



INFLUENCE OF PROJECT MANAGEMENT COMPONENTS ON EFFECTIVE COMPLETION OF CONSTRUCTION PROJECTS FUNDED BY THE COUNTY GOVERNMENT OF THARAKA NITHI, KENYA

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Nyaga, A. K.,^{1*} & Otinga, H.²

^{1*} Msc. Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

² Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

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ABSTRACT

The main objective of this study was to determine the influence of project management components on effective completion of construction projects funded by the County Government of Tharaka Nithi. A descriptive research design was adopted. The study targeted 174 project managers of construction projects implemented and funded by the County Government of Tharaka Nithi. From the targeted population, the study sampled 121 respondents. The study used primary data, which was collected using structured questionnaires. Descriptive and inferential analysis was done by the use of Statistical Package for Social Sciences (SPSS 24) and presented through percentages, means, standard deviations and frequencies. Both descriptive and inferential statistics showed that all predictor variables; project risk management, project planning, project fund management and monitoring significantly influenced effective completion of projects funded by the Tharaka Nith County Government. The study concluded that effective systematic application of project risk management policies, processes and procedures ensures effective completion of projects funded by County Governments. Secondly, project planning initiatives make the County Government project managers more responsive in effective completion of projects funded by County Governments. Thirdly, continuous assessment of county development project implementation plus periodic assessment of a project's relevance in relation to the project objectives influences effective completion of projects funded by County Governments. The study recommended that officers should engage in effective systematic application of project risk management policies, processes and procedures to the tasks of establishing the context, identifying, analyzing, assessing, monitoring and communicating risks so as to ensure effective completion of projects funded by County Governments. Project management officers should employ efficient project planning initiatives to make county project managers more responsive. There must also be effective continuous assessment of County development project implementation by project beneficiaries. Lastly, officers involved in project oversight functions should have viable project accounting strategies.

Key Words: Project Risk Management, Project Planning, Project Monitoring, Project Fund Management, Construction Projects

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INTRODUCTION

Effective completion of projects is an important element for measuring the success of the particular project. Currently, the success of any project is directly intertwined with the completion of the projects within stipulated timelines, budget and scope coupled with quality of work done. This can be achieved through proper standards, policies and framework drafted by the project manager (Seddon, 2008).

Studies have been done to address the issues of the delays on completion and poor quality of works done in an organization. In a study conducted in West Bank in Palestine, Mahamud (2011) affirmed that the critical factors affecting delays in several projects such as road constructions, building of houses and bridges are lack of proper communication between project owners, embezzlement of funds, and poor planning.

Typically, Al-Najjar (2008) concluded that other factors causing delays in building projects in the Gaza Strip are imminent strikes, frequent attacks, lack of required inputs, replenishment of materials in the site due to delays in deliveries to site, finance shortages during work process, poor management, poor economic conditions such as inflation and currency value deterioration.

In addition, a study on the factors that triggers delay in building construction projects in Malaysia (Tan, A. L. 2007). The study findings allude to the facts that funds management elements are the main causes of delays in projects in Malaysia. Secondly, project Coordination indicators between the parties in another important factor causing delays. Materials delivery is also paramount in enhancing effective flow of construction without delays.

In a nut shell, Sambasivan and Soon (2007) did a study on ten most paramount causes of delays in the project construction industry, they concluded that project manager poor planning methods, contractor's defective site management skills, lack

of experience by the subcontractors, inadequate funds, material deficit, human capital shortages, lack of construction equipment and poor communication between parties. Faridi and El-Sayegh (2006) reported that lack of skilled and experienced manpower, poor project supervision and site management problems, poor project leadership; unavailability and breakdown of equipment among others lead to delays in construction in United Arab Emirates.

In Africa, the problems of effective project completion take diverse dimension depending on the project's environmental conditions. In Ghana, Frimpong et al. (2003) concluded that five factors caused delays in projects completion on time. The factors include; Remuneration of construction workers and delays in payment of the constructors due to poor management of funds, material deficit, poor technical performance and fluctuation of the prices of material due to inflation. Hanson et al. (2003) examined causes of client disappointment in the South African construction industry and found that internal battle, unskilled manpower and lack of commitment by the contractors is the critical factors behind negatively impact on project completion and the performance at large.

According to Zulu and Chileshe (2008), the performance of majority of contractors in Zambia is below average; most projects in the country have not been completed or significantly took longer time than expected. This poor performance by many local contractors has significant impact on the competitiveness and the entire performance of the projects. Concisely, Kenya, like the other third world countries faces similar issues of delayed projects completion and un completed projects at large. For instance, some road construction projects in many parts have not been completed for more than 4 years since inception. Surprisingly, this road construction projects are financed by the World Bank; therefore, the essence of fund shortages might not be experienced unless the funds are embezzled. The delays negatively impacted on both

the social and economic benefits that would have accrued if the projects were completed on time (Ngesa, 2012).

