$\{\beta_1, \beta_{2 \text{ and }} \beta_3\}$= coefficients of independent variables and μ = error term

Y= Implementation of upgrading Amahoro National stadium Project

X_1= Stakeholder mapping and analysis,

X_2= Project budget planning

X_3= Project scheduling and

X_4=Project risk planning

The result of a statistical test, denoted p, shall be interpreted as follows, the null hypothesis H0 is rejected if $p<0.05$ level of significant. The regression was conducted using a multistage analysis which involving first running the R2 and F-test without the moderator while the second stage involved running the tests with the moderator included. The purpose was to compare the changes in R^2 value and F-value to determine the effect of the moderator in the relationship between independent variables and the dependent variable. Presence of a significant difference would indicate significant effect of the moderator. Hypotheses in the study were tested using beta, t and p values. The test was done at 95% confidence level, 1 tailed test. This implies that the significance value was set at 0.05. The values less than 0.05 was deemed as significant while those greater than the significance value was deemed to be insignificant (Yin, 2011). Finally, thematic analysis techniques were used to analyze qualitative data collected in the open-ended questions. On the other hand, qualitative data was analyzed using content analysis and this involved organizing data into categories, coding and sorting them to identify patterns and interpret meaning of responses.

6. FINDINGS

This section helps to respond the objectives of this study which was to assess the influence of stakeholder mapping and analysis on implementation of upgrading Amahoro National stadium project; to find out the influence of project budgeting plan on implementation of upgrading Amahoro National stadium project; to assess the influence of project scheduling plan on implementation of upgrading Amahoro National stadium project and to examine the influence of project risk plan on implementation of upgrading Amahoro National stadium project by using both correlation analysis and multiple regression analysis to test the influence among the variables.

Table 3: Correlational coefficient

	X_1	X_2	X_3	X_4	Y

Stakeholder mapping and analysis	Pearson Correlation	1				
Project budget planning	Pearson Correlation	.477**	1			
Project scheduling	Pearson Correlation	.160	.168	1		
Project risk planning	Pearson Correlation	.255**	.178	.056	1	
Implementation of UANS project	Pearson Correlation	.758**	.706**	.578**	.710**	1
	Sig. (2-tailed)	.000	.000	.004	.000	

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

A Pearson Correlation was performed, and the result of the Pearson correlation test as presented in Table 4.8, show a high positive correlation (r)) = 0.758**; p=0.000<0.05) between stakeholder mapping and analysis and implementation of Upgrading Amahoro National Stadium Project. This implies that the stakeholder mapping and analysis positively correlated to the implementation of Upgrading Amahoro National Stadium Project.

In addition, the correlation between project budget planning and implementation of Upgrading Amahoro National Stadium Project was significant at (r=0.706, p=0.00<0.05) which implying a linear relationship between project budget planning and implementation of Upgrading Amahoro National Stadium Project. This shows that project budget planning significantly influenced implementation of Upgrading Amahoro National Stadium Project. This implies that Josephson and Hammarlund (2016) have shown that delays, cost overrun and quality problems in construction projects are attributable to poor design management practices. In addition, the study sought to establish the relationship between project scheduling and implementation of Upgrading Amahoro National Stadium Project. The study findings are in tandem with the literature review by Owino (2016) that resource planning is an entity that contributes to the accomplishment of project activities. Time and cost are directly dependent on the availability of resources. The time required maybe determined by dividing the productivity associated with the resources used on the activity into the defined quantity of work for the activity. Each activity is allocated with a specific resource and must be completed within the time limit, otherwise it may adversely affect the overall duration of the project.

A Pearson Correlation was performed, and the result of the Pearson correlation test as presented in Table 4.8, show a correlation (r) = 0.578**; p=.004<0.05) between project scheduling and implementation of Upgrading Amahoro National Stadium Project. This implies that the project scheduling is positively correlated to the implementation of Upgrading Amahoro National

Stadium Project. In addition, the correlation between these two variables was significant, that is $p<0.05$ implying a linear relationship between project scheduling and implementation of Upgrading Amahoro National Stadium Project. This shows that project scheduling significantly influenced implementation of Upgrading Amahoro National Stadium Project. The study findings agree with the findings by Halpin (2016) that the main objective of scheduling is to produce timetables for individual activities following the plan. There are numerous possible plans available for any given project, hence evolving different schedules. While experience is a good guide to construction planning, each project is likely to have special problems or opportunities that may require considerable ingenuity and creativity to overcome or exploit. Unfortunately, it is quite difficult to provide direct guidance concerning general procedures or strategies to form good plans and schedules in all circumstances.

