Effects of the Financial Management System on Managing Project Funds in Local Government Authorities in Tunduru, Tanzania

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Abstract
This study examines the Effects of the Financial Management System on Managing Project Funds in Local Government Authorities in Tunduru, Tanzania. It explores the effectiveness of these systems in managing project funds by assessing technical challenges, identifying factors influencing system use, and determining appropriate management procedures. Ineffective financial management often leads to poor fund utilization, project delays, overspending, and substandard outcomes. A qualitative research approach was adopted, involving focus group discussions and in-depth interviews with 30 representatives from local government authorities. Data were analyzed using descriptive and content analysis techniques. Findings reveal that the existing financial management systems are inadequate, characterized by limited staff training, weak financial controls, and poor monitoring and evaluation mechanisms. These shortcomings contribute to inefficient fund utilization and hinder successful project implementation. The study recommends strengthening financial management systems through comprehensive capacity-building programs, improved financial controls, and robust monitoring and evaluation frameworks. These measures are essential for enhancing transparency, accountability, and efficiency in managing project funds. Strengthened systems will support timely project completion, effective resource use, and improved public service delivery.

Keywords: *Financial Management Systems, Local Government Authorities, Project Fund Management, Accountability.*

INTRODUCTION

Globally, financial management systems (FMS) are vital for enhancing the efficiency, accountability, and transparency of financial operations within local government authorities (LGAs). Financial management systems encompass a range of technologies and practices designed to automate financial transactions, manage budgets, ensure compliance, and generate

accurate and timely reports. Their role is particularly critical in the public sector, where mismanagement of funds can lead to project failures, loss of public trust, and development setbacks. Effective fund management for development projects relies heavily on the availability of reliable financial systems that ensure funds are allocated, tracked, and utilized as planned.

According to Kinyua and Muathe (2020), the adoption of FMS in local governments globally has led to improved financial discipline and reduced opportunities for corruption. In developed countries such as the United States, Canada, and several European nations, the integration of FMS into public financial management has been linked to better budgeting outcomes, more effective internal controls, and enhanced financial reporting (Gupta & Chalu, 2022). The use of Integrated Financial Management Information Systems (IFMIS) has become a best practice globally, providing a centralized platform for managing all financial transactions, enhancing data accuracy, and supporting sound decision-making processes (Hendriks, 2012). Such improvements directly support project fund management by ensuring that funds are released on time, expenditures are tracked in real time, and deviations are detected early, minimizing risks of fund misappropriation or delays in project implementation.

The World Bank (2021) emphasizes the transformative impact of digital governance tools, including FMS, in promoting transparency and accountability in the public sector. The implementation of FMS aligns with broader trends in e-governance and digital transformation, aiming to streamline public sector operations and combat inefficiencies. Robust financial management systems contribute to effective project fund management by enhancing resource allocation, enabling real-time monitoring, and improving cash flow forecasting, and ensuring compliance with financial regulations (Bokpin, 2021).

In Africa, the management of public funds at the local government level presents unique challenges due to systemic issues such as corruption, inadequate financial management capacity, and outdated technological infrastructure. Many African countries have recognized the need for financial management reforms and have made efforts to implement FMS to address these challenges (Ocheni & Nwankwo, 2020). Despite these efforts, the success of FMS in African LGAs has been mixed. Studies indicate that while the implementation of IFMIS and other FMS tools has improved financial reporting and accountability in some countries, challenges such as poor implementation, lack of skilled personnel, and resistance to change have hindered their effectiveness (Bokpin, 2021).

Countries like Ghana, Nigeria, and South Africa have been at the forefront of adopting FMS, but the journey towards fully functional and effective systems remains ongoing. According to Ocheni and Nwankwo (2020), the effectiveness of financial management systems in Africa is often compromised by governance issues and political interference. In Nigeria, for example, the implementation of financial management reforms has faced obstacles due to weak institutional frameworks and a lack of political will. Similarly, in South Africa, despite having one of the most advanced public financial management systems on the continent, challenges such as corruption and inefficiencies in local government operations continue to affect the management of project funds (Chalu, 2022). These challenges undermine the effective use of project resources and delay service delivery at the community level.

East Africa has made notable progress in adopting financial management systems at the local government level, but challenges remain. Countries like Kenya, Uganda, and Rwanda have implemented various reforms aimed at enhancing financial management within LGAs. For instance, Kenya's Public Finance Management Act (2012) and the adoption of IFMIS have significantly improved financial oversight and transparency in local governments (Wamalwa, 2022). However, the effectiveness of these reforms is often limited by capacity constraints, inadequate training, and resistance from local government officials.

Uganda's experience with IFMIS highlights the potential of financial management systems to improve financial governance, but also underscores the challenges of ensuring widespread adoption and effective use of these systems. According to Mugisha (2021), while IFMIS has improved budget execution and financial reporting in Uganda, issues such as technical glitches, inadequate infrastructure, and limited internet connectivity, particularly in rural areas, continue to pose significant challenges.

Rwanda has been relatively successful in implementing financial management reforms, thanks to strong government commitment and investment in digital infrastructure. However, as noted by Nkurunziza and Twahirwa (2021), even in Rwanda, challenges such as limited capacity at the local government level and the need for continuous training and support are critical issues that need to be addressed to maximize the benefits of FMS. Importantly, these systems have played a key role in improving project fund tracking and reporting, thereby increasing efficiency in service delivery and infrastructure development.

