Journal of Entrepreneurship & Project Management

Effect of Project Planning Practices on the Performance of Tourism Projects: A Case of Sabyinyo Community Livelihood Association, Kinigi Sector, Musanze District

Aimée Desire HABIYAREMYE & Dr. Cyprien SIKUBWABO

ISSN: 2616-8464

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

Effect of Project Planning Practices on the Performance of Tourism Projects: A Case of Sabyinyo Community Livelihood Association, Kinigi Sector, Musanze District

Aimée Desire HABIYAREMYE [1] & Dr. Cyprien SIKUBWABO[2]
[1] Master of Project Management, University of Kigali, Rwanda
[2] Senior Lecturer, University of Kigali, Rwanda

***How to cite this article*: HABIYAREMYE A., D & SIKUBWABO C. (2023). Effect of Project Planning Practices on the Performance of Tourism Projects: A Case of Sabyinyo Community Livelihood Association, Kinigi Sector, Musanze District. *Journal of Entrepreneurship & Project Management. Vol* 7(15) pp. 152-162** https://doi.org/10.53819/81018102t2293

Abstract

The general objective of this research was to find out the effect of project planning practices on the performance of tourism projects in Musanze District. Specifically the study guided by the following objectives to find out the effect of scope planning practice on s performance of SACOLA in Musanze District, determine the effect of cost planning practice on performance of SACOLA in Musanze District, investigate the effect of human resource planning practice on performance of SACOLA in Musanze District and assess the effect of risk planning practice on performance of SACOLA in Musanze District. The population of this study was 145 people including Project staff, District staff, Sector staff and SACOLA members representatives. This study used a sample of 107 participants which was chosen using Slovin's formula. The investigator relied on document analysis, questionnaires, and interviews in collecting data. Statistical Package for Social Sciences (SPSS) used in the study. The findings indicate that R Square value is 0.523 for scope planning practice which means that scope planning practice has effect on performance of SACOLA's projects at a52.3%. The $p<0.05$ indicates that there statistically significant effect of cost Planning Practice on the performance of SACOLA in Musanze District. The unstandardized coefficient (B) for the Human Resource Planning Practice is 2.445. A very low p-value of .000, reinforcing the significance effect of human resource planning on project performance. The Model Summary provides insights into the effect of risk planning practice on performance of SACOLA in Musanze District, The R-squared value of 0.579 indicates that approximately 57.9% of the variance in the project performance variable can be explained by variations in the risk planning practice variable. This indicates a significant effect of risk planning practice on performance of SACOLA in Musanze District. SACOLA is recommended to prioritize effective human resource planning by identifying skill requirements early in the project. Developing comprehensive recruitment, training, and development strategies will ensure that the project team possesses the necessary expertise.

Key words: *Project Planning Practices, Scope Planning Practice, Cost Planning Practice, Human Resource Planning Practice, Risk Planning Practices and Project Performance*

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

1. Introduction

In Rwanda, governments projects are currently facing with various challenges occurring during project implementation and among them contract management, weakness in procurement systems and lastly poor planning and this poor planning impact seriously the national projects such as projects related to the construction (OAG, 2014).

The budget execution report from the Ministry of Finance and Economic Planning stated that the management of public projects in Rwanda continues to face some challenges. The main challenges indicated in this report are the dependence of the country on aid from abroad, with a percentage of 40% of the national budget, and inadequate studies, especially in construction projects that involve additional payments to contractors for unpredicted additional works, while this amount was not estimated by the procurement entities during the preparation of their plans (MinECOFIN, 2014). According to (ADRA Report, 2016) one laptop per child project has failed to achieve its objectives due to poor planning and 45% project planning has taken a central role to facilitate the promotion of sustainability.

There are few studies conducted on project planning practices and project performance in the region, including Gahigana's (2019), which assessed the determinants of project performance. Dufitumukiza (2022) conducted research about the project planning and sustainability of the Rwanda education assistance project in Rwamagana district; Eric (2021) analyzed the effect of project planning practices on improving project performance in Rwanda.