According to the Project Completion Report (2017), partial target of project completion was achieved in the country. As such, the people were deprived of the expected benefits that they would have enjoyed had the project been completed according to schedule. According to Faridi et al. (2006), delay in project completion is a critical problem in the construction industry and these delays have an adverse impact on project completion in terms of time, cost, quality and safety. Factors contributing to these delays have been identified as inadequate readiness for implementation causing delays in procurement of contractors, loan conditions affecting late release of funds, poor performance of contractors, low capacity of the implementing agencies, poor supervision of works and contract management in responding quickly in resolving contractual issues when they arise.

Delays of donor-funded projects are rampant especially due to endemic corruption and poor reporting structures among the public sector (DFID, 2013). Delay would lead to incapability of achieving the schedule objectives of a project, and late completion and delivery tend to result in cost overruns, client dissatisfaction, and other consequent problems. Assurance of project schedule has been considered as an important indicator of project success, and factors associated with project schedule have been recognized to be critical to project success (Ling, Low, Wang, & Lim, 2009). In order to forestall the challenge of effective project delivery, Samuel (2008) recommends that project time management be a key priority for contractors and that the appointment of a registered project manager for each contract should be a mandatory condition of tender.

According to Frimpong et al. (2003), major delay occurs during project implementation phase, hence factors such as monthly payment difficulties, poor contractor management, material procurement,

poor technical performances and escalation of material prices contributed during construction of groundwater projects in developing countries. Once the delay factors are identified, the opportunities for improving project performance can be examined.

Statement of the Problem

Effective completion of projects is an important element for measuring the success of the particular project. Currently, the success of any project is directly intertwined with the completion of the projects within stipulated timelines, budget and scope coupled with quality of work done. This can be achieved through proper standards, policies and framework drafted by the project manager (Seddon, 2008). Studies have been done to address the issues of the delays on completion and poor quality of works done in an organization. In a study conducted in West Bank in Palestine, Mahamud (2011) affirmed that the critical factors affecting delays in several projects such as building of houses and bridges are lack of proper communication between project owners, embezzlement of funds, and poor planning. As per Atieno (2014), Projects have always been an agenda used to improve the living standards and welfare of the people in a community. However, in most instances, numerous projects have not met their intended objectives due to prolonged postponement and delays in completion. The County Government of Tharaka Nithi has launched different construction projects which are in different phases of implementation (Tharaka Nithi County Integrated Development Plan 2018-2022). For instance, construction of several ECD classes launched in 2015 have not been completed to date. Projects delays in Tharaka Nithi County have been attributed to poor management of funds, incompetent constructors and poor project plans (Tharaka Nithi County Integrated Development Plan 2018-2022). Typically, despite the significant input of manpower and financial resources, many projects rarely meet the objectives such as community empowerment and the other beneficiaries because of poor project management,

inadequate opportunities for potential beneficiaries to participate in project identification and design, poor linkages between project activities and project purpose. Effective completion of projects is often a vital indicator and measure of project success. A detailed study is therefore important to determine the influence of project management components on effective completion of these construction projects. While it is appreciated that construction projects are fundamental to economic success and development aspect of any country or regional blocs, their effective completion is important to attain maximum benefit of the same. This is intended to ensure that initiators of such projects and particularly communities initiating their own projects exploit their full potential and enhance basic infrastructural access in the country. This study therefore sought to provide more insight into the influence of project management components on effective completion of construction projects financed by the County Government of Tharaka Nithi.

Objectives of the Study

The general objective of this study was to determine the influence project management components on effective completion of construction projects funded by the County Government of Tharaka Nithi. The specific objectives were;

- To determine the influence of project risk management on effective completion of construction projects funded by the County Government of Tharaka Nithi
- To determine the influence of project planning on effective completion of construction projects funded by the County Government of Tharaka Nithi
- To determine the influence of project monitoring on effective completion of construction projects funded by the County Government of Tharaka Nithi
- To determine the influence of project fund management on effective completion of

construction projects funded by the County Government of Tharaka Nithi

The study was guided by the following research hypotheses;

- **H₀₁**: There is no significant relationship between project risk management and effective completion of construction projects funded by the County Government of Tharaka Nithi
- **H₀₂**: There is no significant relationship between project planning and effective completion of construction projects funded by the County Government of Tharaka Nithi
- **H₀₃**: There is no significant relationship between project monitoring and effective completion of construction projects funded by the County Government of Tharaka Nithi
- **H₀₄**: There is no significant relationship between project fund management and effective completion of construction projects funded by the County Government of Tharaka Nithi

