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Review of Key Performance Factors in Implementing Public Construction Projects Using Force Account Method in Tanzania

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ABSTRACT

The Force Account Method [FAM] has been effectively used in public construction projects since 2016, offering advantages such as lowering costs and creating job opportunities. However, the use of FAM in public construction projects in Tanzania is still facing difficulties in realising its full potential. This study aimed at reviewing relevant literature to identify key performance factors that could help to improve the effective use of FAM in implementing public building construction projects, focusing on phases of the construction process. Reputable databases such as DOAJ, Google Scholar, and Semantic Scholar and keywords such as force account, performance factors, and public construction management were used to search the relevant articles. From the search, a total of 40 out of 85 research articles published on the topic under investigation were evaluated. Findings indicate that the most significant performance factors of public construction projects using FAM are effective project planning, adequate project design, appropriate procurement management, effective construction supervision, competence of project participants, and support from the government. These factors are interrelated and essential for ensuring the effective implementation of public construction projects using the force account method. Moreover, results suggest that there is a need to create a framework to better manage the execution of construction projects using the force account method. This would help engineers, quantity surveyors, architects, academicians, researchers, and policymakers in the construction industry to enhance the use of the Force Account Method in public construction projects.

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1.0 Introduction

Construction projects are complex and time-consuming undertakings that need various resources, including materials, equipment, plants, and workforce, to achieve productivity and adequate performance (Sears, Clough, and Sears, 2021). In addition to these resources, a project's full development—from initial planning to completion—needs input from a diverse range of specialised services, including government regulatory bodies, various professionals, insurance companies, construction material manufacturers, suppliers, and procurement services. Dissanayaka and Kumaraswamy (1999) define procurement services as the framework within which construction is brought about, acquired, or obtained with a focus on the procurement method.

There are many procurement methods in the construction industry, and the choice of a suitable one depends on the type of construction, volume of work to be done, availability of resources, and client experience in construction projects (Bako, 2016). The Tanzania Public Procurement Act of 2011 says that any organisation that buys goods, works, services, non-consultancy services, or things for disposal through tenders has to use competitive tendering and follow the rules given for each type and value of procurement.

Since 2016, the government of the United Republic of Tanzania has started using the Force Account Method [FAM] in various construction projects to achieve cost-effectiveness and value for money. FAM is the method whereby works are carried out by public or semi-public departments or agencies by using their personnel and equipment or in collaboration with any other public or private entity (PPRA, 2019). The FAM has been mainly used in the construction, reconstruction, demolition, repair, or renovation of public construction projects, primarily buildings (Nsimbila, Matto, and Ame, 2021). According to the American Society of Civil Engineers (2025), a public construction project refers to any infrastructure project commissioned or regulated by government entities, typically involving the design, planning, construction, and maintenance of public works. The government of Tanzania found the FAM to be beneficial in several aspects, such as cost minimisation, time-saving, employment provision, and social-economic growth (PPRA, 2019).

PPRA made a number of guidelines for doing work under FAM in 2016 (Matto, 2023), but projects still have trouble being carried out under FAM (Public Procurement Amendments Act of 2016; Regulation 167(2) of the Public Procurement Regulations of 2013). The National Audit Office of Tanzania (NAOT) published a performance audit report in 2021 that highlighted issues with the FAM's oversight and supervision of education sector projects. The audit covered the fiscal years 2016/2017 and 2019/2020 and was carried out by the Ministries of Finance and Planning, Education, Science and Technology, and the President's Office Regional Administration and Local Government.

These problems included not enough control over time, cost, and quality; bad buying and paying methods that caused prices to go up and payments to be made for goods that weren't delivered; not enough checking and accepting of goods; and not enough supervision and monitoring, which made finished projects less long-lasting (NAOT, 2021).

The annual performance evaluation report for the financial years 2016/2017 and 2017/2018 by PPRA shows that most school construction and rehabilitation projects under the FAM funded by the central government were not completed in time and had low quality with misuse of allocated funds (PPRA, 2019).

According to Mbabazi and Mugurusi (2018), the FAM is still a mystery in theory and practice. For effective implementation of construction projects using the FAM, there is a need to identify procedures for an effective application of the FAM (Shengeza, 2017). It is critical to ensure that FAM projects follow proper procedures to achieve value for money while ensuring that construction projects meet the needs of stakeholders (Macharia, Banzi, and Changalima, 2023). Different scholars cited above explored the shortcomings and determinants of using the FAM in construction projects. However, these previous studies failed to take into account the performance factors associated with different phases of the construction process, including planning, design,

procurement, construction, and post-construction. Thus, the objective of this study was to identify and review the key performance factors that could improve the effective use of FAM in public building construction projects. The study reviewed the literature on implementing public building construction projects to determine performance factors focusing on phases of the construction process. Other sections of the paper include methodology, results, discussion, conclusion, recommendations, and references.