As earlier mention, the studies did not focus on effect of project planning practices on the performance of tourism projects in Musanze District. Hence, the need for this study to be carried out to specifically address the academic parity gap in understanding the critical role of scope planning practices, cost planning practices, human resource planning practices and risk planning practices on the performance of SACOLA in Musanze District.

1.2 Objectives of the Study

The objective of this research was to find out the effect of project planning practices on the performance of tourism projects in Musanze District.

Specifically the study guided by the following objectives:

i. To find out the effect of scope planning practice on performance of SACOLA in Musanze District.
ii. To determine the effect of cost planning practice on performance of SACOLA in Musanze District.
iii. To investigate the effect of human resource planning practice on performance of SACOLA in Musanze District.
iv. To assess the effect of risk planning practice on performance of SACOLA in Musanze District.

1.3 Hypotheses

The study guided by the following hypotheses.

Ho1: There is no significant effect of scope planning practice on performance of SACOLA in Musanze District.

Ho2: Cost planning practice has no significant effect on s performance of SACOLA in Musanze District.

Ho3: There is no significant effect of human resource planning practice on performance of SACOLA in Musanze District.

Ho4: Risk planning practice has no significant effect of risk planning practice on performance of SACOLA in Musanze District.

2. Literature review

2.1. Theoretical review

The main theory underlying this study are theory of change, stakeholder theory and goal setting theory. Details on theory are reviewed in the following section.

2.1.1 Theory of change

This was made by the Aspen Institute Roundtable on Community Change in the 1990s as a way to model and measure the activities of exhaustive networks. The Theory of Change is a full picture and explanation of how and why a change that is wanted is expected to happen. This is why ToC must be considered in project management practices because when you plan, you set changes that you want to realize or you determine what you want to achieve, how it will be achieved, and when it will be realized. The performance of the project is measured according to the indicators of changes that you have planned for (James, 2011).

Even when you have a firm grasp on the problem and know exactly what you want to achieve, project management can feel insurmountable. You can use a Theory of Change to map out your course of action as you go from the current state to your desired future state of affairs. The Theory of Change (ToC) provides an explanation for why and how a given change process will occur. The rationale lays forth the assumptions that underpin the proposed intervention and demonstrates the causal relationships between the short-, intermediate-, and long-term outcomes (Vogel, 2012).

A theory of change should think about the most important changes a project wishes to make, the different routes it could take to achieve those changes, and the reasoning behind choosing one path over another. The theory of change gives us a way to think about how to make the change we want in a world that is constantly changing and uncertain. As a result, we are better able to organize and prioritize our efforts in light of the realities of the world we live in and the means at our disposal (Danielle and Craig, 2012).

So, the theory of change is closely related to project management and project performance. This is because when you plan to manage, you also take strategies that will help you reach on objectives as well as the goal, and once the goal is reached, there is the reality of the dream or change or impact made by the proper execution of the plan (Patricia, 2014).

The researcher used the theory of change to find out how project planning practices affect project performance. The researcher did this by looking at how well the project was set up to make the changes that were wanted and whether or not those changes were made. Researchers can also tell if the changes they wanted to see happened by measuring how well the project did. This is because the theory of change in project management practices can be seen as inputs whose results can be seen in how well the project did.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

2.1.2 Stakeholder theory

Stakeholder theory was first proposed by R. Edward Freeman, a professor of business administration at the University of Virginia, in his book Strategic Management: A Stakeholder Approach published in 1984. Freeman argued that businesses should not only focus on maximizing shareholder value, but also consider the interests and needs of other stakeholders. The idea of stakeholder theory was further developed by other scholars and practitioners, such as Thomas Donaldson, who emphasized the ethical and moral dimensions of stakeholder theory, and Archie Carroll, who proposed a framework of corporate social responsibility that incorporated stakeholder theory (Freeman *et al.*, 2020).

