

Influence Of Project  
Management Skills  
On Performance Of  
Government Funded  
Projects In Burundi: A  
Case Of Burundi Road  
Agency

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**ABSTRACT**

This survey investigated the impact of program administration competencies on the execution and success of government-funded programs, with a specific focus on Burundi Road Agency. The main objective was to examine how program administration skills do influence the fulfillment of government-funded programs within the agency. The survey aimed to achieve this objective by exploring the effects of communication competencies, cost management competencies, and risk management dexterity on the execution of government-funded projects. To enhance understanding of the research topic, various theories were studied. The research employed a descriptive research design, and data was collected through questionnaires distributed to 229 permanent staff members of the Burundi Road Agency. A sample of 146 respondents was selected using the Slovin formula to represent the larger population. Both secondary and primary sources of data were utilized to gather sufficient information. The questionnaire served as the primary tool for data collection. The survey employed linear regression analysis at a significance level of 5% to establish the associations between variables. To ensure the consistency of research instruments, a reliability test was conducted on the questionnaire. The collected information from the respondents was analyzed, and the findings were interpreted. The survey findings provided insights into the relationship between program administration competencies and the execution of government-funded programs in the Burundi Road Agency. Overall, this study contributes to a better understanding of the importance of program administration skills in the successful implementation of government-funded initiatives.

**Key Terms:** Cost management skills; project leadership; project team management skills; risk management skills; technical expertise; stakeholder involvement.

**1. INTRODUCTION**

Nowadays, project administration plays a crucial role in enhancing project performance and achieving its objectives. This is especially important for clients in different sectors of the economy. Project performance can be categorized into groups, with one focusing on the productivity of project management processes. In this category, the project management team describes, organizes, and completes the project work. Stakeholders, including the Government of Burundi funding road construction and maintenance projects, aim to maximize the benefits derived from their investments. To satisfy clients, project administrators must ensure timely completion within budgetary allocations and the required quality standards.

Road construction projects, although time-consuming, should not be endless, as this would disrupt the project's budget. The cost and time taken to complete a project are directly linked. Projects must have defined start and end times, utilize allocated resources, and meet quality criteria to benefit the intended parties (Waihenya, 2011).

The road construction and maintenance sector in many countries heavily relies on the expertise of project managers. The success or failure of a project is largely determined by their management skills. In this sector, poor management often leads to project delays, budget overruns, and scope deviations. Consequently, projects fail to meet their objectives and lack the desired impact.

According to a study conducted by Price Water Coopers in 2014 across Africa, Asia, Australia, Europe, North America, and South America, only 2% of projects achieved 100% success, while 50% failed to reach their intended objectives (PWC 2014). Understanding the key factors influencing project success and effective planning and scheduling are vital to ensure project success.

### **1.1 STATEMENT OF THE PROBLEM**

Management of government-funded projects is a critical phase in project management, as it largely determines the success or failure of implementation. The implementation phase of a project is often influenced by incorrect priorities; insufficient financial resources, poorly examined targets, and inadequate project design (World Bank, 2010). Project implementation failures result in the loss of scarce government resources. To achieve the objectives of a project, effective project administration is crucial. While many organizations recognize the importance of project management skills, a significant number of project managers lack the necessary expertise (Ling & Ma, 2014).

According to Zhang & Fan (2013), government-funded projects continue to underperform, indicating credibility issues that require urgent attention. Sunindijo (2015) also found that major infrastructure projects face delays, procurement challenges, and cost overruns, hindering their optimal implementation. Managing government projects successfully is a significant challenge for the Burundian government. Efforts to address this issue are essential for the projects' efficient and effective implementation, contributing to the nation's development. In Burundi, several taxpayer-funded projects fail to materialize due to various reasons, particularly in the road sector where timely completion is often compromised, compromising quality and value for money. This is particularly critical when donor funds are provided as loans with interest. Project administration remains a major test for the Burundian government. According to the World Economic Forum (2019) General Infrastructure Quality Index in EAC (2010-2019), Burundi ranked last among its East African Community counterparts in terms of infrastructure performance.

