EFFECT OF INTERNAL CONTROL SYSTEMS ON FINANCIAL ACCOUNTABILITY IN PUBLIC TECHNICAL INSTITUTIONS IN EASTERN REGION KENYA

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DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for a degree or any other award in any other University.

Sign ….. Date ………………………………

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BUS-3-0086/1/2022

Recommendations

We confirm that the candidate carried out the work reported in this thesis under our supervision.

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DEDICATION

I dedicate this thesis to my lovely daughters Blessing Gatwiri and Precious Kawira for their words of encouragement and being there for me during this period

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ABSTRACT

The main aim of this research was to scrutinize the effect of internal control systems on financial accountability within the Technical and Vocational Education and Training institutions located in Kenya's Eastern region. The Kenyan government had implemented internal control mechanisms to ascertain the judicious use of funds allocated for education. Nevertheless, a gap in accountability persisted in certain public TVET institutions. The objectives that guided this study included; assessing the influence of institutional governance structure, accounting information systems, legal framework, and monitoring on financial accountability in TVET institutions in the same region. The theoretical framework underpinning this study included agency theory, fraud triangle theory, and accountability theory. The target population was 69 participants, encompassing 23 principals, 23 Board of Governors (BOG) chairs, and 23 finance officers from 23 TVET institutions within the Eastern Region. Census method was adopted and a mixed-method approach using a descriptive design was employed in this research. Questionnaires were used to collect primary data, while scrutinizing audited financial statements to amass secondary data. The data was processed through a blend of descriptive and inferential statistical methods. It was established that legal framework had the strongest influence on performance whereas institutional governance structure had the least influence on financial performance. The conclusion on institutional governance structure was that the various financial decisions made by the BOG were closely influenced by personal interests of the BOG members. On accounting information system, the implementation of AIS had enabled most TVETs to report their financial standings on time due to efficient processing of information when inputted accurately. On legal framework, the management had still not given full authority to legal counsel to fully implement legal measures in bid to curbing identified careless spending and misappropriation of funds. On monitoring, the extent to which the BOG did their oversight role was limited by failure to consistently follow through to monitor budgets implementation process. The study recommends that the BOG appointing body should conduct thorough background checks to facilitate appointment of BOG members who have no conflicting interests with the operations of the TVET. On AIS, the TVET management should provide more funding to strengthen the current accounting information systems from cyber-attack. Further, the BOG members should appoint a team of members whose role will include consistent monitoring and evaluation budgets.

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ABBREVIATIONS AND ACRONYMS

AIS	Accounting Information System
BOM	Board of management
EU	European Union
FPE	Free Primary Education
ILO	International Labour Organization
KATTI	Kenya Association of Technical Training Institutions
MOE	Ministry of Education
NACOSTI	National Commission for Science, Technology and Innovation
PTA	Parent-Teacher Association
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VTCs	Vocational Training Centers

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Adherence to financial guidelines and procurement procedures is mandatory, with non-compliance potentially leading to punitive actions as per the constitution, penal code, and civil service regulations (Ministry of Education [MOE], 2018; Public Procurement Oversight Authority, 2009). In this ever-evolving educational landscape, the Boards of Management (BOMs) and principals of TVET institutions are expected to adhere to financial accountability norms. This means that BOMs and principals are encouraged to transparently justify the use of public funds and take necessary measures to prevent fraudulent activities (Wango & Gatere, 2016).

The Ministry of Education consistently develops strategies to ensure the procurement of goods, services, and works for TVET institutions, is conducted in a transparent and accountable manner. An effective internal control system ensures that financial transactions are accurately recorded, properly authorized, and comprehensively substantiated, providing a true and clear picture of the institution's financial status (Auditor General, 2020). These control systems play a significant role in ensuring the timeliness, completeness, and accuracy of financial records. Moreover, they safeguard assets and ensure their proper recording on asset registers, thereby enhancing overall financial accountability (Dewi et al., 2019).

1.1.2 Financial Accountability

Financial accountability is a crucial component in the functioning of public service organizations and the individuals within them. It holds them responsible for their actions and outcomes, particularly their stewardship of resources. This essence of accountability underpins reliable accounting and financial reporting, aiding in the efficient allocation of resources (Chitema, 2021). Financial accountability was measured using adequate funding for essential services, efficient service delivery, adherence to fiscal procedures, transparency, and data driven decision making. Proper accounting and reporting mechanisms promote a proficient allocation of economic resources by making the use, furthermore, conveyance of these resources is straightforward and effective. This aligns with the core objective of public institutions, which is to disperse few resources effectively to produce goods and services that meet public demand (Choiriah & Sudibyo, 2020). However, the concern about financial accountability in higher learning institutions particularly those that involve technical courses have been faced with variant of issues.

Globally, technical institutions have faced issues such as misappropriation of funds in Australia, unreliable financial structures and limited funding in Sweden (AG, 2021). In China, there are limited experienced trainers and extreme competition from other learning institution such as universities (Mo et al., 2023).

Regionally, educational institutions, including TVET institutions, have faced significant challenges related to internal controls (Chitema, 2021). These include liquidity problems, delayed financial reporting, inadequate accountability for financial assets, and incidents of fraud or misappropriation (Mwanakatwe & Sianjase, 2018).

Locally, the principals, acting as the accounting officers, have been controlling most cash transactions, with the BOMs playing a largely ceremonial role. Other stakeholders, such as parents and donors, have been involved only in fundraising activities, with little oversight on how the funds raised are utilized (Esau, 2018). In some cases, the approval of budgets has primarily been carried out by the principal and the accounts officer, potentially increasing opportunities for collusion and corruption.

The exclusion of department heads in budget oversight has led to lack of transparency and accountability, thereby escalating the risk of financial irregularities (Ngaira, 2021). In light of these challenges and gaps, it was crucial to examine the impact of control systems on financial accountability in TVET institutions. This examination was especially pertinent in the Eastern region of Kenya, where many TVET institutions were located. By identifying and addressing these challenges, these institutions were expected to enhance their financial accountability, ensuring the effective and efficient use of resources. This approach not only aligned with the principles of good governance but also bolstered public trust and confidence in these educational institutions.

Conversely, substandard accounting and reporting can obscure wasteful practices and inefficiencies, preventing the effective allocation of resources. The importance of skills and knowledge in promoting employment, social inclusion, economic development, and international competitiveness is universally acknowledged (Chokaa, 2023). Education, particularly skills training, is important in enhancing employability, productivity, and the inclusive growth of an economy (Otache & Inekwe, 2023). As such, many countries have embarked on transforming their skills development policies and systems, with a key focus on TVET (Chepkoech et al., 2021).

UNESCO defines TVET as "a model of education at the middle level that prepares students for success in the workplace of the twenty-first century" (United Nations Educational Scientific and Cultural Organization [UNESCO], 2020). TVET's principal goal is giving the economy a skilled and serious labor force via suitable training, as outlined by the ILO (Klassen, 2024). To achieve this goal, it is necessary to provide training opportunities to people from all walks of life without bias or prejudice. TVET has increasingly gained attention globally as a significant driver of economic development.

Numerous regional blocs, governments, and associations have integrated TVET into their strategic agendas. OECD, G20, and multidimensional institutions like UNESCO and ILO have all highlighted the relevance of TVET in promoting growth in the economy. Through their combined efforts, they have brought attention to the significance of TVET in developing skilled workers and fostering equitable economic expansion across the world. Both the government and the Ministry of Education place considerable emphasis on prudent financial management.

An effective internal control system was considered as a key aspect in enabling the institutions overcome these challenges. By implementing rigorous financial controls, transparency in transactions, encouragement of stakeholder involvement and oversight from a broader range of stakeholders, TVET institutions significantly would improve their financial accountability (Okoza & Babafemi, 2019). Moreover, ongoing assessments and audits helped in identifying potential areas of concern and provided actionable insights to further improve these control systems. Therefore, a comprehensive examination of these control systems and their impact on financial accountability was consulted for sustainable growth and development of TVET institutions in Kenya.