In Tanzania, local government authorities are critical in implementing development projects and delivering public services at the community level. Effective financial management of project funds is essential to ensure these projects are completed within budget, on time, and with the intended impact. The Tanzanian government has implemented several financial management systems, including the Epicor Financial Management System, MUSE, and the Local Government Revenue Collection Information System (LGRCIS), aimed at improving financial management and accountability within LGAs (Mwakyusa, 2023).

However, despite these initiatives, challenges persist. A study by Ngowi (2022) identifies key issues such as limited capacity of local government staff, technological challenges, poor oversight mechanisms, and corruption as major obstacles to the effective management of project funds in Tanzanian LGAs. The research further highlights that while financial management systems have the potential to significantly improve the efficiency and transparency of financial operations, their effectiveness is often undermined by systemic issues such as resistance to change and inadequate support from higher levels of government.

Recent studies suggest that to enhance the effectiveness of financial management systems in Tanzania, there is a need for continuous capacity building, investment in technological infrastructure, and strengthening of oversight and accountability mechanisms at the local government level (Chalu & Kessy, 2023). This study identifies technical, user, and organizational challenges as significant obstacles to the effective implementation of FMIS in Tanzanian LGAs. They recommend that the Tanzanian government, through the Ministry of Finance and Planning, the President's Office – Regional Administration, and Local Government Authorities, offer full commitment to ensuring effective implementation of FMIS by guaranteeing the constant supply of electricity in all district councils; provision of modern computing equipment; improved organizational management; and enhanced staff facilitation and motivation.

Additionally, they advocate for the engagement of qualified firms and consultants from the private sector to assist with the implementation of successful change management (Pasape & Godson, 2022). These interventions are directly linked to improved project fund management because they help create reliable, transparent, and accountable systems through which project resources can be allocated, monitored, and reported efficiently. Ultimately, strengthening financial management systems

enhances the government's ability to deliver projects that drive socio-economic development at the local level.

Because they make budgeting, tracking spending, financial reporting, and accountability easier, Financial Management Systems (FMS) are essential to the management of project funding within local government agencies. Effective financial management is crucial to ensuring that allotted monies are used for the intended purposes of development projects carried out by LGAs. Effective financial management systems promote timely project implementation, decrease financial mismanagement, and increase transparency. On the other hand, ineffective project execution, erroneous financial reporting, and delays in money release can all be caused by weak or badly executed systems. Therefore, enhancing financial governance and guaranteeing good project outcomes within LGAs requires an understanding of how financial management systems affect the administration of project funds.

Research Problem

Local Government Authorities (LGAs) in Tanzania are responsible for implementing development projects that aim to improve public services and infrastructure at the community level. Effective management of project funds is therefore essential to ensure that these projects are completed on time, within budget, and according to the intended objectives. To strengthen financial accountability and transparency, the government has introduced several Financial Management Systems (FMS), including FFARS, Epicor, MUSE, and LGRCIS.

Despite the implementation of these systems, several audit reports and previous studies indicate persistent weaknesses in project fund management within LGAs. These challenges include delays in financial reporting, inefficient utilization of project funds, weak financial controls, and limited system integration. Technical problems such as system downtime, inadequate ICT infrastructure, and limited user capacity further reduce the effectiveness of these systems. As a result, many local government authorities continue to experience inefficiencies in managing project funds, which negatively affects project implementation and service delivery.

Although financial management systems have been introduced to address these challenges, limited empirical evidence exists on how these systems actually influence the management of project funds in Tanzanian LGAs, particularly in Tunduru District Council. This study, therefore, seeks to

examine the effects of financial management systems on managing project funds in Local Government Authorities in Tunduru, Tanzania.

Research Objectives

General objective

The general objective of the study was to examine the effect of the Financial Management System on the management of project funds in LGAs in Tanzania.

Specific objectives

i) To examine the effects of technical challenges in financial management systems on project fund management in LGAs
ii) To identify factors affecting the usage of financial management systems in managing project funds in LGAs
iii) To examine the procedures used in managing the financial management system for effective project fund management in LGAs

Research Questions

i) What are the effects of technical challenges in financial management systems on project fund management in LGAs?
ii) What factors affect the usage of financial management systems in managing project funds in LGAs?
iii) What procedures are used to manage financial management systems for effective project fund management in LGAs?

LITERATURE REVIEW

Financial management systems

Financial management systems (FMS) are essential tools for monitoring the public sector's financial operations, especially when it comes to local government agencies. To effectively understand the function that financial management systems play in project finance management, it is necessary to define and conceptualise the components of these systems based on the corpus of recent literature. Purchasing, planning, and budgeting, assets, human resources, and income and expenditure management are all managed through a reporting system known as the Financial Management System. MUSE, Planrep, HRMIS, NeST, GAMIS, LGRCIS, TAUSI, and GoTHOMIS are among the systems used by LGAs.

Financial management systems, according to De Carvalho et al. (2020), are "digital platforms that integrate financial operations from planning and budgeting to execution and reporting, ensuring that all financial activities are coordinated and monitored in real-time."

According to Arapis and Reitano (2019), financial management systems are "institutional mechanisms that combine information technology, financial operations, and governance practices to ensure effective management of financial resources, promoting transparency, accountability, and fiscal sustainability."

