

www.strategicjournals.com

Volume 9, Issue 4, Article 041

QUALITY MANAGEMENT PRACTICES AND PERFORMANCE OF COUNTY GOVERNMENT INFRASTRUCTURAL PROJECTS IN MIGORI COUNTY, KENYA

Ouma, J. A., & Omwenga, J. Q.



QUALITY MANAGEMENT PRACTICES AND PERFORMANCE OF COUNTY GOVERNMENT INFRASTRUCTURAL PROJECTS IN MIGORI COUNTY, KENYA

¹Ouma, J. A., & ²Omwenga, J.

¹Master Student, Jomo Kenyatta University of Agriculture and Technology, (JKUAT), Kenya ² Doctor, Lecturer, Jomo Kenyatta University of Agriculture and Technology, (JKUAT), Kenya

Accepted: October 11, 2022

ABSTRACT

Globally, organizations experience a lot of changes in the growth of their business environment due to growing consumer awareness of technological advancement, quality, globalization, innovation, and intense business competition. Quality management, Preventive Management, Just in Time, and Six Sigma are the most considered quality improvement strategies of initiatives implemented in most organizations. Kenya has two-tier government levels: the National Government with devolved units known as County Government headed by the Governors. In terms of responsibilities and functions, County Governments are majorly responsible for initiating and managing infrastructural developments and service delivery at grassroots levels within counties. Quality Management (QM) is known to help organizations improve their service delivery to realize the effects on output. Clear strategies developed can enable the organization to continuously improve everything under their influence, both services and products. The conceptual framework considered for this study was based on the listed objectives: both dependent and independent variables. Quality goals that are stipulated in the implementation plans are prioritized to ensure that the set goals and objectives are realized. The most significant sound Quality Management element is the Quality Improvement process. It involves considering deliberate actions aimed at setting high-Quality standards (Huemann, 2004). In this research, a cross-sectional research design that helps decide the correlation of Quality Management Practices and County Government Infrastructural Projects Performance in Migori County will be embraced. This study targeted eight hundred and twenty (820) infrastructural projects planned as per the County Integrated Development plan 2018-2022. This research used non-probabilistic sampling. The purposive sampling technique was most appropriate during data collection from identified respondents who were directly assigned and were daily involved with infrastructural projects. The County Integrated Development Plan (CIDP) contains the list of prioritized projects and thus provides the desired study list

Keyword: Quality management, Quality Planning, Quality Assurance, Quality Control, Quality Improvement

CITATION: Owino, K. O., & Omwenga, J. (2022). Project management practices and performance of nongovernmental organizations in Migori County, Kenya. *The Strategic Journal of Business & Change Management*, 9 (4), 582 – 595.

INTRODUCTION

Globally, organizations experience a lot of changes in the growth of their business environment due to growing consumer awareness of technological advancement, quality, globalization, innovation, and intense business competition. In order to counter any of these challenges with surety of survival, most organizations and institutions have resolved to implement an array of quality improvement measures geared towards improving their perceived performance and competitiveness. Quality management, preventive management, Just in Time, and Six Sigma are the most considered quality improvement strategies of initiatives implemented in most organizations.

The implementation of QM in the organization usually goes hand in hand with the performance of Quality systems considering by ISO 9000 international set standards. ISO 9000 standard of quality management series and standards represent international principles of agreement, focusing on quality and excellent management best practices that ensure that different organizations are committed to producing or delivering high standard services geared to meet or even exceed customer expectations.

QM refers to the sound process where high standards of goods and services can be established, controlled, and sustained throughout a project lifecycle and does not imply the perfection of the project. Still, it focuses on customer and stakeholder satisfaction towards the Project (Sycheva et al, 2020). Product quality is a critical factor for achieving project goals. Planning, measuring, and remediating quality control issues efficiently and effectively is a crucial principle in determining the success or failure of a project (Patyal & Koilakuntla 2018).

The main principle of QM is to ensure that the projects carried out meet or exceed customers' expectations, mainly with consideration of stakeholders' essential requirements and goals. Project management teams should develop good public work relations with primary stakeholders, in

conjunction with both financiers and project endusers, to understand what quality they desire and what they mean to them. The most perceived causes of poor project monitory and evaluations are meeting only the written requirements for primary outputs but ignore what other major stakeholders require or expect in production (Kurgat, & Omwenga,2016).).

QM practices are essential ingredients for obtaining desired services to clients. Central QM best practices are based on benchmarking practices, Supplier Partnering practices, Continuous improvement practices, international organization for Standardization practices, Quality awards, and Six Sigma practices. Application of QM practices assists organizations in uplifting their internal operations adequately; however, this is a need to become competitive in the global marketplace. QM is a well-known organizational primary process that needs changes, especially during production in conjunction with decision-making processes. Employee mentorship, and training development, together with participation and involvement must be prioritized (Musyoki, A. N. 2018).

