



INFLUENCE OF RESOURCE MONITORING ON THE TIMELY COMPLETION OF ROAD PROJECTS IMPLEMENTED BY THE COUNTY GOVERNMENT OF KAKAMEGA COUNTY, KENYA

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Abstract

Due to project management requirements to deliver projects within the specified time, budget and that satisfy client needs it is imperative that resources are managed so as to ensure high project performance. Therefore, there is need for project managers at County government of Kakamega to know what they need to make a project successful so that they can effectively plan out the optimal way to use those resources towards better performance of the projects. Thus, the aim of this study was examined the Influence of Resource Monitoring on the Timely Completion of Road Projects Implemented by the County Government of Kakamega County, Kenya. The study was guided by theory of constraints. A descriptive survey design was adopted in this research. Selection of the sample was done using stratified random sampling. Structured questionnaires were utilized in gathering of primary data. Analysis of quantitative data was done using descriptive and inferential statistics with use of Statistical Package for Social Sciences. Resource monitoring were found to have a positive and significant influence on timely completion of road projects implemented by County Government of Kakamega. This implied resources monitoring are significant predictor of timely completion of road projects. The study

concluded that a key benefit to resource monitoring is that it helps organisations to fulfill task specifications efficiently. The project manager and other partners identify the best strategy, taking into account specific project goals, availability of capital, environmental factors during resource monitoring.

Keywords: Resources Management, Resource Monitoring, Timely Completion of Projects, Roads Projects

INTRODUCTION

Projects of infrastructure among them road projects have a crucial role within societies of converging the economic development need and most importantly to change the citizens' quality of life (Onyango, Bwisa, & Orwa, 2017). The central role of public infrastructural projects in sustaining development is acknowledged in Chapter 27 of the 21st agenda of United Nations (UN Charter 1945). Likewise, the Kenya Vision 2030 recognizes infrastructure as an enabler for sustained development under the economic pillar. According to Mbaabu (2012), when there exists roads which are good and functioning properly, it greatly in enhancing growth in economy reduces the rate of poverty, creates employment and wealth within the country.

It is the government which is the sole gigantic implementer of road projects in the public, hence the need of ensuring full implementation and performance of such projects provided that large amount of resources are channeled towards them through budgetary allocations (Yeri, 2018). The poor performance of road infrastructure projects exemplified through delays, poor quality and even cost overruns among other key performance indicators negatively impact on both the social and economic benefits to nations that would have accrued if the projects performed as planned (Kagiri & Wainaina, 2017).

The complexity and size of road projects being undertaken at the two levels of the government has increased substantially and so is the amount of resources channeled towards these projects (Musyoki, 2018). There are several activities which correlate and which rely on each other when it comes to projects involving road infrastructure. Nagaraju & Reddy (2012), notes that with an environment which is changing vigorously in the current age, there is an imposition of several constraints when it comes to logistics, legal, environmental, ethical and on finances. Thus, such projects put to use large volumes of resources and have risks, challenges and uncertainties which are inherent. This has resulted to several sequence of issues with regard to resources, for instance, the amount that is required, their sources, the time they should be brought to the site, where to house them, how to bring them to optimal utilization and the time of demobilizing them (Kohli, 2006). Therefore, resources are an important constraint

that greatly influence how road infrastructure projects are designed and the completion of the project activities (Kerzner & Kerzner, 2017). This is the case provided that specific activities have specified allocation of resources and have to operationalize within a set period of time.

Generally, road infrastructure projects being carried out by counties are not of high quality, thus they allocate a lot of resources like materials, time, manpower, machines and space (Kumari & Vikranth, 2012). Major road infrastructure works in these counties involve heavy investments in terms of funds, utilizing technology of high quality and they require a model which is more advanced and supple in effectively managing the resources (Pojani & Stead, 2015). This is very crucial given that counties are implementing multiple projects and hence there is competition for limited resources among tasks in different projects. The adoption of advanced resource management methods ensures effective and reasonable allocation of the finite resources and that their ratios of use are increased (Blichfeldt & Eskerod, 2008). According to Pinha and Ahluwalia (2019), poor management of resources result to an overrun of costs and slippage in schedule in most projects of public infrastructure.

