



# INFLUENCE OF PROJECT MANAGEMENT PRACTICES ON PERFORMANCE OF TELECOMMUNICATION PROJECTS A CASE STUDY OF GOLIS TELECOMMUNICATION SOMALIA

**Abdihakin Hassan Kalif<sup>1</sup>, Samuel Nyambega Nyang'au<sup>2</sup>**

<sup>1</sup>Mount Kenya University, Kenya

<sup>2</sup>Samuel Garissa University. Kenya

## ABSTRACT

Despite the government's best attempts to make money more readily available for development purposes, a growing number of telecommunications projects in Somalia have failed. The performance of the majority of projects in Somalia fails to fulfill the intended objectives based on the indicators of time, quality, and cost. The specific objectives of this research was evaluate the influence of stakeholder participation, project risk management, project planning and monitoring and evaluation practices on the performance of telecommunications projects. A case study of Golis Telecommunication Somalia. The study adopted descriptive design. The target population in the research consisted of 214 staff members from Golia limited. The use of Slovene's formula was used to arrive at 139. The method of sampling that was used for the research is stratified random sampling, and participants were selected at random from each stratum. Using a method called simple random sampling, the researcher was chosen Golia restricted participants at random from among each set of employees. The study used semi structured questionnaires. Statistical analysis, inferential statistics was used to find out the relationship between the variables. Stakeholder involvement methods, had a substantial effect on the outcome of projects on the other hand, the results indicated that techniques for managing projects' risks significantly impacted their outcomes. Project planning techniques had a substantial effect on the performance of projects. Lastly, the results showed that Golis Telecommunication Somalia's project success was significantly influenced by the quality of the M&E procedures. It was found out that project planning has positive relationship with performance of telecommunications projects. The study recommends that project management practices should encourage collective pride in completed work. Indirect and direct users alike should reap the benefits of the project's completion. Users should be able to do this at any point in the project's execution. The projects should be seen as investments that will provide for current and future generations, thus all parties involved should make every effort to work together.

**KEYWORD:** project management practices, Performance of projects, Telecommunications.

## 1.0 INTRODUCTION

Government and commercial sector clients alike are invested in seeing this project through to a happy ending. Although there is much discussion on how best to manage projects, nobody can agree on how their performance should be evaluated (Bai, & Yang, 2011). Successful project completion requires both the creation of a detailed timetable and an understanding of the most influential factors. It makes it easier for the project management and the stakeholders to make the appropriate choices and move in the direction of the project's success (Adan,2016). Despite the absence of government control of phone or Internet connection, several telecommunications providers in Somalia are vying for customers, contributing to the rapid development of technology and people's access to it. Somalia's phone service industry is highly competitive, which has helped the country's economy recover slowly and shows that even in one of Africa's least developed markets, certain complex businesses can survive and thrive (Dahie, et. al 2016). Golis Limited is a key player in the rollout of critical infrastructure for global telecommunications networks. Currently, these endeavors are being worked on by Golis Limited. Abdiaziz(2018) identifies integration, project scope management, time and cost management, procurement, risk management, communications management, human resources management, and quality management as the two most important processes for completing telecommunications network equipment projects on time and under budget. In order to ensure a smooth rollout of communications network equipment projects, the following process areas have been prioritized. Because of the difficulty and expense involved in maintaining multiple technologies, as well as the necessity of freeing up valuable assets that are currently occupied by technology that is both older and less effective, operators have started making preparations for the decommissioning of their older networks.