LITERATURE REVIEW

Stakeholder Theory

Stakeholder Theory was founded by Freeman (1984) is defined as “any group of people who are defined by the objectives of the organization”. Stakeholder theory suggest that managers in an organization have an obligation of ensuring that there is cordial relationship between customers, business partners, suppliers and contractors. As per Freeman (2002), is plays a key role in decision making of the organization. Stakeholders who control them, should come up with value chain for customers, vendors, communities and financiers (Stieb, 2008). The Stakeholder Theory asserts the importance of a firm focusing on various partner groups that are concerned with the daily operations of the organization. The illustration and representation of all the partner groups on projects is therefore paramount for effective and efficient performance of an organization (Gibson, 2000). The stakeholder model is very critical since it defines the duties, rights and responsibilities of various

stakeholders (Freeman, 2002). Stakeholders have larger share in the corporation and expect maximum returns (Frey & Nickerman, 2009). Concisely, the theory is used to establish how project risk management influences effective completion of projects through ensuring proper management of the potential risks that might occur during the progress. Further, the theory is equally important when it comes to Monitoring, project fund management and project planning where involvement of various stakeholders is critically important so as to relies effective completion of projects.

Theory of Constraints

Theory of Constraints (TOC) is a philosophy of management, accountability and improvement and was originally developed by Eliyahu M. Goldratt and introduced in his book, *Theory of Constraints* in 1984. He defines a constraint as anything that limits systems from achieving higher performance versus its goal (Robbins, 2011). This Theory is based on the assumption that, just like the value chain, there is the weakest link, in any multifaceted system at any given time, in most cases there is a limiting factor that hinders the achievement of certain goal or objectives. Therefore, for any system to achieve the intended objectives and goals, this constrain must be identified and analyzed critically (Simsit, Gunay & Vayvay, 2014).

Borrowing this particular concept, project manager needs to assess the constrains in the entire project that may hinder effective objective selection and proper implementation of policies and programs and thus enabling the project to achieve the intended goals and objectives. Theory of constrain provides an adequate paradox method of solving a problem in an organization. It provides solution of a construction constrain, business constrain and supplier constrains. In conclusion, the theory will be

useful in explaining project planning where proper objective selections, policy implementation and procedure alignment should be done in order to check any constrains.

Resource Based Theory

Resource Based Theory is a management framework used to determine resources with potential to deliver comparative advantage in an Organization (Peteraf, 1993). The theory was originated by Jay Barney in 1991. At the project level, this theory is used to explore on the relationships between organization resources, firm's competition and market share including the analysis of competitive level, the market share portion, technology and innovations, the role of imperfect information in creating profitability difference between competing firms and the means by which the process of resource accumulation can sustain competitive advantage. Together, these contributions amount to what has been termed the resource-based view of the firm (Wernerfelt, 1994)

However, the implications of this resource-based theory for strategic management are unclear for two reasons. This theory proposes a framework for resource-based approach to strategy formulation, which integrates a number of key themes arising from strategic planning literature. The frameworks involve five-stage procedure for strategy formulation; analyzing the firms resource base; appraising the firm's capabilities and upgrading the firm pool of resources and capabilities for results in performance. The theory therefore supports financial management on project completion since the project planning has made financial management a key activity in organizations and project in general.