2.0 Literature Review

2.1 Effective Project Planning

The performance of public construction projects is significantly influenced by effective planning. The most significant indicators at a planning stage include feasibility studies, procurement plans, and budgets (Aloyce, Monko, and Luvara, 2023). Project planning involves identifying and assessing risks associated with the project objectives, scope, size, location, and execution strategies. The study by Matto (2023) revealed that most FAM projects were implemented without a feasibility study. According to Mchopa (2020), FAM projects were carried out without first conducting a cost-benefit analysis. It was also revealed that the absence of a proper allocation of the supervision budget was among the hindrances to value-for-money achievement in FAM (Sayi and Monko, 2022). Jongo *et al.* (2019) identified effective mitigation measures in dealing with delays and cost overruns in public procurement projects. Mtana *et al.* (2023) revealed that poor planning is among the human factors causing delays in most construction projects in Tanzania. One of the constraints hindering the effective performance of construction projects in Tanzania was the lack of adequate planning skills. Effective planning enables project executors to identify risks associated with the implementation of the FAM projects and find ways to mitigate them (Stephen, 2021). Effective project planning is essential for ensuring timely completion, controlling costs, achieving high-quality outcomes, and minimising conflicts. A study by Mwanza *et al.* in Kenya revealed that 46% of the respondents strongly agreed that planning directs activities to be performed on time and reduces mistakes. According to Wanjau et al. (2024), planning allows accurate budget estimation, informed decision-making, cost control, risk management, and effective stakeholder management.

2.2 Adequate Project Design

Adequate design is a crucial factor influencing the performance of construction projects, as design errors and changes can lead to delays and cost overruns. Adequate design defines plans, parameters, specifications, costs, activities, and processes, and how and what should be done within the legal, political, social, environmental, safety, and economic constraints in achieving project objectives (Azar, Militaru, and Mattar, 2018). Studies showed that the design stage wasn't given enough attention when the FAM was used for public construction because there weren't enough conditional surveys and details in the material schedule (Matto, 2023; Matto, 2021). Partial or incomplete designs were prepared, which resulted in uncounted changes and variations, an inadequate bill of quantities or schedule of materials, project delays, and uncompleted projects. A report by NAOT (2021) revealed that there were inadequate technical specifications in construction projects under FAM. An NAOT report (2021) showed missing descriptions of the type of floor finishing needed to be laid at Galanos Secondary School and Usagara Secondary School, the gauge of roof covering, and type descriptions of timber to be used for roofing at Nachingwea Teachers' Training College. It also revealed that ten (10) out of 22 audited projects were not completed on time due to inadequate design. Inadequate design is one of the major causes of delays in public building construction projects by local government authorities (Mtango and Sumuni, 2023). According to Aslam *et al.* (2019), design changes in construction projects can significantly impact project cost, often leading to 5-40% cost overruns. Another study by Yap and Skitmore (2017) revealed that building projects in Malaysia encounter time-cost overruns of 5–20% due to design changes. In Japan, defective design has

been found to cause 30% of cost and time overruns in construction projects (Andi and Minato, 2003).

Adequate design ends with every aspect of the construction process with the bill of quantities or schedule of materials and necessary specifications that guide the contractor (Azar, Militaru, and Mattar, 2018). An adequate design process produces quality design documents with sufficient details to enable efficient implementation of construction projects at a realistic cost immediately. High-quality design documents engender the attainment of the desired project objectives (Sospeter, 2023).

2.3 Procurement Management

Recent studies on procurement management in construction projects in Tanzania have highlighted several reports from the Prevention and Combating of Corruption Bureau (PCCB) for the financial year 2022/23. These reports revealed that participants in the implementation of construction projects using the FAM projects either lacked or had limited awareness of procurement procedures (Chibwete, R., 2022). In their study, NAOT (2021) highlighted several issues that occurred during the implementation of building projects using the FAM. These issues included the absence of a material procurement plan, the failure of procurement entities to negotiate with suppliers, anomalous pricing for goods, and other irregularities. According to Matto (2023), no purchasing organisation negotiated the acquisition of materials prior to issuing a local purchase order or signing a contract.