1.1.3 Global Perspective of TVET Institutions

Many countries have recognized and given TVET a high priority in their educational systems, according to a 2020 report by UNESCO, this group of countries also includes, among others, Belgium, Poland, Mexico, Bulgaria, Portugal, Thailand, Mauritius, Canada, and Ukraine. These countries have specific policies in place to enhance the growth of TVET and its acceptance within their societies. Canada is significantly advancing in the TVET field. Universities in Canada offer advanced degree programs focused on technical education. This commitment to TVET has led to the development of innovative instructional methods intended to make TVET courses more appealing (UNESCO, 2020). While TVET courses were traditionally dominated by men, there has been an observable expansion in female enrolment in these projects throughout recent years, suggesting a shifting perception and acceptance of women in technical fields (Khan et al., 2021).

Similarly, Australia has made significant strides in its TVET sector. The Australian constitution details the framework for TVET education, following extensive consultations with stakeholders involved in training across the country. This inclusive approach ensures that the country's TVET framework is responsive to the needs of the industry, thereby enhancing its relevance and effectiveness (Australian Government, 2021). In Europe, member countries have unified their approach to TVET, developing a common qualification framework that underpins the education system. This unified approach enhances consistency and standards, making TVET education across the continent more comparable and transferable.

Japan, on the other hand, has taken a more industry-driven approach to promote TVET. The Japanese government offers profession advancement awards to managers to enhance TVET education within their organizations (UNESCO, 2020). This symbiotic relationship between industry and education has resulted in the growth of both TVET education and the country's industrial sector. The successful integration of TVET into the education and industrial sectors has, in turn, propelled Japan's innovative and financial growth, situating it as one of the world's most exceptional economies.

The approaches adopted by these countries underscore the importance of TVET in driving industrial and economic growth. The advancement of TVET requires a concerted effort from all stakeholders, including government, education providers, industry, and the wider society. The integration of TVET into mainstream education systems will not only drive economic growth but also enhance social inclusion by providing people with the skills needed to participate fully in the economy and society.

1.1.4 Regional Perspective of TVET

TVET is widely acknowledged in the African setting as a key driver of economic growth. In its Second Decade of Education, the African Union emphasizes the value of TVET as a means of boosting economic growth and productivity throughout the continent (African Union, 2023). The investment in TVET is justified by its capacity to provide the technological expertise, knowledge, and advanced skills necessary to facilitate the transition towards knowledge-based societies. The ability to adapt to modern times and anticipate future changes is instrumental for any society aiming to foster economic growth and development (Rambau & Henning, 2020).

Furthermore, a nation's technological prowess, knowledge base, and the quality of skills at its disposal significantly influence its attractiveness in the global economy. Countries with well-developed TVET systems can attract more foreign direct investment (FDI), prompting expanded financial performance, work creation, and in general improvement in the way of life for their residents. In the long run, a strong and stable economy can contribute to global stability and peace, reaffirming the role of TVET in national and global development (Chitema, 2021).

Uganda has provided a case in point for the role of TVET in job creation and reducing unemployment. According to the Ugandan' Ministry of Labour and Social Development, the job market is incredibly competitive, with only 8000 job opportunities available annually for the 390,000 students who complete tertiary education each year (Mutebi et al., 2024). This severe imbalance between the number of job seekers and available opportunities points to the urgent need for the Ugandan government to shift focus towards vocational training.

TVET programs, due to their practical nature and focus on specific skill sets, often lead to self-employment and entrepreneurship. Therefore, promoting vocational training has been a strategic solution to address Uganda's unemployment challenge. Instead of a singular focus on university education, which leads to underemployment or joblessness due to a lack of practical skills, the country leverages vocational training to equip its youth with the skills needed for self-employment and job creation (Mutebi et al., 2024).

Expanding this model across Africa had yield substantial benefits. By promoting TVET, African countries have been equipping their population with the skills necessary for the jobs of the future, driving economic growth and reducing unemployment. The strategic importance of TVET in Africa's economic development has been taken into considerations with appropriate investments and policy interventions made to leverage its full potential. Therefore, the significance of TVET extends beyond economic development to social inclusion, peace, and stability. As such, all stakeholders in the education and economic sectors, including government, industry, civil society, and international partners, are encouraged to collaborate with each other. This is seen as a way of enhancing the quality, relevance, and accessibility of TVET across the continent.

1.1.5 Kenya Perspective of TVET Institution

In Kenya, TVET encompasses any learning process that leads to the acquisition of practical skills and knowledge, which are essential for engaging in productive economic activities. This includes both formal and informal education and training. TVET is viewed as a critical component of national economic development strategies and a significant contributor to enhancing global competitiveness (Hockett, 2021). The thrust behind prioritizing TVET, both in developed and developing economies, stems from the presence of a large human capital base that lacks the requisite technical skills and knowledge.

Thus, the strategic focus on TVET by various governments represents a crucial shift in driving national development and educational priorities (Chitema, 2021). TVET has been instrumental in equipping learners with the skills needed in industries like the vehicle administration and service industry. Be that as it may; while preparing and improvement programs inside TVET have distinct preparation goals, they have faced a plethora of challenges that must be addressed for the successful achievement of these goals (Ngaira, 2021).

The role of Kenya’s development of skills, especially through TVET, is pivotal for monetary growth, scarcity alleviation, and communal inclusivity. However, notwithstanding the significant purpose of TVET in resolving labor market challenges, key policy documents often lack a clear strategy for leveraging TVET to achieve these outcomes (Paudel, 2019). TVET, therefore, has been faced with the onerous task of responding to a myriad of challenges. These challenges include a rapidly increasing population; escalating youth unemployment; prohibitive education costs in the face of constrained resources; high rates of rural-urban migration; growing communal and monetary uncertainty; decrease in employment opportunities due to monetary liberalization and the advent of novel innovations; and a heightened demand for accountability from the populace (Sifuna, 2020).

Meeting these challenges necessitates concerted efforts to enhance the effectiveness and relevance of TVET programs. This includes enhancing partnerships with industry to ensure the relevance of training, strengthening institutional capacity, improving the quality of TVET teaching, enhancing access and equity in TVET provision, and creating a supportive policy and regulatory environment. Additionally, addressing systemic issues like adequate funding, curriculum relevance, quality assurance, and the image of TVET has been established to strengthen its role in national development.

Therefore, a well-structured, responsive, and adequately funded TVET system is critical for Kenya's pursuit of national economic growth; global competitiveness; the successful implementation of Vision 2030; and the Big Four Agenda. Policymakers are encouraged to pay attention to the challenges facing TVET and design interventions to address them. The relevance of all stakeholders, including government, the private sector, TVET institutions, civil society, and development partners, is encouraged to work together in enhancement and the contribution of TVET to Kenya's development.

1.1.6 Public TVET institutions in Eastern Region Kenya

The TVET infrastructure in Kenya exhibits a geographical spread, compartmentalized into six distinct regions: Western, Nyanza, North Rift, Mt. Kenya, Nairobi, and Coast. These demarcations are referenced in the 2022 report by the Kenya Association of Technical Training Institutions (KATTI). Notably, the focal point of this research was the Mount Kenya region, which encompasses the Eastern region. It hosts a total of eight TVET institutions, falling under the broader umbrella of twenty-three institutions in the Mt Kenya region.

These establishments represented various categories within the TVET system in Kenya and were instrumental in imparting diverse levels of technical and vocational training. At the foundational level, there are Vocational Training Centers (VTCs) were established. These facilities offer artisan certificate programs designed to equip individuals with skills in various trades. The training provided at VTCs is often hands-on and directly relevant to the job market, bridging the gap between education and employment for many Kenyans.

Moving up the education chain are the Technical Training Institutes [TTIs]. These institutions offer more advanced education, providing craft certificates and technician diplomas. They cater to students who want to dive deeper into specific technical disciplines, offering a blend of theoretical knowledge and practical skills. The programs offered here are more comprehensive compared to the VTCs, preparing students for more specialized roles in the workforce. At the apex of this system are the National Polytechnics and Technical Universities. National Polytechnics primarily offer technician diploma programs, although some also offer degree programs in collaboration with universities.

These institutions are at the forefront of technical and vocational education, providing high-level training in various technical disciplines. Technical Universities, on the other hand, were established under the Universities Act, 2012 (National Council for Law Reporting, [NCLR], 2012). These institutions represent the pinnacle of technical and vocational education in Kenya, offering undergraduate and postgraduate degrees in technical fields.

