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Resource allocation and successful implementation of Telecom Projects in Kenya

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Abstract: **This research looked at the influence of resource allocation on the successful implementation of Telecom projects in Kenya. Many telecom operators worldwide are faced with the difficulty of determining the most effective way to carry out these projects as they upgrade their network technology in an effort to boost capacity and improve performance. Around the world, a lot of projects consistently fail, costing organizations millions of dollars. This study was conducted in an effort to pinpoint the influence of resource allocation on its implementation. The theory of constraint and resource-based view theory guided this study. 36 respondents encompassing project managers, CEOs, and contractors within the Telecommunication industry in Kenya took part in this study. The research utilized both closed-ended and open-ended questionnaires, comprising two sections. SPSS was used to conduct a descriptive analysis of the four independent variables. The independent variables had a positive correlation with the implementation of Telecom projects. The study revealed resource allocation requires improvements. According to the study's findings, effectively allocating resources helps the project manager recognize issues, prevent overspending, and adjust to change by ensuring that the project has the required personnel, tools, funding, etc. as efficiently as feasible. According to the report, project managers need to make sure that the proper amount of team members are present at all times and understand that they must prevent both overstaffing and understaffing.**

Keywords: **Implementation of telecom projects, Project managers, Resource allocation, Resource based theory, Theory of constraints.**

1. INTRODUCTION

1.1 Introduction

Managers face a constant challenge in project implementation, which entails successfully creating and introducing projects within the organization. Slevin (1987) asserts that the process of implementing a project is complicated and typically necessitates simultaneous focus on many technical, financial, and human factors. Consequently, the function of the organizational project manager in the execution of telecommunication projects is challenging, marked by high levels of activity, fragmentation, superficiality, and task overload.

This study adopted two theoretical frameworks, the Theory of Constraints and the Resource-Based View Theory, to guide its examination of telecom projects in Kenya. The Theory of Constraints offers a systematic approach, focusing on identifying and managing critical bottlenecks in systems and processes. For project managers, it provides a valuable tool for recognizing and mitigating constraints throughout the project lifecycle, ensuring success across initiation, planning, implementation, and closure phases. This theory aligned seamlessly with the dynamic nature of telecom project implementation in Kenya. On the other hand, RBV Theory, introduced by Barney in 1991, emphasizes how organizational management leverages unique resources for a competitive advantage. In the context of Telecom Projects in Kenya, this theory proved vital for understanding how Telekom Kenya utilizes its resources, both tangible and intangible, to establish a sustainable competitive edge. It underscored the strategic importance of firm-specific resources and capabilities in achieving heterogeneity, performance, and sustainability in organizations (Barney, 1991; Morheney & Pandian, 1992; Barney, Wright, & Ketchen, 2001).

The telecommunications industry globally confronts challenges driven by rapid technological advancements that surpass regulatory and infrastructure capabilities. Meeting demands for faster data speeds, enhanced connectivity, and new technologies like 5G necessitates substantial investments and expertise. Market barriers limit competition and innovation, while external factors such as economic fluctuations, geopolitical tensions, and natural disasters pose operational and investment risks. In Kenya, telecommunications infrastructure is pivotal to Vision 2030's Economic and Macro pillar, aiming for 10% GDP growth by 2030 through improved national connectivity. Despite strides, rural areas face connectivity gaps due to inadequate fiber-optic network investments, with high broadband costs hindering widespread digital inclusion and economic development goals (Republic of Kenya Government, 2020; Communication Authority of Kenya, 2022).

1.2 Statement of the problem

The implementation of telecom projects faces multifaceted challenges that necessitate a comprehensive understanding of the problem landscape. One prominent issue is the inadequacy of effective project initiation procedures, as noted by Mutwiri, Were, and Odhiambo (2018). The lack of a well-structured conceptualization and design phase can lead to increased vulnerability, impacting the decision-making process regarding project approval and support (Islam, Bhuiyan, & Hoque, 2019). Afolabi (2018) highlighted that project initiation often skips key steps, including the development of a robust business case. This deficiency results in poor project performance, compromising timelines, budgets, and overall project quality. Matu et al. (2020) underscored the dominance of the initiation phase in determining project success, making it imperative to address the gaps in project initiation practices for enhanced outcomes in Kenya's telecom sector.