The four Major QM processes are; Quality Improvements, Quality Definition, Quality Control and Quality Assurance (PM4DEV, 2016). Project Management is rooted in sound planning, monitoring, and controlling an activity (Kerzner, 2017); it further entails resources like time, quality, and cost management in order to achieve its success (Njau, & Omwenga, 2019). Firms all over the globe have embraced the implementation of Quality Management Practices. A study carried out on forty-four (44) small manufacturing companies in Valencia and Spain found out that effective management improves the quality of the performance of the companies (Amollo, & Omwenga2017).

The global community also has put pressure on countries to initiate and improve infrastructural projects to keep them competitive and gain an advantage over others, again for the countries to avoid lagging. The role played by public infrastructural projects like poverty eradication, opening markets, and increasing literacy in equal measures cannot be ignored (Bondar et at, 2015). For instance, the Kenya Government fiscal policy's significant objectives are prioritized in infrastructural developments. With this, а conducive business environment was created, providing investments to achieve and sustain fast economic growth and stability considering the Vision 2030 blueprint.

Infrastructural projects are known to contribute key pillar towards the socio-economic foundational establishment of a country and people due to improved living standards (Okero 2011). Kenyan Government manages different projects via devolved functions. These projects focus on enlarging infrastructure, Urban & Rural progress, Health Care Services, and Socio-economic welfare. The projects affect its citizens' livelihoods and mirror the success of the Government (Musau & Kiru, 2018).

Countless factors are known to affect projects' implementation, that is: tribalism, affairs of state, inadequate technology, financial embezzlement, dishonest dealings, and mislaid priorities (World Bank, 2012). One of the great reasons Kenya voted the constitution 2010 was to do away with the barriers to developments and ensure that the products are near to all citizens through devolution. Devolution also sought to bring cooperative projects to meritorious citizens in the villages and shanty areas in the country (Musau & Kirui, 2018).

The county government of Migori acknowledged infrastructure as a significant enabler for sustainable economic increase and sustainability since it enhances quick and cheap means of transport, perceived to be critical for the expansion of economic ventures for employment and competitiveness in an economy. The county government of Migori, in collaboration with other development partners, is scheduled to expand infrastructure, create more employment opportunities and provide a conducive environment for investment to cater to the ever-growing urban population (CIDP 2018-2022). The research targets county government infrastructural projects completed in the recent past since 2014 to date. The research will be based in the County Government of Migori to establish the quality management best practices being applied and how it affects the performance of County Government Infrastructural Projects carried out within the period.

The 2010 Kenyan Constitution established the County Government of Migori, which is located towards South-Western Kenya, borders Homabay County from (North), Kisii County towards (North East), Narok from (South East), Tanzania in (West and South), and Lake Victoria towards the west. Migori County Government is headquartered by Migori Town, perceived to be the largest town. Migori County Government comprises eight (8) Sub-Counties: Uriri , Rongo, Kuria West , Awendo, Suna East, Kuria East, Nyatike, Suna West. County Governor is the head, together with appointed Executive Members committed to overseeing its daily running of activities.

Statement of the Problem

A favourable project should be within the planned cost, scheduled time, preferred quality, customer satisfaction, and stakeholder fulfilment. Project success is associated with positive or negative factors (Norman, 2020). Nearly all the projects in county governments are negligible to project objectives and, therefore, never successful (okuta, 2019).

There have been complaints from the citizens of counties on poor service. But still, there is inadequate information concerning the implementation of QM practices on infrastructure projects in the county governments (Okuta 2019). If QM is implemented in the County Government with solid structures, it will yield high-performance levels. Quality Management Practices improve project planning, management, and execution efficiency, hence project success (Ibrahim,& Daniel, 2019). Quality implementation on infrastructural projects, programs are lacking in the county

governments, leading to unsatisfactory projects for the residents (Galgallo, 2019).

The County Government of Migori has many incomplete projects resulting from weak project design, poor implementation strategies, not to mention limited information sharing for sound project management. Project supervision especially infrastructural development is inadequate, resulting in poor deliverables. Minor concerns have been made on the project's life cycle, with little research on the Project Quality Management best Practices embraced in Migori County Government infrastructural projects Performance.

Objectives of the study

This study's primary aim was to determine the effect of project quality Management Practices on County Government Performance Infrastructural Projects Migori. The **s**pecific objectives of the study were;

- To establish the influence of quality planning on Infrastructural Projects' performance in the Migori County Government.
- To determine the influence of Quality Assurance on Infrastructural Projects' performance in the Migori County Government.
- To evaluate the effect of Quality control on Infrastructural Projects' performance in the Migori County Government.
- To examine the influence of quality improvement on Infrastructural Projects' performance in the Migori County Government.