The World Bank's Transport Resilience Project in 2020 highlighted insufficient road network maintenance in Burundi. Since 2015, the country has initiated various road projects aimed at addressing flood damage from that year. However, the World Bank report in 2020 revealed that these projects had achieved a moderate success rate of about 47% in terms of completion and implementation. Some projects experienced cost overruns or delays. The report attributed these challenges to a lack of necessary skills among project managers. Therefore,

studying the effects of project management skills on the performance of government-funded projects is necessary.

## **1.2 OBJECTIVES OF THE STUDY**

The main objective of this study was to examine influence of project management skills on the implementation of government-funded projects within Burundi Road Agency.

### **1.2.1 SPECIFIC OBJECTIVES**

The specific objectives of the project were:

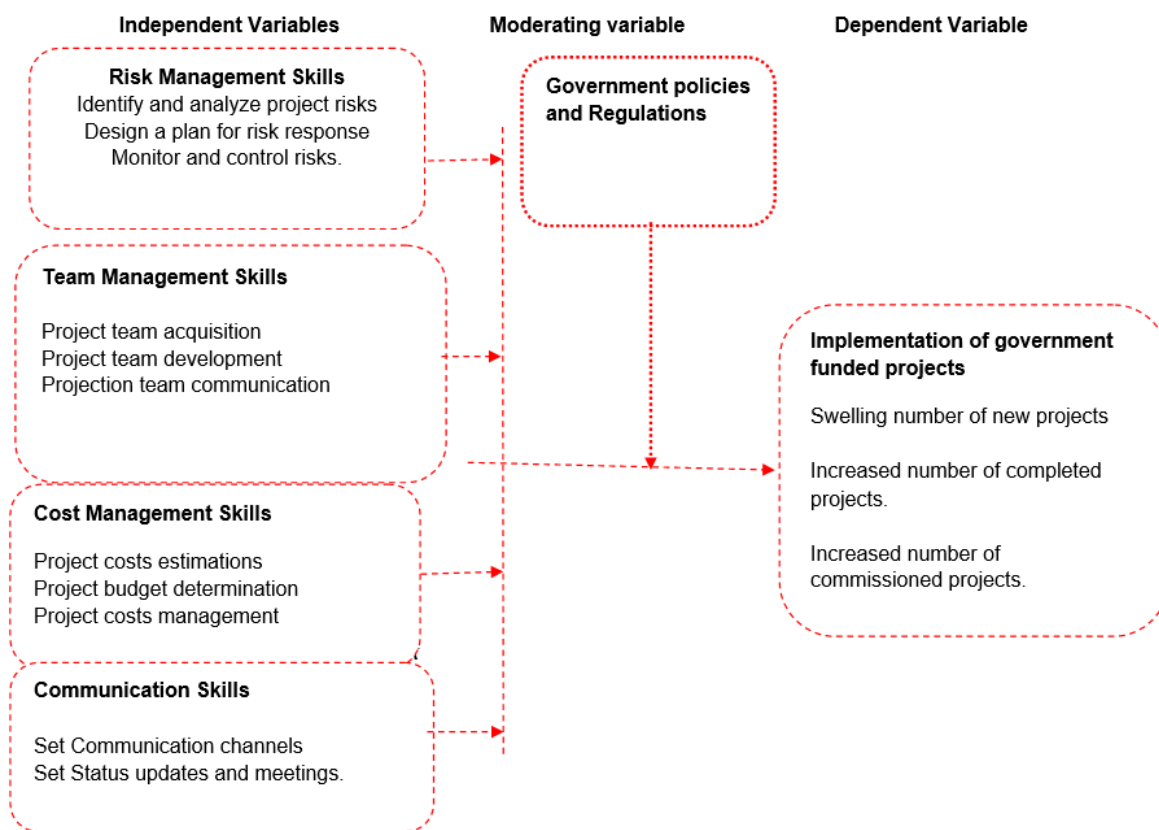
- To explore to what extent communication skills influence execution of government funded projects within Burundi road agency.
- To explore how cost management skills influence execution of government funded projects within Burundi road agency.
- To establish how team Management skills influence execution of government funded projects within Burundi road agency.
- To explore how Risk Management skills influence execution of government funded projects within Burundi road agency.