Furthermore, the Kenyan telecom landscape grapples with challenges related to resource allocation and the subsequent implementation of projects. The resource constraints outlined in the Theory of Constraints (Ricketts, 2007) resonate with the practicalities faced by telecom projects in the country. Telkom Kenya, being a key player, must navigate issues concerning the availability of resources, time allocation, and unexpected challenges (Matu et al., 2020). The impact of these challenges is reflected in indicators such as project duration, costs, operational changes, and scope creep, constituting significant risks (Matu et al., 2020). Efficient communication management is also critical, as emphasized by Gupta and Boyd (2008), to address the complex, cross-functional nature of organizational processes within the telecom sector. Addressing these issues comprehensively is paramount for fostering a conducive environment for successful telecom project implementation in Kenya.

To ensure the timely and effective implementation of telecom projects, there is a need for clear and established procedures for project initiation. Thus, this study sought to establish the influence of project initiation procedures on the implementation of telecom projects in Kenya.

1.3 Objectives of the study

This research aimed to accomplish four objectives;

To identify how resource allocation influences the implementation of Telecom Projects in Kenya.

2. LITERATURE REVIEW

2.1 Introduction

This chapter examined the literature on project communication management, methods of project initiation, resource allocation, and risks as they influence implementation of telecoms projects. Theoretical and conceptual frameworks are also highlighted.

2.2 Theoretical Framework

Creating a theoretical framework includes developing theories that underpin an investigated argument. The theory of constraint and resource-based view theory guided this study.

2.2.1 Theory of Constraints

The theory of constraints helps identify the biggest bottleneck in systems and processes so that performance can be improved. The observation that most systems are limited by a single aspect that keeps them from accomplishing more of their goals is the basis for the idea of limitations. Any system that aspires to achieve substantial improvement must first recognize this limitation and handle the system holistically with that in mind. This theory consists of determining the

constraints of the system, determining how to take advantage of those constraints, and, if a constraint was violated in a previous step, going back to the beginning and preventing inertia from creating a system constraint (Rand, 2000).

Project managers must constantly check important restrictions and recognize opportunities to ensure project success. Therefore, to limit the likelihood of delays project managers should recognize and manage constraints throughout the whole project life cycle. They should also work to lower levels of complexity and ambiguity. Project managers are encouraged by the Theory of Constraints to identify constraints at each step of the project and put solutions in place to deal with them (Parker, Nicholas, & Isharyanto, 2015). The Theory of Constraints supported the phases of implementation of Telecom projects in Kenya, including initiation, planning, implementation, and closure.

2.2.2 Resource-Based View Theory

In 1991, Barney introduced the Resource-Based Theory (RBV) to elucidate how organizational management teams leverage their resources to achieve a competitive advantage in comparison to rivals. According to this theory, different businesses possess unique sets of resources. As a consequence of these divergent resource endowments, each business adopts distinct strategies to attain a competitive edge. This implies that organizations endowed with greater resources employ management practices that lead to superior performance relative to their competitors, while those with fewer resources may not enjoy the same advantage.

The Resource-Based View (RBV) theory emerges as a robust and relevant theoretical framework for understanding and analyzing Telecom Projects in Kenya, particularly within the operations of Telkom Kenya. It was proposed by Penrose (1959), that this theory stresses the strategic importance of an organization's control over its resources for realizing a sustainable competitive advantage. The theory focuses on the heterogeneity, performance, and sustainability of firms, suggesting that firm-specific resources and capabilities are central to strategic management (Morheney & Pandian, 1992; Barney, Wright, & Ketchen, 2001). In the context of Telecom Projects, RBV was crucial for assessing how Telkom Kenya leverages its resources, both tangible and intangible, to gain a competitive edge and enhance project outcomes.

2.3 Empirical review

Resource allocation is a critical element in project initiation and execution, with Matu et al. (2020) emphasizing the importance of assessing resource requirements. According to Kerzner (2017), resource allocation involves determining and assigning the necessary resources, such as personnel, equipment, and funds, to project activities. This aligns with Afolabi (2018) emphasis on resource availability, highlighting the need to ensure that the required resources are accessible and utilized optimally.