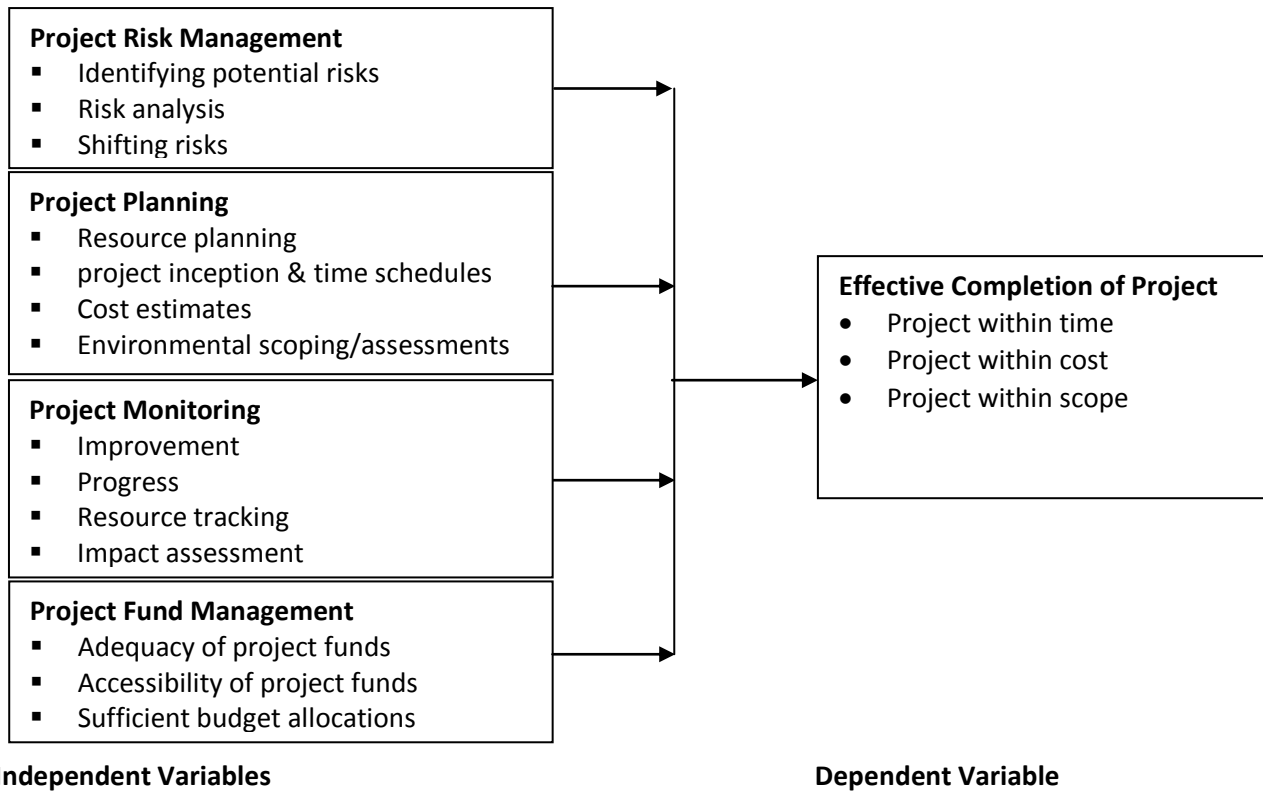


Figure 1: Conceptual Frame Work

Empirical Review

Chang (2013) posited that project uncertainty and complexity relates to the defining characteristics of projects, long duration, huge investment and many uncontrollable emergent factors. That is, there are several ways proposed to categorize the risks and issues. Some examples are by sponsorship/development, market, social acceptability, regulatory, political, financial, execution, and operation or government relations; host community relations; contract management and procurement; and the influence of multi-location execution.

Smith et al. (2006) also provided a comprehensive description of the concept of risk management and how it can be used in practice. According to the authors, risk management cannot be perceived as a tool to predict the future, since that is rather impossible. Instead, they describe it as a tool to facilitate the project in order to make better decisions based on the information from the investment. In this way, decisions based on

insufficient information can be avoided, and this will lead to better overall performance. In the literature, risk management is described as a process with some predefined procedures. The scope of its definition differs among the authors, however the core information is the same. From a number of definitions which can be found in the management literature Blackstone et al. (2005) explanation brings the essence of this concept: The risk management process involves the systematic application of management policies, processes and procedures to the tasks of establishing the context, identifying, analyzing, assessing, treating, monitoring and communicating risks (Blackstone et al., 2005). Risk management process (risk management planning) is the basic principle of understanding and managing risks in a project. It consists of the main phases: identification, assessment and analysis, and response (Smith et al., 2006).

Planning is defined as the preparation and assessment for the major goals and objectives

taken by a company's manager on behalf of owners, based on consideration of resources and internal and external initiatives by the organization (Smith, 2012). According to Bryson (2011), planning is an organization management activity that is used to set priorities, focus energy and resources strengthen operations. Strategic planning involves identification of most important options towards the realization of a practical vision (goal). Barry (1997) sees strategic planning as a process not done off activity but ongoing or continuous process. It helps stakeholders in an organization or a project determine what they intend to accomplish in a specified period. The strategic planning thus ensures project completion and sustainability.

According to Isaac and Navon (2013), planning is a management tool that comprise of four features; a clear path of the organization vision, the analysis of the agencies external stakeholders and the delineation of the agency's strategic goals and objectives, typically several years plan; and the implementation of strategies to achieve them. Perhaps the best effective description of the strategic planning consists of eight procedural steps; first is planning; assessment of mandates and responsibilities; mission and vision formulation; external assessment and assessment; issue identification; development of effective strategy and development of report of the organization in the future results (Kahilu, 2010). Concisely, Strategic planning is typically being the most critical element in the conduct of strategic management (Cohon, 2013).

Mono (2013) noted that planning has possible pros and intrinsic values that eventually translate into completion of a project and performance of an organization in the long run. It is therefore a vehicle that facilitates effective completion of project. Planning can be considered from content or a process view point. The content relates to the distinct elements of the strategic plan which differ from organization to organization. Process relates to the mechanism for the development of the

strategic plan and its subsequent deployment. Brechmann and Czado (2013) noted that planning systems focuses on two areas; the impact of strategic planning and the role of strategic planning in decision making.

According to Pinto and Slevin (1987), monitoring and feedback are the project control processes whereby at each stage of the project implementation, the project team receive feedback on how the project is comparing to initial projections. Monitoring also involves feedback about the progress of the project to the donors, implementers and beneficiaries of the project. "The resulting information is used for decision making for improving project performance" (Bartle, 2007). Allowing for sufficient monitoring and feedback mechanisms gives the project manager the capacity to predict challenges, oversee counteractive actions and to ensure that no weaknesses are overlooked

Evaluation is an organized and effective assessment of work in progress or completed project, program, design and implementation of end results. The main focus is to ascertain the relevance and effectiveness of objectives, program efficiency, influence and sustainability. An evaluation should give information which is reliable and useful, enabling the linkage between lessons learned into implementation process of both the parties involved (Smith, 2012). Monitoring and evaluation involves; monitoring work in progress, monitoring the project indicators or elements such as cost and scope against the project management success and the project results baseline and set up corrective measures to address issues and risks effectively (Musau, 2011).