Project

Organisation for International Standardisation (ISO, 2022): "A temporary endeavour undertaken to create a unique product, service, or result" is what ISO 21500:2022 defines as a project. It is distinguished by well-defined scope, precise start and finish dates, and resources allotted for the accomplishment of particular aims and objectives." According to ISO 21500:2022, Guidance on Project Management, this definition places a strong emphasis on the organised methodology and resource allocation used in project management.

Project funds

The International Monetary Fund (IMF, 2023) defined project funds as "financial resources designated for specific projects, including capital investments and operational expenditures." The management of these funds is ensured by means of comprehensive budgeting and financial controls, which also track project performance (IMF, 2023, Public Financial Management).

Theoretical Literature Review

Project Management Theory offers structured methods for planning, executing, and controlling projects to achieve specific goals within time, budget, and scope constraints. It has evolved from traditional linear approaches to dynamic methods like agile and lean project management, emphasizing adaptability and continuous improvement (Kerzner, 2017). Key strengths include structured planning, risk management, and stakeholder engagement, which are vital for managing public funds in local government authorities (LGAs). However, its rigidity and resource demands can challenge resource-constrained settings like Tunduru. The study explores how tailored financial management systems (FMS) integrated with project management practices can enhance the efficiency and transparency of fund utilization in LGAs.

Public Financial Management (PFM) **Theory** emphasizes the systematic management of public resources through budgeting, financial reporting, and accountability. Originating from fiscal discipline and economic theories, it has evolved with reforms like the Medium-Term Expenditure Framework (MTEF) and performance-based budgeting (Allen et al., 2013). PFM

enhances transparency, reduces corruption, and aligns resources with development priorities. However, its complexity and resource-intensive nature pose challenges for implementation in contexts with limited capacity. This study examines how digital tools, such as electronic FMS and mobile money, can modernize PFM processes, improving transparency and accountability in Tunduru LGAs.

Contingency Theory of Accounting Information Systems (AIS) posits that financial systems must align with organizational and environmental factors for optimal performance. Developed from organizational behavior research, it highlights the importance of flexibility and customization in system design (Ismail & King, 2022). Strengths include adaptability to diverse conditions, enabling LGAs to tailor FMS to local needs. However, its reliance on contextual factors can complicate implementation and hinder standardization. This study explores how tools like MUSE and FFARS can enhance financial oversight in Tunduru LGAs, emphasizing the role of capacity building and training in adapting FMS to local contexts.

This research integrates these theories to analyze how tailored FMS and capacity-building initiatives can address the unique challenges of managing project funds in Tunduru, contributing to improved financial management practices in Tanzanian LGAs.

Empirical Literature Review

Impacts of Technical Problems in FMS on Project Fund Management in LGAs

Technical issues in financial management systems (FMS) significantly impact the management of project funds in local government authorities (LGAs). System integration challenges often disrupt data consistency and reporting. Okello (2023) found that poor interoperability in Kenyan LGAs caused delays, while Adedoyin and Akinloye (2022) noted inefficiencies arising from integrating legacy and new systems in Nigeria. Usability problems also lead to inefficiencies, as Njeri and Chege (2022) reported that complex user interfaces in Tanzanian LGAs caused frequent errors, mirrored by findings in Ghana by Akinwande (2023).

Data security and system reliability are critical. Osei-Tutu and Asare (2023) observed that cyber-attacks and downtimes in Ghanaian LGAs delayed fund disbursement, with Juma (2023) reporting similar vulnerabilities in Tanzanian LGAs, undermining trust in FMS. Additionally, insufficient technical support exacerbates system failures. Moyo and Zulu (2023)

highlighted prolonged downtimes in Zambian LGAs, with Chirwa and Kalid (2022) emphasizing the lack of vendor support in Malawi.

Infrastructure limitations also hinder FMS functionality. Studies by Kinyua and Mwaura (2023) and Mwamba and Mwanza (2022) revealed issues like unreliable internet and power supplies in Kenyan and Zambian LGAs, respectively, affecting system performance. Resistance to adopting new technologies further impedes progress. Nkosi and Ngwenya (2023) and Phiri (2022) found staff resistance and insufficient change management strategies problematic in South African and Zimbabwean LGAs.

Moreover, technical issues compromise transparency and accountability. Muriuki and Ndungu (2023) reported delayed reporting in Kenyan LGAs due to system failures, while Lungu and Chirwa (2022) highlighted accountability concerns in Zambia. The financial burden of resolving technical issues was evident in studies by Malwa and Katende (2023) and Banda and Zimba (2022), documenting high costs in Tanzanian and Malawian LGAs.

Effective strategies can mitigate these challenges. Chikowore and Dube (2023) observed that training and dedicated support teams improved outcomes in South Africa, while Gachanja and Karanja (2022) found that cloud-based solutions enhanced reliability in Kenya. Strong policies, as emphasized by Asare and Osei (2023), are essential for addressing technical issues and improving FMS performance.

Factors Affecting Financial Management System Usage in LGAs

The effectiveness of FMS in managing project funds in LGAs depends on various factors. Adequate training is critical, as insufficient training leads to underutilization (Mukhongo, 2023; Nyambura& Muriuki, 2022). Usability also matters, with Juma and Nguvumali (2023) and Okafor and Onwuka (2022) emphasizing the role of user-friendly interfaces in Tanzania and Nigeria.