A study by Mchopa (2020) revealed a failure to comply with guidelines and standard documents issued by the PPRA in the implementation of construction projects using the FAM. Changalima *et al.* (2022) revealed that procurement regulatory compliance has a significant and positive relationship with value for money in procurement. Tekka (2023) revealed that supply chain management positively affected the construction project's performance. A study by Salim and Macha (2023) found that procurement planning, procurement selection criteria, and procurement contract monitoring affected the performance of public construction by 59.2%, 37.7%, and 30.7%, respectively, in the Ministry of Education and Vocational Training in Zanzibar. According to a report by NAOT (2021), ineffective procurement management in projects, implemented using the FAM, resulted in a loss of TZS. 553,535,247. This loss was attributed to high labour costs, payments for undelivered goods, and abnormal prices for goods procurement. A study by Israel (2023) found that the bureaucratic bidding process, non-compliance with contractual terms, and use of inappropriate procurement methods were critical deficiencies facing construction projects in Tanzania. A study by Matto (2021) found that records management attributes significantly affected procurement performance in Tanzania.

2.4 Effective Construction Supervision

Effective construction supervision includes variables such as adequate communication, control mechanisms, feedback capabilities, coordination effectiveness, decision-making effectiveness, monitoring, organisation structure, safety, quality assurance, and the schedule followed (Chan, Scott, and Chan, 2018). Mchopa (2020) found insufficient quality control, a deficiency in inspection reports, and a lack of a quality assurance plan in Tanzania's implementation of the FAM in work procurement. Matto (2023) revealed inadequate cost control, quality control, and time control in the implementation of construction projects using the FAM in the education sector in Tanzania. Stephen (2021) revealed that poor communication or communication breakdown was a major cause of the delays in implementing construction projects using the FAM to be completed on time in Mbeya, Tanzania. A study by Japhet and Shokia (2024) revealed that adequate communication and feedback are among the determinants of the effective implementation of public construction activities. Ndunguru *et al.* (2020) identified a lack of proper communication and coordination between parties as among the causes of time and cost overruns in construction projects in Tanzania. A report by NAOT (2021) revealed a lack of proper inspection and acceptance of goods, improper

recording of stores, inadequate control of store issues, inadequate cost control, inadequate time control, inadequate quality control, and inadequate consideration of health and safety aspects. Tekka (2019) identified coordination among force account project committees and on-site meetings to enhance information exchange, evaluate project progress, and find solutions to resolve project-hampered problems as crucial determinants of force account performance. Sayi and Monko (2022) discovered that inadequate coordination within the supervision team hinders the achievement of value for money in FAM projects. A study by Ikwueze *et al.* (2024) ranked inadequate construction site management and supervision as the first factor causing delays in construction projects in Nigeria. Kajumulo *et al.* (2024) suggested strengthening management commitment to safety for successful construction projects in Tanzania. A study by Massawe (2023) indicated that tight supervision of local "fundis" is one of the solutions for the challenges in FAM project implementation.

2.5 Adequacy and Competence of the Project Participants

The term 'competence' pertains to the combined knowledge, skills, experience, and qualifications of the individuals or groups engaged in the project, aiming at achieving optimal performance (Homthong, Moungnoi, and Charoenngam, 2024). A study by Matto (2023) revealed the lack of qualified personnel to execute and supervise the works in 22 public construction projects using the FAM in Tanzania. In all 22 projects, there were 8 civil engineers as compared to 18 required civil engineers and 17 civil technicians as compared to 36 required civil technicians to supervise the works. The report by NAOT (2021) revealed that two (2) out of four (4) engineers and three (3) out of three (3) technicians were practicing without being registered by the Engineers Registration Board. In May 2019, 213 out of 859 qualified personnel, or 24.8 percent, were working on projects that used FAM (NAOT, 2021). Kikwasi and Escalante (2020) identified the insufficiency of engineers, architects, quantity surveyors, and related disciplines to meet the demands of the construction industry in Tanzania. A study by Changalima and Mwagike (2024) found that staff competency was a significant factor for the FAM's effectiveness in construction projects. A study by Kajumulo (2023) identified a lack of competent staff as one of seven (7) key factors for improving construction management in Tanzania. A study by Sayi and Monko (2022) realised that neither seminars nor training were given to the person supervising the force account projects. There was a dilemma whether procuring entities and other stakeholders at large clearly understood the concepts and procedures of the FAM (France, 2019). It was also revealed that an increase in staff competence by a unit increases the effectiveness of the FAM in local government authorities by 55.8% (Macharia, Banzi, and Changalima, 2023). Tekka (2019) identified training among participants as one of the crucial determinants of the smooth running of the project done under the FAM.