## **1.3 SIGNIFICANCE OF THE STUDY**

Burundi road agency may use the findings of this study in getting more insight about the skills that are necessary in project management skills and how they influence the implementation of their projects. Burundi road agency therefore would train its staff especially where gaps have been identified accordingly. Scholars and academicians would also find this study more insightful by applying the findings in improving their knowledge on project management skills. Other government agencies and departments would use the findings in developing skills that are geared towards making their staff more effective and efficient in project management.

## **2. LITERATURE REVIEW**

### **2.1 CONCEPTUAL FRAMEWORK**



**2.2 EMPIRICAL REVIEW**

Here we highlight effective skills for the implementation of government funded projects.

**2.2.1 COMMUNICATION SKILLS AND IMPLEMENTATION OF GOVERNMENT FUNDED PROJECTS**

Communication is considered a critical factor for project managers to successfully achieve work objectives (Brill, Bishop, & Walker, 2006). It plays a significant role in determining the success or failure of a project during its design and implementation stages (Söderlund, 2011). Ling and Ma (2014) found in their study conducted in different cities in China that communication is a major factor contributing to project success. Stakeholders require relevant, timely, and precise information about the project's progress, and project managers should possess effective communication skills to ensure successful project performance.

The proper implementation of a project is strongly linked to effective and efficient communication among the parties involved (Maina & Waweru, 2011). Upholding effective communication is crucial for enhancing and positively impacting the project's performance. Project team communication refers to the exchange of ideas, thoughts, and opinions among members to successfully accomplish the organization's mission or goal. The leadership styles of top management in an organization significantly influence team communication levels, either strengthening or weakening them. Communication plays a vital role in ensuring effective operations, promoting team uniformity, and enhancing efficiency – key ingredients for successful project implementation (Yang, Huang, & Wu, 2011). Various studies conducted by researchers have consistently shown that project

team communication greatly influences team output and productivity. Therefore, it is essential to prioritize the enhancement and sustenance of team communication efforts.

### **2.2.2 COST MANAGEMENT SKILLS AND IMPLEMENTATION OF GOVERNMENT FUNDED PROJECTS**

Funding and cost management are crucial components for the successful implementation of infrastructure projects, according to Macharia and Ngugi (2014). Insufficient funding negatively impacts the project's quality and timeline. Project managers and organizational leaders must possess cost management skills to prevent cost overruns. It is important to establish a well-defined procedure for funding the project and share it with the funding agency to ensure successful implementation. A robust funding process plays a key role in the execution of infrastructure projects, particularly road projects, which often suffer from insufficient funds. Delays and even project abandonment can result in significant losses.

Cost management is an essential aspect of project management, as highlighted by Kazaz, Ulubeyli, and Tuncbilekli (2012). Construction projects frequently experience cost overruns that affect the project's timeline and budget. Meeting the budget and timeline is crucial for project financiers and beneficiaries. Project managers have the responsibility to accurately forecast project costs during the planning phase. However, despite taking necessary steps for proper cost management, there is a higher probability of underestimating costs due to the continuous increase in building materials and other expenses. The rise in building material costs, compounded by inflation and scarcity, poses a new challenge for project teams, making it increasingly difficult to budget accurately without incurring cost overruns. Many construction materials are imported from developed countries, creating challenges during currency exchange and increasing the cost of project implementation.

Unpredictable currency exchange rates often necessitate additional funding to bridge the gap between the budgeted amount and the actual project cost. This leads to project delays during negotiations for additional budgets and cost increases. Therefore, it is crucial to have proper cost management skills within the project management team to address these challenges effectively. By implementing effective cost management practices, unnecessary costs can be reduced, and projects can be executed more efficiently.