Infrastructure limitations, such as unreliable internet and outdated hardware, are major barriers (Mwaura & Wanjiru, 2023; Chikondi & Malisa, 2022). Integration challenges, as noted by Zziwa and Kasozi (2023), disrupt efficiency, with Kinyua and Mwaura (2022) highlighting compatibility issues in Kenyan LGAs.

Ongoing technical support is essential. Akinpelu and Sanni (2023) and Njeri and Wambui (2022) found that the lack of support in Nigerian and Kenyan LGAs led to frequent disruptions. Organizational resistance also affects

adoption. Musasizi and Kiggundu (2023) and Mwale and Banda (2022) noted resistance to change in Ugandan and Zambian LGAs, impeding FMS usage.

Policy and institutional support are vital for success. Chirwa and Ndebele (2023) and Osei-Tutu and Asare (2022) highlighted the importance of robust frameworks in South African and Ghanaian LGAs. Data security concerns, as seen in Tanzanian LGAs (Tindwa & Moyo, 2023), also affect confidence in FMS usage.
Budget constraints hinder procurement and maintenance (Akinwande & Olaniyan, 2023; Maseko & Nyoni, 2022). Involving users in system implementation, as Kasim and Ibrahim (2023) and Akinleye and Bello (2022) reported, enhances acceptance and usage.

Procedures for managing the financial management system in LGAs
Effective FMS management in LGAs involves structured implementation, continuous training, and monitoring. Okonkwo and Ijeoma (2023) and Adebayo (2022) stressed the importance of phased rollouts and needs assessments during implementation in Nigerian and Kenyan LGAs. Regular training, as shown by Moyo and Banda (2023), improved FMS usage in Zambia, with Kamau and Gachanja (2022) emphasizing ongoing capacity building in Tanzania.

Monitoring ensures system performance. Chirwa and Moyo (2023) and Chikondi and Malisa (2022) found that regular evaluations in South African and Malawian LGAs addressed inefficiencies. Proper data management practices, including backups and validation, are crucial (Osei-Tutu & Asare, 2023; Njeri & Wambui, 2022).

Proactive maintenance enhances reliability, as seen in Nigerian LGAs (Akinwande & Olaniyan, 2023), while integration with existing systems streamlines operations (Kinyua & Mwaura, 2023; Zziwa & Kasozi, 2022). Risk management procedures, as reported by Ndlovu and Sithole (2023) and Tindwa and Moyo (2022), mitigate potential disruptions.

Compliance with policies is essential for accountability (Malwa & Katende, 2023; Asare & Osei, 2022). Incorporating user feedback, as Gachanja and Karanja (2023) and Akinleye and Bello (2022) suggested, enhances system performance. Proper record-keeping supports transparency and auditing, as highlighted by Mukhongo and Muremi (2023) and Kamau and Gachanja (2022).

Research Gap

Several important research gaps are shown by the critical literature evaluation of theoretical and empirical studies on the effectiveness of financial management systems (FMS) in managing project money in local government authorities (LGAs), especially in Tunduru. Theoretical frameworks, such as Public Financial Management Theory and Project Management Theory, frequently lack context-specific modifications to address the particular institutional and socioeconomic difficulties faced by LGAs. Regionally specific research is also lacking, according to empirical investigations, especially when it comes to the practical concerns of system implementation, user training, and system integration. Notably, there is a lack of knowledge regarding how to improve the efficacy of current FMS frameworks by integrating cutting-edge technical breakthroughs like cloud computing and artificial intelligence.

Furthermore, the practical difficulties of risk management and user feedback systems, as well as the local procedural and compliance issues unique to Tunduru, are not sufficiently explored in current research. In order to improve FMS for managing project funds in Tunduru's LGAs, filling in these gaps will offer more specialised and useful insights. This will aid in the creation of more successful, contextually appropriate plans and solutions.

Research Hypothesis

H1: Technical challenges in financial management systems negatively affect the management of project funds in Local Government Authorities.

H2: User-related factors such as training, technical support, and system usability significantly influence the usage of financial management systems in managing project funds.

H3: Effective management procedures of financial management systems positively influence project fund management in Local Government Authorities.

Conceptual Framework of the Study

The conceptual framework is a structured guide in research that connects theoretical concepts to empirical analysis, providing a clear roadmap for data collection, analysis, and interpretation. According to Miles and Huberman (1994), it visually or narratively represents key variables—such as dependent, independent, control, moderating, and mediating variables—and their presumed relationships. In studying financial management systems (FMS) in managing project funds within local government authorities (LGAs), the framework situates "effectiveness of project fund management" as the dependent variable, influenced by independent variables like technical

infrastructure, human resource capacity, and organizational support. The framework draws on theories such as Public Financial Management Theory and Contingency Theory, offering a solid theoretical foundation and aligning research with broader academic insights. Ultimately, it provides coherence throughout the study, linking research questions, methods, and findings in a meaningful and theoretically grounded way.