This is basically defined by criteria of budget, deliverables and time (Thomas & Fernandez, 2008). Recent studies have, however proved that project success is multidimensional and broadens the focus of performance to incorporate characteristics such as project management performance (Ika, 2009). Thus, success within a project is a concept which is multidimensional, with dimensions such as business, technical, behavioral, strategic and behavioral being interrelated (Cao & Hoffman, 2011). Performance within a project as Chen et al. (2004) notes, is based upon the set timelines, its effectiveness and efficiency. Efficiency is noted by smooth operations within the team members and how resources such as cost and time are adhered to whereas effectiveness is quality of work that is being generated and whether objectives of the project are being met (Sundqvist, Backlund, & Chron er, 2014). Literature on management of projects look at performance of project as that which meets the schedule, efficiency of operations, goals and budget (Zidane & Olsson, 2017). Other indicators of project performance as outlined by Ali, Al-Sulaihi, and Al-Gahtani (2013) include satisfaction within clients, change of clients, performance of the business, environmental impact, minimum conflicts and disputes, health and safety.

According to Phiri (2015), quality, time and cost are prevalent dimensions of evaluating performance. Another eminent way is by use of two sets of indicators which are very common (Pheng & Chuan, 2006). As (Enshassi, Mohamed, & Abushaban (2009) notes, the first set relates to users, the general public and stakeholders; a set of individuals who will analyze performance from a macro point of view. The second one involves the contractor and developer, a set of people who will analyze performance from a micro point of view (ibid). Afaq (2013)

asserts that project performance is seen as good when it meets its technical specifications and if satisfaction is achieved among stakeholders such as end users, project team members, parent organization managers and donors or financiers.

In Kenya, there was a study by World Bank in 2014 on how the county governments were implementing projects which were funded by the government of Dutch and International Monetary Fund (IMF) in Nandi, Kisii, Murang'a and Kwale counties. Findings showed that only 21% of these development endeavors were effectively and efficiently finalized between 2013 and 2014. There was a failure of 48.25% within these counties on matters of re- carpeting of existent roads which were in bad condition. Nevertheless, a Devolution Annual Report (2015) produced by the Kenyan Government and United Nations Development Programme (UNDP) recognized a tremendous improvement when it comes to projects related to infrastructure following the promulgation of the new constitution in Kenya. Despite this, according to report by the devolution ministry in 2016, implementation of these projects across the counties was 55% unsuccessful as a result of several outstanding issues like insufficient finances allocated to such projects and inconsiderate utilization of available resources. This is in support of a Government of Kenya report of 2013 that revealed that 49.21% of the planned county development projects could not be achieved due to some unnecessary issues that could otherwise be avoided.

According to Adek (2015), major projects in the devolved units in Kenya have failed or taken longer than they should. In Bomet and Kisumu counties, lack of sufficient funds from both the national and county governments left about 60% of development projects not implemented. In the cases of Kwale, Kilifi, Embu, Taita Taveta, Garissa, Kitui and Kisii counties, up to 52% of the planned roads failed due to among other factors, limited resources, corruption and or embezzlement of funds. According to Musyoki (2018), 21% of the projects within counties have realized efficient and effective implementation, 45% of them are still struggling while the rest have failed or have been abandoned.

Management of resources is the deployment of resources of the organization effectively and efficiently at the time they are required (Watt, 2007). On basis of project management, managing of resources is developing of techniques, processes and philosophies of the most appropriate approach of allotting resources to activities or tasks of a given project (Maserang, 2012). Management of resources within a project is inclusive of the procurement and deployment of external and internal resources that are prerequisite for project delivery. Its major focus is prioritization when it comes to utilization of resources, monitoring production and usage of resources and measurement of the effectiveness of resources (Engwall & Jerbrant, 2003; Petrovic & Van Bruwaene, 2004).

