

ROLE OF CONFLICT RESOLUTION ON THE PERFORMANCE OF A PROJECT TEAM IN KIAMBU COUNTY, KENYA

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Abstract: The essential need of implementing project team performance has been of concern for organizations because it has been proved that motivation is one of the deciding factors in work performance and for the success or failure of projects in an organization. The purpose of this study is to investigate team management and performance of construction projects in Kiambu County-Kenya. The study was guided by the objective to assess the influence of conflict resolution on the performance of a project team. The study was guided by the following three Theories: Tuckman's Teamwork theory, Star Team Model and Amabile and Kramer's progress theory. The study employed descriptive research design since it minimizes biasness. The study focused on completed projects from each of the 12 sub-counties in Kiambu County. Therefore, the target population was 473. The author's expectation was to provide a useful tool for influencing project team member's performance the study revealed that managers can apply in order to achieve organization success and employee satisfaction. revealed that the management team education helps in dealing with employee resistance to change and facilitates implementing business strategies, that educationally more diverse teams are better equipped to handle complex decision making situations for their respective function in the project executions and that the management team for the road construction project are able to tolerate ambiguity and to show themselves to be more able in complex situations.

Keywords: Conflict Resolution, Individual Role Management, Project Teams

INTRODUCTION

Background of the Study

In the construction industry, the aim of the project team management is to ensure the projects finish on time, within budget and achieving other project objectives as well. Therefore its considered a very complex task which is being undertaken by project managers in practice, which involves constantly measuring progress; evaluating plans and taking corrective actions when required (Kerzner, 2015). The goal of all the parties involved in construction projects, owners, contractors, engineers and consultants in either public or private sector is to successfully complete the project on schedule within planned budget with the highest quality and the safest manner. When projects are completed in time, their duration is not extended beyond the scheduled and therefore operates within the budget (Gollapudil, 2014).

Kiambu County

Kiambu County has recently shown a rapid growth due to the factors such as increasing in the demand for housing which has resulted from the rising population. There is a population influx in Kiambu which has increased recently this has been attributed to the elaborate infrastructure and proximity to Nairobi the County

also has a mixture of semi-urban and urban lifestyle which makes it possible for people to easily access social amenities and also access food from farmers (Kiambu Annual Development Plan, 2016/2017). All these make the County attract more businesses and therefore infrastructure development. Kiambu County is known as one of the County where industrialization parks have been developed by the national government. Other Counties included in this category includes Nairobi, Taita Taveta, Uasin Gishu and Kisumu County. There are several road construction projects that are going on in Kiambu; these are meant to offer infrastructural support to the entrepreneurs and are meant to improve and stimulate economic growth. Further, Kiambu County is also among five counties in Kenya whose population is 50% urban. This implies that most of the residents are engaging in businesses (County Government of Kiambu, 2017). Kiambu County is well endowed with lots of agricultural resources and an entrepreneurial spirit among the residents. It is ranked as the second best out of the 47 in terms of economic growth in the last years due to the entrepreneurial spirit of the residents who engage in both small and small enterprises. This has therefore spurred the road construction development that is ongoing. The county government of Kiambu is lobbying central government for completion of the ongoing road construction projects in Kiambu (County Government of Kiambu, 2017).

Concept of Performance

Success of a project is largely dependent on achieving an effective coordination and integration among the key stakeholder units of the project. Project performance therefore, mainly focuses on the outcome impact of the project Buzzell and Wiersema (2013), Phillips et al (2016), Vickery and Droge (2016) study found that project performance is significantly related to outcome implementation and how the outcome impact on the lives of the community residents. Project performance measurement therefore remains to be an integral component to how the project deliberations can be successfully is achieved. It is natural, then, that project team should demonstrate an interest in the performance measurement, especially since Internet technology makes diffusion of performance measurement across the project or across businesses much simpler than in the past. The measurement mantra continues to reverberate throughout nearly every corridor of business life Simmons (2015). In order to survive and succeed, firms therefore need to set out the specific strategic directions, establish goals, execute decisions and monitor their state and behavior as they move towards their goal.