Stakeholder theory is a management theory that suggests that an organization should consider the interests and needs of all of its stakeholders, rather than just its shareholders or owners. The stakeholders of an organization may include employees, customers, suppliers, communities, and even the environment. According to the stakeholder theory, an organization should take into account the interests of all its stakeholders when making decisions and planning strategies. This means that an organization should not only focus on maximizing profits for its shareholders, but also on creating value for all its stakeholders. By doing so, an organization can create long-term value for itself and for its stakeholders (Phillips & Freeman, 2021).

According to Jones (2021) the stakeholder theory also emphasizes the importance of stakeholder engagement and communication. By engaging with its stakeholders and understanding their needs and concerns, an organization can better address their interests and build stronger relationships with them. This can lead to greater trust, loyalty, and support from stakeholders. Stakeholder theory has become increasingly important in modern business practice, as organizations recognize the importance of social responsibility, sustainability, and ethical behavior. By taking a stakeholder approach, organizations can not only achieve financial success, but also create social and environmental value for the communities they serve.

2.1.3 Goal setting theory

Goal setting theory was first proposed by Edwin Locke, a psychologist, and Gary Latham, a management researcher, in the late 1960s and early 1970s. They argued that setting specific and challenging goals can lead to improved performance and motivation for individuals and teams. Locke and Latham proposed that goals should be specific, measurable, attainable, relevant, and time-bound (SMART). They also suggested that feedback and support from managers and colleagues can help individuals achieve their goals and improve their performance (Latham & Locke, 2019).

Goal setting theory is a management theory that proposes that setting specific and challenging goals can lead to increased motivation, performance, and achievement. According to the theory, individuals and teams perform better when they have clear goals to work towards and a sense of purpose and direction. Critics of goal setting theory argue that it can lead to unintended consequences, such as unethical behavior or a focus on short-term goals at the expense of long-term goals. However, advocates of the theory argue that these risks can be mitigated by careful goal setting and management. Goal setting theory has had a significant impact on management practice and continues to be an important area of research and development in the field of organizational behavior (Seijts & Latham, 2020).