2.6 Effective Leadership and Support from the Government

According to a study by Mfugale (2022), avoiding bureaucracy was one of the driving forces that influenced the good practice of force accounting in the construction and rehabilitation of public secondary schools in Iringa Rural District, Tanzania. Top management interference, especially in selecting service providers and vendors of the required material and equipment, was among the challenges experienced during the implementation of projects using the FAM (Mwalukasa and Salwa, 2023). Sayi and Monko (2022) identified directives of political leaders that affect the execution of work, and technical supervisors being put into custody by orders of political leaders were among the hindrances to value-for-money achievement in FAM projects. A study by Macharia, Banzi, and Changalima (2023) found that a unit increase in management support increases the effectiveness of the FAM in Tanzania's local government authorities by 23.3%. According to Tekka (2019), the government has been very helpful to the FAM's performance by giving them money, giving them working guidelines, making sure project participants get training, and resolving conflicts.

Another study by Tekka and Msangi (2020) revealed that strong government support positively impacts the performance of construction projects by enhancing construction quality, combating malpractice, promoting social satisfaction, and ensuring timely payment. It was also found that interference from high administration created disruptions and hindered decision-making (Saire, 2023). Table 1 shows a review of previous studies and other researchers' work that led to the identification of 6 important performance factors of FAM. These factors formed the basis of this study.

Table 1
Key Performance Factors of FAM

SN	Performance Factors	Reference (s)
1	Effective Project Planning	Aloyce, Monko, and Luvara (2023); Mtana *et al.* (2023); Stephen (2021); Wanjau *et al.* (2024).
2	Adequate Project Design	Azar, Militaru, and Mattar (2018); Sospeter (2023); Mtango and Sumuni (2023); Yap and Skitmore (2017).
3	Procurement Management	Changalima *et al.* (2022); Tekka (2023); Salim and Macha, (2023); Matto (2021).
4	Effective Construction Supervision	Chan, Scott, and Chan, (2018); Japhet and Shokia (2024) Tekka (2019); Ikwueze *et al.* (2024); Kajumulo *et al.* (2024).
5	Adequacy and Competence of the Project Participants	Matto (2023); NAOT (2021); Kikwasi and Escalante (2020); Tekka (2019); Macharia, Banzi, and Changalima (2023).
6	Effective Leadership and Support from the Government	Mfugale (2022); Mwalukasa and Salwa (2023); Sayi and Monko (2022); Macharia, Banzi, and Changalima (2023); Tekka and Msangi (2020); Saire, (2023).

3.0 Materials and Methods

3.1 Review Approach

This study conducted a systematic literature review of the existing literature on the implementation of public construction projects using FAM and construction management. Systematic literature review as a methodology encapsulates the process of assembling, arranging, and assessing existing literature in a review domain with the goal of advancing knowledge in the domain (Paul *et al*. 2021). Many previous studies have been conducted on the implementation of FAM since 2016. However, there has been no systematic review done within the last five years in the context of the Tanzanian construction industry. The FAM is still a mystery in both theory and practice (Mbabazi and Mugurusi, 2019). Although the issue of using the FAM in construction projects is not new, it has garnered the attention of numerous researchers, such as Changalima *et al*. (2024), Chibwete (2024), and France (2024), since 2016, particularly in Tanzania.

3.2 Stages of the Review

The first stage of the review focused on identifying and arranging literature based on the performance factors for procuring public construction projects using the FAM. Literature about the FAM's flaws, importance, and factors that affect it was found and compared with other literature about construction management. Reputable databases such as DOAJ, Google Scholar, and Semantic Scholar, and keywords such as force account, performance factors, and public construction management were used to search the relevant articles. From the search, a total of 46 (54%) articles out of 85 research articles published on the topic under investigation were evaluated. The review's second stage focused on the assessment of shortcomings, determinants, or performance factors of the FAM in comparison with the key phases of the construction life cycle, including planning, design, procurement, and construction. The researcher evaluated the findings and determined key performance factors at each stage. Performance factors that influenced all the stages of the construction lifecycle were grouped together.

4.0 Results and Discussion

Findings from a thorough review of the literature identified the six key performance factors

influencing the performance of construction projects using the FAM as discussed below and summarised in the flow diagram shown in Figure 1 below.