They are characterized by a strong emphasis on research and innovation, contributing significantly to Kenya's technological development. The distribution and categorization of TVET institutions across the Mount Kenya region and specifically the Eastern region, demonstrate the concerted efforts by the Kenyan government and various stakeholders in education to provide access to technical and vocational education for all Kenyans. This research aimed to delve deeper into these institutions, particularly their internal control systems and financial accountability, to add to their continuous turn of events and improvement.

1.1.7 Internal Control in TVET Institutions

Internal control is a process designed and maintained by governance and management bodies, that is crucial for giving sensible affirmation about the acknowledgment of an institutional goals concerning dependable monetary revealing, functional viability and effectiveness, and consistence with material regulations (International Federation of Accountants [IFAC], 2017). The internal control system, which includes the control environment and control activities, comprises policies and procedures established by an entity's directors and management. The aim is to facilitate the smooth and efficient operation of business, ensure policy adherence, protect assets, prevent fraud, ensure the accuracy of bookkeeping records, and advance the ideal creation of dependable monetary organization (Msibi, 2021).

An effective internal control system is critical for promoting transparency and reliability in financial management, and for maintaining accurate fiscal records within an organization (Shin et al., 2021). According to (Sharma, 2022), internal control helps mitigate an integrity gap which arises from unintentional mistakes, absence of bookkeeping information, accidental inclination, purposeful distortion, or deviation from acknowledged bookkeeping standards. For any institution, financial accountability is a key determinant of success. In this vein, governments and other institutions, both public and private, have established internal control procedures to manage the utility of money.

In the context of TVET institutions, internal control systems include aspects such as the control environment, control activities, risk assessment, and information and communication (Technical and Vocational Education Training Authority [TVETA], 2023).

Internal control systems in every organization, particularly in the public sector, are strategic tools that ensure financial administration accountability, especially in the context of a country's limited resources (Chepkoech et al., 2021). The control environment, often regarded as an organization's "tone at the top", influences the perceptions and actions of its employees. It concerns creating a conducive atmosphere for efficient activity execution and effective control task performance (Maina & Muathe, 2022). Control activities are activities executed through strategies and methodologies that assist with satisfying administration mandates to moderate dangers to genuine accomplishment (Nakisuyi, 2019).

Risk assessment is a dynamic process that ascertains and evaluates potential hazards to goal achievement (Maina & Muathe, 2022). Additionally, communication is the iterative process through which vital information is disseminated across the entity, enabling employees to receive clear messages about the importance of control tasks (Chepkoech et al., 2021). Fraud is a significant challenge faced by organizations globally. A study in Malaysia revealed that 23% of 100 key organizations, both public and private, were helpless against misrepresentation, with 70% of the announced cases committed by staff.

The main cause of these fraudulent cases was linked to weak internal controls, and it was found that organizations with tight internal controls experienced less fraud (Akinleye & Kolawole, 2020). Internal control practices vary globally and in America, learning institutional bank books should be accommodated month to month and financial records must not exceed spending limits. Regular independent audits are required, and money transfers between bank accounts must be approved by the principal, with a written record provided to the school council each month (Rae et al., 2017). In Botswana, guidelines stipulate that individual checks should not be cashed in any institution of higher learning, and all checks acknowledged by post should be recorded in a compensation book (Samboma, 2017).

Within the framework of Kenya's Ministry of Education (MOE), the mission statement is established to offer, promote, and coordinate education, training, and research for long-term sustainable development. Beginning in 2003, the government began implementing a number of changes intended to improve the educational system, one of which was the provision of primary education that would be free. In 2008, the Ministry of Education (MOE) raised the amount of assistance it provides to public secondary schools by offering a subsidy to help schools with their operational and development costs. More recently, in April 2023, the government announced a funding formula for universities and TVET institutions (MOE, 2018; Muchunguh, 2023). However, to achieve value from these funding initiatives, institutions are encouraged to implement robust internal controls to enhance accountability for funds and other resources at their disposal.

1.2 Statement of the Problem

In recent years, the Kenyan government and other stakeholders have shown significant commitment towards the financing of the TVET program. Approximately 30% of the annual government budget is dedicated to the education sector, emphasizing its importance (MoE, 2018). In 2021, the government demonstrated its resolve by injecting over Kshs 30 billion into the modernization and expansion of TVET institutions across the nation (Ngure, 2022). Nevertheless, financial accountability remained a challenge in a number of public TVET institutions. Instances of misappropriation and fraudulent practices were not uncommon, raising concerns over the usefulness of the financial management and control systems in place (Ngaira, 2021). According to Ngaira (2022), instances of questionable ethics and conflicts of interest among auditors and board members were reported, further undermining financial transparency and accountability.

Ethics and Anti-Corruption Commission (EACC, 2020) suggested that approximately 30% of reserves allocated for the modernization and improvement of TVET institutions could not be satisfactorily accounted for by the respective accounting officers. It was noted that the absence of an internal audit function in some of these institutions significantly contributed to these corrupt and unethical practices. Findings from the Auditor General's (2020) review of financial statements from the Ministry of Education indicated potential significant losses of capitation funds intended for TVET institutions. The 2020/2021 financial assessments revealed a range of fraudulent practices, including inflated enrollment numbers, irregular fund allocations, questionable procurement processes, and unexplained expenditures (Auditor General, 2020). These practices persisted despite the presence of government-initiated internal control systems.

The Boards of Management (BOMs) play a crucial role in institutional governance, risk assessment, and monitoring to implement these control systems. However, these instances of financial misappropriation presented a significant impediment to the achievement of the primary objectives of national polytechnics, technical training institutes, and vocational colleges - providing the human resource needs of the industry. The misuse of funds that could otherwise be invested in developmental projects for these institutions further compounded this problem.

It was, therefore, of great significance to delve deeper into the background reasons for enduring absence financial accountability in Kenya's TVET institutions. By analyzing these issues and formulating effective, long-term solutions, it would be possible to curb these instances of misappropriation. The effective utilization of funds dedicated to the TVET sector was not only a matter of fiscal responsibility but also a critical factor in achieving the broader educational and development goals of the country.

Enhanced financial accountability and effective internal control systems are key to safeguarding the significant investments made into these institutions, thus ensuring their ability to fulfill their mandate. It involves ensuring the transparency of financial transactions, developing robust oversight and monitoring mechanisms, and establishing stringent consequences for fraudulent practices. As such, the examination and assessment of these issues formed the basis of this study, with the ultimate aim of providing actionable recommendations to enhance financial accountability and efficiency in the management of TVET institutions in Kenya.

1.3 General Objective of the Study

This study examined the effect of internal control systems on financial accountability in public technical institutions in the Eastern region Kenya.

1.4 Specific Objectives of the Study

The study was guided by the following specific objectives;

i. To assess the effect of institutional governance structure on financial accountability in TVET institutions in Eastern region Kenya.
ii. To determine the effect of accounting information system on financial accountability in TVET institutions Eastern region Kenya.
iii. To investigate the effect of legal framework on financial accountability in TVET institutions in Eastern region Kenya.
iv. To establish the effect of monitoring on financial accountability in TVET institutions in Eastern region Kenya.

1.5 Research Hypothesis

$H_0 1$: There was no significant effect of institutional governance structure on financial accountability in TVET institutions in Eastern region Kenya.

$H_0 2$: There was no significant effect of accounting information system on financial accountability in TVET institutions in Eastern region Kenya.

$H_0 3$: There was no significant effect of legal framework on financial accountability in TVET institutions in Eastern region Kenya.

$H_0 4$: There was no significant effect of monitoring on financial accountability in TVET institutions in Eastern region Kenya.

1.6 Significance of the Study

The outcomes would provide critical recommendations to the government and other decision-makers in developing policies and guidelines that strengthen internal control measures, thus facilitating effective financial management in TVET institutions and other government agencies. By guaranteeing that public assets are utilized as planned, instances of fraud and misappropriation would be significantly reduced.

This, in turn, could improve the efficiency of public service delivery to Kenyan citizens. Moreover, this study would enrich the existing body of literature on financial accountability within public TVET institutions. By offering fresh insights into the matter, it would guide administrators and principals of such institutions in their quest to refine financial management practices. In particular, it could also shed light on strategies to enhance integrity at the top levels of management, fortify control activities and the control environment, thereby promoting efficient and effective financial management (Aldegis, 2018).