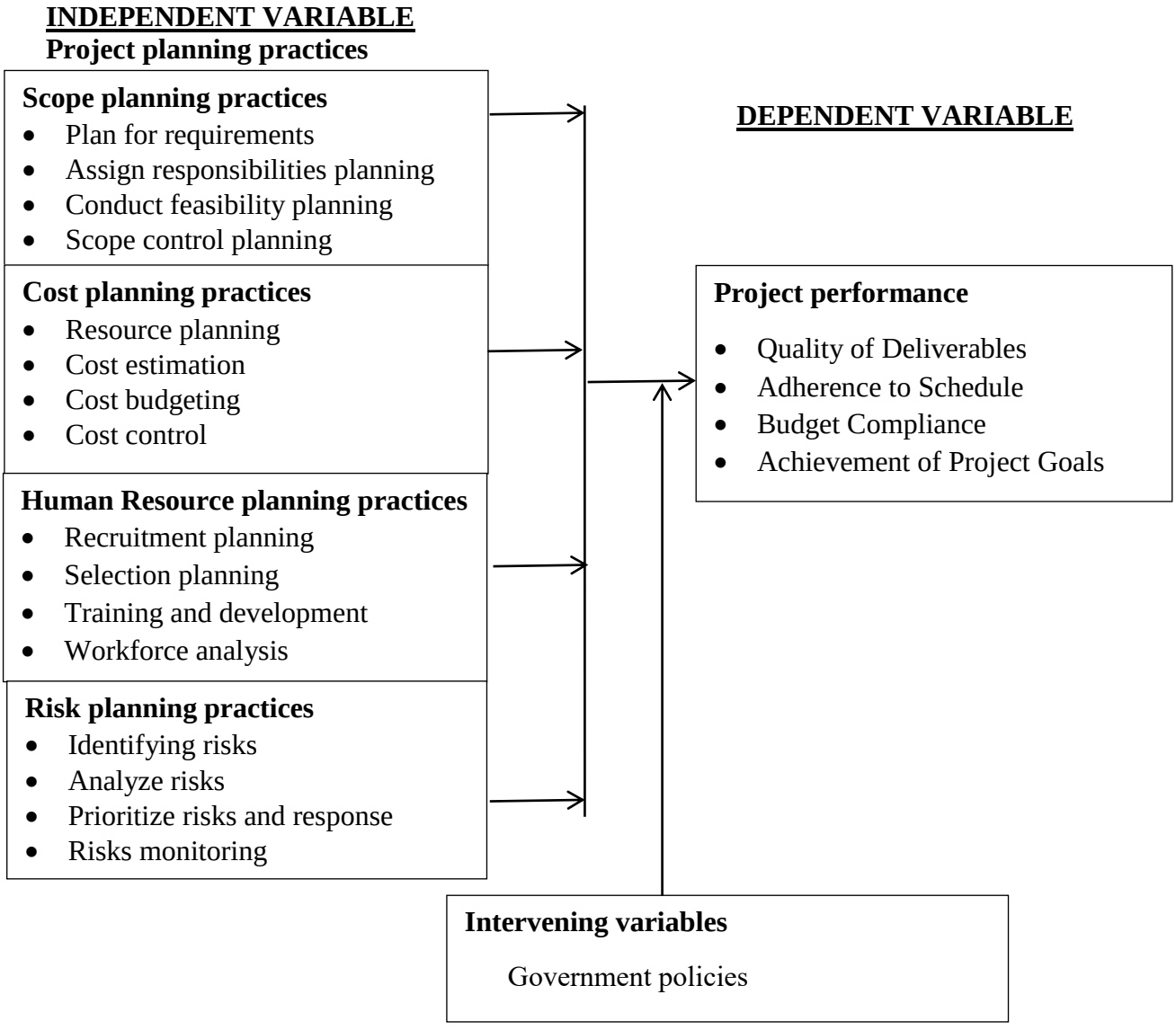
Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

2.2 Conceptual framework

A conceptual framework is used to map out the important ideas, variables, and relationships in this investigation. In other words, a conceptual framework is a strategy for organizing concepts in order to achieve a set of research objectives.

The independent variable is project planning practices, with its sub variables including scope planning practices, cost planning practices, human resource planning practices, and risk planning practices. These variables represent different aspects of project planning practices that can influence the outcome of a project. The dependent variable is project performance, which encompasses several indicators such as the quality of deliverables, adherence to schedule, budget compliance, and achievement of project goals.

Figure 1: Conceptual framework



Source: Researcher, 2023

The connection between the independent variables and the dependent variable is that the implementation and effectiveness of these planning practices can directly impact the likelihood of achieving project performance.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

By implementing these planning practices effectively, project managers can increase the likelihood of achieving project performance in terms of delivering high-quality outcomes, adhering to the project schedule, complying with the allocated budget, and achieving project goals. However, it is important to note that project performance is influenced by various other factors, and these planning practices are just a part of the overall project management process.

3. Research methodology

This chapter delves into the methodology employed in the study, providing insights into how the research was carried out. It outlines the plan for conducting the research and explains the chosen methodology in depth.

3.1 Study Design

The researcher intends to employ both descriptive and correlational study methods. Descriptive survey research involved the use of surveys to gather information about various aspects of interest. This approach aims to provide a detailed overview and understanding of the subjects and their characteristics. Additionally, the correlational research design used to explore the relationships that exist between different variables under examination. This approach seeks to uncover potential connections or associations between these variables, shedding light on patterns and potential causal links. By combining these two research designs, the study aims to achieve a well-rounded and in-depth exploration of the research question, effectively utilizing the strengths of each approach to gather valuable insights.

