

**FACTOR AFFECTING QUALITY MANAGEMENT PROCESSES IN GOVERNMENT
CONSTRUCTION PROJECT ACTIVITIES:
A CASE OF ARUSHA CITY COUNCIL.**

Kheri Abeid (Student)
Department of Post Graduate Studies
&
Prof Edison Lubua
Institute of Accountancy Arusha - Department of Post Graduate Studies

Abstract

This study was about factors affecting quality management process in government construction projects by taking a survey of Arusha city council. The researcher used simple random sampling and purposive to select a sample that represents the entire population. The target population was 100 employees and sample size were be 50 respondents, however only 48 respondents willingly participated in the study. A descriptive survey design was employed in undertaking the study. The findings of the study show that leadership of the organization is moderately committed to quality management. The implication is that quality management is not given much consideration by the organization leaders. As the leaders demonstrate moderate commitment on quality management, there is a possibility for quality management practices not to be frequently conducted leading into less quality in government construction project activities. Also, the findings of this study revealed that, not all employees in the organizations get professional development on quality management. Lack of such training makes it difficult for these employees to effectively respond to different aspects arising in the quality management process. In addition, the findings of this study show that, not all goods and material used in government construction probably pass the quality standard that may be caused by poor project cost control whereby well controlled project has the set standard for material for quality management which is to be tested so as to meet quality and standard set. From the study findings, it was concluded that, leadership commitment highly affects the quality management process in government construction project activities. Professional development training on quality management practices plays a major role towards enhancing quality management in the implementation of government construction activities and furthermore, Quality control mechanisms significantly affect the process of quality management in government construction activities. From the study findings, it was suggested that, project leaders should be committed in performing quality management practices so as to ensure that the resources are used as expected, project activities are being performed as planned and also to conduct regular monitoring of the implementation of project activities. Professional development training programmes should be frequently conducted to the leaders and employers so as to equip them with skills and knowledge on quality management. Finally, quality management mechanisms need to be enhanced by making proper policies that will hold every participant responsible for quality management.

Key words: *Quality Management, Government Construction Project, Factors, Arusha City*

1.0 Background of the Study

Construction projects are organized efforts to construct a building or a structure. In the fields of civil engineering and architecture, construction projects involve the process of assembling a tangible infrastructure or building. These projects tend to involve different construction types with connected agendas and tasks to be completed (Jenkins & Wallace 2016). Controlling and improving quality has become an important strategy for many organizations, including within the government. This is because quality is the competitive advantage. A project that can delight customers by improving and controlling quality can dominate its competitors. Quality dimensions include: Performance, Reliability, Durability, Serviceability, Aesthetics, Features, Perceived quality, and Conformance to standards. Good planning for projects provides a concept, establishes requirements and arranges quality management criteria. Management. Quality involves many challenges which affect the implementation of quality management process in government construction project activities, due business environment, economic crisis, globalization as well as competition in the market (Popov, 2022). Leadership commitment, trained staff as well as proper quality control as important aspects that form part of project quality management. The current study is focused to assess factors that affect quality control in government constructed projects for the case of Arusha City Council

2.0 Literature Review

Theoretical literature

This study was guided by Deming's theory of profound knowledge is a management philosophy grounded in systems theory which is based on the principle that each organization is composed of a system of interrelated processes and people that make up its system components. The success of all workers within the system is dependent on management's capability to orchestrate the delicate balance of each component for optimization of the entire system (Bowen, 2010; Mwanteri 2015). Another theory used in this study is general systems theory. This theory was developed by Bertalanffy Ludwig Von (1971) who noted that a system is a collection of parts unified to accomplish an overall goal. If part of the system is removed, the nature of the system is also altered. Quality management can also be viewed as a system with inputs, processes, and outputs. Quality management operates well and is dependent on the interaction of its parts. Those parts are leadership, employee training, and quality controls. Therefore, the failure of these parties to implement quality management practices leads to poor quality in construction projects. In the context of this study, the theory is applicable because it provides a well-framed framework for analyzing how parties within quality management affect government construction projects.