Rugiri and Njangiru (2018) conducted research on how Nyeri County, Kenya's CDF funded water projects and the effects resource allocation had on their effectiveness. To determine resource allocation, capital and human capital were employed. In Nyeri County, 86 water projects that were sponsored by CDF made up the population. 60 respondents who were all project managers for water projects were chosen by the researcher using a stratified random sample approach. Bivariate and multivariate techniques were utilized to identify pertinent data, as well as regression and correlation analysis. Regression analysis revealed that accessibility to resources was a reliable indicator of project success. A Pearson correlation study revealed that resource availability was a positive predictor of project success.

Ndayisaba and Mulyungi (2018) studied resource management from project conception to completion. An Initiative to Support Rwandan Livelihoods in Rural Areas the management of time, money and materials, and human resources were all included in the resource allocation review. Every single person involved in the initiative was part of the target population. To objectively examine the data and ascertain the correlations between the variables studied, regression analysis was employed. Proper utilisation of resources was shown to have an 83.7% impact on the projects' capacity to improve lives in the Muhanga district of rural Rwanda.

The effect of resource scheduling on the execution of residential building projects in Kenya was examined by Kimutai and Kirui (2020). Resource allocation was evaluated using task and time management. Research methodology used was descriptive. The sample included 79 residential projects. Data was gathered via questionnaires. The study found a connection between project implementation and resource planning. Ochieng' (2018) looked into how resource management affected the delivery of projects by mobile communications firms in Kenya. Time allotment and task planning were used to evaluate resource management. Descriptive statistics were applied to show how the variables related to one another. The survey also showed that technology is still not well managed, with many respondents saying that databases are still handled by hand and that project management software is not frequently utilized.

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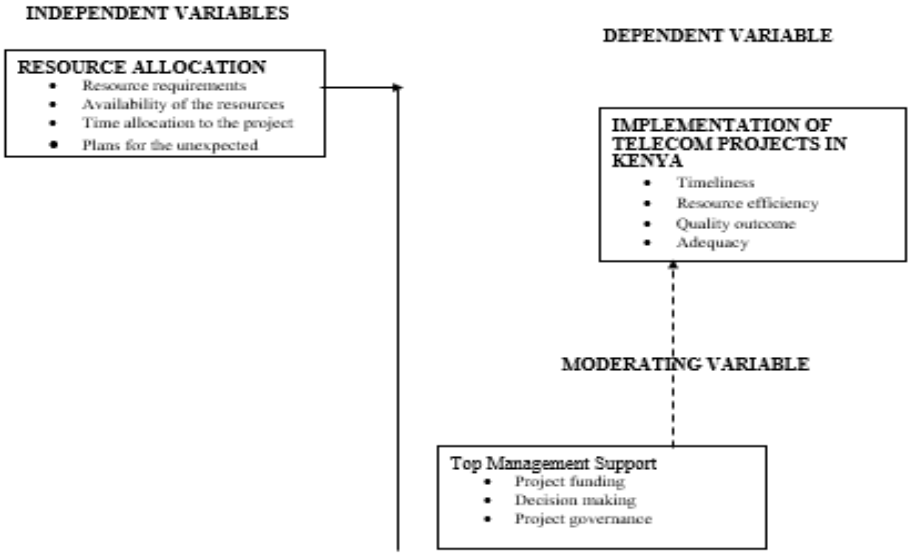
2.4 Conceptual Framework

The relationship between resource allocation and project implementation was created by the conceptual framework for the study.