Road Construction Projects

The road construction projects in Kenya are procured through the traditional systems where the consultant civil engineer is in charge of design and construction process on behalf of the client. According to the traditional system, the design process ought to be completed prior to commencement of construction. The client commissions of the consultant civil engineer who is briefed by the client. The consultant civil engineer then develops the design and prepares contract documents. The tendering process begins by pre-qualifying contractors on the basis of experience, work capacity and past performance. The pre-qualified contractors are then invited to tender. The contract is normally awarded to the lowest bidder. The standard form of contract that is commonly used for civil engineering works in Kenya is FIDIC (International Federation of Consulting Engineers). The consultant civil engineer appoints a Resident Engineer to be permanently based on site to supervise the project (Sanz-Llopis, J. & Ostermann, 2020).

The consultant Civil Engineer delegates some of his duties and powers under the contract to the Resident Engineer. The Resident Engineer holds monthly site meetings with the contractor. The consultant Civil Engineer and the client usually attend these meetings. At the practical completion stage, an inspection is carried out and the project handed over expected to make good any defects within the Defects Liability Period that normally lasts for one year (Ministry of Roads, 2016).

The Kenya vision 2030 aspires to a country with integrated and firmly interconnected transport and communication infrastructure consisting of roads, railways, ports, airports, waterways and telecommunication infrastructure. Government of Kenya recognizes that the attainment of Kenya Vision 2030 and millennium development goals will depend heavily on the quality of our road network. Road transport is cardinal in Kenya's transportation sector as it caters for over 93% of all freights and passenger traffic in the country. With the implementation of the roads subsector investment programmes and strategy, Kenya stands to reap immense benefits as a result of high-quality road network (Ministry of Roads, 2016). However, as in many other African countries, road projects in Kenya have been facing numerous challenges, including completion delays, the associated cost overruns as well as the demolition of residential and business houses and abortive works to pay for such projects (Sanz-Llopis, J. & Ostermann, 2020). For instance in the construction of now famous and successfully completed Thika Superhighway, the cost escalated from 26.44 billion to 34.45 billion (World Bank, 2014). The date of completion itself had to be revised from the earlier one of July 2011, to July 2013, a difference of two whole years. According to Wan (2020), they argue that evidence from enterprise surveys suggest that infrastructure constraints are responsible for about 30% of productivity handicap faced by Kenyan firms while poor governance, red tape and financing constraints are the major contributing factors to infrastructure constraints. Power is the infrastructure constrain that weighs most heavily on Kenyan firms, with transport a close second (Wan, 2020).

Statement of the Problem

In Kenya Road construction projects are facing challenges of non-Completion, where many construction projects fail due to factors like time in efficiency, lack of adequate funds and lack of advance working equipment. Kenya Urban Road Authority, (2016) reported there were many projects which were not completed due to obstacles by client, non-availability of materials, poor infrastructure, lack of funds and lack of project managers competency. Construction and maintenance of standard road networks plays an important role in the maintenance of proper living standards to residents of Kiambu County.

To attain and also maintain the road standards, investment comes in handy in the form of monetary investment from state corporations which are: Kenya Urban Roads Authority (KURA), Kenya National Highway Authority (KeNHA), and Kenya Rural Roads Authority (KERRA), Kenya Roads Board (KRB), Engineers Board of Kenya, (ERB) and also external donors. These state corporations are under the Ministry of Transport and Infrastructure Development, and they strive to meet the demands and needs of the residents and are also mandated to maintain and improve the states of roads in Kiambu County (Ministry of Roads, 2016).

According to Maina, (2013) some of the stretches of roads in Kiambu County are short and even some having less than a kilometer long but dilapidation is their worst characteristic. These roads play a key linking role for some residential estates and commercial hubs within the County, but using them has become a headache for motorists and pedestrians as well thus posing the greatest challenge.

From the above background, it's apparent that the role of the management team on the performance of the road construction in Kiambu County is key thus the need for the study and this research therefore seeks to answer the question; what role does the team management have on the performance of the road construction projects in Kiambu County.

Research Objectives

The general objective of the study is to establish the role of team management on the performance of construction projects. The researcher was also guided by the specific objective; to find out on the role of conflict resolution on the performance of a project team.

Literature Review

Conflict Resolution: Is the after effect of a distinction of discernment, sentiment or convictions among individuals (Wall and Callister, 2015). For the most part, strife happens when there are inconsistent objectives, considerations or feelings among people, bringing about restriction and differences. Divider and Callister (2015) characterize clashes as a procedure in which one gathering sees that its advantages are being contradicted or contrarily influenced by another gathering. Ahmed (2012) states that contention is a type of seen contrast between at least two gatherings bringing about shared restriction. Struggle including the venture group, just as gatherings that are outside of the task, can be inconvenient to extend execution (Yu-Chih, Chen and Sheu, 2011). Undertaking supervisors regularly experience interface clashes that originate from contradictory necessities from various venture partners.