3.2. Population of the Study

The population of this study was 145 people including Project staff, District staff, Sector staff and SACOLA members representatives.

3.3 Sampling procedures

Slovin's formula enable researchers to sample the community with the appropriate degree of precision, while studying the complete population is impossible owing to lack resources and time. Using Slovin's formula, researcher estimate how big of a sample they'll need to get reliable findings.

This is how you determine which version of Slovin's equation to use:

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

n= Number of samples or sample size

N= Total population

e = Error tolerance

$$n = \frac{145}{1 + (145x0.05^2)}$$

$$n = \frac{145}{1 + (145x0.0025)}$$

$$n = \frac{145}{1 + 0.3625}$$

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

$$n = \frac{145}{1.3625}$$

$$n = 106.4 \cong 107$$

The researcher relied on document analysis, questionnaires, and interviews to compile their data.

3.4. Data analysis

The scientist was able to do both theoretical and practical analyses with the aid of this. The statistical approach may be thought of as a toolkit for putting numbers on study findings.

Using this strategy, the researcher easily displayed the findings in the form of numbers and statistics, giving the reader a more holistic understanding of the findings. Statistical Package for Social Sciences (SPSS) used in the study. Quantities employed for analysis of interviewees' perspectives on each variable, and a Pearson's correlation performed to examine the nature of the relationships between the report's factors.

4. Research findings

This chapter focuses into a detailed discussion of the research's outcomes. By applying statistical tools to the gathered data, the chapter aims to uncover meaningful percentages means, standard deviations, correlation and regression.

Table 1: Correlations

		Scope planning	Cost planning	Human resource planning	Risk planning	Project performance
Scope planning	Pearson Correlation	1	.634**	.619**	.653**	.723**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	107	107	107	107	107
Cost planning	Pearson Correlation	.634**	1	.959**	.738**	.774**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	107	107	107	107	107
Human resource planning	Pearson Correlation	.619**	.959**	1	.701**	.756**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	107	107	107	107	107
Risk planning	Pearson Correlation	.653**	.738**	.701**	1	.761**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	107	107	107	107	107
Project performance	Pearson Correlation	.723**	.774**	.756**	.761**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	107	107	107	107	107

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

Source: Primary data, July 2023

Table 1 presents correlation coefficients among various factors - Scope Planning, Cost Planning, Human Resource Planning, Risk Planning, and Project performance - in SACOLA's projects. The correlation coefficient of 0.723 and $p<0.05$ between scope planning and project performance indicates a substantial and positive association, reflecting how well-defined scope planning aligns with successful project execution. Significant correlations exist between other planning dimensions and project performance, with cost planning ($r = 0.774$, $p < 0.05$), and human resource planning ($r = 0.756$, $p < 0.05$) all positively influencing project

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

performance. The correlation coefficient of 0.761 between Risk Planning and Project performance indicates a strong positive correlation. This implies that when SACOLA focuses on comprehensive risk planning, there is a higher likelihood of achieving successful project outcomes. The findings align with the results of Fageha and Aibinu (2014) stressed the significance of well-defined project scope and effective cost planning for optimal project performance. The results also echo the idea that projects' success relies on effective coordination of different planning aspects, as emphasized by the interconnectedness of the correlation coefficients. These findings underscore the holistic nature of project management and the need to consider multiple planning dimensions to achieve successful outcomes, which is consistent with the views of various scholars in the field.