Source: (Author, 2024)

Figure 1: Conceptual Framework

2.5 Summary of the Literature Review and Research Gaps

Table 1

Author (year)	Study title	Knowledge Gaps	Methodology used	Findings	Focus of Current Study
Ndayisaba et al.,(2018)	Resource allocation and the performance of NGO funded projects in Rwanda	The study was qualitative in nature	Cross sectional survey	It was found that effective resource management had an 83.7% impact on the projects' ability to boost livelihoods in rural Rwanda's Muhanga area	This study will be both quantitative and qualitative as close ended questionnaire will be used to collect the data
Rugiri & Njangiru (2018)	Effects of resource allocation on the performance of water projects in Nyeri	Bivariate and multivariate techniques were utilized	Descriptive design	Resource availability was a significant predictor of project success, according to the findings of the regression analysis	This study employed correlation analysis
Kimutai & Kirui (2020)	Resource scheduling and execution of residential building projects	Involved residential building projects	Descriptive design	The study found a connection between project execution and resource planning	This study was on telecommunication projects
Ochieng (2018)	Resource management and delivery mobile communications firms in Kenya	The study involved two mobile firms only	Descriptive design	Time allotment and task planning were used to evaluate resource management. Descriptive statistics were applied to show how the variables related to one another	This study targeted a number of different telecommunications companies

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3. RESEARCH METHODOLOGY

3.1 Introduction

The research techniques that were employed in the collection and analysis of data are described in this chapter.

3.2 Research Design

As stated by Creswell and Creswell (2018), this functions as a plan for executing a study, delineating its methodology and approach. In this research, a descriptive survey research design was employed, aimed at characterizing social phenomena and investigating the occurrence of specific behaviours or events (Williamson & Johanson, 2017). The selection of this design was based on its ability to offer precision and accuracy.

3.3 Target Population

The research focused on a specific population comprising 45 individuals, encompassing project managers, CEOs, and contractors within the Telecommunication industry in Kenya. This selection was guided by information sourced from the Communications Authority of Kenya (2024), which identifies these key players involved in the project initiation procedures at Telecom Firms. This approach ensured a targeted and representative sample, incorporating the expertise and perspectives of individuals directly involved in the telecom project management processes in Kenya.

3.4 Sample Size

Two methods of sample size calculation were employed to arrive at the study's sample size. Purposive sampling was employed for this research to ensure the inclusion of individuals who have a direct impact on and deep understanding of the operational efficiency and project outcomes within the telecommunication industry in Kenya. Additionally, the use of stratified sampling within this purposive approach was employed to ensure that different subgroups of employees were adequately represented. The sample used was 45 participants.

3.5 Data collection

The research utilized both closed-ended and open-ended questionnaires, comprising two sections. The first section was distributed to CEOs, project managers (PMs), and the top three levels of management among contractors. It encompassed demographic information about the respondents. The second part included questions related to the four independent variables concerning the dependent variable based on the conceptual framework. The questionnaire's design aligned with the variables outlined in the conceptual framework.

3.5.1 Piloting of Instruments

A pilot study was implemented using a small sample of 5 respondents in the telecommunication industry. This was done to analyse the efficacy of research instruments and methodologies, evaluate various metrics of the variables, and make any required methodological improvements to the instruments' rollout or administration.

3.5.2 Validity of Instruments

The research supervisor and subject-matter experts assessed the content validity of the research tools to guarantee they would gather relevant and measurable data. Cronbach's Construct Validity was employed to align the measuring instruments with the theoretical framework, ensuring their dependence on theoretical principles and concepts.

3.5.3 Reliability of Instruments

To determine the reliability index, Cronbach's alpha was used after descriptive statistics for each variable were obtained. The reliability assessment incorporated results from both the current study and the pilot study, with all research variables demonstrating high reliability above 0.7.

3.6 Data Analysis

Data was recorded in excel and reviewed it for accuracy, and required modifications were done. SPSS was used to conduct a descriptive analysis of the four independent variables. The means and standard deviation of the data were displayed. The relationship between the variables was ascertained using the Pearson's correlation coefficient.

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4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

The chapter contains the study findings, analysis, and discussion. It contains information on the participants' demographics, the discussion and results are arranged thematically according to objectives.

4.2 Questionnaire Return Rate

Participant numbers affect the research effectiveness since a low response rate might restrict how far the findings can be applied. As in Table 2, 36 of the 40 participants who were supposed to take part in the study returned the questionnaires, yielding a 90% response rate. According to Creswell and Poth (2016), a response rate of 50% and above ideal for meaningful statistical analysis. Therefore, the research response for this study was adequate.