### 1.2 Statement of the Problem

Numerous initiatives all around the globe continue to be unsuccessful, which costs businesses and organizations tens of millions of dollars. Despite the government's best attempts to make money more readily available for development purposes, a growing number of telecommunications projects in Somalia have failed (Gharouni, 2021). According to Kaufmann and Kock, (2022), the performance of the majority of projects in Somalia fails to fulfill the intended objectives based on the indicators of time, quality, and cost. More than 70% of the initiatives that are really carried out will almost certainly lengthen the overall duration of the project by fifty percent. Additionally, more than fifty % of the projects that are carried out will most likely result in an increase of more than twenty % in the total cost of the project. Most telecommunication projects in Somalia which are aimed at ensuring the better the community have been mentioned to have short lifespan, others have stalled and others have not impacted significantly to the community intended (United Nations Development Programmed (Khalid, 2015). According to Dai and Wells (2004), project teams and supervisors lack soft skills. Soft skills in project performance have not been examined in the Somali telecommunications business. It is not entirely obvious if the successful completion of projects in the telecommunications industry in Somalia is influenced in any measurable way by the use of certain "soft skills" possessed by project managers. It was noted that top management should try to incorporate the organization's plans in their activities. However, there exists a notable gap in the research landscape, as none of these studies have been extended to encompass performance of projects of telecommunications. A case study of Golis Telecommunication Somalia.

### 1.3 Objectives of the study

This research aimed to determine;

- i. To investigate the influence of stakeholder engagement on performance of projects of telecommunications. A case study of Golis Telecommunication Somalia.
- ii. To assess the effect that project risk management practices have on performance of projects of telecommunications. A case study of Golis Telecommunication Somalia.
- iii. To determine the extent to which project planning practices on performance of projects of telecommunications. A case study of Golis Telecommunication Somalia.
- iv. To investigate the influence of monitoring and evaluation on performance of projects of telecommunications. A case study of Golis Telecommunication Somalia.

## 2.0 LITERATURE REVIEW

### Stakeholders Participation Practices and Performance of Projects

Adan(2019) studied the Isiolo North Constituency to see how voters affect the success of development funds. This study used a descriptive approach. This study demonstrates the importance of project managers and government officials in a project's final outcome. The key concerns of the research were the roles played by different parties and suggestions for bolstering electoral progress. Research is now being performed with the goal of better understanding how stakeholders in Somalia's telecommunications projects are involved in the implementation process. In their research, Mandala, (2018) investigated how the engagement of stakeholders affected the efficiency of road construction projects carried out by the Kenya National Highways Authority (KeNHA). In order to obtain quantitative as well as qualitative information, the research included interview schedules and questionnaires. A stratified random sample approach was used to choose 251 participants from the prequalified contractor population, KeNHA top management (Job group 7-10), and prequalified consultant populations for this research. All of the participants worked for legitimate companies. The research found that seminars and conferences, as well as open lines of communication between all parties involved, were essential to the success of road construction projects. Wamugu and Ogollah(2017) looked on how involved different groups were in carrying out the CDF project in Kenya's Mathira East constituency. Since stakeholders may have the largest effect on the results of CDF initiatives, the findings suggest that their involvement in the project's preliminary stages, including identification, screening, and selection, is crucial. Only CDF projects were included in the study, whereas the current examination is narrowing down on the effectiveness of telecoms initiatives in Somalia.

### Project Risk Management Practices and Performance of Projects

According to Ahmadabadi and Heravi, (2019) study's findings, construction projects' risk management strategies can be defined as any action taken to reduce the likelihood of undesirable outcomes that could compromise the project's timeline, budget, or overall success. The studies did not address the project risk on a telecommunications project, which is a gap in the variable of project risk on performance projects that is meant to be addressed by this research. Maiyo and Kamaara. (2019) was found out that development projects will fulfill their intended goals if sufficient accountability and transparency are exercised in the process of resource mobilization, and that involvement of project stakeholders leads to projects that are demand driven, which in turn leads to projects that reach their intended results. Stakeholder analysis and stakeholder interaction were also highlighted as areas where project teams may benefit from training.



By examining how project risk affects the successful conclusion of telecommunications projects, this research hopes to fill a need in the existing literature.