4.1 Effective Project Planning

The studies indicate that adequate project planning requires a feasibility study. The preparation of a procurement plan, budgeting, and risk analysis are essential for the successful implementation of public construction projects using the force account method. The studies further revealed that 46% of the respondents in cited literature above strongly agreed that planning directs the activities to be performed in time and reduces mistakes.

4.2 Adequate Design

Most of the scholars in the cited literature above suggest that high-quality design documents, including client requirements, environmental and safety considerations, topographical and geotechnical survey considerations, budget considerations, architectural design, structural design, engineering estimates, and risk assessment, could significantly influence the performance of construction projects using the force account method. The studies also show that inadequate design may lead to design changes in construction projects, which can significantly impact project cost, often leading to cost overruns.

4.3 Procurement Management

Based on the thorough literature review above, it shows that awareness of procurement procedures, procurement planning, regulatory compliance, supply chain management, and record management are the most significant indicators of successful procurement management in construction projects. Addressing these key procurement management factors could lead to the effective performance of construction projects using the FAM.

4.4 Effective Construction Supervision

The studies mentioned above make it clear that good construction supervision includes good communication, good coordination, good decision-making, safety and quality control, as well as monitoring and evaluation to make sure that projects are carried out well.

4.5 Adequacy and Competence of the Project Participants

Findings suggest that using the FAM to carry out construction projects needs qualified and suitable participants who can contribute to the planning, design, execution, and completion of the project successfully. The review also revealed that an increase in staff competence by a unit increases the FAM's effectiveness in local government authorities by 55.8%. The studies further show that there was a dilemma regarding whether procuring entities and other stakeholders at large clearly understood the concepts and procedures of the FAM.

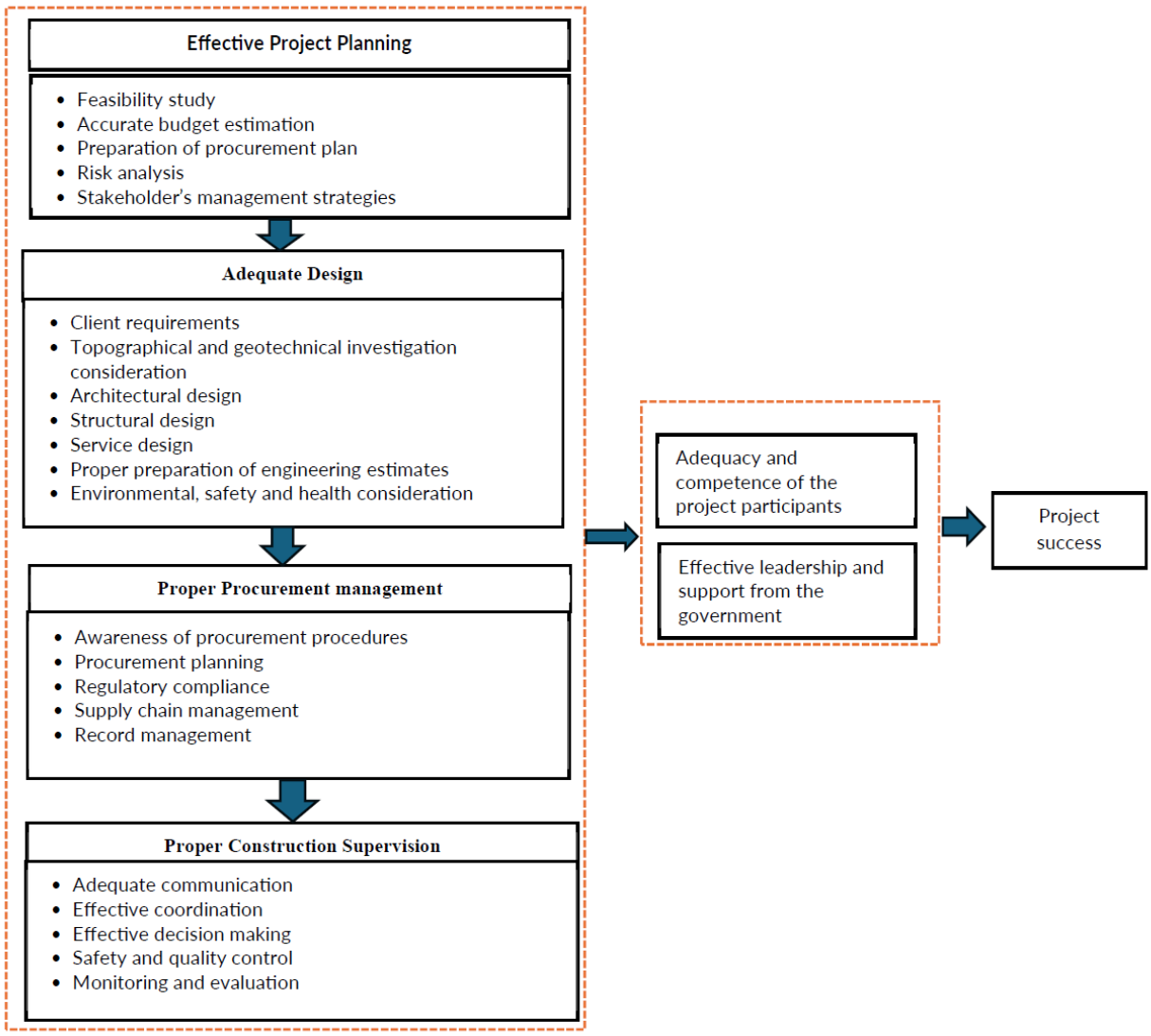
4.6 Effective Leadership and Support from the Government