TABLE 2: Response rate

Category	Frequency	Percentage
Completed and returned	36	90
Not returned	4	10
Total	40	100

4.3 Demographic Attributes of Respondents

The study encompassed individuals from different backgrounds, providing a comprehensive overview of the demographic composition within the dataset. Analyzing these attributes through descriptive statistics offers valuable insights into the characteristics of the surveyed population, aiding in the interpretation and understanding of research findings.

4.3.1 Percentage Response by Gender

Both genders were fairly represented in the study, which aided in the collection of reliable information from various gender viewpoints.

TABLE 3: Distribution by gender

Gender	Frequency	Percentage (%)
Female	14	38.8%
Male	22	61.2%
Total	36	100.0%

As shown, most project managers, CEOs, and contractors within the Telecommunication Industry in Kenya respondents (61.2%) were men, with the remaining respondents (38.8%) being women. This statistic suggests that there is a gender disparity among project managers, CEOs, and contractors within the Telecommunication Industry in Kenya, with a higher representation of men compared to women. The higher proportion of male respondents suggests potential gender imbalances within leadership and managerial roles in the telecommunications industry in Kenya.

4.3.2 Distribution by Age

Respondents in this survey ranged in age from below 20 to above 50 years old. The inclusion of respondents from various age groups allowed for the normal distribution of data. Table 4 shows the percentage of responses by age.

Table 4: Respondents by Age

Age	Frequency	Percent
Below 20	2	5.6
21-30	4	11
31-40	8	22
40-50	16	44.4
Above 50	6	17
Total	36	100

The age distribution among project managers, CEOs, and contractors within the telecommunication industry in Kenya reflects a diverse mix of professionals across various age groups. While the majority of respondents fall within the 31-50 age range, accounting for a significant proportion of the sample at 22% and 44.4% respectively, there is also representation from younger and older age groups. Approximately 16.6% of respondents are under the age of 30, indicating some presence of youth in leadership roles, while 17% are above the age of 50, suggesting the involvement of seasoned professionals and senior leaders within the industry. This distribution underscores the importance of both experienced expertise and youthful innovation in driving growth and development within the telecommunications sector.

4.3.3 Highest Level of Education

Table 5 sought to check the highest educational attainment levels of the respondents in order to ascertain the objectivity of the results gathered.

Table 5: Distribution of respondents as per the academic qualifications

Category	Frequency	Percent
Diploma	6	16.7
Degree	22	61
Master's Degree	8	22.3
Total	36	100

The results show that most respondents (61%) listed a degree as their highest education level, with a postgraduate degree coming in second (22.3%). Diploma certification accounted for 16.7% of the total denoting the minority representation. Overall, this data suggests a diverse mix of educational backgrounds among respondents, ranging from diploma to master's degree levels, which may contribute to a well-rounded workforce within the telecommunications sector.

4.3.4 Respondents work experience

This was necessary to determine the experience they have as far as telecommunication projects are concerned.

Table 6: Work Experience

Age	Frequency	Percent
Less than 1 Year	2	6
1 to 5 Years	11	30
6 to 10 Years	13	36
Over 10	10	28
Total	36	100

The majority of respondents (36%) have accumulated 6 to 10 years of experience in telecommunication projects, indicating a significant presence of seasoned professionals with a substantial amount of industry experience. Additionally, 30% of respondents have 1 to 5 years of experience, suggesting a substantial proportion of individuals who are relatively early in their careers but still possess valuable experience in telecommunication projects. Moreover, 28% of respondents have over 10 years of experience, indicating a big presence of highly experienced professionals who have been involved in telecommunication projects for an extensive period. However, 6% of respondents have less than 1 year of experience, indicating some representation of individuals who are relatively new to the field. Overall, this data suggests a diverse range of experience levels among respondents, ranging from novice to highly experienced professionals, which may contribute to a well-rounded workforce within the telecommunication sector.

4.4 Implementation of Telecom Projects in Kenya

Respondents were presented with five components as indicators of implementation of telecom projects in Kenya. Respondents used a 5-point category scale to answer questions ranging from strongly agree (5) to strongly disagree (1). This data was further evaluated and consolidated based on the percentages, averages, and standard deviations.