Each gathering will commonly show contrasts in mentality towards a task, and these distinctions will create interface clashes (Awakul and Ogunlana, 2012). Rahim (2012) laid out the most widely recognized five styles of managing struggle: defying, overwhelming, trading off, obliging and staying away from. Kuhn and Poole (2000) took a gander at going up against peace promotion style in venture the executives as a circumstance that enable clash to be settled between two gatherings that outcome in a success win circumstance. This style includes clear and straight correspondence and it makes accessible most extreme revelation. Thammavijitdej (2012) placed that showdown has demonstrated to be the most effective of all the peace making styles since it energizes transparency and a cut clear data amalgamation starting with one gathering then onto the next. Bargaining is viewed as give and take. Lee (2014) and Verma (2012) consider trading off to be haggling to tackle the pending clash that fulfills the two gatherings and continually cooking for unequivocal purpose. It is great to utilize when the two gatherings need to win; there is a stop, there isn't sufficient opportunity, the need to keep up the relationship is significant and there is no reasonable time, at the end of the day, the two gatherings gain something to lose something.

A contention is characterized as a circumstance of rivalry between, at least two at times, parties in which the gatherings know about the contradiction of potential future positions and in which each gathering wishes to involve a position which is incongruent with the desires of the other (Cloke and Goldsmith, 2012).

Schuler (2013) and Meredith (2016) have comprehended that contention can be valuable and solid for an association. Struggle isn't something to be apprehensive off; and this goes both for directors and their colleagues. In the event that contention is seen as an undertaking's indistinguishable part and as a characteristic wonder inside associations, and whenever oversaw appropriately, it can demonstrate an extremely helpful apparatus for getting background, for rising hidden issues, for driving individuals propose critical thinking arrangements and document significant exercises learned for future tasks. Struggle can demonstrate valuable since it helps supervisors and colleagues recognize their qualities and shortcomings, as it typically manages significant venture systems, and gives the rules expected to make a move for the opportune, inside expense and quality conveyance of the task.

Cloke and Goldsmith (2012) have likewise depicted clash as being ruinous. As per the creators, if strife isn't overseen appropriately it can demonstrate dangerous for the undertaking and the association. Connections can

be harmed, camaraderie might be totally lost, the task's shared vision might be overlooked, associations will ruin and threatening vibe and independence may overwhelm the group. This circumstance would bring negative outcomes for the venture's expectations, and it would obviously influence the association's structure and prosperity outside the undertaking also. Dangerous clash has an anticipated example known as the Drama Triangle (Loyd, 2013).

In this triangle three jobs are recognized. The undertaking chief is in charge of understanding who will be who, since this can set the base for the goals of the contention and the taking of win-win results. The three jobs of the triangle is: a). "The Persecutor" is the clashing party that holds the most severe and forceful conduct. This individual is conceivable to assault the other party both verbally and physically and has at the top of the priority list that he/she is the one that sets the standards of the game and holds the unrivaled position; b). "The Victim" is at the opposite side of the table. This is generally the individual that endures the conduct of the persecutor. The individual feels alone and defenseless, and this can incite both thoughtful conduct and increasingly forceful also. They speak to the nonassertive party of the contention that typically can't represent its position and bolster its contentions; c). "The Rescuer" is the individual that will attempt to discover an answer for the issue. In a task domain, this job must be allowed to the Project Manager, who will really need to ensure the unfortunate casualty by the decisive conduct of the persecutor. In spite of that, and since being the injured individual does not mean being directly too, the rescuer may utilize forceful or nonaggressive conduct so as to explain the circumstance, both with the persecutor and the person in question.