These findings suggest the most significant performance indicators of effective leadership and government support in construction projects include transparency, accountability, commitment, training, timely payments, and society satisfaction. The studies further show that a unit increase in management support increases the effectiveness of the FAM in Tanzania's local government authorities by 23.3%. Furthermore, the studies identified directives of political leaders that affect the execution of work, and technical supervisors being put into custody by orders of political leaders were among the hindrances to value-for-money achievement in FAM projects in Tanzania.

Furthermore, various aspects of the key factors that determine the success of construction projects under FAM are summarised in Figure 1, below.

Figure 1

Key Performance Factors that Determine the Success of Construction Projects Using FAM



Source: Author (2024)

5.0 Conclusion and Recommendations

A thorough review of the literature in this study revealed that key performance factors in the implementation of public construction projects using the FAM in Tanzania directly relate to the phases of the construction process, which include effective planning, effective and adequate project design, awareness and adherence to the procurement regulations and guidelines, and effective construction management. The intermediate performance factors that impact all phases encompass the adequacy and competence of project participants, including the necessary technical personnel, along with effective leadership and government support. All the shortcomings identified in the implementation of public construction projects using the FAM relate to these factors.

This study recommends the development of a framework for the effective implementation of public construction projects using the FAM, with a primary focus on the phases of the construction process and variables that determine success in each phase.

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8.0 Declaration of conflicting of interests

The authors declare no conflict of interest

9.0 References

Aloyce, D., Monko, R. J., & Luvara, V. G. M. (2023). Critical audit indicators for assessing construction projects performance (CPP) at pre-contract stage in Tanzania. *International Journal of Construction Management*, 1–10.
American Society of Civil Engineers (ASCE) (2025). *Definition of public construction projects*. Available at: https://www.asce.org/ (Accessed: 05 January 2025).
Andi, S., & Minato, T. (2003). Design documents quality in the Japanese construction industry: Factors influencing and impacts on construction process. *International Journal of Project Management, 21*(7), 537–546.
Aslam, M., Baffoe-Twum, E., & Saleem, F. (2019). Design changes on construction projects—Causes and impact on cost. *Civil Engineering Journal, 5*(7), 1647–1655. https://doi.org/10.28991/CEJ-2019-03091360.
Azar, A. D., Militaru, C., & Mattar, C. P. (2018). Construction design-phase errors and their impacts on project performance: Case study of Lebanese local applications. *International Journal of Engineering and Information Systems, 2*(7), 42–46.
Bako, S. S. (2016). An overview of procurement methods and techniques for effective delivery of construction projects. *International Journal of Advanced Research in Engineering, 2*(3), 1–5.
Baraka, I. (2023). A study of stakeholders' procurement deficiencies, delays and cost overruns in Tanzania's construction projects. *International Journal of Procurement Management, 18*(4), 489–508. https://doi.org/10.1504/IJPM.2023.134629
Chan, A. P. C., Scott, D., & Chan, A. P. L. (2018). Factors affecting the success of a construction project. *Journal of Construction Engineering and Management, 130*(1), 153–155. https://doi.org/10.1061/(ASCE)0733-9364(2004)130:1(153)
Changalima, I. A., &Mdee, A. E. (2023). Procurement skills and procurement performance in public organizations: The mediating role of procurement planning. *Cogent Business & Management.* https://doi.org/10.1080/23311975.2022.2163562.
Changalima, I., Ismail, I., &Mwaiseje, S. (2022). Obtaining the best value for money through procurement planning: Can procurement regulatory compliance intervene? *Journal of Money and Business, 2*(2), 133–148. https://doi.org/10.1108/JMB-11-2021.
Changalima, I., Mwagike, I. S., & Raphael, L. (2024). The moderating role of staff competency on communication and the effectiveness of force account approach: An empirical study from Tanzania. *Cogent Social Sciences, 10*(1). https://doi.org/10.1080/23311886.2024.2363600.
Chibwete, R. (2024). Force Account badonichangamoto. *Mwananchi.* Retrieved from https://www.mwananchi.co.tz.
France, O. (2019). Implementation of force account: Concept, procedures, success and challenges. *Procurement and Supplies Professionals and Technicians Board (PSPTB) Annual Conference*. Dodoma, Tanzania..