The study could also be of benefit to various partners like donors, NGOs, guardians, and other financial contributors to public TVET institutions in Kenya. By highlighting the state of financial accountability in these institutions, it could inform these stakeholders on how their financial investments are managed and accounted for, assuring them of their judicious use. Lastly, this study could serve as a valuable resource for researchers studying the state of internal controls in public TVET institutions. It would prove particularly useful to students pursuing studies in accountancy and investment, who are investigating the purpose of internal controls in preventing fraud. Not only can they leverage this study to build their research literature, but they could also identify research gaps unaddressed in this study that warrant further investigation. As such, this study was key in advancing knowledge in the realm of financial accountability and internal control systems in educational institutions.

1.7 Scope of the Study

This research analyzed the effect of internal control systems on the financial accountability of public TVET institutions, focusing specifically on those in the Eastern region of Kenya. The study drew information from the principals, financial officers, and chairs of the Boards of Management (BOM) from the respective TVET institutions. These stakeholders were expected to provide more relevant information on internal control systems, given their positions in the organizational hierarchy. The research concentrated on four principal variables: the institutional governance structure, the incorporation of accounting information systems, the legal framework, and monitoring mechanisms (McAlister & McKee, 2017). These factors were investigated to understand their effect on the financial accountability of public TVET institutions in the Eastern region of Kenya. The study also reviewed and analyzed the audited financial records of the chosen institutions for a financial period of 4 years beginning from 2020-2023. The various aspects considered included gross profit, expenses, net profit, debtors, and creditors of the institution

1.8 Limitations of the Study

This study faced some limitations, among them, a potential reluctance by certain principals, BOG chairs, and finance officers to disclose sensitive information about their institutions. Another limitation was the location of some institutions in relativity to remote areas, hence potentially hindering accessibility. This geographical factor prolonged the data collection process and inadvertently increased the related costs. Furthermore, the lack of readily accessible institutional financial statements in soft copy format on government websites possessed a challenge. As a result, the study largely relied on information provided by the respondents and the limited number of accessible financial statements.

1.9 Delimitations of the Study

To address the first limitation, the study reassured the participants about the confidentiality of their shared information and its academic use only. Additionally, various authorization was sought after such as NACOSTI, introduction letter from KeMU and ethical clearance. In addressing the second limitation, the study ensured that the data collection methods were flexible, accommodated the preferences and availability of participants, facilitating their participation in the study. In addressing the third limitation, leveraging on existing relationships and networks within the TVETs in Eastern region of Kenya, facilitated access to TVET institutions and enhance cooperation from stakeholders.

1.10 Assumptions of the Study

The review expected that the respondents would give an accurate account to the questionnaires and where necessary, financial statements were provided for authentication. Additionally, the study also assumed that the TVET institutions' accounting system was guided by the Financial Accounting Standard Board [FASB] hence previous financial information would be readily provided since they are compelled by the law to do so.

1.11 Definition of Operational Terms

Financial Accountability

The practice of holding entities and people engaged in public service accountable for their choices and results (Dzomira, 2020).

Internal Control Systems

The processes that have been created by the MOE to examine, document, and oversee the administration of finances in public secondary schools, with the intention of providing reasonable assurance of the accomplishment of goals (Lassou et al., 2021).

Institutional Governance Structure

Refers to the framework of rules, policies, and processes that guide the decision-making and operational activities of an institution. It establishes the roles, responsibilities, and relationships among various stakeholders within the organization, ensuring accountability, transparency, and effective management (Australian Government, 2021).

Legal Framework

This is a structure of laws, regulations, policies, and procedures that oversee a specific purview or area of action. It ensures foundation for organizing, regulating, and resolving legal matters within a society or a specific sector (Hazelkorn & Gibson, 2019).

Monitoring

Implementing and monitoring policies to ensure compliance with Ministry of Education regulations (Otache & Inekwe, 2023).

TVET Institutions

These are educational institutions that provide practical skills and technical knowledge to prepare individuals for specific occupations or trades (Paudel, 2019).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter examines the relevant literature pertaining to the study. This exploration comprises the theoretical framework, an empirical review of literature, a summary of research gaps, a conceptual framework, as well as an operational framework.

2.2 Theoretical Review

The concept of a theory denotes a structured set of ideas that coalesce to explain and predict a particular situation. Theories offer explanations for why and how events transpire in the manner they do, and they forecast outcomes under the assumption that conditions remain constant (Mueller & Urbach, 2017). The theoretical foundation for this study was constructed upon the agency theory, fraud triangle theory, and accountability theory.

2.2.1 Agency Theory

The agency theory was developed by Jensen and Meckling (1976) and guided institutional governance structure. It explored the ideal formation of relationships where one party, the principal, determined the task to be accomplished, and another party, the agent, executed the task. The theory contended that a company's primary objective was to maximize the resources of shareholders (Jensen & Meckling, 1976). Agency theory was observed on two perspectives. One situation involved complete information, where the agent's actions and motives were transparent, leading to a behavior-based contract for services. The other situation arose when information asymmetry existed; the principal did not possess perfect knowledge about the agent's effort level and conduct. For this situation, a static pay served in as a motivator for the agent to keep away from tasks, as their compensation continued as before regardless of exertion or work quality (Eisenhardt, 1989).

In the framework of this theory, an organization consisted of owners (principals) and managers (agents). The agents, with execution authority, did not always align with the principals' interests and acted in self-interest at the expense of the owners. This problem was further exacerbated by the separation of ownership and control, often leading to agents acting selfishly to the detriment of principals' wealth (Ivanhoe, 2018). The theory assumed both principals and agents were driven by self-interest (Schultze, 2010). Agency theory suggested various control mechanisms to safeguard shareholders' returns and align principal-agent interests. These mechanisms included financial incentive schemes linked to company performance and designing an appropriate organizational authority structure, like expanding the quantity of outside board individuals to perform reviews and evaluations (Young et al., 2003).

To check the issue of personal circumstance, investors set up measures, for example, interior controls to protect the organization's resources and guarantee bookkeeping exactness. These controls also ensured that managers acted in shareholders' interests. Internal and external audits aligned managers' interests with those of stakeholders, acting as remedial mechanisms for any discrepancies before they adversely impacted the company's financial performance (Muhunyo & Jagongo, 2018). Organization misfortune was the deviation between the best possible result for the standard and the aftereffect of the exercises taken by the agent, and it was used to assess whether or not the agent was operating in the best interest of the principal. When an agent's activities were in line with the principal's interests, there was no commission loss for the principle. The disparity between the two caused an increase in the loss of agency. When both parties wanted the same goals, and the principal was properly informed on how those results came about as a result of the agent's activities and agency costs kept to a minimum (Choiriah & Sudibyo, 2020).

Not only did agency theory assisted elucidate the presence of internal controls and internal audits in businesses, but it also elucidated key elements of an internal audit department. For example, agency theory helped explain why firms had internal controls and internal audits. Agency theory was experimentally tested to determine whether or not variances in internal auditing methods reflected different contractual relations that were the result of differences in organizational structure (Kamaruddin & Ramli, 2018).

Since the board of governors and trustees of public TVET institutions in Eastern Kenya functioned as agents connected by the public authority and different partners, it was appropriate to apply this approach to the administration of the institutions' financial affairs. It was imperative that the principals, BOG, and trustees behaved in the best interest of all parties involved and were held responsible for any money that had been distributed. Aware of potential conflicting interests, the government had implemented internal control systems to ensure effective financial management in public TVET institutions. These systems ensured financial accountability and protect stakeholders' interests.

2.2.2 Fraud Triangle Theory

The fraud triangle theory was developed by Cressey (1953) and guided legal framework. It provided a framework for understanding fraudulent behavior, suggesting that three elements must converge for such activities to occur: pressure, opportunity, and rationalization. Although its foundational premise lied in Cressey's work, its modern interpretation and applicability had been enhanced by many researchers and scholars.