Statement of the Problem

Timely completion of road construction projects is fundamental if the project objectives and success is to be achieved within the stipulated cost, time, scope and quality. However, many construction projects are notorious for failing to complete in time due to cost and time overruns saddled with scope creep and poor communication protocols (Guerin, 2012). In this regard, road construction projects' timely completion has recently attracted serious attention from researchers, financing clientele, practitioners in the construction industry, and road users. According to Kagiri and Wainaina (2016), major projects in the devolved units in Kenya have failed or taken long than they could do because of both the internal and external factors in the counties

Further, road construction projects in all the 47 counties has never been a success to a tune of 55% due to various prevailing constraints like lack of sufficient projects finances, politicization of development projects, insecurity in some counties, poor state of enabling infrastructure, poor technology and low levels of community participation. KNBS (2020) report indicated that more than 70.0% of projects in Kakamega County are not timely completed as expected due to client related obstacles, material unavailability, poor infrastructure, natural calamities, financial inadequacy and poor management abilities. In Kakamega County for example, the road terminal joining Kisumu was carpeted with Ksh.110 million that came from the revenue of about 4.1billion that was collected by the Kakamega county government but took too long to be completed among other county roads (World Bank, 2017).

The major challenges highlighted in the Annual Development Plan 2017/2018 and CIDP 2018-2022 as affecting the meeting of the county project targets included insufficient resources in undertaking of major priorities but with the expensive nature of projects, weak M&E system for tracking the implementation of projects and value for money directed to these projects, delays in disbursement of funds which slowed project works as well as poor deployment of funds, equipment and staff in an optimal manner in efforts to evade the starving of key areas of priority while directing much resources in non-priority areas. This called for the urgent investigation of the project resource management and how it influenced timely completion of road in Kakamega County.

Ochieng (2014) study examined the influence of resource management practices on performance of projects in global system of mobile communications companies in Kenya and found that awareness on importance of resource management is carried out among GSM companies in Kenya. However, the study used qualitative data does not provide conclusive findings. Umulisa, Mbabazize and Shukla (2015) study examined the effects of project resource planning practices on project performance of Agaseke Project in Kigali, Rwanda and found that

all project resource planning practices studied had a positive significant relationship on project performance. However, project resource planning practices alone does not affect project performance. Ndayisaba and Mulyungi (2018) study investigated the effect of resources management on project success implementation and revealed that resources management has an influence of on project success implementation of strengthening livelihoods in rural Rwanda project Muhanga district. However, the study used cross- sectional research design that uses a small sample size and hence not representative of whole population. Therefore, this study investigated the influence of project resource management practices on the timely completion of road projects implemented by the County Government of Kakamega County, Kenya.

Hypothesis of the Study

H₀: Resource monitoring is not a significant determine of timely completion of road projects implemented by the County Government of Kakamega County, Kenya.

LITERATURE REVIEW

Theoretical Framework

Theory of Project Constraints guided the research. This is a theory by Goldratt (1984), which maintains that a system is faced by constraints that limit it from achieving its objectives. Some of these limiting factors emanate from production, planning, production control, managing a project, logistics, accounting, and measurement of performance and other paths of business which might impact on performance. In this theory, constraints define the output of a given system whether or not they are recognized. The aim of the top management is finding appropriate ways to minimize the constraints of a system in the organization. This way the organization can effectively be able to realize its goals and maximize profits.

This theory describes the causes of the system constraints and also sheds light on the best ways to deal with these constraints (Goldratt, 2006). An organization operates with the help of systems. A system can be described as a collection of independent and interrelated process which works together in generating outputs from inputs when pursuing certain goals. The limitation for this system is a constraint which prevents the system from its efforts of achieving organizational goals(Noreen, Smith,& Mackey, 2008).