Empirical Literature Review

In 2020, Geletu, N. (2020), did a study on factors affecting the quality of construction projects in the case of selected building construction industries in Addis Ababa, Ethiopia. The data for the study was collected from a sample population of 273 respondents. The study revealed the following factors that affected the quality of construction projects: conflict management, leadership, lack of management commitment, lack of motivation, low effective project

management system, team management, solutions development, and poor project management ability on the quality of construction projects.

Oni, O.Z. and colleagues (2019) conducted research on the factors influencing quality management practices on building construction sites in Nigeria. To achieve the aim, a convenient sampling technique was used to select the construction sites within the study area. The sampling frame comprised the professionals in the built environment, such as architects, quantity surveyors, builders, and the engineers working on each site. A total of 88 questionnaires were administered. The study revealed that top among the factors affecting quality management on construction sites both in public and private organizations in Oyo State were lack of adequate sanction by the standard assurance organization, non-implementation of the National Building Code, lack of proper inspection at every construction stage, award of contract to an unqualified contractor, Lack of construction quality control inspection program; lack of effective quality policy implementation; Inadequate personnel and craftsman training, poor specification, bribery and corruption, and professional role usurpation

According to Ogwueleka (2013) A Review of Safety and Quality Issues in the Construction Industry, *Journal of Construction Engineering and Project Management*, their findings point out that the lack of knowledge and experience from the technical team for the establishment of IBS components can result in low quality construction projects. Past studies demonstrate that numerous quality issues emerge for IBS projects because of the absence of design guidelines. Along with these technical issues, some specialized issues can undoubtedly be settled by discussion and meeting among teams with high skills and experience. However, the skills and experience of staff are among the main factors influencing quality in construction projects.

However, Mwaikogi D. (2013) did the study on factors influencing the effectiveness of implementation of the economic stimulus program (ESP), the case of construction projects in Nairobi County, Kenya. The study used quantitative research methodology and employed field survey design. The field survey confirmed that changes in construction designs, selection processes of contractors, project funding levels, project cost control, and project scheduling all have an influence on the effectiveness of the implementation of construction projects. Analysis of the relative importance index revealed that project cost control had the highest influence, followed by project funding levels. Project scheduling, contractors' selection process, and finally changes in construction designs follow in that order of importance.

According to Kazare B. (2019), he affirms that the determination of factors influencing construction project performance in public institutions is a case of Musoma & Butiama District Council. The study adopted an explanatory research design. There were 114 respondents obtained through random sampling and purposive sampling. Explanatory research design is employed to determine the relationships between variables. To supplement the study, data were collected through a questionnaire and a documentary review, using both quantitative and qualitative approaches. The dissertation concluded that construction project performance in Tanzanian public institutions is influenced by project planning, relationship management, and institutional factors. Furthermore, the study recommended that public institutions should ensure proper preparation of

projects; also, project schedules should be prepared by skilled personnel in order to ensure VFM in public construction projects.

Gwahula Raphael (2016) did a study on An Assessment of Critical Factors Affecting Quality Performance of Government Financed Construction Projects: Evidence from Tanzania. The researcher used a closed-end questionnaire consisting of 20 performance factors that were issued to 80 respondents. The study was initiated because many government-financed construction projects are carried out with varying delivery time, cost, and quality. The findings revealed that the critical factors that have a direct impact on the quality performance of government-financed construction projects are: project financing processes, experience of contractors in the construction industry, project technology, availability of plant and equipment, procurement systems and processes, and project manager knowledge and skills.