Motaleb and Kishk, (2013) found out that faults in linkages to the project occurred during unprepared implementation. The second kind of risk is involved with the Execution phase of the project and happens when team members are unable to complete project-related tasks effectively. Finally, there's the potential for horizontal and vertical integration throughout the whole of the project's work. Their advice is to put more effort into carrying out the tasks after they have been planned. One of the problems that has been identified all through the process of adding new features is integration risks, where one part of the project is not compatible with the other, leading to malfunction and a lack of component interoperability. To rephrase, even if everyone in the team completes their work on time and on budget, the project may still fail if its many components are not well-suited to one another. Maghanga(2019) looked on how cement manufacturing companies in Nairobi County, Kenya, handled project risk and how it affected final results. Aspects of project risk management that have been found to effect project results include risk avoidance, risk retention, risk transfer, and risk control. Additionally, there is a considerable link between the factors, both independent and dependent on one another. The research will concentrate on initiatives related to telecommunications in Somalia.

### **Project Planning Practices and Performance of Projects**

Muute and James, (2019) examined how project planning practices and performance of construction projects in Nairobi City County, Kenya. The study's scope was narrow since it solely examined housing developments and attempted to identify factors that affect actual implementation. This research will examine the effectiveness of telecommunications project management. Nzioka(2018) investigated the positive outcomes of careful project management planning in Kenya's capital city, Nairobi. All aspects of the research were anchored in the context of the Kenya Power Infrastructure Development Projects. In order to collect information for this research, a Census Survey was sent to all project managers. The study mapped out the various planning tasks and identified the various planning approaches. This study aims to answer the question of whether or not effective project planning improves the speed with which telecommunications projects are finished.

To ascertain the significance of planning for projects, Gitau, (2015) found out that the quality of a project's early planning significantly affects the project's outcome. Researchers deduced from this that success rates for projects were higher when more time was spent on preparation. This study's findings suggest that project managers need to put in sufficient effort during the planning phase of their endeavors. This successfully places the emphasis on the role that risk management plays throughout the planning phase of the project. Similar conclusions were reached by Magagan and Ngugi, (2021) showed that the project's success or failure was heavily dependent on the human capital planning tactics used. It should come as no surprise that the quality of the instruction offered to the persons who participated in the effort and the amount of participation demonstrated by the individuals who were a part of the initiative were directly related to the project's success. The research shed light on the several aspects of planning that, when combined, have the potential to greatly impact the accomplishment of building endeavors.

### **Monitoring and Evaluation Practices and Performance of Projects**

Project management approaches were very helpful for local businesses in the Lake Basin Region's road building projects, as stated by Ocheng(2018). Findings suggest that the success of road infrastructure programs is significantly affected by the degree to which their progress is monitored and assessed. The Lake Basin Region served as the study's location, and it used both descriptive and explanatory research approaches into its overall methodology. This research is going to be carried out in Somalia. Wambua(2019) investigated how M&E affects county-funded education initiatives. Makueni was studied descriptively. The county M&E unit and sub-county M&E teams, all of whom got M&E training and engaged in public participation-oriented baseline surveys, structured the M&E process, the data showed. This research examines how M&E affects Somalia's several telecommunications initiatives. In the setting of Makueni County, Muindi(2018) conducted research on the impact of M&E on county-funded programs for social betterment. The study's results informed recommendations for how Kibwezi Sub County should better coordinate its assets to ensure that the administrative personnel and financial means needed to oversee county-funded initiatives were readily available. The M&E was the primary focus of the research, however performance initiatives were not discussed.

Kala, (2020) revealed that many projects failed to meet their objectives. The research says this happened because there wasn't enough checking in and assessing going on. Research shows that these things are necessary for activities to take place: participant involvement, capacity building, and appropriate funding. However, there are also some beneficial outcomes, such as greater quality projects thanks to public backing and larger profits for private investors because to public subsidies. Due to the fact that there was no previous study that looked at the influence of M&E on project outcomes during telecommunications projects, this new research will fill the void left by



the absence of such research. Njiru(2018) investigated manufacturing company project management methods and execution in Nairobi, Kenya. It was found out that project monitoring should be a constant and ongoing project review and surveillance to verify that the deliveries, schedules of work, goal outputs and other necessary actions are implemented in accordance with the plan. Research on M&E in telecommunication firms in Somalia neglected to include the context of project success, which is a void that this research intends to fill.