LITERATURE REVIEW

Theoretical Review

Deming's Theory – Quality Management

This is the most profound theory found upon fourteen pillars of total quality management that is (the system of deep knowledge) together with Shewhart Cycle commonly also known as the PDCA (Plan-Do-Check-Act) (Bartosova & Hraskova 2015). Deming explained that quality entails improving processes using knowledge. For instance, adopting the fourteen management points are perceived indicators that the administration is stable and can stay in a float in business (KIM, 2009).

In Deming's theory, fourteen pillars of total quality management include: Develop constancies of purpose; New philosophy embrace; Stop inspection dependencies for quality achievements; Stop the practice of business award based on price alone; alternatively, work with a single supplier to minimize overall cost by working with just a single trusted supplier; Aim for continuous planning, production, service improvement; on-job constant and mentorship; Leadership training Implementation; Organizational fear management and abolishment; Break down departmental huddles and barriers; Watchwords abolishment, encouragements, together with targets for the employees; Quotas in conjunction with standards abolishment; Craftsmanship Support; Make sure that everybody is well trained and mentored with the view of working towards the organizational goal-accomplishing and transformation.

Deming also improved the PDCA cycle for continuous improvement that Walter Shewhart initiated. The PDCA consists of four steps, and when repeated continuously, it forms a cycle for quality improvement. Actions and objectives are enlisted during planning phases, followed by implementing processes and progress. Moreover, close monitory is done to ensure that changes made are working positively and investigate selected processes results compared with the original perceived plan. Lastly, determine where changes should be made for continuous improvement should be prioritized before reviewing the planning phase (Bartosova & Hraskova 2015). In quality management, Deming's theory is applicable in variables considered for the study. Quality Management essentiality is also detrimental in determining the acceptable project outcomes and outputs. This explains the inadequacy and planning limits and deliverability of desired projects and the uncertainties that cannot be effectively managed. Therefore Managers must embrace and exercise elaborate plans for improved and selected projects deliverables. Poor planning is

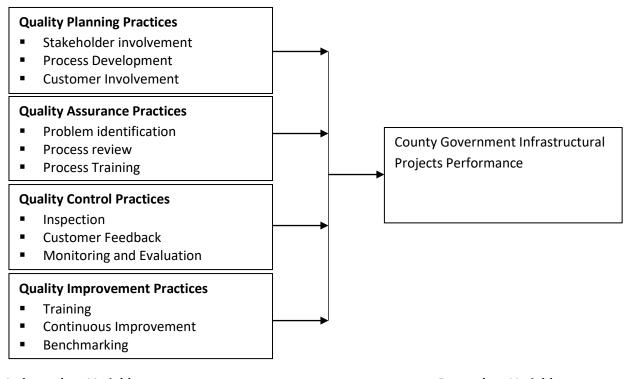
a recipe of project mismanagement and poor resource mobilizations and scheduling together with poor time and cost management (Akhwale & Muthee, 2018). The major point for embrace is the project outcome with respect to subsequent measures that defines to improve on the project construction deliverability. Value control is argued to have the power of project control and therefore must be included in the project planning processes, budgeting, resource mobilization, scheduling and consumption (Omeno & Sang, 2018).

Juran Trilogy Theory

This theory was developed by Joseph Juran and embraced Quality Trilogy: Quality control, Quality Planning, and Quality Assurance. Juran alludes that Quality planning is fundamental and involves

Conceptual Framework

different parties concerned with goods and services. This provides road maps and involves critical steps that include: Customer identification, establishing the requirements of the customers, transforming the identified needs to languages that can easily be understood. Again, developing products that can resolve these requirements, and improved product features with surety of customer satisfaction. Quality Improvement embraces the development of a process capable of producing the desired products and optimizing the process. The primary role of Quality Control is the development of strategies and standards capable of producing quality products under the existing conditions converting the process and procedure into operation (Juran, 2010).



Independent Variable

Figure 1: The Conceptual Framework

Empirical Review

Quality Planning entails the management of activities. Both the strategic plans and action plans are used for proper coordination and alignment of different desired initiatives capable of yielding good

Dependent Variable

results within the Organization. Quality Planning avails a structured sequence of undertaking various activities geared towards completion, improving to sustain Quality (Senaratne & Jayarathna, 2012). Quality planning gives a road map and how best the organizational plans should be handled to realize desired goals. Quality Planning Processes are designed to lead the development of Quality plans, document and give a road map on how Quality will be achieved during the Project life cycle.

Acquisition of elaborate quality management plans is the prerequisite for the initiation of Quality Management standards and processes. Quality goals that are stipulated in the implementation plans are prioritized to ensure that the set goals and objectives are realized. Quality assurance is one of the significant steps to be achieved in the project life cycle since it is seen as an appropriate proactive approach in managing Quality.