Knowledge Gap

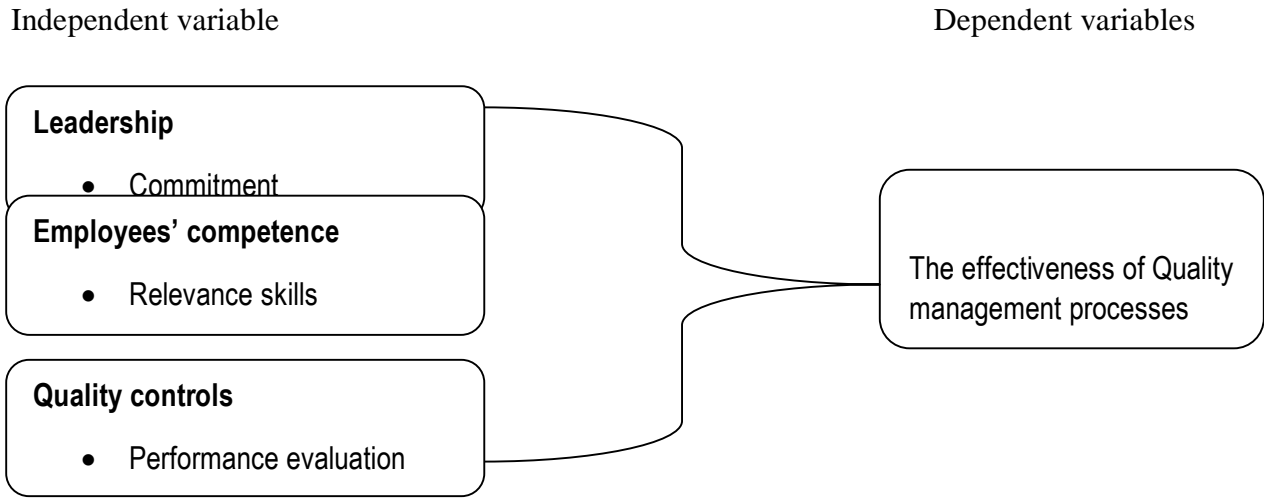
Previous research has been conducted by Gwahula Raphael (2016) on An Assessment of Critical Factors Affecting Quality Performance of Government Financed Construction Projects: Evidence from Tanzania, and Kazare B (2019) on the determination of factors influencing construction project performance in public institutions: a case study of Musoma & Butiama District Council (Alias, Z, Zawawi, E. M., Yusof, K., & Aris, N. MA conceptual framework for determining critical success factors in project management practice. J. Asunka (2016). Government project failure in Ghana: A multidimensional approach M. Radujkovic and M. Sjekavicab (2017) Factors Influencing Project Management Success Procedia Engineering Rasul, I. & Rogger, D. (2016).

There are also few studies made on factors affecting quality in government construction project management, particularly in the Arusha region. Despite constructive scientific reports, these findings could not be well generalized to the context of the factors affecting quality management processes in government construction project activities in Arusha City Council. Therefore, the current study will focus on the factors affecting quality management processes in government construction projects: a case of Arusha City Council so as to fill the identified research gap.

Conceptual Framework

As for this study, dependent variable is Quality management processes while the independent variables are the factors affecting quality management processes in government Construction Project which are: Leadership, employee's training, quality control.

Figure 2.1: Factors affecting quality management processes in government Construction Project



Source: Researcher, (2022).

3.0 Research Methodology

This study collected information from 48 respondents consisting of contractors, engineers and site supervisors from five construction projects in Arusha City Council. Both questionnaires and interviews were used to collect data for this study. Descriptive analysis was adopted in this study with the help of SPSS software and finally findings were presented using tables.

4.0 Findings and discussion

Impact of leadership commitment on quality management processes in government construction project activities

The first objective was aimed at determining the impact of leadership commitment on quality management processes in government construction project activities. Closed ended question was used to collect data whereby data were collected from 48 respondents comprising of project managers, contractors, engineers, site supervisors and consultants. Data were analyzed using Likert scale where 5 represented very important, 4 represented important, 3 represented undecided, 2 represented less important and 1 represented not important. To achieve this objective, descriptive statistics was used to determine the impact of leadership commitment on quality management processes in government construction project activities by computing percentages and mean scores. The summary of the findings has been presented in table 4.2.

