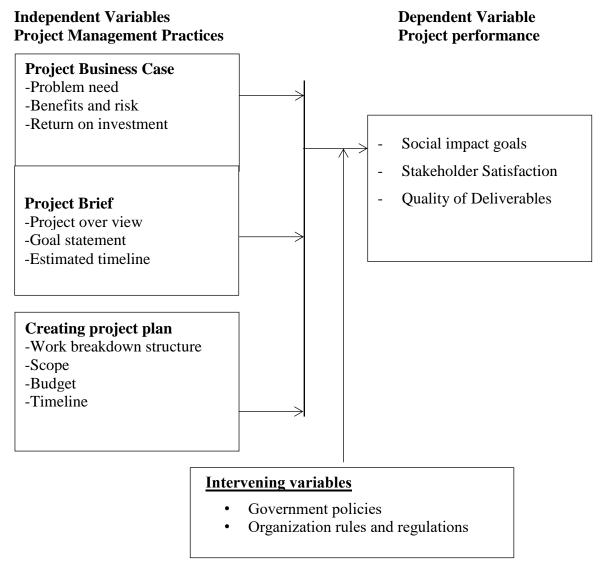


Figure 1: Conceptual Framework

Source: Researcher, (2023)

Project Management Practices (Independent Variable): This variable encompasses various practices involved in managing a project effectively. It includes: Project Business Case: This section defines the problem or need the project aims to address, identifies potential benefits and risks, and evaluates the return on investment (ROI) for the project. Project Brief: It provides an overview of the project, states the project's goals, and presents an estimated timeline for completion. Creating a Project Plan: This involves breaking down the project into manageable tasks using a work breakdown structure (WBS), defining the project's scope, setting a budget, and establishing a timeline. The quality of Project Management Practices directly affects the performance of the project by ensuring that it addresses social impact goals, achieves long-term benefits, operates effectively, satisfies stakeholders, and fosters productive partnerships.



3. Research methodology

Research Design

A study design describes the steps or procedures that helped the researcher arrive at a conclusion. It illustrates the approach the researcher take to address the study topics (Cooper & Schindler, 2014). For this study, a technique combining descriptive and correlational research was used. The study integrated interviews with frequencies, percentages, means, standard deviations, correlation analysis and regression analysis as part of a quantitative methodology.

Target Population and sample size

The participants of this study were 30 managers and another 120 employees of One Acre Fund Project, so that a total of 150 participants took part.

Sampling refers to the process and techniques a researcher uses to collect a small sample of respondents from the study or target population. The sample size was chosen by applying the following Slovin's formula:

$$n = N / 1 + N (e^2),$$

 $n = N / 1 + N (e^2)$

Where N is the population size, n is the sample size, and e is the margin of error (or confidence interval), with a standard error of 5% for 95% confidence. Applying the above formula, the sample size becomes n = 150/1 + 150(0.05) = 109 respondents.

Data Collection Instruments

The questionnaires were provided as the main method of the study for data collection. The survey collects information from employees. A questionnaire is recommended because it protects respondents' privacy, saves time, and is easy to complete. Communicating on sensitive issues was done objectively, allowing accurate and trustworthy data to be collected. With the help of an interview guide, the views of the executive also were obtained.

Data analysis

The statistical Product for Service Solution (SPSS) version 25 was used to collect data from the returned questionnaire copies. The software's capability and adaptability made it appropriate for processing massive amounts of data. It permitted both descriptive and inferential analysis of the gathered data using frequency, percentage, means, and standard deviation.

The analytical model for this research is shown as an equation below.

 $Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3 + \varepsilon$

Y = Project performance

 $\alpha = constant$

b1-3 = Regression Coefficient

X₁: Project business case

X₂: Project brief

X₃: Creating project plan

 ε = error term



4. Research findings

In this chapter, the focus was on presenting the research findings and conducting data analysis. To achieve the research objectives, a combination of descriptive analysis, which includes percentages, means, and standard deviations, along with inferential analysis, such as regression and correlation, was employed. Out of the total 109 questionnaires distributed, a significant 87.156% response rate was achieved, as 95 questionnaires were completed and returned by the respondents. This high return rate indicates a strong willingness of participants to engage with the study's objectives.