Several studies have been carried out with an aim of determining the critical success factors (CSFs) which contribute to project success. Most of the studies link project success to M&E. Despite knowledge that effective M&E is a major contributor to project success, there are still project failures in Kenya. A study by Prabhakar (2008)

pointed that Monitoring and Feedback was one of factors leading to project success. Likewise Papke-

According to Mono (2013), fund management is a process of managing the funds in a more effective and efficient manner to allow the organization completes the intended projects on time (Altman, 2010). Fund management is directly linked to the top management of the organization such as managers. For instance, the funds intended for a specific purpose is embezzled then the project completion will take time or fail completely.

Fund management is essentially an accounting strategy focusing on effective and efficient management of assets and money channeled to the organization to achieve some objectives. Fund management enhances continuous and sufficient cash flow for a project in order to meet the expenditures incurred at the course of a project (Brigham & Ehrhardt, 2013). Fund management is a very critical element of corporate accounting in that it provides direct link between the start of a project to the end.

METHODOLOGY

The study adopted descriptive survey design. The study targeted 174 project managers of construction projects implemented and funded by the County Government of Tharaka Nithi which were construction of; ECDE classes, polytechnics and health facilities spread across the 3 Sub Counties in Tharaka Nithi County. The sample size of the study was 121 respondents, which was distributed proportionally. Data was collected through structured questionnaires.

Quantitative data was collected and both descriptive and inferential analysis carried out by

the use of Statistical Package for Social Sciences (SPSS 24) and presented through percentages, means, standard deviations and frequencies. Analyzed data was presented by use of tables, graphs and in prose form. The Analytical model for the study took the form:

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

Where;

Y= Effective completion of construction projects

α = Constant Term

β = Beta Coefficient –This measures how many standard deviations a dependent variable will change, per standard deviation increase in the independent variable.

X_1 = Project risk management

X_2 = Project monitoring

X_3 = Project fund management

X_4 = Project strategic planning

ϵ = Error term

FINDINGS AND DISCUSSIONS

Project Risk Management and Effective Completion of Projects

This assessed objective one of the study, that is, to determine the influence of project risk management on timely completion of projects funded by Tharaka Nithi County Government.

The research attempted to understand if; risk analysis, delayed risk shifting of risks, delays in identifying potential risks and whether generally, delayed assessment of project affects effective completion of construction projects. The responses were summarized in table 1.

Table 1: Project Risk Management

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1. Delayed risk analysis negatively affects project scope	21(22.1)	55(57.9)	4(4.2)	10(10.5)	5(5.3)	3.81	.965
2. Shifting of risks negatively affects project scope	9(9.5)	44(46.3)	21(22.1)	11(11.6)	10(10.5)	3.33	.734
3. Risk analysis has an effect on project cost	10(10.5)	51(53.7)	19(20.0)	8(8.4)	7(7.4)	3.52	.940
4. Delays in identifying potential risks affects project time	16(16.9)	44(46.3)	10(10.5)	13(13.7)	12(12.6)	3.41	.876
5. Generally, delayed assessment of project affects effective completion of construction projects	13(13.7)	51(53.6)	7(7.4)	15(15.8)	9(9.5)	3.58	.974
Valid N (list wise)	95						
Grand mean = 3.53 =4							

From table 1, most respondents (57.9%) agreed that delayed risk analysis affects project scope while a small percentage (10.5%) disagreed. Further, most respondents agreed (46.3%) and strongly agreed (9.5%) that the shifting of risks has a negative effect on project scopes, while 53.7% agreed and 10.5% strongly agreed that risk analysis has an effect on project cost. Moreover, 46.3% agreed and 16.9% strongly agreed that identifying potential risks affects project time. This implies that identifying potential risks is a mitigating factor which saves the project time and hence ensures timely completion of Tharaka Nithi County Government funded projects.

On overall, most respondents agreed (53.6%) and strongly agreed (13.7%) that generally, project risk management practices affect effective completion of construction projects which matches with the grand mean = 3.53 = 4 = agree. Project delays affecting timely completion of projects is supported by Blackstone (2005) assertion that project risk management process involves the systematic application of management policies, processes and procedures to the tasks of establishing the context, identifying, analyzing, assessing, treating,

monitoring and communicating risks which eventually takes toll on time needed to complete a given project. Based on empirical evidence, Davies (2000) found that project risk management planning had a positive impact on the ability to predict the project duration because risk management also entails finding the length in which the projects are exposed to various risk.