Homthong, S., Moungnoi, W., & Charoenngam, C. (2024). Whole life critical factors influencing construction project performance for different objectives: Evidence from Thailand. *Buildings, 14*(4), Article 999. https://doi.org/10.3390/buildings14040999

Ikwueze, S., & Ejiofor, N. E. O. (2024). Impact of project management practices on cost and time overruns in construction projects in Nigeria. *Newport International Journal of Scientific and Experimental Sciences, 5*(2), 26-34. https://doi.org/10.59298/NIJSES/2024/10.5.262634.

Japhet, L., &Shokia, A. (2024). The role of communication among project stakeholders in the implementation of buildings construction projects in Arusha city, Tanzania. *International Journal of Humanities Social Science and Management, 4*(2), 418–430.

Jongo, J., *et al.* (2019). Mitigation measures in dealing with delays and cost overrun in public building projects in Dar es Salaam. *International Journal of Construction Engineering and Management, 8*(3), 81–96.

Kajumulo, K. (2023). Identification and analysis of key elements for improving construction management performance in Tanzania. *International Journal of Construction Engineering and Management, 12*(2), 43–53.

Kajumulo, K., Matindana, J., & Mohamed, F. (2024). Modelling of safety performance in building construction projects using system dynamics approach in Tanzania. *Safety, 10*(3), Article 57. https://doi.org/10.3390/safety10030057.

Kisamo, L., & Mokaya, S. (2019). Project management skills and performance of construction projects in Tanzania: A case of selected construction firms in Mwanza. *International Journal of Social Science and Humanities Research, 7*(2), 363–370.

Macharia, T. E., Banzi, A. L., & Changalima, I. A. (2023). Effectiveness of the Force Account Approach in Tanzanian local government authorities: Do management support and staff competence matter? *Management & Economics Research Journal, 5*(1), 66–82. https://doi.org/10.48100/merj.2023.301.

Massawe, J. (2023). Towards addressing challenges of achieving force account targets in Tanzania: The case of construction projects supervised by the Mbeya University of Science and Technology Consultancy Bureau. *Mbeya University of Science and Technology Journal of Research and Development, 4*(4), 639-646. https://doi.org/10.62277/mjrd2023v4i40036.

Matto, M. (2021). Implementation of force account projects in Tanzania: Success, shortcomings, and way forward. *12th Professionals Annual Conference (PSPTB)*, Arusha, Tanzania.

Matto, M. C. (2022). Records management and performance of procurement management units in Tanzania: A case study. *Records Management Journal, 10* (1). https://doi.org/10.1108/RMJ-05-2021-0018.

Matto, M. C. (2023). Identifying the latent shortcomings of force account projects in Tanzania: The case of construction projects in the education sector. *Engineering, Construction and Architectural Management, 30*(2),787-804. https://doi.org/10.1108/ECAM-06-2021-0525.

Mbambazi, F., & Mugurusi, G. (2018). Adoption of force account mechanism in road maintenance works' procurements: Stakeholders' opinions in Uganda. *Proceedings of the International Public Procurement Conference Held at Arusha International Conference Centre.*

Mfugale, R. (2022). The role of force account on the construction and rehabilitation of projects in public secondary schools at Iringa Rural District, Tanzania. *International Journal of Research in Education Humanities and Commerce, 3*(5), 256–256.