Table 1: Correlations

		Project business case	Project brief	Creating project plan	Project performance	
Project business case	Pearson Correlation	1	.548**	.541**	.727**	
	Sig. (2-tailed)		.000	.000	.000	
	N		95	95	95	
Project brief	Pearson Correlation		1	.629**	.774**	
	Sig. (2-tailed)			.000	.000	
	N			95	95	
Creating project plan	Pearson Correlation			1	.789**	
	Sig. (2-tailed)				.000	
	N				95	
	Pearson				1	
Project	Correlation				1	
performance	Sig. (2-tailed)					
	N				95	
**. Correlation is significant at the 0.01 level (2-tailed).						

Source: Research findings (2023)

Table 1 is a correlation matrix displaying the relationships between the Project business case, Project brief, Creating project plan, and performance of One Acre Fund Projects. Pearson correlation coefficients, which show the magnitude and direction of correlations between variables, are shown in the table. Specifically, a favorable correlation (r = 0.727, p=0.000 < 0.05) was found between Project business case and performance of One Acre Fund Projects. This provides some evidence that a strong Project business case contributes to the successful completion of One Acre Fund Projects. The quality of the Project brief has a favorable relationship with the outcome of One Acre Fund Projects (r = 0.774, p=0.000 < 0.05). This indicates that there is a positive relationship between Project brief and the performance of One Acre Fund Projects. Project success may be attributed to well-planned Project brief. Indepth project plan creation is positively correlated with the performance of One Acre Fund Projects, as shown by the data (r = 0.789, p=0.000 < 0.05). An effective project plan creation usually leads to better outcomes.

The findings are in line with Ahmed's (2021) emphasis on the significance of Project Management Practices. Ahmed highlights the systematic methods, processes, and tools used to effectively plan, execute, and control projects to ensure successful outcomes. The results in Table 4.10 affirm the positive correlations between aspects of project management practices



and the performance of One Acre Fund Projects, emphasizing how a strong project business case, well-prepared project brief, and comprehensive project planning contribute significantly to success.

Table 2: Model Summary

I able 2. 1	viouci Suiiiii	ui y				
Model	R	R Square	Adjusted R Square	Std. Error	of	the
				Estimate		
1	.903ª	.816	.810	0.28141		

a. Predictors: (Constant), Creating project plan, Project business case, Project brief

Source: Research findings (2023)

Table 2 summarizes our model's results with respect to the connection between Creating project plan, Project business case, Project brief, and the performance of One Acre Fund Projects. Multiple correlation (R) = 0.903; R square = 0.816; adjusted R square = 0.810. According to these numbers, roughly 81.6% of the variation in the performance of One Acre Fund Projects can be attributed to the Creating project plan, Project business case, Project brief. The regression model using the predictors (Creating project plan, Project business case, Project brief) shows a strong positive relationship with the performance of One Acre Fund Projects.

The findings align with Rahab's (2018) emphasis on the significance of project management practices. Rahab's research suggests a link between project quality and business management practices, which corresponds with the strong positive relationship observed in the study's results between creating project plans, project business cases, project briefs, and the performance of One Acre Fund Projects. This reinforces the notion that effective project management practices significantly influence project performance.

Table 3. ANOVA

Table 5. ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	31.918	3	10.639	134.353	.000 ^b
1	Residual	7.206	91	.079		
	Total	39.124	94			

a. Dependent Variable: : project performance

b. Predictors: (Constant), Creating project plan, Project business case, Project brief

Source: Research findings (2023)

Table 3 displays the findings of an analysis of variance performed on the relationship between the independent variables (Creating project plan, Project business case, Project brief) and the dependent variable (the performance of One Acre Fund Projects). The calculated value of F is 134.353, and the associated p-value is 0.000, which is much less than the 0.05 threshold for statistical significance. There is a statistically significant relationship between the performance of One Acre Fund Projects and the Creating project plan, Project business case, Project brief. Here, the researcher chooses to accept an alternate hypothesis while rejecting the null.

The findings are in line with Semigabo's (2015) emphasis on the significance of project management practices. Semigabo highlights the critical role of competent project



management skills, dedicated staff, proper planning, clear vision, and management support in project success. These findings support the subsequent analysis of variance (Table 4.12), which demonstrates the significant impact of various project management factors (Creating project plan, Project business case, Project brief) on the performance of One Acre Fund Projects, reinforcing the idea that sound project management practices are essential for project success.