Theory of constraints is applicable in this study since the planning, scheduling, allocation and monitoring of project resources are constraints that face project teams in counties when carrying out road infrastructure projects. The best way to handle such kind of a problem is to find ways of countering these challenges to remove barriers in implementing road projects (Ruhl, 2011). Resource management is an important aspect in executing road projects and

should be undertaken in an effective manner in order to improve success of these endeavors. Among the impediments affecting success of projects are inadequate resources that are poorly allocated to project tasks. These limitations highly contribute to failure of project completion resulting into inefficiencies and delays which might result in increased costs of projects. However, the supporters of this theory; Noreen et al. (2012) put more emphasis on the significance of project teams identifying the limitations and establishing effective ways to deal with these limitations at early stages to reduce their impact on road projects.

Within this study, this theory guides not only the overall study objectives but also the specific ones as well. First, this theory is crucial in addressing the dependent variable which is timely completion of road projects. In order to road projects undertaken by Kakamega County to perform well, it is necessary to lessen the constraints that can otherwise diminish the project outcomes such as the quality of roads constructed. These constraints may pertain to how the project resources are managed in terms of their planning and allocation among others. This theory underlines the necessity of the project management to identify these project constraints that are likely to limit the projects' performance and taking the necessary measures on solving these constraints. This theory therefore guided the assessment on the influence of resource monitoring on timely completion of road projects implemented by County Government of Kakamega.

Conceptual Review

Figure 1 presents the conceptual framework of the study which shows how the variables of the study relate. The independent variable which is resource monitoring practices is broken down in to Resource audits and review. Follow up on resource audit feedback and Existence of resource monitoring framework while the dependent variable is the timely completion of road projects implemented by the County Government of Kakamega County, Kenya.

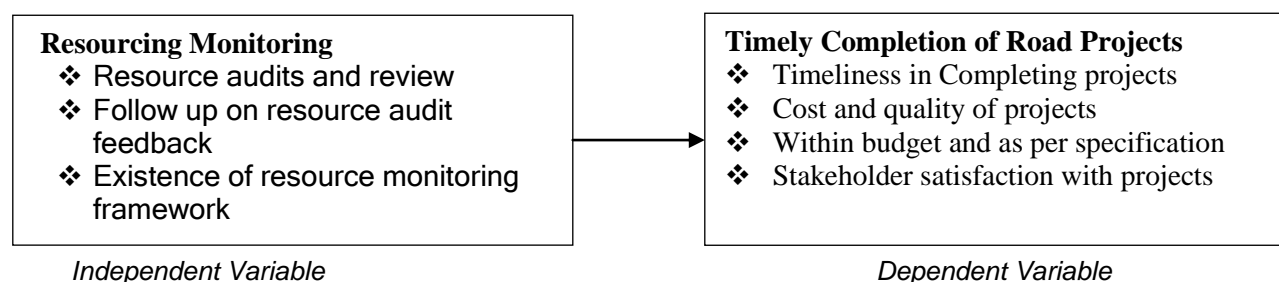


Figure 1: Conceptual Framework

Empirical Review

Mosago (2013) assessed impacts of financial monitoring on success of programs undertaken by international NGOs in Kenya. A mixed methods research design was used. There was a positive link between financial monitoring and programme performance for INGOs. The study underscored that the programme performance for INGOs could be greatly improved if on site visits, financial desk reviews and periodic financial review meetings were conducted. Financial monitoring needed to be conducted frequently. Thorough monitoring, reorienting and intensifying monitoring greatly contributed to more cost-effective, socially effective and successful programmes. Financial monitoring reduced the chances of funds being misallocated as they were utilized for the core business of the programs existence. However, the contextual setting of this study varies as it focuses on projects which are different from the one being undertaken.