Pressure, one of the key aspects of this theory, referred to the force that instigated unethical actions, often originating from financial or non-financial strains (Shin et al., 2021). This perceived stress, whether based in reality or not, prompted fraud if the individual felt cornered by their circumstances. According to Wolfe and Hermanson (2022), pressures ranged from personal monetary issues, occupational stress, or external demands, underlining the diversity of possible motivations (Shaturaev, 2021). Opportunity, the second facet of the fraud triangle, referred to a situation or set of circumstances that allowed an individual to commit fraudulent acts without immediate risk of detection (Daniel et al., 2023). These opportunities often arose from weaknesses in an organization's internal control mechanisms or lack of adequate checks and balances, creating a favorable environment for unethical behavior (Shin et al., 2021).

The third element, rationalization, related to the psychological mechanisms that individuals employed to justify fraudulent behavior. This component of the triangle typically involved individuals developing morally acceptable reasons for their actions, making it easier for them to carry out their fraudulent activities without experiencing significant moral conflict (Fuerst & Luetge, 2023). It was important to note that the recognition and identification of rationalization was challenging, as it involved understanding the mindset and moral frameworks of the individuals involved. However, a strong ethical culture within the organization dissuaded employees from rationalizing unethical behavior (Wango & Gatere, 2016).

Effective internal controls within an organization significantly reduced the opportunity for fraud to occur. It was important to create control mechanisms that were both efficient and effective to offer maximum benefits to the organization (Dzomira, 2020). For instance, organizations with robust internal control systems were likely to have fewer opportunities for fraudulent behavior due to the reduced chances of undetected fraudulent activities. Moreover, it was observed that if individuals felt an intense need or pressure, they were more inclined to rationalize fraudulent behavior. For example, employees resorted to fraudulent practices to meet corporate financial goals, to preserve their jobs, or to keep the company afloat (Fotaki et al., 2020). Hence, cultivating an ethical work environment where employees realized that unethical behavior was not tolerated, made fraudulent conduct harder to rationalize.

Regarding the notion of opportunity, it was emphasized that preventing fraud through robust internal controls was essential since individuals who had found a way to rationalize their actions and feel pressured were likely to commit fraud if an opportunity presented itself (Gofwan, 2022). Notably, instances of fraud often occurred in environments where internal controls were weak or absent or where there was insufficient managerial oversight (Maina & Muathe, 2022).

Fraud triangle theory was crucial in comprehending why some individuals in positions of trust, such as principals and financial officers in public TVET institutions, engaged in fraudulent activities. Factors like personal gain, perceived pressures, opportunities created by weak internal controls, and the ability to rationalize their actions potentially instigated such behavior (Thao, 2018). However, tightening internal control systems to limit opportunities for fraudulent activities significantly reduced fraud and thus expanded responsibility.

2.2.3 Accountability Theory

Accountability theory was developed by Lerner and Tetlock (1999) and guided AIS and monitoring variables. This theory served as a powerful lens to examine decision-making processes and their subsequent outcomes. The theory argued that the external need to justify one's actions to a third party engendered a sense of responsibility, provoking individuals to critically and methodically reflect on their decisions. In this way, the anticipation of accountability led to more thoughtful and deliberate behavior (Lerner & Tetlock, 1999). The theory further elaborated on the dichotomous nature of accountability, portraying it both as a virtue and as a mechanism.

Viewed as a virtue, accountability referred to an individual's readiness to take responsibility for their actions, making it a desirable characteristic in various entities, including public officers, government agencies, and companies (Fuerst & Luetge, 2023). As a mechanism, accountability signified a process where individuals felt obliged to explain their actions to an outsider that had the position to assess those activities and possibly force punishments (Hussein & Ali, 2020). Lerner and Tetlock suggested that certain factors heightened the perception of accountability.

These included the anticipation of assessment, the identification of the individual, and the presence of another person. This was further explored in more recent study, which contended that the four main tenets of this theory that included recognizability, assumption for evaluation, consciousness of checking, and social presence, were impacted by the architecture of information technology systems. These technological advancements fostered an enhanced sense of accountability among employees regarding organizational system security, without the need for intrusive interventions or comprehensive training (Fuerst & Luetge, 2023).

The concept of identifiability referred to an individual's awareness that their contributions would be traced back to them, revealing their identity. The assumption for evaluation denoted the conviction that one's performance was scrutinized according to established standards, with potential consequences for not meeting those standards. Awareness of monitoring pertained to an individual's consciousness that their actions within a system were being observed. Lastly, social presence referred to an individual's awareness of the existence of others within the same system (Hussein & Ali, 2020).

The relevance of accountability theory to the present study lied in its potential to elucidate ways in which accountability was augmented through the implementation of effective internal controls. The perception of being held accountable encouraged individuals, such as principals and members of Boards of Management (BOMs), to think more deeply and systematically about their actions (Ejoh & Ejom, 2014). The assumption for assessment, attention to observing, and social presence which were encouraged through powerful inner controls made directors and BOM individuals’ conscious of the way that their financial statements were audited by government entities. This, in turn, promoted greater transparency, reduced fraudulent activities, and led to more responsible behavior (Hunziker, 2017).

Overall, the application of accountability theory fostered a more responsible and transparent organizational environment. The knowledge that one's actions were evaluated and potentially scrutinized encouraged individuals to be more mindful of their decisions and actions. In the context of enhancing accountability within organizations, this theory underscored the importance of implementing robust internal controls, cultivating an environment of transparency, and fostering a culture where accountability was both expected and valued (Karsono & Suraji, 2020).

2.3 Empirical Literature Review

The empirical evidence regarding the impact of internal control systems on financial accountability provided significant insights into the mechanisms that governed financial operations within organizations. Conducting a review of the literature on this subject not only provided a comprehensive understanding of the research landscape, but also allowed one to identify gaps in knowledge, thus shaping the direction of future research (Aveyard, 2023). Organizations adopted internal control systems to guarantee accurate financial and accounting data, achieve their strategic and operational objectives, and stay in accordance with all applicable rules and regulations. They were essential to the prevention of fraud and protection of company assets (Jensen & Meckling, 1976).

Internal control systems had a major effect on the transparency of financial reporting. Compliance with rules and regulations, as well as the accuracy of financial reports, were all bolstered by effective internal control systems. It provided checks and balances that prevented or reduced the likelihood of errors and irregularities (Al-Waeli et al., 2020). Strong internal control systems led to improved financial accountability by encouraging transparency and deterring fraudulent activities. For instance, routine financial audits were a crucial aspect of internal controls, ensuring that financial records were accurate and compliant with regulations. This significantly improved financial accountability, as it deterred fraudulent activities and identified areas where controls were insufficient (Chokaa et al., 2023).

Internal control systems were essential for fostering financial responsibility, and its constituent parts, such as control activities, risk assessment, and information and communication, all played important roles. Control activities significantly reduced the risk of error or fraud (Fotaki et al., 2020). Meanwhile, risk assessment helped to identify and analyze risks that prevented the achievement of objectives. Adequate information and communication helped in capturing and transmitting necessary information for the smooth operation of control responsibilities (Chokaa et al., 2023). The literature assessment concluded that effective internal control systems were crucial to promoting corporate financial responsibility. It was evident from the studies that the implementation of effective internal control systems was key in maintaining the integrity of financial reporting, meeting operational or strategic objectives, and adhering to laws and regulations. Furthermore, they played a pivotal role in preventing fraudulent activities, thereby ensuring financial accountability.

2.3.1 Institutional Governance Structure and Financial Accountability

Institutional governance emerged as a focal point of discussion in the realm of public sector operations, owing to its potential to influence organizational behavior through its interface with citizens and institutions. It was understood that the ethical climate within an institution, which hinged on the top management's ability to meet organizational objectives, made sound judgments, and adopted effective managerial styles, acted as a cornerstone for other internal control components (Fuerst & Luetge, 2023).

With an array of factors contributing to the governance structure, such as adherence to ethical standards, management philosophies, and an inherent sense of business integrity, it was crucial to note the organization's moral values, its organizational structure, and the delegation of power. Additionally, how the organization retained competent individuals and the emphasis on performance measures also played a significant role (Fotaki et al., 2020). Various studies were conducted across different regions to understand how internal control practices impacted on accountability of finances. For instance, research conducted in Malaysia on Islamic non-profit organizations demonstrated a tangible connection between internal control practices and accountability of finances, emphasizing the role of internal control in financial processes, transparency, and the organization's ability to garner trust from stakeholders (Kamaruddin & Ramli, 2018).