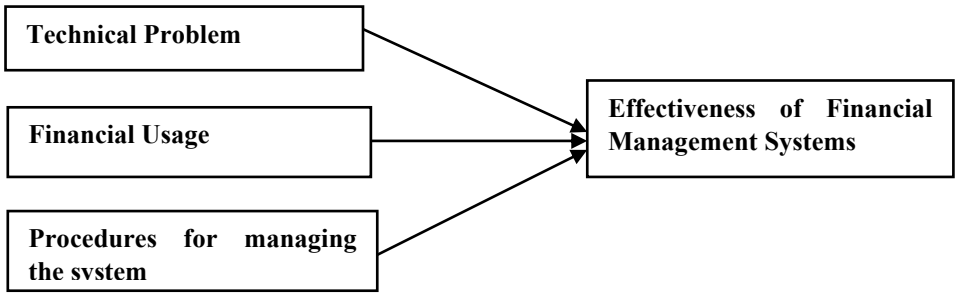

Figure 2.2: *Conceptual framework*
Source: Researcher (2024)

METHODOLOGY

Research Philosophy

Research philosophy refers to the set of beliefs and assumptions about the nature of knowledge, the process of its development, and how it should be gathered, analyzed, and interpreted in the research process. It essentially defines the framework within which a researcher works, influencing their methodological choices and how they perceive the research problem (Saunders, Lewis, & Thornhill, 2019).

Saunders et al. (2019) identify several key research philosophies commonly used in research, including positivism, interpretivism, realism, and pragmatism. Each philosophy represents a different stance on the nature of reality (ontology), the nature of knowledge (epistemology), and how knowledge can be acquired (methodology).

The research philosophy adopted in a study reflects the beliefs and assumptions about the nature of knowledge, the process of its development, and the approach to investigating reality. For this study on the effects of financial management systems in managing project funds in Local Government Authorities (LGAs), an interpretivism philosophy has been employed, aligned with a qualitative research approach. Interpretivism posits that reality is socially constructed and subjectively experienced, emphasizing the need to understand phenomena from the perspectives of those involved (Saunders, Lewis, & Thornhill, 2016). This approach is rooted in the idea that

social contexts are complex and cannot be fully understood through objective measurements alone, necessitating methods that capture the richness of human experiences and interactions.

Research Approach

A qualitative research approach is employed to investigate the effects of financial management systems (FMS) in managing project funds within local government authorities (LGAs) in Tunduru. This approach is chosen due to its strength in exploring complex, context-specific phenomena through detailed and nuanced data collection methods.

Research Design and Strategy

Research design is the detailed plan that outlines the procedures for conducting a research study, specifying how data will be collected, measured, and analyzed. It provides a structured framework to ensure that the research objectives are systematically addressed. According to Creswell and Creswell (2018), research design is "a blueprint for conducting the research and includes the methodology, sampling, and data collection and analysis techniques to answer the research questions effectively. The design ensures that the study is conducted systematically and that the results are valid and reliable.

The study employed purposive sampling to select 30 participants from various departments of Tunduru LGAs, including finance, planning, and project management units. Data were collected using in-depth interviews and focus group discussions, which provided detailed insights into the operational strengths, weaknesses, and challenges of the existing financial management systems.

Data were analyzed through descriptive and content analysis techniques, allowing the identification of recurring themes, patterns, and relationships within the participants' responses. This design facilitated a comprehensive understanding of how financial management systems influence fund utilization, accountability, and project performance, enabling the formulation of practical recommendations to improve the management of project funds in Tunduru District.

Research strategy refers to the overall plan and approach for conducting a research study, including the specific methods and procedures for data collection and analysis. It is a crucial component of research design and determines how the study will be executed to address the research problem. According to Yin (2018), a research strategy is "the approach used to achieve

the research objectives and answer the research questions, including the selection of methods for data collection and analysis". The strategy provides a coherent framework for systematically gathering and analyzing data to ensure that the research findings are robust and relevant.

In this study, the case study strategy is employed as part of the qualitative approach. This strategy involves an in-depth examination of specific instances of FMS implementation within Tunduru's LGAs. Case studies provide rich, detailed insights into how FMS is applied in practice, highlighting successes, challenges, and contextual factors that influence its effectiveness. This strategy allows for a comprehensive understanding of the real-world implications of FMS on project fund management.

Research Population and Study Area

The study targeted a total population of 30 government officers responsible for project implementation, which includes project planning officers, IT officers, project managers and coordinators, finance officers, procurement officers, and project engineers. This study was conducted at the Tunduru District Council. According to the 2022 Tanzania National Census, the population of the Tunduru District was 412,054 (URT, 2013). According to the 2022 Tanzania National Census, the population of the Tunduru District was 412,054 (URT,2013). According to the Tunduru District Council Financial Statement 2023, the main reason for researching the Tunduru District Council is that there are existing incidences of the effects of the financial management system on the management of project funds in the Tunduru District Council, which could help in conducting the study more easily

Sampling Design and Procedure

According to Cochran (1977), sample design refers to the strategy or plan that outlines how a sample is chosen from a broader population. It involves selecting a subset of individuals or units in a way that enables researchers to make reliable inferences about the entire population. The goal of a sample design is to ensure that the sample accurately represents the larger group, allowing for generalizations to be made with a reasonable degree of confidence. It includes decisions about the sampling method, the size of the sample, and the procedures used to select participants, all of which play a crucial role in the validity and accuracy of the research findings.

Sampling procedures involve the systematic steps taken to select participants or units from a research population to form a sample for study. These procedures ensure that the sample is representative, relevant, and able to

provide meaningful insights into the research questions. According to Fink (2013), sampling procedures include "the steps taken to identify, select, and recruit participants or units to ensure the sample is appropriate for addressing the research objectives".