Quality Assurance embraces checks and balances to ensure that Quality systems are built into the project at the start (Goswami, 2015). Activities involving hiring of qualified employees, engagements of qualified suppliers, supplier pieces of training, staff training, and mentorship programs, consideration of increment of arrangements between employees and suppliers, reviews of monitory and evaluation of different inputs, outputs, to ensure that the most desired standards are in the blueprint design plans (Bhonde & Shaikh, 2015).

The primary aim of Quality Assurance is to manage and help in defects management. Several research studies have been done to examine Quality Assurance best practices, especially in relation to Project Management. For instance, by examining ehealth services programs and best practices, five rural health facilities motsly located in the eastern part of Cape Province, South Africa. Observed results showed that some weaknesses were realized, especially at the application and implementation of Quality Assurance policies and plans through a structured manner.

Lack of critical stakeholders, user involvements, together with independent Quality Assurance Evaluations (Ruxwana et al ,. 2014). Observations made establish that many limitations on Quality Assurance enhance the success of some particular e-health programs or projects. A study on quality assurance found that it increases the probability and success of technological projects like Software Engineering through an adequate level of instilled confidence and satisfaction of required Quality (Khraiwesh, 2014).

Quality Control plays a very crucial role in Quality management. For instance, Quality Control helps carry out project inspection and analysis of input and output to ascertain whether the outcome meets the desired standards (Goswami, 2015). If the result falls below the required standard, Quality Control officers are expected to initiate any corrective measures. By considering the infrastructural settings, the corrective actions involve reviewing parts of the already completed projects.

Quality Control identifies project defects, unlike Quality Assurance that mainly focuses on weaknesses and deficiencies. The whole process is a very interactive approach for managing Quality. Again, this process is seen as the most necessary process in Quality checks and management, and it may enable the project team to achieve 100% defect proof and prevention. According to a study conducted by Githenya & Ngugi (2014), there is a significant correlation between successful house project implementation and project control.

The regression shows a unit project measure results to an increase in 0.766 high chances of success in implementing the perceived project. The authors argue that project managers need to focus primarily on developing adequate sound control strategies in every project development and management aspect that include Quality. Worth noting is that the quality material supply is seen to be a critical determinant, especially for successful projects completion, such as rural electrification projects. Unreliability of quality material supply may cause derailment in initiation and project management. This may result in low morale and general worker productivity (Kwasiraet al,. 2016). The most significant sound Quality Management element is the Quality Improvement process. It involves considering deliberate actions aimed at setting high-Quality standards (Huemann, 2004). Quality Improvement strategies are best used in routine processing and manufacturing entities but are not so common or fully embraced in the project management field. Most of the practitioners hold the view that project management is independent and are also temporary in nature. By viewing the nature of infrastructural projects and considering this context, the perception is misleading as most of the project contractors are fully engaged in implementation of the projects, even at multisectoral projects (Harnadez & Aspinwall, 2007).

Therefore, it can work best when Quality related lessons are learned and knowledge implemented in other subsequent projects.

Quality gaps observed in project constructions can be averted by applying Lean Methodology (Alves & Barbosa 2014). The research designs that embrace Lean methodology learn how to eliminate administrative deficiencies observed during the construction of different projects. Different teams will be equipped with adequate skills on project planning and quality improvements. A case study on the construction of large-scale projects in Turkey shows success by fully embracing Six Sigma (Taner, 2013). Several factors are considered key for both implementation and application of Six Sigma; top management, together with other leadership commitments, guarantees high-Quality standards to esteemed customers.

METHODOLOGY

A cross-sectional research approach was used in this study to assist determine the association of Quality Management Practices and County Government Infrastructural Projects Performance in Migori County. This study targeted eight hundred and twenty (96) infrastructural projects planned as per the County Integrated Development plan 2018-2022. This research used non-probabilistic sampling method. The purposive sampling technique was

most appropriate during data collection from identified respondents who are directly assigned and are daily involved with infrastructural projects. The study employed the technique of stratified random methods to identify projects of study. The County Integrated Development Plan (CIDP) contains the list of prioritized projects and thus provided the desired study list. All four (4) departments with infrastructural projects were considered during sampling. Questionnaires method was primarily used for data collection due to its consistency and stimulus nature to many people. The data analysis process consists of data collection, data cleaning, data triangulation, data coding, and entry into spreadsheets using the Statistical Package for Social Sciences (SPSS). Data screening eliminated errors and check on data completeness and omissions. The means, percentages, standard deviation, and frequencies was calculated. Regression analysis to determine the influence of Effective communication was done; continuous Improvement, Total employee commitment and Customer focus affect the management of projects in the County Government of Migori. Below is the regression model embraced for this study analysis.