Mtana, M., Mwaluko, G., &Matindana, J. (2023). Current and future trends of construction project performance models: A review. *Tanzania Journal of Engineering and*

Technology, 42 (1), 58-71. https://doi.org/10.52339/tjet.v42i1.888.

Mtango, J., &Sumuni, C. (2023). Assessment of client-related factors for delaying public buildings construction projects in local government authorities: A case of Arusha City Council. *The Accountancy and Business Review, 15* (1), 55-74. https://doi.org/10.59645/abr.v15i1.93.

Mwalukasa, B., & Salwa, A. (2023). Effects of Force Account method on procurement process compliance in construction projects. *Social Sciences, Humanities and Education Journal, 4*(3), 459–469.

Mwanza, P. W., Namusonge, G. S., & Makokha, E. N. (2020). Influence of project planning practice on performance of construction projects in Kenya. *International Journal of Social Sciences and Information Technology, 5* (5),
23-30. Retrieved from http://www.ijssit.com

National Audit Office. (2021). *Performance audit report on monitoring and supervision of projects implemented through force account method in education sector as performed by Ministry of Finance and Planning, Ministry of Education, Science and Technology, and the President's Office Regional Administration and Local Government*. Dodoma.

Ndunguru, D. D., Niyonyungu, F., & Yang, X. (2020). Quantification of the influence of factors causing time and cost overruns in Tanzanian construction projects. *Open Journal of Business and Management, 8*(5), 2133–2147.
https://doi.org/10.4236/ojbm.2020.85130.

Nsimbila, P. M., Matto, M. C., & Ame, A. M. (2021). Tender process and value for money in Tanzania public procurement. *International Journal of Logistics Economics and Globalisation, 9* (1), 1. https://doi.org/10.1504/IJLEG.2021.10039481.

Siare, H. (2023). Effectiveness of force account management in public primary school construction in Tanzania: Experience from Simiyu region. *[Master's dissertation, University of Dodoma]*.

Salim, R., & Joseph, M. D. (2023). Effects of procurement procedures on performance of public building construction in the Ministry of Education and Vocational Training, Zanzibar. *International Journal of Business Management and Economic Review, 6* (3), 56-97. https://doi.org/10.35409/IJBMER.2023.3487.

Sayi, M., & Monko, R. (2022). Hindrances to value for money achievement in Force Account projects. *International Journal of Construction Engineering and Management, 11* (1), 1–7.

Sears, G. A., Clough, R. H., & Sears, S. K. (2021). *Construction management: A practical guide to field construction management* (3rd ed.). John Wiley & Sons, Inc.

Shengeza, J. J. (2018). Procedure on effective application of Force Account as a method of procurement or renovation and remodelling of government building projects. *Journal of Civil, Construction and Environmental Engineering, 2*(6), 153–158.

Sospeter, N., &Rwelamila, P. (2020). Improving the performance of construction industries for developing countries. In *N. Sospeter* (Ed.), *Boston: Routledge* (pp. 324–348).

Sospeter, N. G. (2023). A categorization of factors affecting quality of design documentation in Tanzanian construction projects. *Journal of Engineering, Design and Technology*. https://doi.org/10.1108/JEDT-02-2023-0040.

Stephen, K. (2021). Use of Force Account procurement method for development of small and medium contracting firms in Mbeya. *International Journal of Finance Research, 2* (2), 94-110. https://doi.org/10.47747/ijfr.v2i2.311.

Tekka, R. (2019). Performance determinants of Force Account method of contracting: The case of public infrastructure rehabilitation and remodeling. *International Journal of Advanced Research in Science, Engineering and Technology, 6*(6), 9807–9817.

Tekka, R. S. (2023). Stakeholders' perception of the impacts of supply chain management on

Tanzania construction projects' performance. *African Journal of Accounting and Social Science Studies, 4* (2), 309-324. https://doi.org/10.4314/ajasss.v4i2.17.

Tekka, S. T., & Msangi, M. S. (2020). Effects of strong government in attaining outstanding performance on construction projects: Stakeholders' opinions in Tanzania. *Industrial Engineering, 4* (2), 55. https://doi.org/10.11648/j.ie.20200402.15.

Wanjau, C. M., Namusonge, G. N., & Lango, B. (2024). Project cost planning and performance of housing projects in Kenya. *International Academic Journal of Information Sciences and Project Management, 3* (7), 248–262.

Yap, J. B. H., &Skitmore, M. (2017). Investigating design changes in Malaysian building projects. *Architectural Engineering and Design Management*, 1–21.