

THE EFFECT OF TIME AND COST MANAGEMENT ON PROJECT IMPLEMENTATION IN RWANDA; A CASE STUDY OF SUSTAINABLE FOOD INITIATIVE PROJECT

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Abstract: Most successful projects attribute their survival to effective use of resources and time manage and avoid increase in costs and scope creeping which may result into additional work that is not planned for as well as increasing costs that affect performance of projects. However, some projects have not given much consideration to time and cost management in their project implementation; there is nothing much that is being done to ensure effective use of resources and time due to insufficient information and understanding on the effect of time and cost management on project implementation. The general objective of this research is to assess the effect of time and cost management on project implementation. A research design is the set of methods and procedures used in collecting and analyzing measures of the variables specified in the research problem. In this research, the researcher used a descriptive research design which was based on both quantitative and qualitative data. The populations of this research are 89 employees of sustainable food initiative project located in Kimihurura sector Kigali district. the value of R^2 is 0.805. This indicates that there is positive relationship between two variables. This means that approximately 80.5% variations of time and cost management are positive relative to project implementation, at 5% level of significance. the relationship between cost management and project implementation at 5% level of significance. Analysis of Variance shows that f-calculated is greater that f – critical that is $2.301 > 0.00$. The study based on the data presented and analyzed on the assessment of time cost and effective utilization of resources in sustainable food initiative project in Rwanda, concluded from the findings of the research that the major factors are: time management, cost management and effective utilization of resources has been influenced the project implementation in Rwanda. Based on the conclusion drawn above the following recommendations are hereby proposed: Efforts should be made by the food initiative project team to plan all work operation activities.

1. BACKGROUND OF THE STUDY

In the drive toward formalizing project management as a distinct discipline, there has been much discussion on the nature and definition of project implementation, but no consensus has emerged. The importance of cost control in project management success is something every project manager is familiar with. The ability to maintain an organized approach to tasks while staying aware of cost control is not an easy skill. Although time and resource management are vital to achieving goals, cost performance is ultimately what determines a positive project outcome (Abdelhak & Mohamed, 2012).

In establishing a suitable amount of control over the budget, a project manager must exercise strict cost supervision. In other words, they have to be conscious of where funds are allocated at all times and if anything needs to change to meet the set budget. Project managers should never be caught with going over budget unexpectedly. Ultimately, the subset of

all project management is cost management. Cost control is critical and an enterprise cannot afford to underestimate the budget on an important project. The most efficient means of modern budget control is through technology. A software program can help project managers stay on track and automate simple calculations. With tools like this, project managers can focus on what they do best: leading the project to success (Sawalhi & Enshassi, 2012).

Budget overruns are a litmus test for project implementation or failure. Few companies have an unlimited budget, so the first thing project stakeholders look to in determining whether their project was a great success or a colossal failure is the bottom line. This fact fuels the pressure project leaders and their teams face with each passing day. As such, effective budget management is a primary area of focus for project managers who value their careers (Ade & Ahmad, 2013).

Of the three overlapping circles of management business, project, and product management – the initiation phase of the project management life cycle commences with the transmission of vision from the business manager to the project manager. The enterprise vision in each instance must contain the necessary elements for the project manager to define the project scope in time, cost, and objective terms (Rahman & Karim, 2013).

Control is a management function and therefore legitimate project management work. The project manager must look inside the project to determine progress, measure variance, predict outcomes, report status, manage change and judge outcomes. To control is to supervise. To supervise is to observe, to react, and to evaluate. Both formal and informal control mechanisms exist for this purpose (Aftab & Ade, 2012).

In Rwanda success of projects is normally determined by the ability of the project to use resources effectively and the capacity of the project to accomplish the specified activities in the right time using the specified resources. The involvement of project beneficiaries is a major attribute towards success of projects; projects that incur high costs are also facing challenges of poor sustainability leading to limited success. In sustainable food initiative project, activities are carried out as planned in the budget. This is done in order to minimize costs and accomplish the set objectives in the specified time. The project has been in existence for the last seven years and it has been successful and management of the project attributes its success to time and cost management, however, the researcher could not confirm this without sufficient evidence. It is against that background that the researcher intended to carry out this research.

2. STATEMENT OF THE PROBLEM

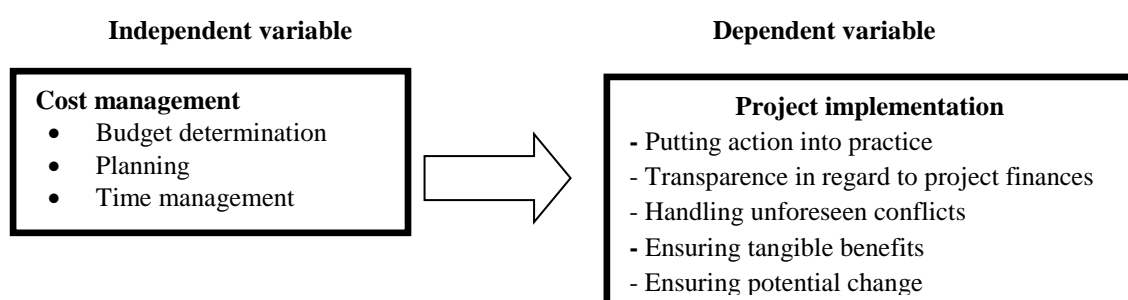
Project implementation is one of the major ways through which projects attain the set objectives and remain sustainable. Projects try as much as possible to establish time frame and budgets that guide the implementation and operations of the project so as to avoid too much costs that may cause project failure, as a result the concept of time and cost management are taken serious and given much attention in the project design and implementation (Breuer, 2014).