Table 4.2: Responses on the impact of leadership commitment on quality management processes in government construction project activities

	SA	A	U	D	SD	Mean Score
	F (%)	F (%)	F (%)	F (%)	F (%)	
Leadership of your organization is committed to quality management	10(20.83)	20(41.67)	12(25.00)	3(6.25)	3(6.25)	3.65
Critical resources required in supporting quality initiatives are made always available.	6(12.50)	14(29.17)	18(37.50)	8(16.67)	2(4.17)	3.29
Leadership of your organization takes part at all stages in quality management programs	5(10.42)	12(25.00)	6(12.50)	12(25.00)	3(6.25)	2.46
Your organization has a formal quality management structure.	8(16.67)	8(16.67)	14(29.17)	10(20.83)	8(16.67)	2.96

Source (Field data, 2022) Key: SD = strongly disagree; D = disagree; N = no option; A = agree; SA = strongly agree; F = frequency; % = percentage

Table 4.2 shows that the response mean score on the statement “leadership of the organization is committed to quality management” was 3.65. This value is higher than the neutral point (3.0) but lower than 4. This indicates that leadership in the organizations is somehow committed to the quality management. The implication is that quality management is not given much consideration by the organization leaders. As the leaders demonstrate moderate commitment on quality management, there is a possibility for quality management practices not to be frequently conducted leading into less quality in government construction project activities. Whereby less commitment among leaders may be caused by lack of project management knowledge, insufficient resource and corruption as supported by Geletu, N. (2020) in Ethiopia who contended that lack of management commitment, lack of motivation, low effective project management system, team management, solutions development, and poor project management ability on the quality of construction projects affected the quality of construction projects.

Also similar findings found by Oni et al. (2019) in Nigeria show that lack of adequate sanction by the standard assurance organization, non-implementation of the National Building Code, lack of proper inspection at every construction stage, award of contract to an unqualified contractor, Lack of construction quality control inspection program; lack of effective quality policy implementation; Inadequate personnel and craftsman training, poor specification, bribery and corruption, and professional role usurpation affected the quality of government construction projects. This implies that majority of African leaders were less committed on quality management

of government construction projects as result of less quality among many governments construction project sometimes with good budget.

Also, in table 4.2 shows that the mean score of respondents on statement “Critical resources required in supporting quality initiatives are made always available” was 3.29. This value is a bit higher than neutral point 3.0 but is lower than 4. This implies that government somehow provides critical resources required in supporting quality initiatives. That indicate that sometimes critical resources required in supporting quality are delayed therefore contribute to affect quality of government construction projects. These findings are in line with Kazare B. (2019), who revealed that some public construction projects were not well planned that make leaders fail to manage quality of construction as shortage of critical resources at initial stage of the project it is an indicator of poor planning of the project. Critical resources required in supporting quality of construction may not be available at beginning on time probably due to project financing processes. When the initial finances not released on time by the government also may affect the availability critical resources as supported by Gwahula (2016) in Tanzania revealed out that many government-financed construction projects are carried out with varying delivery time, cost, and quality. Therefore, delaying of project finance contributes on poor quality of many government projects, finance as among of critical resources it very had to maintain the quality because very stage in project constructions requires money.

Also in data in table 4.2 show that the mean score response on statement “Leadership of your organization takes part at all stages in quality management programs” was 2.46. This mean score is below neutral point 3.0. This implies that majority of leaders in organization does not take part at all stages in quality management programs. The findings show that leaders do wait in the office for report of the project instead of taking part in every stage probably because of lack on important skills and experience on project quality management among leaders as supported by Oni et al. (2019) who reported that lack of proper inspection at every construction stage and award of contract to an unqualified contractor was seen among leaders. Lack of important skills including proper inspection on every stage of construction may led to leaders to fail take part all stage in quality management programs.