### **2.2.3 TEAM MANAGEMENT SKILLS AND IMPLEMENTATION OF GOVERNMENT FUNDED PROJECTS**

In a project team, individuals come from diverse backgrounds, resulting in different personalities, opinions, and perceptions. Conflicts and disagreements may arise during project design and implementation. It is crucial for the project manager to ensure seamless and harmonious teamwork to avoid negative impacts on project success. Newton (2015) suggests that a skilled project manager should understand each team member's skills, experiences, expertise, competences, and personalities to maximize their impact and manage conflicts effectively. This fosters a strong connection between team members, addressing misunderstandings and enhancing project operations. Networking and understanding individual interests can further strengthen this connection.

**2.2.4 RISK MANAGEMENT SKILLS AND IMPLEMENTATION OF GOVERNMENT FUNDED PROJECTS.**

According to Lugusa & Moronge (2016), risks are inevitable challenges in every project, requiring project managers to plan and manage them. Risk management involves addressing potential negative effects and opportunities. Lusesi (2018) emphasized the significance of risk management skills for implementing projects, particularly in the context of Constituency Development projects in Kenya. Equipping principals in schools with risk management skills enables them to identify risks. A study by Roque & de Carvalho (2013) on Brazilian Vendor companies revealed that prioritizing and implementing risk assessment approaches positively impacts project performance. Proactive identification and timely resolution of challenges ensure projects are completed within budget, schedule, and quality requirements. The study concluded that project risk assessment significantly contributes to project success.

**3. METHODOLOGY**

The research employed a descriptive research design, using a target population of all ARB employees. The researcher distributed questionnaires to gather data, following a rational and cogent research design as described by Cresswell (2013). The target population was the 229 employees of Burundi Road Agency, chosen because they could provide sufficient and representative information.

Sampling techniques were applied to select a subset of individuals for the study. To ensure efficiency and minimize errors, a sample size of 146 was derived using the Slovin formulae.

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

Where n = Sample Size, N = the total population, 1 = constant, e = limit of sampling error

$$n = \frac{229}{1+229(0.05)^2} = 146$$

Sample size=146

Stratified sampling was used to obtain appropriate representation from subgroups such as the road fund department, planning department, and execution of road works department. The percentages of employees in each department (29%, 23%, and 48% respectively) were applied to ensure equitable representation in the research.

Structured questionnaires were utilized to collect primary data from different departments, while secondary data was gathered from journals, internet sources, and textbooks. The self-administered questionnaires were distributed by trained research assistants. The respondents consisted mainly of professionals involved in the road fund department, planning, and execution of road works.

Overall, the research design aimed to gather comprehensive data from a targeted population, utilizing appropriate sampling techniques and research tools to ensure the effectiveness and representativeness of the study.

#### 4. RESEARCH FINDINGS AND DICUSSION

##### 4.1. RESPONSE RATE

The study targeted population of Burundi Road Agency constituted of 229 permanent employees. The sample population of the study was 146 employees out of which 120 employees fully responded and returning the questionnaires that have been forwarded. This represented a successful response rate of 82% and according to Mugenda & Mugenda (2003), a response rate of more than 50% is adequate for analysis.

Table 1: Response Rate

Response	Frequency	Percentage
Successful	120	82
Unsuccessful	26	18
<b>Total</b>	<b>146</b>	<b>100</b>

Source. Researcher (2023)

##### 4.2. RELIABILITY RESULTS

The reliability of an instrument informs is ability to produce or give results that are stable and consistent when an instrument is applied several times. The alpha can take any value from zero (no internal consistency) to one (complete internal consistency). According to George and Mallery (2011), the rule of thumb for Cronbach's Alpha values is that “\_ > .9 – Excellent, \_ > .8 – Good, \_ > .7 – Acceptable, \_ > .6 – Questionable, \_ > .5 – Poor, and < .5 – Unacceptable”. The results support findings of Johnson & Turner (2011) who indicated that a scale of 0.7 and above is a clear indication that the reliability is satisfactory.