Most successful projects attribute their survival to effective use of resources and time manage and avoid increase in costs and scope creeping which may result into additional work that is not planned for as well as increasing costs that affect performance of projects. However, some projects have not given much consideration to time and cost management in their project implementation; there is nothing much that is being done to ensure effective use of resources and time due to insufficient information and understanding on the effect of time and cost management on project implementation. It is against that background that the researcher intends to carry out this research on the effect of time and cost management on project implementation with reference to Sustainable Food Initiative project as the case study.

3. OBJECTIVE OF THE STUDY

- i. To examine the influence of cost management on the implementation of sustainable food initiative project.

4. CONCEPTUAL FRAMEWORK



5. RESEARCH DESIGN

A research design is the set of methods and procedures used in collecting and analyzing measures of the variables specified in the research problem. In this research, the researcher used a descriptive research design which was based on both quantitative and qualitative data. The design of a study defines the study type, research problem, hypotheses, independent and dependent variables, experimental design, and, if applicable, data collection methods and a statistical analysis plan. A research design is a framework that has been created to find answers to research questions.

6. POPULATION OF THE STUDY

The study population is a group of individuals taken from the general population who share a common characteristic, such as age, sex, or health condition. This group may be studied for different reasons. The populations of this research are 89 employees of sustainable food initiative project located in Kimihurura sector Kigali district.

7. SAMPLE SIZE AND SAMPLING TECHNIQUE

Sample size is the number of observations used for calculating estimates of a given population. For the case of this study, researcher was taken all 89 respondents. The researcher was used simple random sampling technique. Simple random sampling technique was used on lower level employees while purposive sampling technique was used on managers of the project.

8. DATA COLLECTION INSTRUMENTS

These are the tools that the researcher intends to use while carrying out the research; Researcher was used questionnaires. The researcher was formulated questions related to factors that affect of time and cost management on project implementation. The questionnaires used closed ended questionnaire.

9. RESEARCH FINDINGS AND DISCUSSION

Table1: The influence of cost management on the implementation of sustainable food initiative project

Rating	SA	A	N	D	SD
Budget determination	16%	78.3%	0	5.7%	0
Planning	25%	75%	0	0	0
Time management	100%	0	0	0	0
Change management	20%	80%	0	0	0
Earned value management	35%	60%	3%	2%	0

Source: Primary data, 2018

The above Table1 shows the perception of respondents on how cost management influence sustainable of food initiative project in Rwanda. The results show that budget and planning are well conducted in food initiative project, 94.3% and 100% of respondents were appreciated. Time management and change management are the most indicators influenced the implementation of sustainable food initiative project.

Most sustainable food initiative projects fails to offer value for money, food initiative projects are said to cost too much, take too long to complete and too prone to failure, therefore, this research seeks to explore the management of three project parameter, (time, cost and effective) in Rwanda.

9.1 Regression Analysis

Table2: Model Summary: Regression analysis

Model	R	R Square	Adjusted R Square	Change Statistics	
				F Change	
				Sig. F Change	
1	.897 ^a	.805	.825	7.567	.029

Source: Primary data, 2019

According to the findings in the table above, the value of R^2 is 0.805. This indicates that there is positive relationship between two variables. This means that approximately 80.5% variations of time and cost management are positive relative to project implementation, at 5% level of significance. These indicate good fit of the regression equation used.

The rule of Thumb is that, usually an R square of more than 50% is considered as better. This study proves the rule of Thumb the R^2 is (0.805). In this study the rule of thumb is that, usually an R square of more than 50% is considered as better.

Table 3: Multiple Regressions

Model	Un-standardized Coefficients	Standardized Coefficients	Sig.
	B	Std. Error	Beta
(Constant)	.164	.472	.002
Cost management	.702	.341	.000

Source: Primary data, 2019

From Table3, the regression model therefore becomes:

$$Y=0.164+0.702x_2+ \varepsilon$$

On table 3; the regression coefficients of the predictors (cost management) influence the project implementation of food initiative project. Results indicate that all variables influence the success of project implementation and p-value of 0.05 and beta value is 0.701.

10. CONCLUSION

The study based on the data presented and analyzed on the assessment of time cost and effective utilization of resources in sustainable food initiative project in Rwanda, concluded from the findings of the research that the major factors are: time management, cost management and effective utilization of resources has been influenced the project implementation in Rwanda. Conclusively the study further reaffirms the importance of effective management of time cost and utilization of resources in Rwanda.

11. RECOMMENDATIONS

Based on the conclusion drawn above the following recommendations are hereby proposed: Efforts should be made by the food initiative project team to plan all work operation activities. Starting from the pre-contract stage, through to the post contract stage; Also effort should be put in place by Private sector and concerned professional bodies to guide against fraud in the project planning.

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