### 3.0 METHODOLOGY

#### Research Design

This study was used a descriptive study design. This descriptive format allows one to express information about the nature and state of an event more clearly(Creswell, 2012). This descriptive study design was relevant for this analysis as it helped to characterize the state of activities as they appear without the study's aim of manipulating variables.

#### Population of the Study

The population of this study covered 214 employees at Golis Telecommunication. Employees were classified as either upper-level managers, middle-level managers, or entry-level workers. The layers were put into action.

**Table 1: Distribution of the Target Population**

Category	Population	Percentage
Senior Level Management	29	14%
Middle level Management	83	39%
Bottom Level Management	102	48%
<b>Total</b>	<b>214</b>	<b>100</b>

Source: Golis Telecommunication HR records(2022)

#### Sample Size and Sampling Techniques

Sample is the proportion of the total population to be studied sampling technique was the method used for selecting a sample. The number of elements in a sample is known as sample size. Since the population of this study was finite, the application of statistical formula becomes essential in order to determine the sample size. The sample size for this study was arrived at using the Taro Yamane formula. This is as expressed below

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

Where:

n =Sample size

N =Population of the study

e =Tolerable level of error (5%)

$$n = \frac{214}{1 + 214(0.05)^2}$$

$$n = \frac{214}{1 + 214 (0.0025)}$$

$$n = 139$$

**Table2: Sample Size**

Category	Population	Proportionate sample Size ( x/214*139)
Senior Level Management	29	19
Middle level Management	83	54
Bottom Level Management	102	66
<b>Total</b>	<b>214</b>	<b>139</b>



**Method of Data Analysis**

Descriptive statistics in SPSS 24 were used to assess the study's quantitative data. Mean, frequency, standard deviation, and percentages are all examples of descriptive statistics that may be used to characterize a sample and highlight key trends in the data. Using a correlation statistic called the product-moment correlation coefficient that Pearson devised, the researcher assessed the significance of the associations between the variables. Multiple linear regression analysis was used to look for correlations and establish causation. This research investigated how different approaches to project management might impact the efficiency of an organization. The information obtained over the course of this research will be analyzed using SPSS version 22, which will be provided by IBM. The regression model will consist of the following:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;

Y = Performance of Projects

$\alpha$  - Is the regression constant or intercept,

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$ – Are regression coefficients or change induced in Y by each  $X_1, X_2, X_3$  and  $X_4$  that are predictor variables,

$X_1$  = Stakeholder Participation Practices

$X_2$  = Project Risk Management Practices

$X_3$  =Project Planning Practices

$X_4$  = Monitoring and Evaluation

$\epsilon$  (Extraneous) - That part of the error term that takes into consideration the predictor variables' linear effects but fails to explain the observed variation in Y.

**4.0 DATA ANALYSIS AND FINDINGS**

In this study, multivariate regression analysis was employed to ascertain the correlation between the dependent variable, namely the performance of telecommunications projects, and a set of independent variables, including stakeholder participation practices, project risk management practices, project planning practices and M&E practices.

The multiple regression models were as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Whereby; Y was performance of projects of telecommunications,  $\beta_0$  was a Constant,  $\beta_1 - \beta_4$  were Coefficients of determination,

$X_1$  was stakeholder participation practices

$X_2$  was project risk management practices

$X_3$  was project planning practices

$X_4$  was monitoring and evaluation practices

$\epsilon$  was Error term.

**Table 3: Model summary for combined Performance of projects**

Model	R	R Square	Adjusted R square	Std. Error of the estimate
1	.861a	.742	.730	.35548

1

Constant predictors include stakeholder engagement, risk management, planning, and M&E procedures. Table 3 displays the findings, revealing a R Square statistic of 0.742. According to these results, about 74.2 % of the observed variation in project outcomes can be explained. Therefore, it can be deduced that factors not included or analyzed in the current study may account for 25.8% of the observed variations in project success. As can be seen in Table 4.10, the outcomes of an ANOVA were calculated and presented in a clear and plain format.