Also table 4.2 shows that the mean scores of statement “Your organization has a formal quality management structure” was 2.96. This value is below neutral point 3.0. This implies that most of organization has no formal quality management structure. This indicted that most government construction projects are conducted without special team for managing the project. Unavailability of formal quality management structure may lead to less commitment among leader where construction projects are in their leadership territory. Having project without formal quality management structure may lead to failure project management due to poor site planning and proper inspection on every stage of construction because of being not expert and experience in construction project management that affect negatively quality of construction project as supported by Oke and Dlamini (2017) in Nigeria who reported that the absence of an experienced team normally prompts poor on site planning and coordination for tending to nearby issues affect the end quality of products.

Impact of employees' training on the quality management process in government construction Projects

The second objective for this study aimed at assessing the impact of employees training on the quality management process in government construction projects. The main aim was to find whether leadership commitment is important for successful completion of the government construction projects. To address the objective, respondents were provided with a rating scale with four items concerning how leadership commitment impacts government construction projects. The respondents were requiring to rate each statement from very important to not important. Numbers (1 to 5) were then used to represent the responses whereby 1 stood for not important and 5 represented very important. By using the numbers mean scores for responses across all the statements were computed as presented in table 4.3

Table 4.3: responses on the impact on training on government construction projects

Statement	SA	A	U	D	SD	Mean Score
	F (%)	F (%)	F (%)	F (%)	F (%)	
All employees in your organization get professional training on quality management	5(10.42)	10(20.83)	9(18.75)	15(31.25)	9(18.75)	2.73
Professional training received by employees of your organization equips them with broad understanding on quality management	8(16.67)	8(16.67)	7(14.58)	14(29.17)	11(22.92)	2.75
Employees in your organization are frequently trained on quality management	9(18.75)	10(20.83)	9(18.75)	16(33.33)	4(8.33)	3.08
Employees are involved in the quality management training programs	7(14.58)	16(33.33)	11(22.92)	9(18.75)	5(10.42)	3.23

Source (Field data, 2022) *Key: SD = strongly disagree; D = disagree; N = no option; A = agree; SA = strongly agree; F = frequency; % = percentage*

Table 4.3 shows that the response mean score for the statement “All employees in your organization get professional training on quality management” was 2.75 which is less than the neutral point (3.0). This means that most of the respondents were of negative opinion on the statement. The implication is that not all the employees in the organizations get professional development on quality management. Lack of such training makes it difficult to these employees to effectively respond to different aspects arising in the quality management process. According to Kazare (2019), skills personnel are required for proper making of project schedules and

monitoring the implementation of project activities. skilled personnel results from professional development courses on matters related to quality management thus as the employees do not attend such programmes it becomes hard for them to acquire the skills required for management of quality in the government construction projects.

Similar findings were reported in Swaziland by Oke and Dlamini (2017) who also reported that lack of skilled and experienced personnel negatively affects the implementation of construction projects as evidenced by poor planning, improper tending and miscues of resources which eventually affects the implementation of the projects. A study conducted in Nigeria by Oni et al (2019) also showed lack of skilled professionals to be among the hindering factors for effective implementation of government projects. Findings from Europe, Africa and Tanzania generally show that there are limited professional development trainings among the employees with regard to quality management. Lack of such training negatively affects the implementation of construction projects as the employees do not have adequate skills for planning, implementing and evaluating the projects.