Warner (2012) contend that occasionally, relationship clashes lead to doubt, disappointment, skepticism, lack of care, non-genial connections, incited antagonistic vibe, tension and diminished task execution. The abnormal state of contentions additionally expands the expenses and calendars of the task. Appropriately overseen clashes result into better quality item, better basic leadership, more advancement and upgraded execution (Nair, 2013). Helpful refereeing joins shared regard, collaboration and aim to gain from one another. Culturally diverse groups are inclined to more clash (Nair, 2013). The seed of contention is planted when one of the gatherings feels disharmony in ventures (Billikopf, 2013). Current day venture directors spend least of 20% of their time in managing clashes (Ayan, 2014). Mama, Lee, and Yu (2013) have completed a meta investigation of 500 fifty-six diary articles on peace making which were distributed somewhere in the range of 1997 and 2010 and communicated that refereeing examination is thinking for the most part couple of territories, for example, job of social contrasts in clashes, peacemaking styles, clashes at working environment, clashes and group execution and refereeing rehearses.

As per these researchers, the scholarly structure of peace promotion is reclaiming stage in refereeing exploration and it was not featured much in past peace making writing. Henceforth, there is have to infer a theoretical model of peace making, struggle lifecycle, refereeing process, examine various purposes behind clashes in tasks, oftentimes utilized compromise strategies in undertakings and how the arrangements are actualized in ventures.

Jehn, Chadwick and Thatcher (2013) studied eighty-eight groups of five individuals each from three US business colleges doing MBA program to discover the relationship and effect of significant worth compatibility, statistic assorted variety, and clashes on workgroup results. They found that individual unmistakable statistic contrasts, for example, sex and age expands relationship struggle and instructive statistic contrasts, for example, training builds errand strife. Gathering esteem harmoniousness diminishes both undertaking and relationship clashes. Singular strength and definitiveness came about into higher execution. The gathering results considered in this investigation is part fulfillment, target execution and impression of

execution. Undertaking struggle is contrarily identified with seen execution and part fulfillment and relationship strife is adversely identified with target execution, saw execution and part fulfillment. Undertaking strife is decidedly identified with target execution in work gatherings.

RESEARCH METHODOLOGY

The study employed descriptive research design since it minimizes biasness. The study focused on completed projects from each of the 12 sub-counties in Kiambu County. Therefore, the target population was 473. The unit of observation was the project managers and project supervisors. A census was used since it entails having an in-depth analysis of the research. This study used primary data which was collected using questionnaires for the road construction projects. Simple random sampling was used to sample the project managers and project supervisors. The research instruments were validated by use of a pilot study, which was assessed by the supervisor. Data collected was analyzed by use of Statistical Package for Social Sciences (SPSS) Computer Package version 22 was used to produce frequencies, descriptive and inferential statistics was used to derive conclusions and generalizations regarding the population. A multiple regression model was used to show the relationship between the independent variables to the dependent variable. The findings of the study was analyzed and presented through, frequency tables as well as converting them in to descriptive statistics.

RESEARCH FINDINGS AND DISCUSSION

Conflict Resolutions

The study sought to investigate on the conflict resolution on the performance of the road construction projects. The data collected under the objective are presented in the following section. Conflict resolution was considered as being important since the researcher deemed it to affects the performance of the road construction projects. Therefore the various concepts of the conflict resolution were measured so as to gain a better and a clear understanding of the objective. The results are presented in the section below.

Conflict and Project Objectives

The results as depicted in table 1 revealed that majority 70.0% of the respondents agreed to a very great extent that occurrence of conflicts during work affects achievement of the project objectives. 16% agreed to great extent, 10.0% agreed to a moderate extent, 3.0% agreed to a little extent while only 1.0% of the respondents were of contrary opinion. The results therefore, show that conflicts at the work place affect successful realization of the project objectives.

The results of the study are in line with the literature reviewed (Cloke and Goldsmith, 2012) contends that conflict is characterized as a circumstance of rivalry between, at least two at times, parties in which the gatherings know about the contradiction of potential future positions and in which each gathering wishes to involve a position which is incongruent with the desires of the others.

Table 1: Conflict and Project Objectives

Response on effects of conflicts on Projects Objectives	Frequency	Percentage
No extent	1	1
Little extent	3	3
Moderate extent	9	10
Great extent	14	16

Very Great extent	63	70
TOTAL	90	100

Conflict resolution mechanisms

Table 2 shows the response on the conflict resolution mechanisms that are in use by the project leadership. From the results 67% of the respondents reported negotiations, 60.0% reported joint problem solving, 26.0% reported compromise, and 16.0% reported other means of conflict resolution while 13.0% of the respondents reported domination. From the findings as revealed, it can be deduced that the most commonly used conflict resolution mechanisms are negotiations, joint problem solving and compromise. The findings are in line with the works of Schuler, (2013) who contends that conflict isn't something to be apprehensive of but rather, when it happens there is need for colleagues to have a common agreement on the way forward especially when it happens during the project implementation processes.