**Table 4: ANOVA for combined determinants and performance of projects**

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	31.187	4	7.797	61.702	.000b
	Residual	10.867	133	.126		
	Total	42.055	137			

Dependent variable: Performance of projects

Predictors:(constant), Stakeholder participation practices, project risk management practices, project planning practices and M&E

As shown in Table 4, the value of F=61.702 with p=0.000<0.05, this means that project management practices significantly predicts performance of projects. The results of the regression beta coefficients with the p-values are as indicated in table 5

**Table5: Model coefficients for combined determinants and performance of project**

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			
(Constant)	-.609	.265			-2.300	.024
1	Stakeholder Participation Practices	.235	.064	.261	3.666	.000
	Project risk management	.240	.068	.245	3.559	.001
	Project Planning Practices	.174	.077	.173	2.259	.026
	Monitoring and Evaluation	.493	.089	.400	5.556	.000

From the findings in Table 4.11, the following model is predicted between project management practices and performance of projects:

$$Y=0.609+.235X1 +.240X2 +.174X3 +.493X4$$

Where

Y is Performance of projects.

X1 is Stakeholder Participation Practices

X2 is Project Risk Management

X3 is Project Planning Practices

X4 is Monitoring and Evaluation

As a result, strategies for project management account for -.609 of the variation in project outcomes. For each unit increase in stakeholder involvement practices, project success rises by 0.235 units, assuming all other factors remain unchanged. The same holds true for project risk management; every unit of improvement there is associated with a 0.24% rise in project success. Project performance also varies



by 0.174 units for every unit variation in planning approaches. In conclusion, there is a positive correlation between a one-unit increase in M&E and a 0.49-unit improvement in project performance.

## 5.0 CONCLUSION AND RECOMMENDATIONS

The study concludes that stakeholder engagement techniques were the fourth most influential factor in determining project success. The execution of the projects took care of the needs of the users as the system grew. Customers were given the opportunity to take some level of responsibility throughout the design and implementation phases of the project. When it comes to tackling legal, financial, and technological risks, Goliath company has a number of obstacles. These risks induce cost and schedule overruns, which in turn affect poor performance of the projects they are attached to. The researchers concluded that project planning strategies had a large effect on project outcomes. The results also suggest that the project team effectively coordinated their efforts to achieve the project's goal, which was directly related to the organization's overall objective. Lastly, the studies conclude the importance of M&E in determining performance since these processes assist maintain track of actions and provide solutions when things aren't going as planned. Since M&E provides information that helps support decision-making, it plays a role in supporting good management choices, which is one of its many benefits.

The findings suggest that project management practices should encourage collective pride in completed work. Indirect and direct users alike should reap the benefits of the project's completion. Users should be able to do this at any point in the project's execution. The report recommends that Goliath develop and follow best practices in time management related to projects since time is a crucial resource that leads to a 65% failure rate for initiatives. The projects should be seen as investments that will provide for current and future generations, thus all parties involved should make every effort to work together. Since M&E of the projects is the best approach to improve the projects' outcomes, they should be encouraged. More people need to be involved in monitoring activities for there to be a meaningful flow of information and lessons learned.