Ochieng (2014) investigated the degree to which resource management influenced the execution of projects undertaken by mobile communications firms within Kenya. Study relied upon the design of descriptive survey. Investigations revealed that enough efforts to monitor and control the project resources ensured that project funds were spent appropriately as planned and with proper authorization. The study noted that the tools for monitoring progress and how often financial auditing and reporting were undertaken helped to eliminate waste and served as a performance monitoring tool. Financial auditing was found to be very important in assessing the process and system used in capturing and reporting project costs. However, the study focused on projects undertaken privately by mobile communications firms which are different from public road projects undertaken by Kakamega County hence the findings of the study cannot be automatically generalized to fit the case under study.

Kamwana and Muturi (2014) evaluated the level of success of projects which were financed by World Bank in particular KPLC projects was impacted by financial monitoring. A descriptive study design was applied. It was established that the monitoring of financial resources channeled to these projects was positively and significantly influencing success of the projects. It was highlighted that monitoring the funds enhanced their wise usage for the envisioned purposes and enhanced the creation of value for the beneficiaries. Financial resource monitoring ensured that cases of diversion of project resources to other purposes and interests outside the project scope and work plans were minimized. Monitoring how the resources were used ensured that projects were implemented in accordance to the set budget and time frames. The study underlined the role of unexpected audits where there was suspicion of resource misuse by financiers. However, the contextual setting of this study varies and focuses on different projects from the ones considered in this current study.

Jha and Iyer (2016) assessed the significant dynamics that affected the quality projects in the industry of construction within India. The study made use of the design of descriptive survey. It emerged from the research that appropriate monitoring of project resources and provision of feedback that was timely regarding assisted in the supervision of the level of workmanship in executing the projects which improved their quality. Ensuring that all cases of inappropriate use of project resources, whether material, labor, plant and machinery or finances were monitored well and reporting done on time, the anticipated project quality was attained. However, the study was carried out in a different setting and focuses on different projects from those considered in this study hence a contextual gap.

MATERIAL AND METHODS

This study utilized descriptive survey design. A descriptive survey design helps the researcher to collect information that describe, explore and help the investigator understand social life. The target populations (those cases that contain the desired information) were prequalified contractors in Kakamega County, county public works officers, employees from County Transport and Infrastructure department, Government road engineers from National Construction authority (NCA), Kakamega Region. The study's sample size was determined using Taro Yamane's proportional sampling technique formula. Therefore a sample size was calculated as per Taro Yamane's proportional sampling technique formula shown below;

$$n = N / (1 + (e)^2)$$

Where n = Sample size

N = population under study

e = margin error (0.05)

Therefore;

$$n = 116 / (1 + 116 (0.05)^2)$$

$$n = 116 / (1 + 116(0.0025))$$

$$n = 116 / (1 + 0.29)$$

$$n = 116 / 1.29$$

$$n = 89.922$$

rounded off to 90

From the calculation, 90 respondents were used for this study as the sample size, where respondents were randomly selected as per table 1.

Table 1: Sample Size

Category of staff	No. of officials	Sample size
Road contractors Technical Staff	49	38
County public works officers	38	29
County Transport and Infrastructure officers	23	18
NCA Civil engineers	6	5
Total	116	90

The study used structured (close ended) questionnaire to get uniform responses from respondents. The data collection tool adopted was a 5-point likert scale where the respondents selected their appropriate response from the structured questionnaires. Content validity was used in this study to ensure the items in the questionnaire are clearly stated, meaningful and have adequate content through expert judgment. Cronbach's alpha coefficient of internal consistency was used to determine the reliability of the research questionnaire. The quantitative data collected was analyzed by Statistical Package for Social Sciences (SPSS) version 24. Descriptive statistics were presented through percentages, means, standard deviations and frequencies. For variable relationships, linear regression analysis were computed

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics presented in this section are summated responses on the statements measuring the study's variables using Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Uncertain, 2=Disagree and 1= Strongly Disagree. The results are presented in the table form showing frequencies of responses as per each statement and its corresponding percentage score in brackets, means and standard deviations (Table 2).