Table 2: Conflict resolution mechanisms

Conflict resolution mechanisms	Frequency	Percentage
Domination	12	13
Joint Problem solving	54	60
Compromise	23	26
Negotiation	60	67
Others	14	16

Conflict resolution Strategies

Majority of the respondents strongly agreed that organizational culture determines the way conflict is resolved as was shown by mean score=4.7831, others also agreed that conflicts arises as a result of different opinions, view or goals. However a few of the respondents also agreed that domination is the most commonly used conflict resolution strategy as was shown by mean score=3.5967. From the results, it can be deduced that conflicts arise as a result of differing opinions, views or goals, that culture of the organization determines the way conflict is resolved and that dominion is a way of conflict resolution strategy. The results conform to the works of Loyd, (2013) who alludes that conflict resolution is conceptualized as the methods and processes involved in the facilitation of the peaceful ending of conflict and retribution, Loyd further affirms that committed project members try to resolve project related conflicts through active communications by the project team members.

Table 3: Conflict resolution Strategies

Level of agreement on conflict resolution strategies	Mean	STDev
Conflicts arise as a result of differing opinions, views or goals	4.1432	.0978
Domination is the most commonly used conflict resolution strategy	3.5967	.9076
Culture determines the way conflict is resolved	4.7831	.2354

Leadership Styles and Conflict resolution Strategies

Table 4 shows the results on the influence that the leadership style has on the conflict resolution strategies within the road construction projects. From the results, majority 53.0% of the respondents agreed to a very great extent that leadership style affects the conflict resolution strategies, 31.0% of the respondents agreed to a great extent, 9.0% agreed to a moderate extent, 4.0% agreed to a little extent while 2.0% of the respondent were of the contrary opinion. From the results as revealed by the majority of the respondents, leadership style plays a critical role on the conflict resolution strategies that is applied by the road construction projects. Kamau, (2017) also noted that leadership style plays a critical role on the conflict resolution in an organization set up.

Table 4: Leadership Styles and Conflict resolution Strategies

Leadership Styles and Conflict resolution Strategies	Frequency	Percentage
No extent	2	2
Little extent	4	4
Moderate extent	8	9
Great extent	28	31
Very great extent	48	53
TOTAL	90	100

Aspects of leadership Styles on the Conflict resolution Strategies

Table 5 shows the results on the influence that the leadership style has on the conflict resolution strategies within the road construction projects. From the results, majority 53.0% of the respondents agreed to a very great extent that leadership style affects the conflict resolution strategies, 31.0% of the respondents agreed to a great extent, 9.0% agreed to a moderate extent, 4.0% agreed to a little extent while 2.0% of the respondent were of the contrary opinion. From the results as revealed by the majority of the respondents, leadership style plays a critical role on the conflict resolution strategies that is applied by the road construction projects. Kamau, (2017) also noted that leadership style plays a critical role on the conflict resolution in an organization set up.

Table 5: Aspects of leadership Styles on the Conflict resolution Strategies

Leadership and Conflict resolution strategies	Mean	Std. Dev.
Those leaders who motivate their subordinates adopt the problem-solving strategy in resolving conflict creating a conducive working environment.	4.3214	.02413
Leaders that compromise with their subordinates do so to achieve the organizational goals.	4.4573	.01325
Leaders who use domination to resolve conflicts achieve the organizational goals faster.	4.2198	.45271

The results on the aspects of the leadership styles and they influence on the conflict resolution strategies were presented in the table 5. From the results, majority of the respondents strongly agreed that leaders that compromise with their subordinates do so to achieve the organizational goals as was shown by mean score=4.4573, other respondents agreed that those leaders who motivate their subordinates adopt the problem-solving strategy in resolving conflict creating a conducive working environment as was shown by mean score=4.3214 and that leaders who use domination to resolve conflicts achieve the organizational goals faster as was shown by mean score=4.2198.

The results therefore revealed that leaders who motivate their subordinates adopt the problem-solving strategy in resolving conflict creating a conducive working environment and that those leaders who compromise with their subordinates do so to achieve the organizational goals while those who use domination to resolve conflicts achieve the organizational goals faster as compared to the others as shared above. Warner (2012) notes that leaders who inspire their subordinates use a problem-solving approach to overcome conflict, resulting in a pleasant working atmosphere.