Table 2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.852[a]	.726	.716	7.51767

a. Predictors: (Constant), Risk planning, Scope planning, Human resource planning, Cost planning

Source: Primary data, July 2023

In Table 2, the Model Summary presents valuable insights into the overall the effect of the predictors (Risk planning, Scope planning, Human resource planning, Cost planning) on the dependent variable (Project performance). The correlation coefficient (R) of 0.852 indicates a strong positive linear combined effect of these planning dimensions on project performance. This signifies that as these planning practices improve collectively, there's a strong tendency for project performance to increase. The coefficient of determination (R squared), which is 0.726, reveals that approximately 72.6% of the variability in the dependent variable (Project performance) can be explained by variations in the combined effect of the predictor variables (Risk planning, Scope planning, Human resource planning, Cost planning). This indicate that these planning practices, taken together, have a substantial influence on project performance. The findings support the notion of Cagliano (2015) that an integrated approach to planning, encompassing risk, scope, human resources, and cost dimensions, aligns with the strategies recommended by prior research for enhancing project performance.

Table 3 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15296.081	4	3824.020	67.663	.000[b]
	Residual	5764.573	102	56.515		
	Total	21060.654	106			

a. Dependent Variable: Project performance

b. Predictors: (Constant), Risk planning, Scope planning, Human resource planning, Cost planning

Source: Primary data, July 2023

The ANOVA table 3 provides significant insights into the effect of the combined planning dimensions (Risk planning, Scope planning, Human resource planning, Cost planning) on project performance. The calculated F-statistic of 67.663 indicates that there is a statistically significant overall the effect of these planning practices on project performance. The p-value associated with the F-statistic is shown as .000, which is less than the common threshold of 0.05, highlighting the strong significance of the effect. The findings align with that of Fageha & Aibinu (2014) emphasize that an integrated approach to planning, encompassing risk, scope, human resources, and cost dimensions, is crucial for enhancing project performance.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project Management
Volume 7||Issue 15||Page 152-162 ||December||2023|
Email: info@stratfordjournals.org ISSN: 2616-8464

Table 4 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.399	3.210		2.305	.023
	Scope planning	1.170	.287	.293	4.074	.000
	Cost planning	.670	.609	.213	1.100	.024
	Human resource planning	.520	.593	.161	.876	.033
	Risk planning	.970	.266	.299	3.641	.000

a. Dependent Variable: Project performance

Source: Primary data, July 2023

In Table 4, the coefficients of the multiple regression model are presented. The constant term is 7.399, indicating the expected value of the dependent variable (Project performance) when all predictor variables are set to zero. The unstandardized coefficients represent the change in the dependent variable associated with a one-unit change in the corresponding predictor variable while keeping other predictors constant. Scope planning (Beta = 0.293, $p<0.05$), Cost planning (Beta = 0.213, $p<0.05$), Human resource planning (Beta = 0.161, $p<0.05$), and Risk planning (Beta = 0.299, $p<0.05$) exhibit positive standardized coefficients, indicating that each of these planning practices positively influences project performance. all planning dimensions have p-values less than 0.05, indicating that they are statistically significant contributors to project performance. This indicate that the combined effects of Scope planning, Cost planning, Human resource planning, and Risk planning significantly impact the performance of SACOLA's projects in Musanze District. These findings align with the existing literature, such as the studies by Semigabo (2015), which emphasize the importance of holistic planning practices in achieving successful project outcomes. The research underscores the need for SACOLA to continue focusing on effective scope, cost, human resource, and risk planning to enhance the success of their projects in Musanze District.

The study guided by the following hypotheses. Ho1: There is no significant effect of scope planning practice on performance of SACOLA in Musanze District, Ho2: Cost planning practice has no significant effect on performance of SACOLA in Musanze District, Ho3:There is no significant effect of human resource planning practice on performance of SACOLA in Musanze District, Ho4: Risk planning practice has no significant effect of risk planning practice on performance of SACOLA in Musanze District. The $p<0.05$ between scope planning and project performance indicates a substantial and positive association, reflecting how well-defined scope planning aligns with successful project execution. Significant correlations exist between other planning dimensions and project performance, with cost planning (, $p < 0.05$), and human resource planning ($p < 0.05$) all positively influencing project performance. The coefficient between Risk Planning and Project performance ($p<0.05$) indicates a significant effect. Hereby, all research hypotheses were rejected.