Table 2: Resource Monitoring

Statement	5	4	3	2	1	Mean	SD
The county has a recognized framework and tools for monitoring the use of resources in executing road projects.	21 (29.6)	21 (29.6)	17 (23.9)	9 (12.7)	3 (4.2)	3.68	1.16
There is continuity in inspecting the physical and financial progress of road projects in the county against established resource plans.	30 (42.3)	18 (25.4)	6 (8.5)	5 (7)	12 (16.9)	3.69	1.50

County project supervisors give emphasis to auditing and reviewing the use of road project resources at frequent intervals and on a timely basis.	23 (32.4)	17 (23.9)	11 (15.5)	8 (11.3)	12 (16.9)	3.44	1.47
Results and feedback from road project resource audits and reviews are always provided on time.	26 (36.6)	20 (28.2)	8 (11.3)	7 (9.9)	10 (14.1)	3.63	1.43
Resource audit follow-ups are implemented throughout lifecycle of road projects in the county.	28 (39.4)	31 (43.7)	6 (8.5)	2 (2.8)	4 (5.6)	4.08	1.05
Average Score (N=71)	36.1	30.1	13.5	8.7	11.5	3.70	1.32

From the results in Table 2, the average mean of 3.70 indicated that resource monitoring affects timely completion of road projects in Kakamega County, Kenya with a standard deviation of 1.32. 36.1% of the respondents strongly agreed, 30.1% agreed, 13.5% neutral, 8.7% disagreed and 11.5% strongly disagreed with the statement. Jha and Iyer (2016) assessed the significant dynamics that affected the quality projects in the industry of construction within India and revealed that appropriate monitoring of project resources and provision of feedback that was timely regarding assisted in the supervision of the level of workmanship in executing the projects which improved their quality.

From the results in Table 2, the mean of 4.08 indicate that resource audit follow-ups are implemented throughout lifecycle of road projects in the county with a significance variance of 1.05. 39.4% of the respondents strongly agreed, 43.7% agreed, 2.8% disagreed and 5.6% strongly disagreed with the statement. These findings are in line with the findings of Mosago (2013) study that assessed impacts of financial monitoring on success of programs undertaken by international NGOs in Kenya and found a positive link between financial monitoring and programme performance for INGOs. The study underscored that the programme performance for INGOs could be greatly improved if on site visits, financial desk reviews and periodic financial review meetings were conducted.

The respondents also indicated that the county has a recognized framework and tools for monitoring the use of resources in executing road projects as shown by mean of 3.68 and a standard deviation of 1.16. This is supported by Ochieng (2014) study findings that investigated the degree to which resource management influenced the execution of projects undertaken by mobile communications firms within Kenya and revealed that enough efforts to monitor and control the project resources ensured that project funds were spent appropriately as planned and with proper authorization.

The mean of 3.69 indicated that there is continuity in inspecting the physical and financial progress of road projects in the county against established resource plans with standard deviation of 1.50. Kamwana and Muturi (2014) study agree with these findings after evaluating the level of success of projects which were financed by World Bank in particular KPLC projects was impacted by financial monitoring and established that the monitoring of financial resources channeled to these projects was positively and significantly influencing success of the projects.

Inferential Statistics

The research objective was to explore the influence of resource monitoring on the timely completion of road projects implemented by the County Government of Kakamega County, Kenya. Linear regression was used to test the direct influence of resource monitoring on timely completion of road projects in Kakamega County. The results are shown table 3.