In this study, purposive sampling was employed because the research focused on individuals who are directly involved in financial management and project implementation in the Tunduru District Council. These participants possess the necessary knowledge, experience, and insight to provide meaningful information about the effects of financial management systems on project fund management. The sample size of 30 participants was determined based on the qualitative nature of the study. In qualitative research, the focus is on depth of understanding rather than statistical representation, and smaller sample sizes are often sufficient to capture detailed insights. Literature suggests that qualitative studies typically use 20–50 participants to achieve data saturation, which occurs when no new information or themes emerge from additional data collection. The total population of Tunduru District Council is approximately 412,054 people, but not all individuals are relevant to the study. The population figure helped to identify the specific sub-group of interest—staff involved in financial management and project operations. By focusing on this relevant group, the study could select 30 key informants whose experiences reflect the practices and challenges of the financial management system, ensuring the study remains manageable while providing rich, meaningful data.

Sample Size

According to Saunders, Lewis, and Thornhill (2016), a sample is defined as the number of participants or units selected from the research population for inclusion in the study. It is a critical aspect of the research methodology, as it affects the reliability and validity of the study findings. "The sample size must be large enough to provide reliable and valid data, but not so large that it becomes unmanageable or impractical." The appropriate sample size depends on the research design, objectives, and methodological approach. For this study, a sample size of 20-30 participants was targeted. This range is considered adequate for qualitative research to provide rich, detailed data while allowing for thorough analysis. The sample will include project planning officers, IT officers, project managers and coordinators, finance and accounting officers, procurement officers, and project engineers. The sample size for this study was selected as follows:

Table 3.1:
Sample Size

Category	Total number	Percentage
Project planning officers	5	16.67
IT officers	2	6.67
Project managers & coordinators	6	20.00
Finance & accounting officers	8	26.67
Procurement officers	4	13.33
Project engineers	5	16.67
Total	**30**	**100**

Data Collection

Data collection tools are instruments used to gather information from participants to address research questions and objectives. They play a crucial role in ensuring that the data collected is relevant, accurate, and useful for analysis. "Devices or methods used to collect data from research participants, including interviews, surveys, and observational techniques, to ensure the reliability and validity of the research findings" are what Robson and McCartan (2016) define as data collecting tools. The choice of tools depends on the research design, methodology, and objectives. In this study, the data were collected by the following tools;

Semi-structured interviews are a qualitative data collection method where the interviewer follows a guide with predefined questions but allows flexibility for the interviewee to elaborate and provide detailed responses. This tool is used to explore participants' experiences, opinions, and insights into the FMS. It allows for in-depth understanding and the flexibility to probe further based on responses. A set of open-ended questions will be developed based on the research objectives. The guide covers topics related to FMS implementation, challenges, and impacts on project fund management. Interviews were conducted face-to-face and via digital platforms (Microsoft Teams), depending on participants' availability and location. Every interview will be transcribed for analysis and, with approval, recorded.

Focus groups in this study were 6-10 participants selected from staff who are directly involved in financial management, project planning, and implementation within the Tunduru District Council. The size was chosen because groups of this range are large enough to generate diverse perspectives but small enough to allow each participant to contribute meaningfully. The purpose of conducting focus groups is to gather collective insights and explore shared experiences regarding the Financial Management System (FMS). Unlike individual interviews, focus groups encourage interaction among participants, allowing them to build on each other’s ideas,

challenge assumptions, and discuss differing opinions. This dynamic often uncovers common themes, challenges, and suggestions for improvement that may not emerge in one-on-one interviews.

Case studies involve an in-depth examination of specific instances or examples of FMS implementation within the LGAs. This tool is used to provide detailed contextual analysis and real-world examples of how FMS affects project fund management. It offers practical insights and lessons learned. Specific projects or instances where FMS has been implemented will be selected based on their relevance and impact. Data was collected through documentation, interviews, and observations. Detailed analysis of each case was conducted to understand the successes, challenges, and outcomes of FMS implementation.

Document review involves analyzing existing records, reports, and documents related to FMS and project fund management. This tool provides additional context and background information, helping to corroborate findings from interviews and focus groups. Relevant financial reports, project plans, and policy documents were collected from LGAs and reviewed. Documents were analyzed through the use of identification and selection of documents, organising documents, content analysis, cross verification, and thematic synthesis.

Variables and Measurement

To investigate the impact of Financial Management Systems (FMS) on project finance management in Local Government Authorities (LGAs), variables were divided into dependent and independent categories. Project fund management, or how well financial resources allotted to development projects are planned, used, tracked, and reported within the local government system, was the dependent variable. Respondents' opinions about the promptness of fund usage, the correctness of financial reporting, the accountability and openness of financial transactions, and the general effectiveness of project implementation were used to qualitatively evaluate this variable.

Factors about the operation and administration of financial management systems comprised the independent variables. These included financial management practices, system utilisation concerns, and technological difficulties. The term "technical challenges" refers to system-related issues, such as system outages, inaccurate data, erratic network connectivity, and inadequate ICT infrastructure that impact the functionality of financial management systems. System use considerations include things like user

training, system usability, technical support, and system interaction with other platforms that affect how well employees use financial management systems. The operational techniques used to efficiently manage financial systems, including forecasting and budgeting, financial reporting, audit compliance, system upkeep, user access control, and data backup protocols, are referred to as financial management procedures.