$Y = 60 + 61X1 + 62X2 + 63X3 + 64X4 + \varepsilon$

Where: Y = Management of projects; $\beta 0$ = Constant; $\beta 1$, $\beta 2$, $\beta 3$, $\beta 4$ = Regression coefficients;

- **X**₁ = Effective Communication;
- X₂ = Continuous Improvement;
- **X**₃ = Total Employee Commitment;
- X₄ = Customer Focus,
- ϵ = error term.

Two-tailed tests was carried out to all tests with significant levels set as 95% confidence level an alpha level of 0.05 (p<0.05). Consolidation of Qualitative data was done and analyzed through themes and frequencies generation. Finally, tables and graphs based on the research objectives will be generated.

FINDINGS AND DISCUSSION

Table 1: Quality Planning

Descriptive Analysis

The researcher first analyzed the data descriptively in order to describe the general central tendencies of the despondences concerning the study variables. The questionnaire was designed to have 5-point Likert scale measurements which is a measurement with response catergories ranging from "Strongly Disagree (1) to Strongly Agree (5)" which require the respondents to tick the level of agreement with structured questions.

Descriptive analysis focuses on describing the basic features of data in a given study (Cooper & Schindler, 2013). Descriptive analysis was used to

summarize findings regarding of communication, project resource planning, stakeholders involvement and monitoring and evaluation. The information is represented in the following subsections below:

Effect of quality planning on performance of county government infrastructure in Migori County, Kenya

The first objective of the study was to establish the effect of quality planning on performance of county government infrastructural projects in Migori County, Kenya. The descriptive statistics for quality planning on the response received is shown in the table below.

Quality Planning	Number	Min	Max	Mean	STD
Show your level of agreement that stakeholders are involved in	74	2	4	3.54	0.954
quality management practices in hence the performance of county					
government infrastructural in Migori county, Kenya.					
At which level do you agree with the statement that there is process	74	2	4	3.48	0.890
development in performance of county government infrastructural					
in Migori county, Kenya.					
At which level will you agree that there is customers are involved in	74	4	5	4.10	0.301
decision making in performance of county government					
infrastructural in Migori county, Kenya.					
Average				3.70	0.715

Effect of quality assurance on performance of county government infrastructure in Migori County, Kenya

The dependent variable was performance of county government infrastructural in Migori County, Kenya for the last 3 – 5 years

Table 2: Performance of county Government infrastructural in Migori County for the last three to five years

Performance of county government infrastructural	Number	Min	Max	Mean	STD
Show your level of agreement that there is early problem identification in quality management practices in hence the performance of county government infrastructural in Migori county, Kenya.	74	1	4	1.74	0.945
At which level do you agree with the statement that there is process review in performance of county government infrastructural in Migori county, Kenya.	74	1	5	2.14	0.898
At which level will you agree that there is regular training of employees who are involved in quality assurance practices in performance of county government infrastructural in Migori county,	74	1	3	2.23	0.970
Kenya.					
Average				3.37	0.938

From the above inferential statistics, it shows that the majority of respondents agreed that there is inspection which is done in the event of quality management with a mean of 3.94 and a standard deviation of 0.794. On whether there is mechanism for customer feedback in regard to quality management practices hence performance of county government infrastructural in Migori County Kenya, the respondents agreed with the statement with a mean of 3.48 and a standard deviation of 0.926. Similarly, the respondents who respondents wwre in agreement with the statement that monitoring and evaluation is conducted by by the county government of Migori by a mean of 2.58 and a standard deviation of 0.402 Overall, the average scores on quality control showed a mean score of 3.33 and standard deviation of 0.707 implying majority were in agreement with all the statements.

Effect of quality control on performance of county government infrastructure in Migori County, Kenya The third objective of the study was to establish the effect of quality control on performance of county government infrastructural projects in Migori County, Kenya. The descriptive statistics for quality control on the response received is shown in the table below.

Table 3: Quality Control

Quality Control	Number	Min	Max	Mean	STD
Show your level of agreement that there is early proble	74	2	4	3.94	0.794
identification in quality management practices in hence the					
performance of county government infrastructural in Migori					
county, Kenya.					
At which level do you agree with the statement that there is	74	2	5	3.48	0.926
process review in performance of county government					
infrastructural in Migori county, Kenya.			_		
At which level will you agree that there is regular training of	/4	4	5	2.58	0.402
employees who are involved in quality assurance practices in					
performance of county government infrastructural in Migori					
county, Kenya.				2 22	0 707
Average				3.33	0.707

Effect of quality Improvement on performance of county government infrastructure in Migori County, Kenya

The last specific objective of the study was to establish the effect of quality improvement on

performance of county government infrastructural projects in Migori County, Kenya. The descriptive statistics for quality improvement on the response received is shown in the table below.