Project Planning and Effective Completion of Projects

This assessed objective one of the study, that is, to assess the influence of project planning on effective completion of projects funded by Tharaka Nithi County Government. The research attempted to understand if; there are clear project inception & time schedules, project construction cost estimates are well planned, economic feasibility of the construction projects is well assessed before construction commencement, alignment to procedure affects project scope on effective completion of construction projects and objective project selection affects project time on effective completion of construction projects. The responses were summarized in table 2.

Table 2: Descriptive Statistics; Project Planning

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
There are clear project inception & time schedules	11(11.6)	48(50.5)	9(9.5)	18(18.9)	9(9.5)	3.56	.893
Project construction cost estimates are well planned	6(6.3)	44(46.3)	5(5.3)	27(28.4)	13(13.7)	3.53	.750
Economic feasibility of the construction projects is well assessed before construction commencement	8(8.4)	52(54.7)	1(1.1)	26(27.40)	8(8.4)	3.67	.998
Alignment to procedure affects project scope on effective completion of construction projects	4(4.2)	41(43.1)	20(21.1)	19(20.0)	11(11.6)	3.38	0.927
Objective project selection affects project time on effective completion of construction projects	20(21.1)	58(61.1)	6(6.3)	8(8.4)	3(3.10)	3.88	0.944
Valid N (listwise)	95						
Grand mean =	3.60=4						

From table 2, most respondents agreed (50.5%) and strongly agreed (11.6%) that there are clear project inception & time schedules. This is because selection of objectives is a major aspect of strategic planning, thus, if more time is spent on crafting and sieving viable project objectives, then this will ultimately impact on time taken to complete the selected project. Secondly, most respondents also agreed (46.3%) and strongly agreed (6.3%) project construction cost estimates are well planned. This is because strategic planning can be considered from content or a process view point. The content relates to the distinct elements of the strategic plan which differ from organization to organization and procedures or process relates to the mechanism for the development of the strategic plan and its subsequent deployment (Brechmann & Czado, 2013), which definitely influence project completion.

Further, most respondents (43.1%) agreed and a small number of them disagreed (20%) that economic feasibility of the construction projects is well assessed before construction commencement. Finally, most respondents (61.1%) agreed that objective project selection affects project time on effective completion of construction. This is also summarily represented by the grand mean; 3.6=4=agree. This notion of strategic project planning is supported by Purdy (2010) assertion that planning is a common thread that intertwines all the activities from conception to commissioning and handing over the work to the client. This shows that planning encompasses the essential activities such as scheduling, breakdown structures, time estimates and statement of work. This is supported by Harold (2010) who argues that project management involves planning, directing and controlling the company's resources for both short

and long term projects which have been established for the completion of specific project goals.

Project Monitoring and Effective Completion of Projects

This assessed objective three of the study; that is; to examine the influence of project monitoring on effective completion of projects by Tharaka Nithi

County Government. The researcher sought to understand whether: report checking, resource tracking, assessment and continuous monitoring have an effect on effective completion of construction projects funded by Tharaka Nithi County Government. The summarized responses were presented in table 3.

Table 3: Descriptive Statistics; Project Monitoring

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
There is frequent report checking to ensure that the construction projects are being implemented within the project scope	4(4.2)	57(60)	10(10.5)	17(17.9)	7(7.4)	3.36	0.861
There is a resource tracking system to ensure prudent management of resources allocated to construction projects	14(14.7)	60(63.2)	4(4.2)	8(8.4)	9(9.5)	3.65	0.728
An assessment is carried out at the end of each stage of construction with a view of determining the degree of achievements of the project objectives	16(16.8)	53(55.8)	4(4.2)	16(16.8)	6(6.3)	3.60	0.843
There is continuous Monitoring activities of construction projects leading constant tracking of implementation of the projects	15(15.8)	61(64.1)	5(5.3)	11(11.6)	3(3.2)	3.78	0.958
Valid N (list wise)	95						
Grand mean =	3.66=4						

From table 3, most respondents agreed (60%) that there is frequent report checking to ensure that the construction projects are being implemented within the project scope while 63.2 % further agreed that there is a resource tracking system to ensure prudent management of resources allocated to construction projects. This agreement on report checking and resource tracking support Burke (2013) assertion that project-monitoring assists the entities track success and achievements by a frequent collection of information to assist timely decision-making, ensure transparency and give

basic forms of evaluation and progress. Most respondents agreed (55.8%) and strongly agreed (16.8%) that an assessment was carried out at the end of each stage of construction with a view of determining the degree of achievements of the project objectives. Further 64.1% agreed and 15.8% strongly agreed that there is continuous Monitoring activities of construction projects leading constant tracking of implementation of the projects.

Therefore, project monitoring as a practice of project management has an effect on effective completion of construction projects. This is

supported by Musau (2011) that monitoring involves; monitoring work in progress, monitoring the project indicators or elements such as cost and scope against the project management success and the project results baseline and set up corrective measures to address issues and risks effectively.