Table 4.3 also shows that the response mean score on the statement “Professional training received by employees of your organization equips them with broad understanding on quality management” was 2.75 which is also less than the neutral point. This indicates that a large percent of the respondents disagreed with the statement. The implication here is that the professional development that is received by employees is considered not to be much effective on equipping them with broad understanding on quality management. The inference here is that despite that professional development training on quality is not conducted to all the employees, even the few who get such training are not effectively equipped with the skills on matters related to professional development. Thus the training lacks some essential aspects needed for proper quality management in the organizations. This argument is supported by Ogwueleka (2013) who also reported lack of quality management skills among the employees despite having attended professional development training. Therefore, the organized trainings on quality management may be too theoretical to the extent that they do not equip the employees with the skills required for quality management.

Data in table 4.3 also show that the response mean score on the statement “Employees in your organization are frequently trained on quality management” was 3.08. The value was slightly higher than the neutral point (3.0) this means that respondents considered the frequency of providing training to the employees with trainings on quality management not to be much high. The implication is that employees are not frequently trained on quality management. Given the ever-changing needs in the field of quality management, there is a need for the employees to be frequently trained so as to enable them to respond to the current challenges in this field. Staying with employees for a long time without offering them with training on quality management may limit their efficiency on dealing with quality management matters and hence affect the quality of government construction projects. The study by Geletu (2020) in Ethiopia also found out poor project management skills to be one of the limiting factors for quality in construction projects. Such poor management skills were caused by lack of frequent training to the employees on quality management. Therefore, the frequency of offering professional development training to the

employees on the aspects of quality management contributes to the quality of construction projects not only in Tanzania but across the world.

Table 4.3 also shows that the response mean score on the statement “Employees are involved in the quality management training programs” was 3.23. The value was slightly higher than the neutral point (3.0) but less than 4.0 to indicate an agreement. The implication is that employees are moderately involved in the quality management training programmes. Thus, the planning and implementation of quality management training programmes do not actively involve the employees. As the employees are not much involved, there is a possibility for the offered training to be irrelevant as the quality management training needs of the employers may not be well considered in the trainings. This may be one of the reasons for these trainings not to equip the employees with skills needed for quality management. When the employees are not involved in the programmes, their participation in such programmes also becomes low as a result they may not the required skills for project quality management.

Impact of quality controls on the effectiveness of quality management process in government construction project activities

The third objective for this study aimed at assessing the impact of quality controls on the effectiveness of quality management process in government construction project activities. Data from the rating scale in the respondents’ questionnaires were analyzed to generate frequencies, percentages and mean scores as presented in table 4.4

Table 4.4: responses on the impact of quality controls on the effectiveness of quality management in government construction process activities

	SA	A	U	D	SD	Mean Score
	F (%)	F (%)	F (%)	F (%)	F (%)	
Your organization evaluates quality management performance.	8(16.67)	19(39.58)	8(16.67)	11(22.92)	2(4.17)	3.42
Your organization test goods for conformance to set standards.	6(12.50)	17(35.42)	9(18.75)	10(20.83)	6(12.50)	3.15
Your organization compare receive beneficiary feedback on performance	9(18.75)	19(39.58)	12(25.00)	7(14.58)	1(2.08)	3.58
Your organization eliminates causes of unsatisfactory performance.	8(16.67)	22(45.83)	10(20.83)	6(12.50)	2(4.17)	3.58

Source (Field data, 2022) Key: SD = strongly disagree; D = disagree; N = no option; A = agree; SA = strongly agree; F = frequency; % = percentage

Data in table 4.4 show that mean score of response on statement “Your organization evaluates quality management performance” was 3.42. This value is above the neutral point 3.0 and it is below 4. This implies organization do evaluate quality management performance at moderate level because the mean score of response is below 4. The results indicate that project evaluation is not effectively done probably because of leaderships are not effectively committed in management of construction quality as have been evidenced in table 4.2 that Leadership of in organization les take part at all stages in quality management programs. These results concur with Oni et al. (2019) who reported that Lack of construction quality control inspection program, lack of proper inspection at every construction stage, bribery and corruption may influence poor quality management performance evaluation of construction projects.