Table 4: Quality Improvement

Quality Improvement	Number	Min	Max	Mean	STD
Show your level of agreement that there is continous training		2	4	2.90	1.012
on quality management practices in hence the performance of					
county government infrastructural in Migori county, Kenya.					
At which level do you agree with the statement that there is	74	4	5	4.23	0.425
continous improvement in performance of county government					
infrastructural in Migori county, Kenya.					
Do you agree with the statement that county government	74	4	5	4.42	0.502
infrastructural projects in Migori County, Kenya do					
benchmarking from other counties which are best in class.					
Average				3.85	0.646

Multiple Regression Analysis Model

The study adopted a multiple regression analysis so as to establish the relationship of independent variables and dependent variables. The study applied Statistical Packages for Social Sciences (SPSS) version 26 to determine the measurements of the multiple regression analysis. According to the model summary Table 5, the coefficient of determination (R2) is used to determine how far the regression model's ability to explain the variation of the independent variables. R is the correlation coefficient which shows the relationship between the independent variables and dependent variable. It is notable that there exists strong positive relationship between the independent variables and dependent variable as shown by R value (0.844). The coefficient of determination is between zero and one (Robinson, 2010). The data showed that the high R square is 0.712. It shows that the independent variables in the study were able to explain 71.20% variation in the performance

of county government infrastructural projects by while the remaining 29.80% is explained by the variables outside the model. The standard error is minimal with a value of 0.01 meaning the model used in the study would have minimal effects of errors associated with performance of county government infrastructural projects in Migori County. This shows that the model has a good fit since the value is 60%. This concurs with Graham (2012) that R-squared is always between 0 and 100%: 0% indicates that the model explains none of the variability of the response data around its mean and 100% indicates that the model explains the variability of the response data around its mean. In general, the higher the R-squared, the better the model fits the data. This indicates that quality planning, quality assurance; quality control and quality improvement need to be well adopted to enhance performance of county government infrastructural projects in Migori County, Kenya.

Model	R	R ²	Adjusted R ²	Std Error of the Estimate
1	0.844	0.712	0.698	0.001

F-test was done to test the effect of independent variables on the dependent variable. F-test was done to test the effect of independent variables on the dependent variable simultaneously. According to Brymann and Cramer (2011), F-statistic test basically shows whether all the independent variables included in the model jointly influence the dependent variable. Based on the study results of the ANOVA Test or F-test in Table 6, obtained F-

count (calculated) value was 23.749 greater the Fcritical (table) value 12.345 with significance of 0.000. Since the significance level of 0.000 < 0.05 we conclude that the set of independent have significant influence on the implementation of performance of county government infrastructural projects in Migori county, Kenya (Y-dependent variable) and this shows that the overall model was significant.

	Table	6: ANOVA	A Results
--	-------	----------	-----------

Model	Sum of Square	D.F	Mean Squire	F	Sig
Regression	65.908	4	16.477	36.477	0.000
Residue	65.908	145	4.545		
Total	80.816	149			

Table 7: Coefficient Results							
Model	Unstandardized	Standardized					
	Coefficients	Coefficients					
	β std Error	β	t				
Constant	16.890 2.859		5.908				
Quality Planning	0.732 0.146	0.687	5.008				

0.098

0.101

0.109

0.596

0.497

0.456

Quality Assurance

Quality Improvement

Quality Control

CONCLUSIONS AND RECOMMMENDATIONS

The research findings it was concluded that performance of county government infrastructural projects in Migori County, Kenya are affected by specific objectives; quality planning, quality assurance, quality control and quality improvement.

0.630

0.600

0.545

According to the research descriptive analysis, the research concludes that quality planning is the first vital factor that influence performance of county government infrastructural projects in Migori County, Kenya. The regression coefficients of the research show that quality planning has an influence on performance of county government infrastructural projects in Migori County, Kenya. This shows that raising levels of quality planning would raise the levels of performance of county government infrastructural projects in Migori County, Kenya. This shows that quality planning has an influence on performance of county government infrastructural projects in Migori County, Kenya.

Additionally, the research shows that quality assurance is the second vital factor that influence the performance of county government infrastructural projects in Migori County, Kenya. The regression coefficients of the research conclude that quality assurance has an influence on performance of county government infrastructural projects in Migori County, Kenya. This implies that raising levels of quality assurance would raise the levels of performance of county government infrastructural projects in Migori County, Kenya. This proves that quality assurance has a positive influence on performance of county government infrastructural projects in Migori County, Kenya.

Also the research findings conclude that quality control is another vital factor that performance of county government infrastructural projects in Migori County, Kenya. The regression coefficients of the research proves that quality control has an influence on performance of county government infrastructural projects in Migori County, Kenya. This means that raising levels of quality control raise the levels of performance of county government infrastructural projects in Migori County, Kenya. This proves that quality control has a great influence on performance of county government infrastructural projects in Migori County, Kenya.