Internal control systems, comprising internal governance structures and impacted on the financial performance of private universities in Uganda, according to research done there. The study suggested greater emphasis on competence profiling in internal audits and managing information systems for improved access and authorized use of information (Nakisuyi, 2019). Similar findings were replicated in a Kenyan study which reported a significant influence of governance structures, risk appraisal, control exercises, and data correspondence on the monetary execution of public higher learning foundations in Nairobi City (Muhunyo & Jagongo, 2018). In conclusion, empirical evidence from around the globe signified the pivotal role institutional governance, internal control practices, and ethical considerations played in achieving financial accountability. Their importance extended to enhancing the financial performance of organizations across sectors, thereby underlining the need for robust and comprehensive internal control systems.

2.3.2 Adoption of Accounting Information System and Financial Accountability

The essence of information systems in any organization could not be understated. These systems generated operational, financial, and compliance-related reports that acted as the lifeblood of organizational control. An integral part of this information system framework was the accounting information system, which upheld the reliability and validity of the accounting process. To optimize these systems, management needed to establish effective communication channels and gathered evidence from external stakeholders who could considerably affect organizational objectives. Successful management of information technology was critical to the accurate, ongoing recording and communication of information. It was also important that all members of the organization were acquainted with the system's details (Thao, 2018).

Gofwan's (2022) study used an exploratory research approach to try to figure out how exactly accounting information systems affect a company's bottom line. The study concluded that one of the most significant impacts of Information Technology on accounting is companies' ability to design and use computerized systems. These systems facilitate the executive's independent direction, inner controls, and improve the nature of monetary reports (Gofwan, 2022). Moreover, the effect of the bookkeeping data framework on the financial performance of Iraqi industrial enterprises was investigated by Al-Waeli

(2020) who used internal control as a moderating variable. The relevance of timeliness, accuracy, and verifiability in accounting systems was confirmed by the study's findings, which showed that these factors significantly affected financial performance (Al-Waeli, 2020).

Aldegis (2018) analyzed the impact of the nature of bookkeeping data systems and the interaction between the system's quality and organizational culture on users' perceived benefits. The findings indicated a positive correlation between the quality of the accounting information system and its perceived benefits, emphasizing the critical role of human resources orientation and cooperation in maximizing the benefits of accounting systems. Research in Sudan by Kabeyi and Olanrewaju (2022) investigated both customary and present-day bookkeeping frameworks and control strategies in the electricity sector. They concluded that accurate and timely accounting information benefits users immensely. The study found that the reliability of accounting information directly influences decision-making, thus highlighting the importance of a robust accounting system and stringent control mechanisms (Kabeyi & Olanrewaju, 2022).

In Indonesia, (Wisna, 2015) concentrated on the effect of hierarchical culture on the nature of bookkeeping data frameworks. The review demonstrated that authoritative culture altogether influences the nature of bookkeeping data frameworks, accentuating the job of culture in upgrading framework quality. Shaturaev (2021) expected to research factors impacting the outcome of the bookkeeping data framework and the nature of bookkeeping data in the Service of Advanced education's staff in focal Indonesia. The review reasoned that hierarchical consistence and culture fundamentally influence the progress of bookkeeping data frameworks, which thus upgrades the nature of bookkeeping data.

Strikingly, the effect of bookkeeping data frameworks on business execution was the subject of exploration led by (Choiriah & Sudibyo, 2020). Moreover, the job of hierarchical culture as a mediator between AIS achievement models and institutional performance was explored. The findings of this research showed that businesses improved their performance by establishing a culture that promoted high standards of information, data, and system quality and their interplay with one another. In conclusion, accounting information systems played a pivotal role in enhancing organizational performance, financial management, and decision-making processes. Organizational culture and compliance were significant factors influencing the success of these systems. By optimizing the use of these systems, organizations improved their performance, transparency, and accountability.

Additionally, Obinna-Akakuru et al. (2022) assess what brought about stress among Nigeria's lecturers in tertiary institutions, and how that affected their work-related performance. A sample size of three hundred and eighty-two lecturers were considered as the respondents selected using simple random method. According to Obinna-Akakuru et al. (2022), physical factors bringing about stress to lecturers included failure to have digital tools such as adequate number of computers and accounting software to request for various departmental needs. There is the need to expound more on Obinna-Akakuru et al. (2022) work, to assess some of the physical stress factors caused by inadequate learning facilities.

Locally, Ombima (2022) examined what brought about satisfaction of jobs in Kenya's higher education institutions' staff which was a case study USIU in Nairobi. One hundred and six staff answered the questionnaires and were included in the study through proportionate stratified random sampling method. Majority of the respondents 20(27%) were academia staff like professors, senior lecturers, lecturers, and assistant lecturers while the minority were senior management staff 4(5%). Among the factors considered, user friendly technology to digitalize the entire learning and administration role was paramount. Therefore, in regards to administration role, accounting systems adopted enabled the reduction of workload and increased job satisfaction among the staff. However, Ombima (2022) considered only a case study of USIU which is a private university hence difficult to replicate the findings on other institution of higher learning like public universities and TTIs.

2.3.3 Legal Framework and Financial Accountability

Regulation played a crucial role in establishing accountability within institutions by holding individuals responsible for their actions. According to Kaplin and Lee (2018), federal, state, and municipal governments were responsible for governing institutions. In the early 2010s, the accountability movement led to a substantial increase in regulations for TVET institutions, resulting in increased tensions and higher costs of compliance (Bok, 2019). Legislators commonly utilized legislation to encourage desirable behaviors, and regulations were often tied to financing to guarantee that it was utilized as planned (Ariely, 2020). However, higher education institutions generally opposed specific regulations, viewing them as unfunded mandates that imposed financial burdens on students (Casper, 2019).

With greater autonomy conferred upon tertiary institutions by governments, the necessity arose for the establishment of protocols to ensure that the institutions-maintained accountability. This included adhering to approved policies and responsibly managing the funds allotted to them (Samboma, 2017). In Sub-Saharan Africa, regulatory structures for higher education typically integrated five measures designed to safeguard financial responsibility. One such mechanism involved monitoring an institution's performance against the goals outlined in its strategic plan, often done by ministries and oversight bodies. In select Francophone systems, performance contracts were implemented, which stipulated that all institutions met specific performance markers or display evidence of good performance (Shin et al., 2021).

To ensure accountability to various stakeholder groups, institutions included representatives from these groups on their governing boards as stipulated in the policy framework. Recent times witnessed a growing trend of widening the composition of external board members to include elected representatives from constituencies beyond the institution's own community. Recent legislation in countries like Tanzania necessitated a majority of board members to be from external bodies, while countries such as Lesotho and South Africa required a specific proportion of the board's composition to comprise external members. In the Francophone world, certain institutions like Senegal's Université de Thiés and the Kigali Institute of Science and Technology in Rwanda set requirements for a specific percentage of board members to be external. Another evolving practice was the inclusion of stakeholder representation within academic boards, thus further democratizing the governance process (Msibi, 2021).

Concerning academic audits, a rapid trend was observed where governments were establishing national quality assurance agencies. These agencies were tasked with evaluating educational inputs, learning outcomes, and granting periodical accreditation to tertiary institutions. Currently, Sub-Saharan Africa was home to seventeen such national quality assurance agencies for higher education, with 10 of them established post the year 2000.

Typically, institutions were mandated to create publicly available reports encapsulating their annual activities and forwarded plans. It was found that universities in 19 out of 24 surveyed countries were legally obligated to comply with this requirement. In most instances, these reports were submitted to the national assembly or parliament via the minister's office (Ginsburg, & Versteeg, 2021). In an attempt to guide tertiary institutions towards policy objectives while respecting their autonomy, governments devised innovative mechanisms such as performance contracts, benchmarking, and performance-based budgeting formulae. These approaches provided specified financial resources contingent on the institution's achievement of predetermined performance targets (Hazelkorn & Gibson, 2019).

In a recent study, (Chokaa, 2023) examined the impact of regulatory frameworks on corporate financial compliance within public universities in Kenya. This research utilized a descriptive survey methodology and focused on a target population comprising all 40 public universities accredited in Kenya. Data collection was executed using comprehensive, semi-structured questionnaires. The research implemented descriptive statistical.