Qualitative information gathered from focus groups, semi-structured interviews, and document reviews was used to measure these variables. Participants were invited to provide their thoughts and experiences about how financial management systems affect project finance management. Following the collection of data, the responses were classified into themes that represented the main study variables using content and thematic analysis. Using this method, the researcher was able to find trends and connections between the Tunduru District Council's project money management efficacy and elements of the financial management system.

Data Processing and Analysis

According to Smith (2020), data Processing involves the collection, manipulation, and transformation of data into a format that is useful for analysis. This process includes steps like data cleaning, sorting, filtering, aggregation, and data integration, which prepare raw data for further use in decision-making and analysis.

After data collection, the field data from interviews, focus group discussions, and document reviews were systematically processed and analyzed to ensure accuracy and extract meaningful insights into the effects of financial management systems (FMS) in Tunduru District Council. All audio recordings were transcribed verbatim, and field notes from discussions and observations were typed and organized, while documents such as financial reports, audit records, and project plans were cataloged according to type and relevance. The transcripts and notes were carefully reviewed for errors, inconsistencies, or incomplete information, and irrelevant content, repetitions, or unclear statements were removed or clarified. Data were then manually coded by assigning labels to meaningful units of text reflecting specific ideas, experiences, or challenges related to FMS, and similar codes were grouped into broader categories such as “capacity gaps,” “system inefficiencies,” and “oversight challenges.” Using content and thematic analysis, patterns, relationships, and recurring themes were identified, focusing on key objectives such as the impact of FMS on fund utilization and accountability, challenges in system implementation, and recommendations for improving effectiveness. Finally, the themes and patterns were interpreted

to provide a comprehensive understanding of FMS effects on project fund management, highlight operational gaps, and suggest practical recommendations, with illustrative quotes from participants included to enrich and contextualize the findings.

Descriptive and Inferential Statistical Analysis

According to Saunders, Lewis, & Thornhill (2019), descriptive analysis refers to the process of summarizing and presenting data to highlight patterns, trends, and relationships without making inferences or predictions. It uses various statistical measures, visual tools, and qualitative methods to describe the characteristics of a dataset or phenomenon systematically. The aim is to answer "what" is happening rather than exploring "why" it is happening. In qualitative research, descriptive and thematic analysis replace traditional statistical methods. Descriptive analysis involves summarizing participants' responses and identifying common themes.

Validity and Reliability of Measurements

In qualitative research, ensuring validity and reliability is critical to produce credible and trustworthy findings. Validity refers to the extent to which the collected data accurately represent the phenomenon under study—in this case, the effects of financial management systems (FMS) on project fund management in Tunduru District Council (Saunders, Lewis, & Thornhill, 2019). To enhance validity, this study employed triangulation, combining data from interviews, focus group discussions, and document reviews. This approach ensured that findings were cross-verified across multiple sources, reflecting participants' true perspectives and experiences. Additionally, member checking was conducted by sharing preliminary findings with selected participants to confirm the accuracy of interpretations, further strengthening the validity of the results.

Reliability refers to the consistency and dependability of the data collection and analysis process. In this study, reliability was ensured by applying consistent data collection procedures, such as using the same interview and focus group guides for all participants. Detailed documentation of field procedures, coding processes, and analytical steps was maintained to allow for transparency and potential replication. Using multiple data sources and systematic content analysis reduced the risk of researcher bias and enhanced the consistency of findings. Together, these strategies ensured that the study produced trustworthy, credible, and meaningful insights into the functioning and impact of FMS in Tunduru LGAs.

Ethical Considerations

The researcher followed these ethical guidelines when conducting this study:

In this study, the fundamental ethical principle was used to ensure that no harm would arise to participants as a result of their participation in this study. The researcher adhered to rules and regulations guiding the initial consideration of issues in the field that a researcher should address when planning and conducting research. First, the clearance letter was sought from the following office: The Executive Director of Tunduru District Council, for adequate data collection.

After receiving a research permit from the Executive Director of Tunduru District Council, the researcher met with respondents to inform them about the purpose of the study. Informed consent enabled respondents to be aware of the purpose of the study and to understand the importance of participating in it (Leedy, 2001). The researcher also explained how the study was going to be conducted and the uses of the information obtained from the respondents. No one was forced to participate in the study, and participants were informed that they were free to participate or withdraw from the study.

DATA ANALYSIS, FINDINGS, AND DISCUSSION

Technical Challenges with FMS

Analysis of the data revealed that technical issues are among the most significant barriers to effective FMS utilization. Three major challenges emerged: system downtime (76.67%), data inaccuracies (66.67%), and user interface issues (53.33%). Respondents consistently emphasized that frequent system downtimes disrupt payment processing, financial reporting, and record updates, causing project delays and increasing operational costs. Data inaccuracies, including duplication and incomplete entries, were linked to poor financial reporting and reduced accountability. Complex and non-intuitive user interfaces further limited system usability, discouraging users and increasing the likelihood of reverting to manual processes.

Content analysis further identified four dominant themes associated with technical challenges: system reliability (76.67%), data integrity (66.67%), user experience (53.33%), and training and support (43.33%). These findings highlight that technical inefficiencies significantly affect the accuracy, timeliness, and credibility of financial information used in managing project funds.