Further, the study sought to establish the relationship between project risk planningand implementation of Upgrading Amahoro National Stadium Project. A Pearson Correlation was performed, and the result of the Pearson correlation test as presented in Table 4.8, show a correlation (r) = 0.710^{**}; $p=0.000<0.05$) between project risk planningand implementation of Upgrading Amahoro National Stadium Project. This implies that the project risk planningis positively correlated to the implementation of Upgrading Amahoro National Stadium Project. In addition, the correlation between these two variables was significant, that is $p<0.05$) implying a linear relationship between project risk planningand implementation of Upgrading Amahoro National Stadium Project. This shows that project risk planning significantly influenced implementation of Upgrading Amahoro National Stadium Project.

Multiple linear regression analysis

Regression analysis is a statistical tool for the investigation of the relationship between variables. A multiple regression analysis was conducted to investigate the joint causal relationship between the independent (project planning) and dependent variables (implementation of Upgrading Amahoro National Stadium Project). Usually, researcher seeks to maintain the causal effect of one variable upon another. Regression analysis allows you to model, examine and explore spatial relationship, and can help explain the factors behind observed spatial patterns. Regression analysis is also used for prediction.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate

1	.780[a]	.6084	.594	.37332

a. Predictors: (Constant), X4=Project risk planning, X3= Project scheduling and, X2= Project budget planning, X1= Stakeholder mapping and analysis,

Model summary provides the coefficient of determination (R^2) which shows explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (implementation of Upgrading Amahoro National Stadium Project) that is explained by all the four independent variables (Stakeholder mapping and analysis, project scheduling; project budget planning and project risk planning).

From the study findings, it is notable that correlation determination of by R^2 value (0.6084). The study results imply that Stakeholder mapping and analysis, project scheduling; project budget planning and project risk planning jointly accounted for 60.84% of the implementation of Upgrading Amahoro National Stadium Project as represented by the R^2. This therefore means that other factors not studied in this research contribute 39.1% to the implementation of Upgrading Amahoro National Stadium Project. This implies that these variables are very significant and need to be factored to implementation of Upgrading Amahoro project. Therefore, further research should be conducted to investigate the other factors (39.1 percent) that influence implementation of Upgrading Amahoro National Stadium Project

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.568	4	3.642	26.133	.000[b]
	Residual	14.355	103	.139		
	Total	28.923	107			

a. Dependent Variable: Implementation of upgrading Amahoro National stadium Project

b. Predictors: (Constant), X4=Project risk planning, X3= Project scheduling and, X2= Project budget planning, X1= Stakeholder mapping and analysis,

Table 5 shows the Analysis of Variance (ANOVA) of regression analysis between independent variable including project planning practices and a dependent variable; implementation of constituency development funded projects. Further, the analysis of variance was used to examine whether the regression model was a good fit for the data. The F-critical (4, 103) was 2.46 while the F-calculated was 26.133 as shown in Table 5. This shows that F-Calculated was greater than the F-critical and hence there is significant linear relationship between the project planning and implementation of Upgrading Amahoro National Stadium Project. In addition, the p-value was 0.000, which was less than the significance level (0.05). Therefore, the model can be a good fit

for the data and hence it is appropriate in predicting the influence of the four independent variables (project planning) on the dependent variable (implementation of Upgrading Amahoro National Stadium Project).

Table 6: Regression coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	.895	.294		3.044	.008
X1= Stakeholder mapping and analysis	.369	.081	.369	4.559	.000
X2= Project budget planning	.201	.066	.133	3.045	.008
X3= Project scheduling	.187	.075	.175	2.476	.015
X4=Project risk planning	.308	.058	.383	5.317	.000

a. Dependent Variable: Implementation of upgrading Amahoro National stadium Project

Further, the study ran the procedure of obtaining the regression coefficients, and the results were as shown on the Table 6. The coefficients or beta weights for each variable allows the researcher to relative importance comparatively of the project planning. In this study the unstandardized coefficients and standardized coefficients are given for the multiple regression equations. However, discussions are based on the unstandardized coefficients.

The Multiple regression model equation would be ($Y = \beta0 + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4 + \varepsilon$) becomes:

$Y= 0.895+ 0.369X_1+ 0.161X_2 + 0.187X_3 + 0.308X_4$.