Table 7: Implementation of Telecom Projects in Kenya

STATEMENTS	1	2	3	4	5	Mean	SD
Telecom projects are completed on time as scheduled	10.3 %	13%	12.7%	40.3%	23.7%	4.11	0.784
The actual spending on telecom projects align with the budgeted amount	21.3 %	41.3%	10%	15%	12.4%	2.36	0.811
Project quality standards are always met as per project initiation documentation.	12.6 %	15.1%	11.3%	38.3%	22.7%	3.86	0.893
There is high level of stakeholder satisfaction with the implemented telecom projects.	9%	13%	8.3%	42.4%	27.3%	4.38	0.686
Composite and composite mean						3.66	0.794

N=36

The study's conclusions about the implementation of telecom projects in Kenya were emphasized in this section. The first construct was to ascertain whether the telecom projects are completed on time as scheduled. Results showed that most respondents agreed with the statement, (Mean=4.11, SD=.784). Majority of participants disagreed that with the second construct that the actual spending on telecom projects aligned with the budgeted amount (Mean=2.36, SD=.0.811). The third construct sought to determine whether project quality standards are always met as per project initiation document. From the results, most respondents agreed with the statement (Mean=3.86, SD=.0.893). Finally, most participants said there is high stakeholder satisfaction with the implemented telecom projects (Mean=4.38, SD=.686). The overall composite mean of 3.66 indicates a moderately positive perception of the implementation of telecom projects in Kenya among respondents.

During the qualitative interviews conducted as part of the assessment of telecom project implementation in Kenya, several key themes emerged. Project managers and CEOs frequently highlighted challenges related to project management, citing issues such as inadequate resource allocation, scope creep, and difficulty in adhering to project timelines. Additionally, stakeholders expressed concerns about the alignment between budgeted and actual spending, noting instances of budget overruns and the need for better financial oversight.

4.5 Resource allocation and Implementation of telecommunication projects in Kenya

The study's goal was to ascertain if resource allocation affects the implementation of telecom projects in Kenya. Table 8 summarizes four opinions on the impact of Resource allocation. The scale contained five points: highly agree (5 points) to strongly disagree (1).

Table 8

STATEMENTS	**1**	**2**	**3**	**4**	**5**	**Mean**	**Std Dev**
There is comprehensive assessment of resource requirements during project initiation	8.7%	11%	10%	41.3%	29%	4.31	0.633
Necessary resources are made available as per the resource allocation plan	7%	8.3%	7.3%	43.3%	34.1%	4.44	0.625
There is enough time allocation for different projects in the resource allocation plan during initiation	9%	13.7%	11.3%	40.3%	25.7%	4.12	0.642
The resource allocation plan accounts for unexpected challenges	22%	31.3%	14.3%	17.3%	15.1%	2.48	0.781
Composite mean and standard deviation						**3.84**	**0.670**

N=36

The purpose of this was to look into how resource allocation at project inception affects telecom project delivery in Kenya. Table 8 highlights the impact of resource allocation. Most respondents agreed that there is a comprehensive assessment of resource requirements during project initiation (Mean=4.31, SD=.633) and that necessary resources are made available as per the allocation plan (Mean=4.44, SD=.625). They also agreed that sufficient time is allocated for

different projects in the resource allocation plan (Mean=4.12, SD=.642). However, respondents disagreed that the resource allocation plan adequately accounts for unexpected challenges (Mean=2.48, SD=.781). The composite mean of 3.84 reflects a positive perception of resource allocation practices. Interviews with project managers and CEOs emphasized the importance of assessing resource requirements and ensuring resource availability during initiation, which shapes the allocation plan and influences project success. Comprehensive resource assessments and availability prevent delays, keep projects on track, and minimize risks.

4.5.1 Correlation Analysis for Resource allocation and Implementation of telecom projects in Kenya

The coefficient of Pearson correlation was used to demonstrate the relationship between resource allocation and the implementation of telecom projects in Kenya.