Table 31: Direct influence of Resource monitoring on timely completion of road projects

Model Summary									
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.655 ^a	.429	.421	.28962	.429	51.912	1	69	.000

ANOVA^b						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.354	1	4.354	51.912	.000 ^b
	Residual	5.788	69	.084		
	Total	10.142	70			

Coefficients^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	.617	.427		1.445	.153
	Resource monitoring	.826	.115	.655	7.205	.000

a. Dependent Variable: Timely completion of road projects

From table 3, the model summary shows that $R^2 = 0.429$; implying that 42.9% variations in the timely completion of road projects in Kakamega County is explained by resource monitoring while other factors not in the study model accounts for 57.1% of variation in timely completion of road projects in Kakamega County. Further, coefficient analysis shows that resource monitoring has positive significant influence on timely completion of road projects in Kakamega County ($\beta = 0.826$, $P=0.000$). This implies that a unit increase in resource monitoring will lead to 0.826 unit decrease in the timely completion of road projects in Kakamega County. Therefore, the linear regression equation is;

$$y = 0.617 + 0.826X_1$$

Where;

y = timely completion of road projects in Kakamega County.

X_1 = resource monitoring

The results are supported by Ochieng (2014) who aimed at ascertaining how resource management influences implementation of projects in the telecommunication Industry in Kenya with a deliberate focus on the Global System of Mobile Communications (GSM) companies in Kenya. The results revealed that resource monitoring significantly influenced implementation of projects in the telecommunication Industry in Kenya. Natome and Muchelule (2018) looked the effect of resource monitoring on performance of project constructions in Uasin Gishu County. The study concluded that proper resource monitoring leads to an increased project performance risk management plays an important role in project management because without it project managers cannot define their objectives for future and project monitoring plays a vital role in project manager's decision making processes since it helps project managers and their teams to foresee potential risks and obstacles that if left unaddressed could derail the project.

There is continuity in inspecting the physical and financial progress of road projects in the county against established resource plans, County project supervisors give emphasis to auditing and reviewing the use of road project resources at frequent intervals and on a timely basis and that the county has a recognized framework and tools for monitoring the use of resources in executing road projects. This is in agreement with Ochieng (2014) study that revealed that enough efforts to monitor and control the project resources ensured that project funds were spent appropriately as planned and with proper authorization. These results are supported by Kamwana and Muturi (2014) who evaluated the level of success of projects which were financed by World Bank in particular KPLC projects was impacted by financial monitoring. It was highlighted that monitoring the funds enhanced their wise usage for the envisioned purposes and enhanced the creation of value for the beneficiaries. Financial resource

monitoring ensured that cases of diversion of project resources to other purposes and interests outside the project scope and work plans were minimized.

CONCLUSION AND RECOMMENDATIONS

The study concluded that resource monitoring influence timely completion of road projects implemented by the County Government of Kakamega County, Kenya. The fourth null hypothesis was rejected. The study concludes that reporting requires daily tracking of key elements of project performance in terms of inputs, actions and outcomes. Good evaluation helps to know whether the expected goals are being accomplished as anticipated, which steps are needed to achieve the intended results during the implementation of the project, and whether these measures have a positive impact on the execution of the project. The study recommends that project management during the execution of the plan and should include cost-control strategies, deadlines and deliverables techniques, quality standards approaches and more. The different techniques in use should include basic and common methods such as scientific analysis meetings such as earned value analysis and critical path analysis. The project manager and other partners identify the best strategy, taking into account specific project goals, availability of capital, environmental factors and more. The study recommends that project managers should be mindful of the scope of the project they are operating on, because the greater the nature of the project, the more they will decide how to distribute the money. Identify the facilities by specifying the type of equipment to be used where the work activities are to be done and the storage required. Start by creating a project's high-level schedule consisting of its specifications and results and start tracking time and workload

SUGGESTIONS FOR FURTHER STUDIES

The current study was focused on assessing the effect of project resource management practices on timely completion road projects in Kakamega County, Kenya specifically on how resource planning, resource scheduling, resource allocation and resource monitoring affects timely completion of road projects. Therefore, further studies should be carried out on how project resource management practices affect the performance of road projects in Kakamega County, Kenya.

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