6.406

5.927

5.000

Sig 0.000 0.000

0.001

0.006

0.015

Lastly, the research concludes that quality improvement is also important factor that influence performance performance of county government infrastructural projects in Migori County, Kenya. The regression coefficients of the research prove that quality improvement has a great influence on performance of county government infrastructural projects in Migori County, Kenya. This shows that raising levels of quality improvement would raise the levels performance of county government infrastructural projects in Migori County, Kenya. This shows that quality improvement has a strong influence on performance of county government infrastructural projects in Migori County, Kenya.

Recommendation of the Study

The research established that quality management practices has an effect on performance of county government infrastructural projects in Migori County, Kenya. The project management practices in terms of communication, project resource

planning, stakeholders' involvement and monitoring and evaluation accounted for the 68.00% of performance of non-governmental organizations in Migori County, Kenya. There is need to establish other factors which account for 32.00% of performance of non-governmental organizations in Migori County, Kenya. There is need also to establish whether the project planning has an effect on performance of non-governmental organizations in Migori County, Kenya

REFERENCES

- Afridi, A. K. (2016). *Significant Factors of Delay in Construction Projects in Afghanistan* (Doctoral dissertation, Master's Thesis, Yamaguchi University, Yamaguchi, Japan).
- Amollo, B. A., & Omwenga, J. (2017). Influence of the project manager's technical skills on research and development project outputs in Kenya Industrial research and development institute. *International Journal of Small Business and Entrepreneurship Research*, 5(3), 63-73.
- Barbosa, M. A. C., & de Mendonça, J. R. C. (2014). O Professor-Gestor em Universidades Federais: alguns apontamentos e reflexões. *Teoria e Prática em Administração (TPA), 4*(2), 131-154.
- Bartošová, V., Majerčák, P., & Hrašková, D. (2015). Taking risk into account in the evaluation of economic efficiency of investment projects: traditional methods. *Procedia Economics and Finance*, 24, 68-75
- Bhonde, C., & Shaikh, F. (2015). Review of project quality plan. *International Journal for Research in Emerging Science and Technology*, *2*(1), 26-34.
- Bondar, N. M. (2015). Factors for successful implementation of infrastructure projects through public-private partnerships.
- Charles, M., & Omwenga, J. (2018). Role of Supplier Management Practices in Optimization of Operational Performance in Telecommunication Service Industry in Kenya: A Case of Safaricom Limited. International Journal of Social Science and Humanities Research, 6(1), 224-245.
- Chow, S. C., Shao, J., Wang, H., & Lokhnygina, Y. (2017). *Sample size calculations in clinical research*. Chapman and Hall/CRC.
- Delgado-Hernandez, D. J., Bampton, K. E., & Aspinwall, E. (2007). Quality function deployment in construction. *Construction Management and Economics*, *25*(6), 597-609.
- Donabedian, A. (2002). An introduction to quality assurance in health care. Oxford University Press.
- Galgallo, S. G. (2019). Influence of monitoring and evaluation practices on the implementation of county governments' infrastructural development projects in Marsabit County, Kenya (Doctoral dissertation, University of Nairobi).
- Githenya, M. S., & Ngugi, K. (2014). Assessment of the determinants of implementation of housing projects in Kenya. *European journal of business management*, 1(11), 230-253.
- Hao, W., Shah, S. M. A., Nawaz, A., Nawazc, M. A., & Noman, S. M. (2020). The impact of CPEC on infrastructure development, the a-double mediating role of project success factors & project management. Revista Argentina de Clínica Psicológica, 29(4), 737-750.
- Huemann, M. (2004). Improving quality in projects and programs. *The Wiley Guide to Managing Projects*, 903-936.
- Ibrahim, A. U., & Daniel, C. O. (2019). The Effect of Total Quality Management on Project Management.