Table 9: Correlation analysis

Variable		Resource allocation	Implementation of telecom projects in Kenya
Resource allocation	Pearson Correlation	1	0.684**
	Sig. (2-tailed)		0.000
	n	36	36
Implementation of telecom projects in Kenya	Pearson Correlation	0.684**	1
	Sig. (2-tailed)	0.000	
	n	36	36

The results of the correlation analysis in Table 9 indicate a significant positive connection (r = 0.684, p = 0.000) between the deployment of telecom projects in Kenya and resource allocation. The value of 0.684 indicates a high positive correlation between the variables. These results are consistent with other investigations. Ndayisaba and Mulyungi (2018), for example, studied resource management throughout project execution. It was discovered that the programs' capacity to improve lives in the Muhanga district of rural Rwanda was impacted by efficient resource management in an 83.7% of cases. There is a relationship between project execution and resource allocation planning, according to different research by Kimutai and Kirui (2020) on the impact of resource scheduling on the completion of residential construction projects in Kenya.

4.5.2 Regression Analysis for Resource allocation and Implementation of telecom projects in Kenya

The purpose of this study was to determine whether resource allocation and the execution of telecom projects in Kenya are related.

Table 10: Regression analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.684[a]	.553	.481	.4751

a. Predictors: (Constant), Resource allocation

In the regression analysis (Table 10), resource allocation emerged as a crucial predictor of success in implementation of telecom projects in Kenya. About 55.3% of the variance in success is explained by variations in resource allocation (R Square = 0.553). Considering model complexity, the Adjusted R Square is 0.481, signifying that approximately 48.1% of the variance is explained by resource allocation. The positive correlation coefficient (R = 0.684) underlines a robust positive relationship between resource allocation and the implementation of telecom projects in Kenya.

Additionally, an ANOVA test was performed to determine the significance of resource allocation as an indicator of the implementation of telecom projects in Kenya.

Table 11: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	53.227	1	53.227	82.223	.000[b]
	Residual	75.234	35	.620		
	Total	128.461	36			

According to Table 11, resource allocation is a strong predictor of telecom project implementation in Kenya and has a large influence on it as well [F (1, 35) = 82.223, P.05].

5. SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study's findings, conclusions made and the research recommendations.

5.2 Summary of Findings

This research looked at the influence of project initiation procedures on the successful implementation of Telecom projects in Kenya. This research sought to identify the relationship between resource allocation and implementation of telecommunication project in Kenya, emphasizing the importance of efficient resource allocation for project success.

5.2.1 Implementation of telecommunication projects

The study aimed to evaluate the implementation of telecommunication projects in Kenya using a questionnaire where participants ranked statements related to project execution. Results showed that most respondents agreed that telecommunication projects are completed on time (Mean=4.11), but disagreed that actual spending aligns with budgets (Mean=2.36). However, respondents generally agreed that project quality standards are met (Mean=3.86) and stakeholders are satisfied (Mean=4.38). The overall perception was moderately positive (Composite Mean=3.66). Qualitative interviews highlighted challenges like resource allocation issues, scope creep, and budget discrepancies, reflecting concerns about project management practices and financial oversight.

5.2.2 Methods of project initiation and Implementation of telecommunication projects

The study on project initiation and implementation of telecommunication projects in Kenya highlighted effective initiation practices with mean scores ranging from 3.91 to 4.33, indicating positive perceptions. Analysis showed a strong positive correlation ($r = 0.622$, $p = 0.000$) between initiation methods and project implementation, with regression explaining 54% of variance in outcomes. ANOVA results confirmed the significant impact of project initiation methods ($F = 93.25$, $p < 0.05$) on telecommunication project success, emphasizing their crucial role in project implementation.

5.2.3 Resource allocation and Implementation of telecommunication projects in Kenya

The study examined the influence of resource allocation on the implementation of telecommunication projects in Kenya. Descriptive statistics showed positive perceptions of resource allocation practices, with a composite mean of 3.84. Interviews with project managers and CEOs emphasized the importance of assessing resource requirements and ensuring availability to prevent delays and maintain momentum. Correlation analysis revealed a strong positive relationship ($r = 0.684$, $p = 0.000$) between resource allocation and project implementation. Regression analysis confirmed resource allocation as a significant predictor of implementation success, explaining 55.3% of the variance, supported by ANOVA results ($F = 82.223$, $p < 0.05$).