Also data in table 4.4 show that mean score of response on statement “Your organization test goods for conformance to set standards” was 3.15, this value is above the midpoint 3.0 but is below 4. This implies that testing for good for conformance to set standard is somehow done. In order to meet high quality standard, goods and material used in construction must be tasted. This show that not all goods and material used in government construction probably pass the quality standard that may be caused by poor project cost control whereby well controlled project has the set standard for material for quality management which are to be tested so as to meet quality and standard set. As supported by Mwaikogi (2013) who revealed out that poor project cost control was among factors that affecting effective implementation of quality project construction that may also be due to shortage of knowledge and skills on project manager. Also findings are in line with Elearn (2013) who reported that quality can be analyzed based on the use perspective if the product or service is fit for the purpose.

Data in table 4.4 also show that mean score of respondents on statement “Your organization compare receive beneficiary feedback on performance” was 3.58 (M=3.58). This mean score is above 3.0 which is neutral mean score and is below. This implies that government receives beneficiary feedback on performance. The feedback helps the organization to improve on project management quality performance when are put into implementation also responding to the views of beneficiary, organizations can improve or evaluate their projects and be held accountable for project. Implementation as supported by Popov (2022) reveled out that outputs of project influence the feedbacks of stakeholders whereby project can have good feedback beneficiaries only if meet requirement needed.

Also data show that mean score of response on statement “Your organization eliminates causes of unsatisfactory performance” was 3.58, this mean score is above neutral mean score 3.0 but is below 4. This implies that organization do eliminate causes of unsatisfactory performance. The results indicated that the government do work on all challenges that set back of project performance however still more effort is needed especial to make the fund available during commencement of the project as reported by Kazare B. (2019) in Tanzania in most of government construction projects do not make project funds are available before the commencement of the project. It’s hard to control cost that lead to effective project implementation without ensuring project funds are available before the commencement of projects. Also the absence of formal quality management

structure may also negatively affect the cost control for effective quality management process in lack team project management influence negatively effective implementation of project.

5.0 Conclusion and Recommendation

Conclusion

Based on the study findings; the following conclusions were made

Leadership commitment highly affects the quality management process in government construction project activities. The poor quality observed in many government projects is therefore linked to lack of commitment among the project leaders. Lack of commitment among the leaders makes it hard for these leaders to constantly monitor the implementation of government construction projects.

Professional development training on quality management practices plays a major role towards enhancing quality management in the implementation of government construction activities. Lack of training makes the employees to be challenged when performing different quality management activities. Thus failure or poor quality of the government projects is attributed by lack of training among the employees.

Quality control mechanisms significantly affect the process of quality management in government construction activities. These mechanisms are somehow practiced in the government projects but most of them fail due to the fact that the leaders and employees do not have adequate skills and knowledge on quality management practices and thus affect the quality mechanisms.

Recommendation

Based on the study findings, the following recommendations were made;

Project leaders should be committed in performing quality management practices so as to ensure that the resources are used as expected, project activities are being performed as planned and also to conduct regular monitoring of the implementation of project activities. Leaders should not sit in their offices and wait for project reports instead they need to conduct site visits.

Professional development training programmes should be frequently conducted to the leaders and employers so as to equip them with skills and knowledge on quality management. This can be done by either offering seminars or workshops on matters related to quality management. The courses also should be relevant to the people as they have to address the needs of the leaders and employees. Finally, quality management mechanisms need to be enhanced by making proper policies that will hold every participant responsible for quality management. The researcher recommends a similar study to be conducted but looking on the effect of other factors apart from training, leadership commitment or quality management mechanisms.