The relationship between the variables under study was determined through Chi-square tests and correlation analyses. The review discoveries showed that administrative system influences emphatically monetary corporate consistence during the time of study and its belongings are huge. The investigation additionally discovered that the colleges were managed by certify administrative bodies as specified by the constitution. This study prescribed that the public authority was to utilize careful responsibility measures and approaches that caused each official in state funded colleges to be considered liable for each action he/she has embraced for the college that drove the college to bring about certain consumptions.

In a research effort led by Chokaa (2023) the influence of regulatory structures on financial adherence in Kenyan public universities was evaluated. The research leveraged a descriptive survey design and zeroed in on 40 recognized public universities throughout Kenya. Comprehensive and semi-structured questionnaires were administered for the purpose of data collection. To analyze the data, a range of descriptive statistical techniques were utilized. Tools like Chi-square and correlation analyses were harnessed to uncover the correlations between the research variables.

Chokaa (2023) findings unveiled a notable and statistically significant correlation between the regulatory framework and financial corporate compliance over the research period. Furthermore, it was observed that the institutions in question were regulated by accredited agencies, as mandated by constitutional law. Taking these findings into account, the study suggested the implementation of robust measures of accountability and associated policies by the government. These proposed measures ensured that each individual in public universities was held accountable for their actions, which potentially resulted in expenditures (Chokaa, 2023).

2.3.4 Monitoring and Financial Accountability

Monitoring involves evaluating the effectiveness of a system's performance throughout its duration. It was important for staff members to regularly evaluate different internal control systems and keep track of updates. It was crucial to quickly address any detected shortcomings in the system and incorporate the remedies into the broader framework of internal controls. The process of monitoring internal controls involved techniques and strategies that facilitated speedy rectification of audit discoveries and outcomes from other reviews.

This approach ensured that issues were not only identified but also dealt with promptly, thereby maintaining the integrity of the overall internal control system. The ongoing monitoring and evolution of these controls was a vital aspect of effective financial governance. Monitoring activities was continuous or conducted as separate assessments, but they were crucial due to the intricate and ever-changing environments organizations typically encounter (Daft, 2021).

Monitoring was essential for ensuring that structures were carrying out activities according to their intended purpose. It was important to regularly evaluate the effectiveness of various components within the internal control system. This was achieved through ongoing or scheduled assessments that determined whether these components were operating as designed. These evaluations were also crucial for recording any deficiencies within the system and communicating these to the relevant authorities for necessary corrective actions. More serious deficiencies were escalated to senior management or even the board of directors, if necessary (Albița & Selișteanu, 2022).

As corporate risks were not static and evolved over time, an internal control system had the ability to recognize whether current controls were appropriate and efficient in mitigating new risks. The monitoring process was able to adapt to these changes, making necessary adjustments to the control strategy based on the dynamic nature of risks. This adaptability was crucial to managing risks at acceptable levels, which in turn ensured the continued efficiency and effectiveness of operations (Akinleye & Kolawole, 2020). This constant evaluation and adjustment were crucial to maintaining an effective internal control system, ensuring that the organization responded effectively to both anticipated and unexpected challenges. Moreover, this ongoing process helped to instill a culture of accountability and transparency within the organization, contributing to overall financial accountability and improving stakeholders' trust in the organization's management.

The monitoring process involved evaluating controls, reporting assessment results, and taking any necessary remedial actions. The success of a monitoring framework was contingent upon cultivating a proactive and positive attitude towards efficient internal controls from the top echelons of an organization. This necessitated the participation and engagement of senior management and the BOG in the evaluation process. They had a pivotal role in setting the tone for the importance of internal controls, which permeated throughout the organization. Senior management's commitment towards robust internal controls signaled the importance of these systems, thereby encouraging employees at all levels to adhere to established control procedures and processes. They also set an example of ethical behavior and integrity in financial reporting and business operations, which further promoted a culture of accountability and transparency within the organization.

By being actively involved in the monitoring framework, top management and directors ensured that the internal control system was effective, comprehensive, and responsive to the evolving risk environment (Aina & Bipath, 2020). Moreover, the leadership's involvement provided assurance to external stakeholders, such as investors and regulators, regarding the dependability of financial reports and consistence with regulations and guidelines. It demonstrated that the organization was committed to maintaining effective internal controls and continuously improving them, thereby enhancing stakeholders' trust and confidence in the organization's financial integrity and operational efficiency (Kewo, 2017). To conduct a meaningful assessment of internal control measures, qualified assessors with a strong understanding of internal control principles, along with the necessary competencies, resources, and authority, were selected and utilized (Rae et al., 2017).

Research in the space of educational administrative competence and its impact on work performance had been of keen interest in recent years. A study undertaken by Owan and Agunwa (2019) in Nigeria focused specifically on the influence of directors' regulatory skill on educators' work yield in auxiliary schools in the Calabar Training Zone of Cross River State. The data were compiled using diverse techniques, including questionnaires, interviews, review of documentation, and analysis of articles. They employed a stratified sampling strategy to distribute the survey and analyzed the data using percentages, tables, correlation coefficients, and z-scores. The study's findings revealed that school activities were driven primarily by the institution's top management. Audits of financial statements were conducted annually by external auditors, but concerns were raised about the possibility of unauthorized access to critical financial information by individual staff members. The research underscored the need for adequate checks and balances in financial transactions (Owan & Agunwa, 2019).

The connection between internal controls and institutional performance was examined in a separate study by Akinleye and Kolawole in Nigeria. This study leveraged the Committee of Sponsoring Organizations (COSO) framework to grasp the effect of inside controls on the performance of tertiary organizations in Ekiti State. A survey research design was used to gather primary data, and multiple regression analysis was used for data interpretation. The results underscored the importance of COSO components of inward control, exhibiting a huge positive effect on the performance of the selected tertiary institutions. Among the COSO components, monitoring activities were particularly significant in enhancing organizational performance (Akinleye & Kolawole, 2020).

A separate study in Uganda explored the crucial role of internal control systems in promoting financial accountability. The findings suggested a positive correlation between internal control systems and accountability of finances. Based on these results, the researchers recommended political leaders and other stakeholders limit interference in the use of public funds and instead focus on monitoring government initiatives to ensure public welfare (Marus et al., 2019).

An investigation to comprehend how Mombasa county's secondary schools that were funded by the government were influenced by cash management elements as carried out by Daniel and others. The researchers used a descriptive research design to gather data from sixty respondents such as principals, bursars, and chairmen of the Board of Management (BOM). The findings highlighted the importance of training in enabling the BOM to assume its responsibilities effectively and be adequately informed about its role in protecting school assets. It was also observed that where the BOM had authority to authorize cash transactions, cash resource management was more effective. In contrast, the Parent-Teacher Association's (PTA) involvement in school management was limited, with no subsequent monitoring of the utilization of the raised funds (Daniel et al., 2023).

In summary, the link that associated internal controls, administrative competence, and performance was of great importance in educational institutions. Studies from various African countries had shown that strong internal control systems and competent management lead to better educational outcomes. However, these studies also highlighted some challenges such as potential for unauthorized access to critical financial information, inefficient auditing processes, and limited involvement of stakeholders in monitoring financial transactions. These challenges needed to be addressed for educational institutions to achieve their full potential. Future research explored effective strategies for overcoming these challenges and enhancing the effectiveness of internal controls and administrative competence in educational institutions.