## REFERENCES

1. Abdiaziz Jama, M.(2018). *Telecommunication industry and employment creation in Garowe District Somalia*(Doctoral dissertation, Kampala International University).
2. Adan, H(2012) *influence of Stakeholders role on Performance of Constituencies" Development Fund Projects. Industrial Engineering and Engineering Journal*, 1915-1918.
3. Ahmadabadi, A. A., & Heravi, G. (2019). *The effect of critical success factors on project success in Public-Private Partnership projects: A case study of highway projects in Iran. Transport policy*, 73, 152-161.
4. Bai, J., & Yang, X.(2011). *Research on construction project process performance measurement. Industrial Engineering and Engineering Journal*, 1915-1918.
5. Creswell, J., (2012). *Best practices in mixed methods for quality of life research. Quality of life Research*, 21, 377-380.
6. Dahie, A. M., Takow, M. A., Nur, A. H., & Osman, M. M.(2016). *Organizational culture and employee performance at telecommunication firms in Mogadishu-Somalia. International Journal in Commerce, IT & Social Sciences*, 3(1), 30-41.
7. Dai, C. X., & Wells, W. G. (2004). *An exploration of project management office features and their relationship to project performance. International journal of project management*, 22(7), 523-532.
8. Ernawati.(2013), *Motivation by project and functional managers in matrix organizations. Engineering Management Journal*, 13(2) 3 – 9.
9. Gitau, L. M. (2015). *The effects of risk management at project planning phase on performance of construction projects in Rwanda. Jomo Kenyatta University of Agriculture and Technology*, 1-76.
10. Gwadoya, R. A.(2012). *Factors influencing effective implementation of monitoring and evaluation practices in donor funded projects in Kenya: a case of Turkana District*(Masters Dissertation). *Kenyatta University, Nairobi, Kenya*.
11. Kala, Y. (2020). *Influence of Monitoring and Evaluation Practices on the Performance of County Government Projects: a Case of Mandera Central Sub-county, Mandera County: Kenya* (Doctoral dissertation, University of Nairobi).
12. Kaufmann, C., & Kock, A. (2022). *Does project management matter? The relationship between project management effort, complexity, and profitability. International Journal of Project Management*, 40(6), 624-633.
13. Khalid, A. J. (2015). *Telecommunication companies and socio-economic development in Puntland state of Somalia: case study-Golis Telecommunication Company*.
14. Magagan, K. C., & Ngugi, L. (2021). *Influence of project management practices on performance of projects in Unilever Kenya Ltd. International Academic Journal of Information Sciences and Project Management*, 3(6), 392-418.
15. Maghanga, M. E. (2019). *Effect Of Project Risk Management Practices On Project Performance In Cement Manufacturing Firms In Kenya. Clear International Journal of Research in Commerce & Management*, 10(3).
16. Maiyo, L. K., & Kamaara, M. (2019). *Influence Of Stakeholders Participation On Completion Of Fiber Optic Projects In Kenya. Journal of International Business, Innovation and Strategic Management*, 3(3), 110-127.



17. Mandala, E. (2018). *Influence of stakeholder's involvement in project management on the performance of road construction projects in Kenya: a case of Bondo sub county, Siaya County (Doctoral dissertation, University of Nairobi).*
18. Motaleb, O., & Kishk, M. (2013). *An investigation into the risk of construction projects delays in the UAE. International Journal of Information Technology Project Management (IJITPM), 4(3), 50-65.*
19. Muindi, J. M. (2018). *Influence of monitoring and evaluation on performance of county funded social development projects in Makueni County, Kenya (Doctoral dissertation, School of Open and Distance Learning, University of Nairobi).*
20. Muute, N. C., & James, R. (2019). *Project planning practices and performance of construction projects in Nairobi City County, Kenya. Unpublished Masters dissertation), Kenyatta University, Kenya.*
21. Njiru, S. G. (2018). *Project management practices and implementation of projects in manufacturing companies in Nairobi City*
22. Noor, A., & Ampornstira, F. (2019). *Challenges of Business Investment in Somalia: The Case of Mobile Telecommunication, Banks and Remittance Companies. European Journal of Business and Management, 11(18), 137-145.*
23. Nzioka, W. M., (2023). *Influence of public-private partnership on healthcare service delivery in Nairobi County, Kenya. International Academic Journal of Health, Medicine and Nursing, 2(1), 341-362.*
24. Ochenge, M. D. (2018). *Project Management Practices and Performance of Road Infrastructure Projects Done By Local Firms in the Lake Basin Region, Kenya (Doctoral dissertation, Doctoral dissertation, Kenyatta University).*
25. Wamugu, J. W., & Ogollah, K. (2017). *Role of stakeholders participation on the performance of constituency development fund projects in Mathira East constituency in Kenya. International Academic Journal of Information Sciences and Project Management, 2(1), 104-125.*