Table 2: Summary of Cronbach's alpha Reliability Coefficient

Variables	Number of Items	Cronbach's Alpha
Communication skills	4	0.913
Cost management skills	3	0.941
Team management skills	3	0.967
Risk management skills	3	0.928
Implementation of government funded projects	3	0.918
<i>Source.</i> Researcher (2023)		

According to the study, to ensure reliability of the survey instruments, Cronbach's Alpha was applied. As indicated in table 2, Communication skills had alpha of 0.913, Cost management skills had 0.941, Team Management skills had 0.967, Risk Management skills had 0.928, Implementation of government-funded projects had alpha of 0.918. This indicates that there is robust internal consistency among measures of variable items.

**4.3. CORRELATION RESULTS FOR GOVERNMENT FUNDED PROJECTS**

Correlation analysis was carried using Pearson correlation coefficient out to establish if there was any major relationship that existed between independent variables and dependent variable. These independent variables include Communication skills, cost management skills, risk management skills and team management skills as well as dependent variable that is effective performance of government funded projects.

*Table 3: Correlation Matrix of Independent variables*

Variables	Test	Communication	Cost Management	Team Management	Risk Management
	Pearson Correlation	1	0.570**	0.340**	0.590**
Communication	Sig. (2-tailed)		.000	.000	.000
	N	229	229	229	229
	Pearson Correlation	0.570**	1	.196*	.282
Cost Management	Sig. (2-tailed)	.000		.000	.011
	N	229	229	229	229
	Pearson Correlation	.340**	.169*	1	.234
Team management	Sig. (2-tailed)	.000	.000		.000
	N	229	229	229	229
	Pearson Correlation	.590**	.244	.216	1
Risk Management	Sig. (2-tailed)	.000	.000	.000	
	N	229	229	229	229
**. Correlation is significant at 0.01 level ( 2-tailed)					
*. Correlation is significant at the 0.05 level (2-tailed)					

Correlation analysis was carried out to ascertain if the variables were connected with each other. From the findings the variables were related significantly to each other. From the study, communication skills in performance of government funded projects had an emphatic and was statistically significant correlated to cost management skills ( $r = 0.570, p < 0.01$ ); Team management ( $r = 0.340, p < 0.01$ ); Risk management had an emphatic and significant correlation to communication Practice ( $r = 0.590, p < 0.01$ ). From the Table 18, the correlation among the variables was determined to be less than  $r < 0.6$  and hence the problems of multi-collinearity were reduced. A common rule of thumb is that correlations among the independent variables should be less than 0.70 to remove the difficulties in regression analysis (Lind et al., 2011).

**4.4. DISCUSSION OF FINDINGS OF THE STUDY**

The study aimed to investigate the impact of project management skills on the performance of government-funded projects in Burundi Road Agency. The first objective was to assess the influence of communication skills on project execution. The findings emphasized the importance of communication in successful project implementation. Organizations should establish effective communication processes to share knowledge and

project information with team members, ensuring efficient execution. The study also highlighted the significance of cost management skills in achieving successful project outcomes. Poor cost management was identified by 84% of respondents as negatively impacting project performance. Additionally, 29% agreed that prompt communication of risks to stakeholders is crucial. Risk management skills were found to be essential in government-funded project execution, emphasizing the need for adequate risk management processes and planned responses. Lastly, team management skills were identified as influential in project execution. Proper training and clear communication channels were recommended to enhance team effectiveness and efficiency. Overall, the study emphasized the importance of effective communication, cost management, risk management, and team management skills for successful government-funded projects within Burundi Road Agency.

## 5. CONCLUSION

From the findings of the study, it can therefore be deduced that communication skills, team management skills, risk management and cost management skills are key and vital in successful completion of government-funded projects. Institutions should provide or facilitate employees to acquire these skills especially where they are lacking.

## CONSENT

The information on the questionnaires was handled with confidentiality and scholarly consumption only. Employees of ARB were given questionnaires and have had opportunity to ask questions. They consented to participate voluntarily and were free to withdraw at any time without giving a reason.

## SUGGESTIONS FOR FURTHER RESEARCHES

This study was carried out in Burundi Road Agency in Bujumbura. The study was focused on factors influencing the performance and management of government-funded projects. In recommendation, other studies should be done on challenges facing execution of donor-funded projects in Burundi, which is not explored in this study.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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