Performance of the Road Construction Projects

The dependent variable of the study was to establish the performance of the road construction projects. The following table shows the data collected with regards to the performance of the road construction projects. Performance of the Road Construction Projects was considered as being important since the researcher sought to establish the performance of the road construction projects. Therefore the various concepts of the Performance of the Road Construction Projects were measured so as to gain a better and a clear understanding of the dependent variable.

Indicators on the performance of road Construction Projects

Finally the researcher sought to establish on the indicators and other aspects of performance of the road construction projects. Table 6 below shows the data collected. The results revealed that majority of the respondents strongly agreed that Environmental policy/programmes affects the road performance as was shown by mean score=4.5032. Others agreed that Unprotected road-user risk has contributed to the effective performance in the road construction projects as was shown by mean score=4.4312. It was agreed by some that decreasing road related cost budgets has contributed to the effective performance in the Construction projects as was shown by mean score=4.3652.

Further it was agreed that acceptance of the deliverables has influenced the completion of the Road construction projects as was shown by mean score=4.1432. Lack of an effective Quality management/audit programmes has affected the effective performance of the Road construction projects as was shown by mean score=4.3210. Also it was agreed that lack of Allocation of resources to road infrastructure has resulted to the poor performance of the road construction projects as was shown by mean score=4.3210 and that the forecast values of road costs vs. actual costs has affected the performance of the Road construction projects as was shown by mean score=4.3421. It was also agreed by some of the respondents that Satisfaction with road system has contributed effective towards the completion of the Road construction projects as was shown by mean score=4.4987.

From the results therefore, it can be deduced that that value of the defects after handing over the completed projects has contributed to the effective performance in the Road construction projects, that defects that are incurred after the handing over of the completed road construction projects has contributed to the effective

performance in the road construction projects and that Acceptance of the deliverables has contributed to the effective performance in the Construction projects.

Further the study revealed that decreasing road related cost budgets has influenced the completion of the Road construction projects and that Level of satisfaction regarding travel time and its reliability and quality of road-user information has affected the effective performance of the Road construction projects. Also it was also apparent that Environmental policy/programmes have resulted to the poor performance of the road construction projects and that the unprotected road-user risk has affected the performance of the Road construction projects. Waweru, (2018) in her work points out that the execution of road construction projects in most cases are being affected by the availability of capital and points out that lack of an efficient mode of stakeholder involvement hinders the effective performance of the projects.

Table 6: Indicators on the performance of road Construction Projects

Performance of the Road Construction projects	Mean	Std. Dev
Value of the defects after handing over the completed projects	3.9870	.90861
Defects that are incurred after the handing over of the completed road construction projects	3.8794	.45632
Acceptance of the deliverables	4.1432	.73094
Decreasing road related cost budgets	4.3652	.43198
Level of satisfaction regarding travel time and its reliability and quality of road-user information	3.7640	.67539
Environmental policy/programmes.	4.5032	.09653
Unprotected road-user risk	4.4312	.01254
Processes in place for market research and customer feedback	3.0965	.07865
Long-term programmes	2.9754	.90764
Allocation of resources to road infrastructure	4.3210	.02512
Quality management/audit programmes	4.3210	.03127
Forecast values of road costs vs. actual costs	4.3421	.00567
State of road bridges	3.0965	.09732
Satisfaction with road system	4.4987	.03154

Statistical Modeling

The concepts of the statistical modelling concerns the statistical method that is deduced from just but a small but representative sample the characteristics of the larger population. Statistical modelling allows the researcher to proceed and make assumptions with regards to a wider group through the utilization of a smaller portion of that group as a guideline. Statistical modelling is one of the two statistical methods that are employed to analyse data, along with descriptive statistics. Therefore the overall goal of the tool is to provide measurements that can be used to bring forth the description of the overall population of a research project by therefore studying a smaller sample of it.

This therefore enables the researcher to make general assumptions with regards to the key while having a fair degree of the confidence. Some of the common statistical modelling tools include the regression models, normal distributions and R-squared analysis, among others. In essence, statistical modelling can be used to elucidate the variable’s overall behaviour from a whole-population perspective which therefore brings to the fore the path for theories and new hypothesis.