Factors Affecting Usage of FMS

The data indicated several factors influencing the effective use of financial management systems. These include system usability (73.33%), data accuracy and reliability (66.67%), technical support and training (60.00%), and most notably, integration with other systems (86.67%). Respondents explained that the lack of system interoperability leads to data inconsistencies

and inefficient financial operations. In addition, inadequate technical training limits staff competence, reducing the system's effectiveness in managing project funds.

Management support (50%) also emerged as a crucial factor. Limited managerial commitment reduces system enforcement, which affects compliance and staff motivation. These findings align with the Technology Acceptance Model (TAM) and Systems Theory, which emphasize ease of use, system integration, and organizational support as key determinants of successful technology adoption. Addressing these factors through capacity building, system improvements, and strong leadership commitment is critical for enhancing FMS effectiveness.

Procedures for Managing FMS in Project Fund Management

Respondents also identified key procedures integral to the successful operation of FMS in project fund management. The most frequently mentioned were budgeting and forecasting (80%), financial reporting (63.33%), and system maintenance (63.33%). Budgeting and forecasting were recognized as essential for resource allocation and financial planning, ensuring projects are adequately funded and aligned with development priorities. Regular financial reporting was associated with improved transparency and accountability.

Other important procedures included user access management (60%), audit and compliance (50%), and data backup and recovery (46.67%). These procedures are essential for ensuring system security, data integrity, and compliance with financial regulations. Regular system maintenance and audits were particularly emphasized as strategies to ensure reliability and prevent disruptions in financial processes.

Key Themes and Implications

From the overall qualitative analysis, several key themes emerged across technical challenges, usage factors, and operational procedures: System Reliability and Data Integrity: Frequent system downtimes and data inaccuracies undermine financial accountability and delay project implementation. Enhancing system performance and ensuring data accuracy through regular maintenance and audits is essential. User capacity and Experience: Inadequate training, coupled with complex system interfaces, reduces system adoption. Comprehensive capacity-building initiatives can improve usability and reduce reliance on manual processes. System integration and Management Commitment: Poor system integration with other platforms leads to inefficiencies, while weak managerial support

reduces compliance and motivation. A more integrated and supported system environment will enhance performance and standard Operating Procedures. Clear procedures for budgeting, reporting, auditing, and data management strengthen transparency, accountability, and operational consistency within LGAs.

Discussion

The findings demonstrate that while FMS is a critical tool for improving public financial management, technical inefficiencies, weak user capacity, poor system integration, and inadequate management support hinder its optimal use in the Tunduru District Council. These findings are consistent with previous research emphasizing that technological adoption in the public sector is shaped by technical reliability, user competence, and organizational commitment. Strengthening FMS requires a holistic approach that addresses both technological and institutional dimensions.

These results underscore the need for capacity building, infrastructure investment, enhanced system integration, and strengthened leadership support to maximize the potential of FMS in promoting efficient, transparent, and accountable project fund management in Tanzanian LGAs.

SUMMARY OF THE FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the study

This study investigated the impact of Financial Management Systems (FMS) on project fund management in Tunduru's Local Government Authorities (LGAs). Interviews with 30 government officials revealed key issues, including system downtimes, complex user interfaces, unreliable data, lack of training and support, poor system integration, and insufficient management commitment. These challenges were found to align with previous research on system reliability, usability, and the importance of training and support. Key procedures for managing FMS were identified, including budgeting, financial reporting, audits, system maintenance, data backup, and user access management. The study concludes that addressing technical issues, improving system usability, ensuring accurate data, and securing management support are essential for effective project fund management. Further research is recommended to explore new technologies, user experiences, and system comparisons across LGAs.

Summary of the findings

The study revealed several key challenges in managing project funds through Financial Management Systems (FMS) in LGAs. Frequent system downtimes

and failures led to delays in transactions, inaccurate financial data, and increased manual intervention, reducing efficiency and raising the risk of errors. Resistance to adopting FMS was observed, with many users preferring traditional methods due to insufficient training. Poor system integration created data silos and inefficiencies, while inconsistent management practices and a lack of clear, up-to-date procedures further hindered effective use of the systems. The study also identified weaknesses in monitoring and compliance, which contributed to unresolved issues and reduced system effectiveness.

Conclusions

The study's theoretical conclusions emphasize the impact of technical problems on the efficiency and accuracy of project fund management, aligning with Systems Theory, which stresses the importance of system reliability. The findings on barriers to system usage, such as resistance to change, lack of training, and integration issues, support Innovation Diffusion Theory and the Technology-Organization-Environment (TOE) Framework. Additionally, the lack of standardized procedures in managing financial systems underscores the importance of Institutional Theory in ensuring consistency and compliance. From a managerial perspective, addressing technical issues, improving user engagement, enhancing training, and ensuring better integration are crucial for improving financial management system effectiveness in LGAs.

Recommendations

To enhance financial management in LGAs, clear policies for standardizing procedures, including data entry and reporting, should be established and enforced through audits. Investment in reliable, integrated systems and regular system upgrades is essential to reduce technical issues and improve performance. Continuous training and dedicated technical support will ensure user proficiency and minimize errors. Regular maintenance, backup systems, and disaster recovery plans must be implemented to ensure data security and system stability. Additionally, seamless integration with other systems, comprehensive documentation, compliance checks, and performance audits will support efficient system usage and drive continuous improvement.

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