Project Fund Management and Effective Completion of Projects

This assessed objective four of the study; that is; to examine the influence of project fund management

on timely completion of projects funded by Tharaka Nithi County Government. The researcher sought to understand if; adequate funds affect project scope on timely completion of projects; accessibility of funds affects project scope on performance of projects; budget allocation affects project scope on timely completion of projects; adequate funds affect project time on timely completion of projects and if budget allocation affects project cost on timely completion of projects. The results were summarized in table 4;

Table 4: Descriptive Statistics; Project Fund Management

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
Adequate funds have been allocated to construction projects	17(17.9)	59(62.1)	6(6.3)	10(10.5)	3(3.2)	3.81	0.960
There is accountability and transparency in the use of funds allocated for construction projects	13(13.7)	63(66.3)	4(4.2)	9(9.5)	6(6.3)	3.72	0.828
Funds allocated to construction projects are timely disbursed	15(15.8)	62(65.3)	4(4.2)	11(11.6)	3(3.2)	3.79	0.955
There is sufficient budget allocations to various stages of construction projects implementation	18(18.9)	58(61.0)	5(5.3)	9(9.5)	5(5.30)	3.79	0.930
Valid N (list wise)	95						
Grand mean =	3.65=4						

From table 4, most respondents agreed (62.1%) and strongly agreed (17.9%) that adequate funds had been allocated to construction projects. This was because most projects take longer time to complete if insufficient funds do not meet the scope of the project. Secondly, most respondents agreed (66.3%) and strongly agreed (13.7%) that there is accountability and transparency in the use of funds allocated for construction projects. This is because well-initiated projects may take longer time to complete due to inaccessibility of project funds. Further, most agreed (65.3% and 61% respectively) that funds allocated to construction projects are timely disbursed

Effective project fund management is supported by Brigham and Ehrhardt (2013) who assert that fund

management is essentially an accounting strategy focusing on effective and efficient management of assets and money channeled to the project to achieve project objectives. Fund management therefore enhances continuous and sufficient cash flow for a project in order to meet the expenditures incurred at the course of a project. Lastly, 61% of respondents agreed that there is sufficient budget allocations to various stages of construction projects implementation. Therefore, most project managers agreed that project fund management has an influence on effective completion of projects funded by Tharaka Nithi County Government; thus, confirming that project fund management is a very critical element of project accounting in that it provides direct link between the time of the start of a project to the time the project ends.

Inferential Analysis

Inferential analysis was based on linear and multiple regressions, thus, assumptions of multiple regression analysis were taken into consideration.

Table 5: Correlation Analysis

		PRM	PP	PME	PFM	ECP
PRM	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	95				
PP	Pearson Correlation	.576**	1			
	Sig. (2-tailed)	.000				
	N	95	95			
PM	Pearson Correlation	.460**	.407**	1		
	Sig. (2-tailed)	.000	.000			
	N	95	95	95		
PFM	Pearson Correlation	.632**	.551**	.339**	1	
	Sig. (2-tailed)	.000	.000	.001		
	N	95	95	95	95	
ECP	Pearson Correlation	.740**	.609**	.532**	.752**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	95	95	95	95	95

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

Multiple Regression Results

In order to investigate how well combined independent variables: project risk management, project planning, project monitoring and project fund management predicted timely completion of

projects funded by Tharaka Nithi County Government, multiple regression was computed. The basic multiple regression assumptions were checked and met.

Table 6: Multiple Regression Results

Model Summary ^b											
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Sig. F Change	Durbin-Watson	
					R Square Change	F Change	df1	df2			
1	.838 ^a	.702	.689	.56196	.702	53.071	4	90	.000	1.940	
ANOVA ^b											
Model	Sum of Squares			Df	Mean Square	F	Sig.				
1	Regression			67.040	4	16.760	53.071	.000 ^a			
	Residual			28.422	90	.316					
	Total			95.462	94						

a. Predictors: (Constant), PFM, PM, PP, PRM

b. Dependent Variable: ECP

Table 6 showed combined regression results for all independent variables (project risk management, project planning, project monitoring and project fund management). The result showed $R^2 = 0.702$, thus the model explained 70.2 % of the variations in effective completion of projects funded by Tharaka Nithi County Government. From the results, the F

statistic was 53.071 significant at $p < 0.001$. This meant that the independent variables were indeed different from each other and therefore influence effective completion of projects funded by Tharaka Nithi County Government in a different manner, thus confirms the accuracy of running multiple regression.

Table 7: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.810	.255		2.139	.019
	PRM	.232	.084	.255	2.770	.007
	PP	.159	.079	.148	2.009	.048
	PME	.218	.067	.215	3.256	.002
	PFM	.391	.083	.410	4.722	.000

a. Dependent Variable: ECP

From the values of unstandardized regression coefficients in table 7, all independent variables: project risk management, project planning, project monitoring and project fund management), significantly predicted effective completion of projects funded by Tharaka Nithi County Government confirming the fitness of the conceptualized multiple regression model;

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

Where:

Y = Effective completion of construction projects funded by Tharaka Nithi County Government

β_0 = constant term

$\beta_1, \beta_2, \beta_3$ and β_4 = Beta coefficients

X_1 = Project risk management

X_2 = Project planning

X_3 = Project monitoring

X_4 = Project fund management

ϵ = error term.