REFERENCES

- Afthanorhan, A, et al (2019). “Assessing the Effects of Service Quality on Customer Satisfaction.” *Management Science Letters*, vol. 9, no. 1, pp. 13–24.
- Ahadzie, D K, & K Amoa-Mensah (2010). “Management Practices in the Ghanaian House Building Industry.” *Journal of Science and Technology*, vol. 30, no. 2, pp. 62–75.
- Al Tasheh, G.H. (2013) “Obstacles to the application of total quality management (TQM) in higher education institutions in the state of Kuwait,” *European Scientific Journal*, 9(4), pp. 209–220.
- Alias, Z and Aris, M. (2014) “Determining critical success factors of project management practice,” *A conceptual framework. Procedia - Social and Behavioral Sciences*, 153, pp. 61–69.
- Asma Hassan, A & Fan, I. S (2016) obstacles hindering the implementation in secondary schools in Saudi Arabia 1School of Aerospace, Transport and Manufacturing, Cranfield University (UK)
- Asunka, J. (2016) “Partisanship and political accountability in new democracies: Explaining compliance with formal rules and procedures in Ghana,” *Research and Politics*, 1, pp. 7–9.
- Awalenia, A & Bednárová, L (2015). Implementation of quality management systems in public administration; *journal of environmental protection, safety, education and management*, 6(3), issn1338-5270.
- Bamford, D. and Forrester. (2010). *Essential Guide to Operation Management: Concepts and Case Notes*. John Willey & Sons, Ltd., West Sussex.
- Bana, Benson and Ngware, S. A. (2005). *Reforming the Public Service: The Tanzanian Experience*.
- Biolos, J.(2002). *Six Sigma Meets the Service Economy*. Boston: Harvard Business School Press.
- Blankstein, A. (1996) ‘Why TQM Can’t Work-and a School Where It Did: It takes a serious understanding of Deming's principles’, *Education Digest*, 62(1), pp. 27–30
- Chi, C.S.F.; Nicole Javernick-Will, A. (2011) Institutional effects on project arrangement: High-speed rail projects in China and Taiwan. *Construction Management Economics*. 29, 595–611.
- Damoah, I. S. & Akwei, C. (2017). Government project failure in Ghana: A multidimensional approach. *International Journal of Managing Projects in Business*, 10 (1), 32 – 59.
- Francis Owusu (2012). Organizational Culture and Public Sector Reforms in a Post-Washington Consensus Era: *Can Ghana’s Reformers Learn from Ghana’s ‘Good Performers’?* , Vol 12, No 2&3, pp131-151.
- Goetsch, D. L. and Davis, S. B. (2006) *Quality management: introduction to total quality management for production*. NJ: Pearson Prentice Hall.

Gotzamani, K. D. and Tsiotras, G. D. (2002) 'the true motives behind ISO 9000 certification: their effect on the overall certification benefits and long-term contribution towards TQM', *International Journal of Quality & Reliability Management*. MCB UP Ltd, 19(2), pp. 151–169.

Gwahula Raphael (2016). Assessment of Critical Factors Affecting Quality Performance of Government Financed Construction Projects: Evidence from Tanzania

Hagemeyer, C., Gershenson, J. K. and Johnson, D. M. (2006) 'Classification and application of problem-solving quality tools: a manufacturing case study', *The TQM Magazine*. Emerald Group Publishing Limited, 18(5), pp. 455– 483.

Hamad, Burhan and Stabua (2014). The Impact of Trade Liberalization on Economic Growth in Tanzania. *International Journal of Academic Research in Business and Social Sciences*, 4(5).

Huq, Z. (2005) 'managing change: a barrier to TQM implementation in service industries', *Managing Service Quality*. Emerald Group Publishing Limited, 15(5), pp. 452–469.

Hussein Lufunyo (2013). Impact of Public Sector Reforms on Service Delivery in Tanzania. *International Journal of Social Science Tomorrow*. Vol. 2 No. 2

Hussein Lufunyo, (2013). Client service charter in public institutions in Tanzania. A myth or reality? An assessment of methods and techniques of awareness building to citizen. *International Journal of Current Research*, Vol. 5, Issue, 09, pp.2699-2704,