- International Organization for Standardization 9001:2005, quality management systems-Fundamentals and Vocabulary.
- International Organization for Standardization 9001:2008, quality management systems, fourth edition
- Jeremiah, N, W., (2015). Total Quality Management and Performance of Pharmaceutical Manufacturing and Distributing Firms in Kenya. Retrieved from http://erepository.uonbi.ac.ke:8080/bitstream/handle/11295/94811/Wangai%20Njimia%2 0Jeremiah.pdf?sequence=1&isAllowed=y
- Juran, J. M., & De Feo, J. A. (2010). *Juran's quality handbook: the complete guide to performance excellence*. McGraw-Hill Education.
- Kenya Institute of Management (2009), Total Quality Management, Theory, Concepts and
- Kerzner, H. (2017). *Project management: a systems approach to planning, scheduling, and controlling*. John Wiley & Sons.
- Khraiwesh, M. (2014). Process and product quality assurance measures in CMMI. International Journal of Computer Science and Engineering Survey, 5(3), 1.
- Kumar, R. S., & Goswami, A. (2015). A fuzzy random EPQ model for imperfect quality items with possibility and necessity constraints. *Applied Soft Computing*, *34*, 838-850.
- Kurgat, I. K., & Omwenga, J. (2016). Impact of power generation project on the livelihoods of adjacent communities in Kenya: a case study of Menengai geothermal power project. *International Journal of Scientific and Research Publications*, 6(10), 610-624.
- Kwasira, L. A., Wambugu, D. G., & Wanyoike, D. M. (2016). Influence of quality management practices on successful completion of building construction projects in Nakuru Town, Kenya. *International Journal* of Innovation and Scientific Research, 27(1), 16-22.
- Lerno, D. L. (2016). *Relationship between internal controls and performance of county government in Kenya* (Doctoral dissertation, University of Nairobi).
- Ling, F.Y. & Chan, S.L., (2002). *Performance evaluation of alternative project procurement methods*. Research brief. The National University of Singapore.
- Migori County Integrated Development Plan 2018-2022
- Mugenda, O., & Mugenda, A. (2003). Research methods: Quantitative and Qualitative methods. *Revised in Nairobi*, *56*(12), 23-34.
- Musau, P. M., & Kirui, C. (2018). Project management practices and implementation of government projects in Kenya, case of Machakos County government. *International Academic Journal of Information Sciences and Project Management*, 3(2), 58-79.
- Musyoki, A. N. (2018). Institutional Factors Influencing Implementation Of Infrastructure Projects By County Governments In Kenya; A Case Of Embu County, Kenya (Doctoral dissertation, University of Nairobi).
- Muthee, V., Bochner, A. F., Osterman, A., Liku, N., Akhwale, W., Kwach, J., ... & Puttkammer, N. (2018). The impact of routine data quality assessments on electronic medical record data quality in Kenya. *PloS one*, *13*(4), e0195362.

- Neyestani, B. (2016). Effectiveness of quality management system (QMS) on construction projects. *Available at SSRN 2947712*.
- Njau, D. N., & Omwenga, J. (2019). Effect of Project Management Practices on Effective Implementation of Building Construction Projects in Kenya. *International Journal of Entrepreneurship and Project Management*, 4(3), 1-16.
- Okero, J. K. (2011). Factors influencing implementation of LATF infrastructure projects in Kenya: the case of selected projects in Mombasa County (Doctoral dissertation, University of Nairobi, Kenya).
- Okuta, O. F. (2019). An investigation of the effectiveness of monitoring and evaluation practice in public projects: A survey of county government projects (Doctoral dissertation, JKUAT-COETEC).
- Omeno, B. K., & Sang, P. (2018). Project Management and Performance of Public Sector Construction Projects: A Case of Constituency Development Funds Projects in Migori East. *Project Management*, 13-26.
- Omondi, A. R. (2014). A Study of the Role of Total Quality Management System in Government Employee Performance Migori County Kenya (Doctoral dissertation, Mount Kenya University).
- Patyal, V. S., & Koilakuntla, M. (2018). Impact of organizational culture on quality management practices: an empirical investigation. *Benchmarking: An International Journal*.
- Polit, D., & Hungler, B. (1999). Research designs for quantitative studies. *Nursing Research: Principles and Methods. 6th ed. Philadelphia, PA: JB Lippincott Company*, 193-218.
- Practice, Macmillan Kenya Publishers, pp.189-207.
- Pries, K. H. (2019). Total quality management for project management. Auerbach Publications.
- Project Management Institute. (2014). *Navigating Complexity: A Practice Guide*. Pennsylvania, USA: Author.
- Ruxwana, N., Herselman, M., & Pottas, D. (2014). A Generic Quality Assurance Model (GQAM) for successful e-health implementation in rural hospitals in South Africa. *Health Information Management Journal*, *43*(1), 26-36.
- Ryan, T. P. (2011). Statistical methods for quality improvement. John Wiley & Sons.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students. Pearson education.
- Senaratne, S., & Jayarathna, T. (2012). Quality planning process of construction contractors: case studies in Sri Lanka. *Journal of Construction in Developing Countries*, *17*(1), 101-114.
- Stevenson, A. (Ed.). (2010). Oxford dictionary of English. Oxford University Press, USA.
- Sycheva, E., Budagov, A., & Novikov, A. (2020). Urban infrastructure development in a global knowledgebased economy. In *SHS Web of Conferences* (Vol. 74, p. 03013). EDP Sciences.
- Taner, M. T. (2013). Critical success factors for six sigma implementations in large-scale Turkish construction companies. *International Review of Management and Marketing*, *3*(4), 212-225.
- Walker, R. M., Chen, J., & Aravind, D. (2015). Management innovation and firm performance: An integration of research findings. *European Management Journal*, *33*(5)