Therefore the revised final multiple regression model was;

$$Y = 0.810 + 0.232X_1 + 0.159X_2 + 0.218X_3 + 0.391X_4$$

It was worth noting that project fund management contributes more (0.391) while project planning contributes less (0.159) elements of effective

completion of projects funded by Tharaka Nithi County Government implying project management committees must be more focused on project fund management which highly determines effective completion of projects funded by Tharaka Nithi County Government.

Testing Null Hypotheses

H_{01} : Project risk management does not significantly influence effective completion of construction projects funded by Tharaka Nithi County Government

H_A : Project risk management significantly influences effective completion of construction projects funded by Tharaka Nithi County Government.

t-test statistics results: (t = 2.770; $p = 0.007 < 0.05$)

Verdict: The null hypothesis H_{01} was rejected.

Results interpretation: H_A : Project risk management significantly influences effective completion of construction projects funded by Tharaka Nithi County Government.

H_{02} : Project planning does not significantly influence effective completion of construction projects funded by Tharaka Nithi County Government.

H_A: Project planning significantly influences effective completion of projects funded by Tharaka Nithi County Government.

t-test statistics results: (t = 2.009; $p=0.048 < 0.05$)

Verdict: The null hypothesis H₀₂ was rejected.

Results interpretation: H_A: Project planning significantly influences effective completion of projects funded by Tharaka Nithi County Government.

H₀₃: Project monitoring does not significantly influence effective completion of projects funded by Tharaka Nithi County Government.

H_A: Project monitoring significantly influences effective completion of projects funded by Tharaka Nithi County Government.

t-test statistics results: (t = 3.256; $p=0.002 < 0.05$)

Verdict: The null hypothesis H₀₃ was rejected.

Results interpretation: H_A: Project monitoring significantly influences effective completion of projects funded by Tharaka Nithi County Government.

H₀₄: Project fund management does not significantly influence effective completion of projects funded by Tharaka Nithi County Government.

H_A: Project fund management significantly influences effective completion of construction projects funded by Tharaka Nithi County Government.

t-test statistics results: (t = 4.722; $p=0.000 < 0.01$)

Verdict: The null hypothesis H₀₄ was rejected.

Results interpretation: H_A: Project fund management significantly influences effective completion of projects funded by Tharaka Nithi County Government.

CONCLUSION AND RECOMMENDATIONS

Several conclusions were drawn from empirical evidence emanating from the study's descriptive and inferential statistics. First, study results revealed that project risk management significantly influences effective completion of projects funded by Tharaka Nithi County Government. It was

concluded that effective systematic application of project risk management policies, processes and procedures ensures effective completion of projects funded by County Governments.

Secondly, project planning significantly influenced timely completion of projects funded by Tharaka Nithi County Government. The study then concluded that project planning initiatives make the County Government project managers more responsive in effective completion of projects funded by County Governments.

Thirdly, project monitoring of the County Government development projects significantly predicts effective completion of projects funded by Tharaka Nithi County Government. It was concluded that continuous assessment of county development project implementation plus periodic assessment of a project's relevance in relation to the project objectives influences effective completion of projects funded by County Governments.

Lastly, project fund management was found to be the highest predictor of effective completion of projects funded by Tharaka Nithi County Government. In this regard, the study concluded that having an effective project accounting strategy that focuses on effective and efficient management of assets and total cash budgeted for County development projects enhances effective completion of projects funded by County Governments.

The study recommended that; First project management officers should engage in effective systematic application of project risk management policies, processes and procedures to the tasks of establishing the context, identifying, analyzing, assessing, monitoring and communicating risks so as to ensure effective completion of projects funded by County Governments.

Secondly, project management officers should employ efficient project planning initiatives to make

county project managers more responsive for effective completion of projects funded by County Governments.

Thirdly, there must be effective continuous assessment of County development project implementation in relation to design schedules and services by project beneficiaries plus periodic assessment of a project's relevance, performance, efficiency, and impact both expected and unexpected in relation to stated objectives so as to ensure effective completion of projects funded by County Governments.

Lastly, officers involved in project oversight functions should have viable project accounting strategies focusing on effective and efficient

management of assets and money meant for county development projects. This will enhance continuous and sufficient cash flow for specific projects. Further, it will help meet the expenditures incurred at the course of those projects; which then will ensure effective completion of selected projects funded by County Governments.

Areas for Further Research

A similar study can be done in non-governmental organizations so as to assess the viability of selected project management practices on effective completion of development projects. Further, a study can be initiated focusing on influence of project fund management in since from the results, it has the highest influence on effective completion of projects.

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