Coefficient of Correlation

The purpose of inferential statistics is to draw conclusions about a population based on information collected from a sample of that population. To ascertain the perceived relationship between project team management and the performance of the road construction projects, the study employed Pearson’s product moment correlation analysis where the study employed coefficient of determination, regression analysis and regression coefficient on team selection management, conflict resolution, team development and individual role management. To compute the correlation (strength) between the study variables and their findings, the researcher used the Karl Pearson’s coefficient of correlation (r). From the findings on the team selection management, conflict resolution, team development management and individual role management that were computed into single variables per factor by obtaining the averages of each factor. Pearson’s correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. The table below indicates the correlation matrix between the factors (conflict resolution) and performance of the road construction projects.

Table 7: Coefficient of Correlation

		Project performance	Team selection	Conflict resolution	Team development	Individual role management
Project performance	Pearson Correlations	1				
	Sig. (2-tailed)					
Conflict resolution	Pearson Correlations	0.764	0.523	1		
	Sig. (2-tailed)	0.017	0.016			
	Sig. (2-tailed)	0.027	0.016	0.026	0.027	

According to the correlation matrix, there is a positive and significant relationship between performance of the road construction projects and conflict resolution of magnitude 0.764 and a P-value of 0.017 at 5% level of significance and 95% level of confidence. The positive relationship indicates that there is a correlation between performance of road construction projects and c conflict resolutions.

According to the correlation matrix, there is a positive and significant relationship between performance of road construction projects and Team development management of magnitude 0.622 and a P-value of 0.021 at 5% level of significance and 95% level of confidence. The positive relationship indicates that there is a correlation between Team development management and performance of road construction projects. The findings also show that there is a positive and significant relationship between performance of road construction projects and Individual role management of magnitude 0.742 and a P-value of 0.027 at 5% level of significance and 95% level of confidence. The positive relationship indicates that there is a correlation between Individual role management and the performance of road construction projects.

The correlation findings infer that conflict resolution has the highest effect on the performance of the road construction projects, followed by individual role management, team selection and then team development. This notwithstanding, all the factors were significant (p-value <0.05) at 95% confidence level.

Model Summary

ANOVA

Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.308	1.342		1.623	.0357
Conflict resolution	0.674	0.156	0.210	3.592	.0285

Optimal Model

The study therefore developed the optimal model that was based on the conceptual framework of the study. From the study findings, the (B₀) was significant in all the simple and multiple linear regression models. The overall study model showed the relationship between the project team management and the performance of the road construction projects and therefore project team management had a direct effect on the performance of the road construction projects. The optimal model is therefore specified as below;

$$Y = \beta_0 + \beta X_1 + e$$

Where:

Y the dependent variable (performance of construction projects)

β_0 the regression constant, β_1 were the coefficients of the independent variable

X_1 = conflict resolution

e = Error term.

From the optimal model the variables are arranged based on their significance level and the beta coefficients. According to Mulinge (2013) as much as most of the variables in the study might have a significant influence on the dependent variable, their significance levels differs therefore sometimes this calls for a revised conceptual framework.

Conflict Resolutions

On the conflict resolution, the results revealed that there are chances of conflicts occurring during work. The results also shows that conflicts at the work place affects successful realization of the project objectives and that the most commonly used conflict resolution mechanisms are negotiations, joint problem solving and comprise. The results also revealed that conflicts arise as a result of differing opinions, views or goals, that culture of the organization determines the way conflict is resolved and that dominion is a way of conflict resolution strategy also, leadership style plays a critical role on the conflict resolution strategies that is applied by the road construction projects. It was also apparent that leaders who motivate their subordinates adopt the problem-solving strategy in resolving conflict creating a conducive working environment and that those leaders who compromise with their subordinates do so to achieve the organizational goals while those who use domination to resolve conflicts achieve the organizational goals faster as compared to the others as shared above.

Project Performance

On the performance of the road construction projects, the study revealed that that that construction equipment availability has contributed to the effective performance in the road construction projects, that material mobilization has contributed to the effective performance in the road construction projects and that construction materials availability has contributed to the effective performance in the construction projects. Further the study revealed that availability of the resources has influenced the completion of the Road construction projects and that lack of an effective mode of the stakeholder engagement has affected the effective performance of the Road construction projects. Also it was also apparent that lack of accountability and responsibility among the staff has resulted to the poor performance of the road construction projects and that the turnaround time has affected the performance of the Road construction projects.

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