Table 4: Coefficients

Model			Unstandardized Coefficients		t -	Sig.
		В	Std. Error	Beta		
1	(Constant)	.201	.189		1.064	.290
	Project business case	.335	.059	.321	5.693	.000
	Project brief	.340	.059	.350	5.733	.000
	Creating project plan	.412	.063	.395	6.513	.000
a Dependent Variable: project performance						

a. Dependent Variable: project performance

Source: Research findings (2023)

The analytical model for this research is shown as an equation below.

 $Y = \alpha + b1X1 + b2X2 + b3X3 + \varepsilon$

Y = Project performance

 $\alpha = constant$

b1-3 = Regression Coefficient

X1: Project business case

X2: Project brief

X3: Creating project plan

 $\varepsilon = \text{error term}$

In Table 4, the regression equation which shows that the performance of One Acre Fund Projects is impacted by a constant factor of 0.201. According to secondary data research, One Acre Fund Projects should anticipate a 0.335-fold improvement in performance for every unit rise in the Project business case. In a similar vein, a factor of 0.340 improvement in the performance of One Acre Fund Projects is linked to an increase of one unit in the Project brief, and a factor of 0.412 improvement in the performance of One Acre Fund Projects is linked to an increase of one unit in the Creating project plan factor. It is noteworthy that the Project business case (p=0.000<0.05), Project brief (p=0.000<0.05), and the Creating project plan (p=0.000<0.05) are all statistically significant in improving the performance of One Acre Fund Projects.

Therefore, the first null hypothesis (Ho1) that there is no significant effect of project business case on the performance of One Acre Fund Projects was rejected because the researcher found a statistically significant relationship between project business case and the performance of One Acre Fund Projects. Another null hypothesis (Ho2) that there is no significant effect of project brief on performance of One Acre Fund Projects was tested and



rejected that project brief had significant impact on the performance of One Acre Fund Projects. Similarly, the third null hypothesis (Ho3) was also rejected, namely, that there is no significant effect of creating project plan on performance of One Acre Fund Projects.

5. Conclusion

The primary aim of this study was to evaluate the effect of project management practices on project performance in Rwanda, focusing on the One Acre Fund Projects as a case study. specifically, the study guided by the following objectives: To evaluate the effect of project business case on the performance of One Acre Fund Projects, examine the effect of project brief on performance of One Acre Fund Projects and investigate the effect of creating a project plan on performance of One Acre Fund Projects.

A significant number of respondents held a moderately positive view on the influence of project business case on the performance of One Acre Fund Projects. Also, respondents had a favorable perception on how project brief affect performance of One Acre Fund Projects. And respondents held a positive view of the effect of creating a project plan on performance of One Acre Fund Projects. It is noteworthy that the Project business case, Project brief, and the Creating project plan are all statistically significant in improving the performance of One Acre Fund Projects (p-values are less than 0.05).

Therefore, the first null hypothesis (Ho1) that there is no significant effect of project business case on the performance of One Acre Fund Projects was rejected because the researcher found a statistically significant relationship between project business case and the performance of One Acre Fund Projects. Another null hypothesis (Ho2) that there is no significant effect of project brief on performance of One Acre Fund Projects was tested and rejected that project brief had significant impact on the performance of One Acre Fund Projects. Similarly, the third null hypothesis (Ho3) was also rejected, namely, that there is no significant effect of creating project plan on performance of One Acre Fund Projects.

6. Recommendations

One Acre Fund Rwanda should invest in developing and maintaining comprehensive project business cases for all its projects. To enhance project performance, it is essential to ensure that these business cases are well-structured, thoroughly researched, and aligned with the organization's strategic objectives.

One Acre Fund Rwanda should establish standardized guidelines and templates for creating project briefs. This will help streamline project initiation and ensure that everyone involved has a clear understanding of the project's objectives and scope.

One Acre Fund Rwanda should further enhance its project planning processes. This involves detailed scheduling, resource allocation, and risk management. Ensuring that project plans are comprehensive and well-structured will contribute to better project execution.

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