6. CONCLUSION

The study assessed the influence of resource allocation on implementation of telecommunication projects in Kenya. Respondents generally agreed that resource requirements were assessed and necessary resources made available, but there was less agreement regarding accounting for unexpected challenges, with a mean score of 2.48 suggesting room for improvement. Strengthening resource allocation plans to better accommodate unforeseen circumstances can enhance project resilience and adaptability, improving overall project outcomes.

7. RECOMMENDATIONS

The study's recommendations were as follows:

1. Thorough scope definition exercises should be conducted, establishing clear change control processes, and regularly monitoring project scope throughout its lifecycle.
2. There should be identification of key stakeholders early in the project lifecycle, conducting stakeholder analysis to understand their interests and concerns, and actively involving them in decision-making processes.

3. There should be setting aside of contingency reserves for unforeseen events, establishing procedures for reallocating resources in response to emergent needs, and regularly reviewing resource allocation plans to ensure their alignment with project objectives.
4. There should be streamlined communication to ensure timely and transparent information sharing among project teams and stakeholders.

REFERENCES

[1] Afolabi, J. O. (2018). Initiating factors affecting information systems project success (Doctoral dissertation, Walden University)

[2] Communications Authority of Kenya. (2018). Kenya Communication Sector Statistics Report: January-March 2018. Retrieved from https://www.ca.go.ke/images/downloads/Statistics/Quarterly-sector-statistics-report-for-January-March-2018.pdf

[3] Communications Authority of Kenya. (2019). Regulatory Framework for the Telecommunications Industry. Retrieved from https://www.ca.go.ke/regulatory-framework-for-the-telecommunications-industry/

[4] Islam, S., Bhuiyan, N. U., & Hoque, M. (2019). The association between project success and project initiation phase: a study on some selected projects in Bangladesh. European Journal of Business and Management, 3(12), 60–68

[5] Islam, S., Bhuiyan, N., & Hoque, M. (2019). Business case development in project initiation: A comprehensive review. *International Journal of Managing Projects in Business, 12*(4), 890-913.

[6] Kerzner, H. R. (2017). Project Management: A Systems Approach to Planning, Scheduling, and Controlling (12th ed.). Wiley.

[7] Matu, J., Kyalo, D. N., Mbugua, J., & Mulwa, A. S. (2020). Stakeholder participation in project initiation: a foundation to completion of Urban road transport infrastructure projects, Kenya. Journal of Civil, Construction and Environmental Engineering, 5(1), 11-19

[8] Mutwiri, F. R., Were, S., & Odhiambo, R. (2018). Project Identification and Initiation Practices on the Success of CDF Construction Projects in Kenya. *Stratford Peer Reviewed Journals and Book Publishing*, *2*(2), 47–56.

[9] Mutwiri, M., Were, M., & Odhiambo, J. (2018). Conceptualization and design of projects: A critical phase in the project life cycle. *International Journal of Project Management, 36*(3), 533-547.

[10] Ndayisaba, O., & Mulyungi, P. (2018). Effect of Resources Management on Project Success Implementation. A Case of Strengthening Livelihoods in Rural Rwanda Project. International Journal of Research in Management, Economics and Commerce, 8(5), 32–41.

[11] Rugiri, M. N., & Njangiru, J. M. (2018). Effect of Resource Availability on Performance of Water Projects Funded by Constituency Development Fund In Nyeri County, Kenya. International Academic Journal of Information Sciences and Project Management, 3(2), 378–393

[12] Ochieng, E. A. (2018). Influence of resource management on implementation of projects in global system of mobile communications companies in Kenya (Doctoral dissertation, University of Nairobi).

[13] Parker, D. W., Parsons, N., & Isharyanto, F. (2015). Inclusion of strategic management theories to project management. *International Journal of Managing Projects in Business*, *8*(3), 552-573.

[14] Penrose, E. T. (1959). The Theory of the Growth of the Firm. New York: John Wiley

[15] Pinto, J. K., & Slevin, D. P. (2019). Critical factors in successful project implementation. IEEE Transactions on Engineering Management, 36(3), 229-243.