5. Conclusion

This research comprehensively investigated the influence of project planning practices on the performance of tourism projects within Musanze District. The study's findings revealed significant associations between various planning dimensions and project performance. Notably, a well-defined scope planning was found to be substantially and positively linked to successful project execution. Additionally, the research demonstrated that effective cost planning and human resource planning practices also contributed significantly to improved

project performance. Moreover, the study established a notable impact of risk planning on project performance. The rejection of all research hypotheses underscores the critical importance of adept project planning practices in enhancing the outcomes of SACOLA projects in Musanze District. These findings emphasize the need for a complete approach to project planning to ensure the successful execution of tourism initiatives and drive positive outcomes for the local tourism industry.

6. Recommendations

- SACOLA should ensure that project scope is meticulously defined and communicated to all stakeholders. Regular reviews and updates to the scope document should be conducted as the project progresses, and any changes should be well-documented and communicated to avoid scope creep.
- SACOLA should implement robust cost estimation and budgeting processes. Regular monitoring and tracking of project expenses against the budget are essential to identify any deviations and take corrective actions promptly.
- SACOLA should prioritize effective human resource planning by identifying skill requirements early in the project. Developing comprehensive recruitment, training, and development strategies will ensure that the project team possesses the necessary expertise.

Acknowledgments

Firstly, I would like to thank God for His guidance and protection not only during this study but in my entire life. And without the direction, collaboration, and support of many people, scientific research is virtually impossible to complete. I greatly appreciate Dr. Cyprien SIKUBWABO for his dedication in supervising my work. I am also grateful to my classmates for their support and encouragement throughout this study. May the holy God richly bless every one of the individuals mentioned.

References

Adedayo, O. O, Sunday O. A, Titilayo, O. O. (2018). Application of project scope management practices on project performance among telecommunication organizations in Nigeria. *International Journal of Development and Sustainability,* Volume 7 Number 2 (2018): Pages 518-532

Bahadorestani, A., Naderpajouh N., & Sadiq R. (2020). Planning for sustainable stakeholder engagement based on the assessment of conflicting interests in projects. *Journal of Cleaner Production*, 118-242.

Cagliano, A. C., Grimaldi, S., and Rafele, C. (2015). Choosing project risk management techniques. A theoretical framework. *Journal of Risk Research* 18(2), 232–248

Carvalho, M. M., & Rabechini R. (2017). Can project sustainability management impact project performance? An empirical study applying a contingent approach. *International Journal of Project Management*, 35(6), 1120–1132.

Eric, M. (2021). Effect of project planning practices on improving project performance in Rwanda. a case of Huguka dukore akazi kanoze project in Nyabihu district. *University of Kigali*. 150, 678–689.

Gahigana S. (2019) *Determinants of Project Management Success In Rwanda, Evidence From Sur'eau Project Of Society For Family Health Rwanda*. University of Rwanda, College of Business and Economics, Volume 26, Issue 5, 2789-3758

Gateka, H., N. (2023). Effect of risk management on rabbit project performance: a case of rabbit ltd Rwanda. *International Journal of Management and Commercial Innovation.* 1-20 of 133

Larsson J., & Larsson L. (2020). Integration, application and importance of collaboration in sustainable project management. *Sustainability*, 12(2), 1–17.

Semigabo, J. C. (2015). Project management skills and project performance in Rwanda. A Case Study of NIMCP Project in Kamonyi District. *Mount Kenya University.10*, 67–89.

Turatsinze, J. (2018). Scope change management and project performance in Rwanda: A case of Rwanda Social Marketing Project (RSMP). Project Management. *Mount Kenya University* 7(2), 9–13

Yu M., Zhu F., Yang X., Wang L., & Sun X. (2018). Integrating sustainability into construction engineering projects: Perspective of sustainable project planning. *Sustainability*, 10(3), 1–17.