This indicates that Implementation of Upgrading Amahoro National Stadium Project = 0.895 + 0.369 (stakeholder mapping and analysis) + 0.161 (project budget planning) + 0.187 (Project scheduling) + 0.308 (Project risk planning).

According to the regression equation established, taking all factors into account project designing, scheduling, project resource planning and participatory planning process constant at zero, implementation of Upgrading Amahoro National Stadium Project was 0.895.

The findings from the table 6, revealed that stakeholder mapping and analysis has significance positive effect on implementation of Upgrading Amahoro National Stadium Project as indicated by β_1= 0.369, p-value=0.000<0.05, t=4.559. The implication is that an increase of one unit in stakeholder mapping and analysis would lead to an increase in implementation of Upgrading

Amahoro National Stadium Project by 0.369 units.The situational analysis aims at describing the community situation as it is currently, identifying and listing pressing problems being encountered by the community. The findings also correlate with Obegi&Kimutai(2017) who stresses the importance of project initiation process in the success of project accomplishment. The findings are also in line with Ndavi (2019) who emphasize that needs assessment is one of the critical stages in the project development process, reliable, accurate and usable information is needed that reflects the ideas articulated by representative groups of the target population and other stakeholders in the community.

The findings from the table 6, revealed that project budget planning has significance positive effect on implementation of Upgrading Amahoro National Stadium Project as indicated by β_2= 0.201, p-value=0.008<0.05, t=3.045. The implication is that an increase of one unit in project budget planning would lead to an increase in implementation of Upgrading Amahoro National Stadium Project by 0.201 units.

The findings from the table 6, revealed that project scheduling has significance positive effect on implementation of Upgrading Amahoro National Stadium Project as indicated by β_3=.187, p-value=0.015<0.05, t=2.476. The implication is that an increase of one unit in project scheduling would lead to an increase in implementation of Upgrading Amahoro National Stadium Project by 0.187units. The study findings agree with the findings by Halpin (2016) that the main objective of scheduling is to produce timetables for individual activities following the plan.

In addition, the findings in Table 6, indicates that project risk planninghad coefficients of estimate which was significant basing on β4 = 0. 308 (p-value = 0.000 which is less than α = 0.05). Also, the effect of Project risk planningis more than the effect attributed to the error and supported by the t values whereby t cal= 5.317> t critical =1.96 at a 5 percent level of significance,thus we conclude that Project risk planning significantly influence implementation of Upgrading Amahoro National Stadium Project.

7. CONCLUSION AND RECOMMENDATIONS

This section presented conclusions, and recommendations of the research. The chapter also contains suggestions of related studies that are carried out in the future.

7.1. Conclusion

The study aimed at finding out influence of project planning on implementation of construction project in Rwanda. Based on the findings the study made the following conclusion. The findings concluded that combination of stakeholder mapping and analysis, project scheduling; project

budget planning and project risk planning jointly accounted for 60.84% of the implementation of Upgrading Amahoro National Stadium Project as represented by the R^2at 95% of confidence interval. The study results indicated that stakeholder mapping and analysis as positive significant influence on implementation of Upgrading Amahoro National Stadium Project. The study concluded that the improvement in stakeholder mapping and analysis leads to improvement implementation of Upgrading Amahoro National Stadium Project.Project budgeting plan was found to be highly significant on the influence it has towards successfully implementation of upgrading Amahoro National stadium project. The study also concluded that project budgeting plan have very great impact on successfully implementation of upgrading Amahoro National stadium project. The results showed that project scheduling have a positive and statistically significant influence on implementation of Upgrading Amahoro National Stadium Project. The study concluded that the improvement in project scheduling leads to improvement implementation of Upgrading Amahoro National Stadium Project. The study concludes that respondents use Project risk plan to manage their construction projects. Moreover, the study concludes that construction projects that use Project risk plan to manage different project parameters accrue more profit margins than projects that do not to a very great extent. The study concludes there exists a positive correlation between Project risk plan and implementation of upgrading Amahoro National stadium project.

7.2. Recommendations

Based on the above discussions and analysis, the study recommends the following:

The project managers should be aware that participation of community in project planning teaches communities how to resolve conflict and allows for different perspectives to be heard.

Before commencing a project, the project should adequately plan for and work schedule be prepared that will guide the project implementation.

Project planning team should incorporate all project stakeholders in throughout the entire process of project planning

The study recommends that risk analysis should be carried out early in a project when the information is highly limited within several areas. all persons associated with a project should be encouraged to identify risks.

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