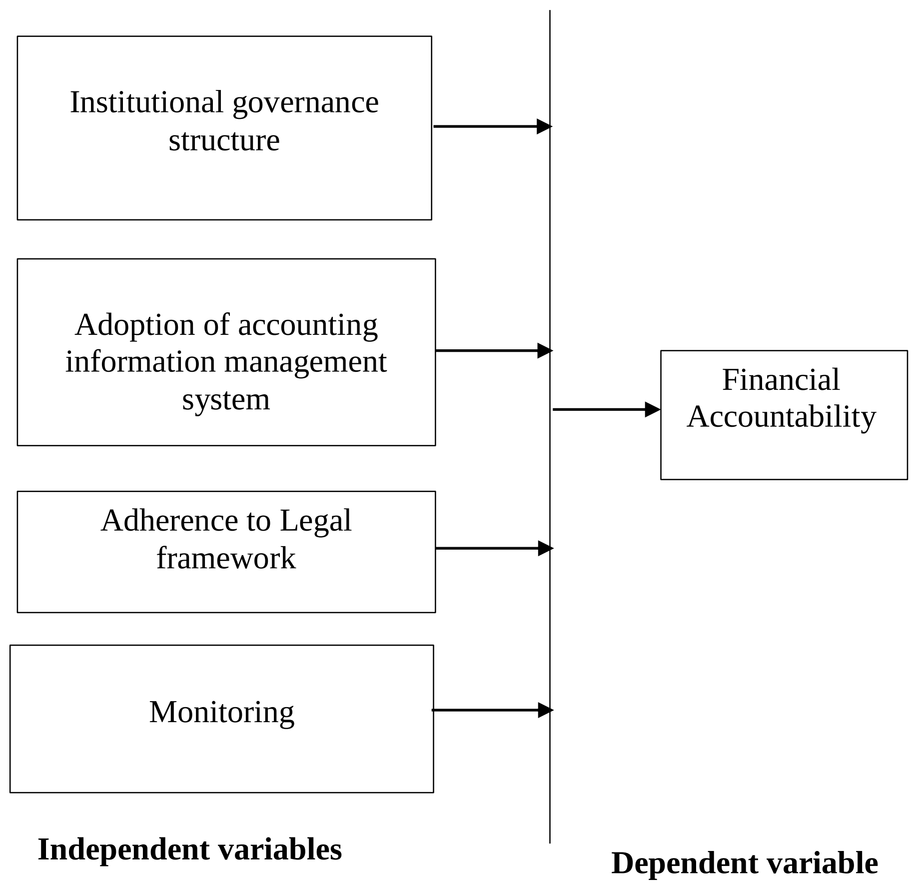
2.4 Summary of Research Gaps

The literature reviewed in this study did not investigate the effect of internal control on financial accountability within TVET institutions in the Eastern region of Kenya. There was a lack of research in this specific area, particularly in developing countries like Kenya. While previous studies focused on related variables, they failed to address the complete implementation and achievement of the primary objective of this study, which was examining the effect of internal control on financial accountability. These examinations left gaps in their measures, title, degree, and system. The writing audit uncovered different speculations concerning the factors and the investigation of the connection between the dependent and independent variable.

2.5 Conceptual Framework

Figure 2.1

Conceptual Framework



Source: Author (2024)

2.5.1 Explanation of Variables

Institutional governance structure referred to the framework and mechanisms through which an institution was governed and its decision-making processes are established. The specific governance structure varied depending on the type of institution, institutions typically had a governing body that oversaw the overall governance and strategic direction. This body involved board of directors, board of trustees, council, or a similar governing entity. The governing body was responsible for making major decisions, setting policies, and appointing key executives (Bratianu & Pinzaru, 2015). Institutions established various committees to address specific areas of governance or to provide expertise and advice on specific issues.

The adoption of accounting information management referred to the implementation and utilization of systems and processes to effectively collect, analyze, and utilize accounting data within an organization (Gyampah & Salam, 2017). It involved the integration of technology, software, and management practices to improve financial reporting, decision-making, and overall organizational performance. By automating routine accounting tasks and streamlining processes, organizations achieved greater operational efficiency and cost savings. Accounting information management systems reduced manual errors, improved data accuracy, and freed up time for accountants to focus on more strategic activities (Souza & Zwicker, 2017).

Adherence to a legal framework referred to the compliance and devotion of individuals and organizations to the laws, regulations, and standards established by the government or relevant authorities. It involved understanding and following the legal requirements applicable to a specific jurisdiction and industry to ensure ethical conduct, mitigate risks, and maintain legal integrity (Backman et al., 2018). Adhering to a legal framework ensured that individuals and organizations met their legal obligations. It helped prevent legal violations, penalties, fines, and reputational damage that arose from lack of following of the regulations and guidelines.

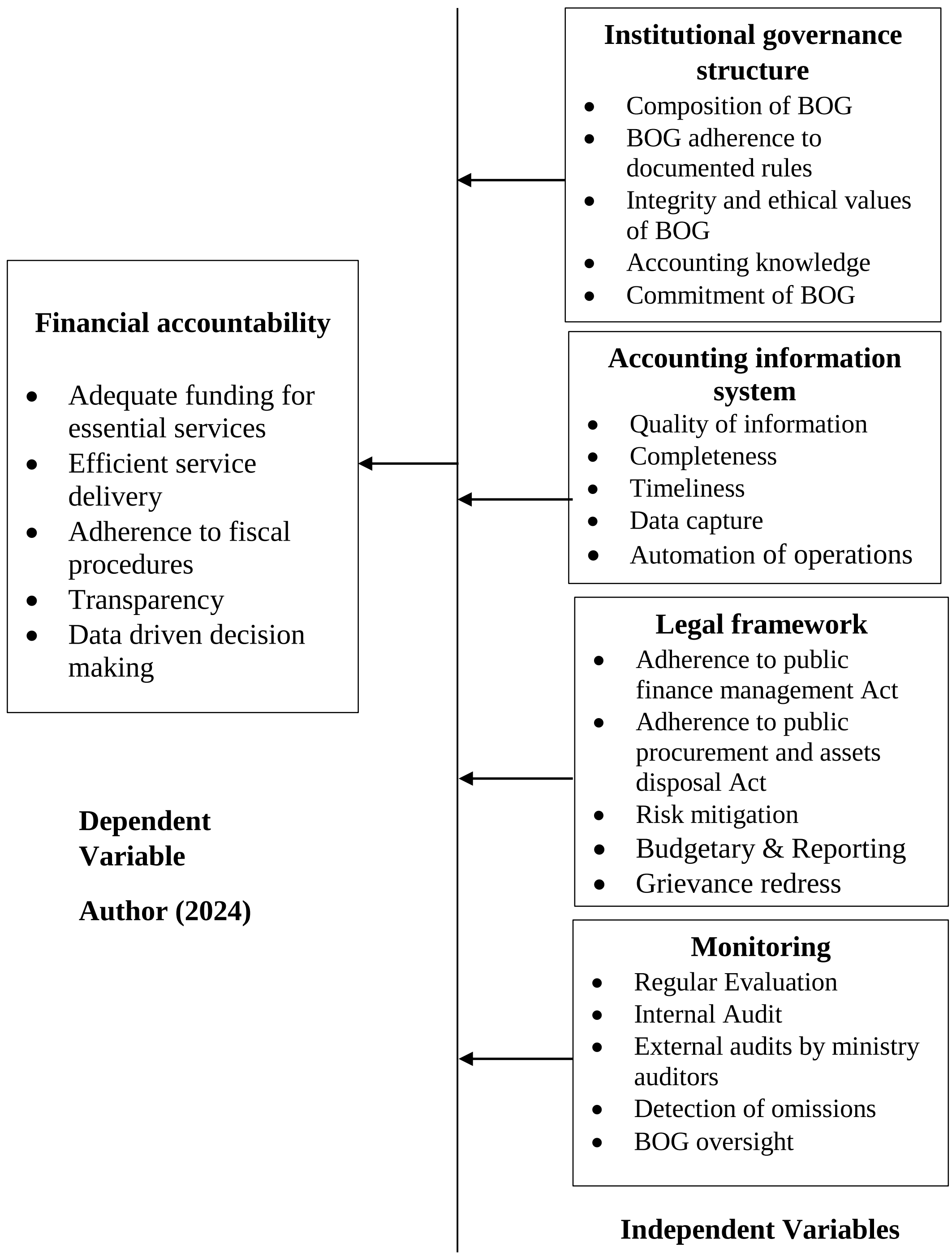
Monitoring referred to the ongoing assessment and supervision of a company's processes, systems, and activities to ensure that they were functioning effectively and in compliance with relevant policies, regulations, and objectives. Monitoring activities were critical for identifying weaknesses, detecting errors or fraud, and providing timely corrective actions (PCAOB, 2007).

2.6 Operational Framework

This section of the study covers a diagrammatic representation of the dependent variable, independent variables and parameters which will be used for measurement purposes.

Figure 2.2

Operational Framework



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a comprehensive overview of the research methodology and design that will be applied in this study. It outlines the key components of the research, such as the intended population, the sampling strategy and sample size, the methods employed for data collection, the initial testing of the instruments, and the considerations for ensuring the reliability and validity of the findings. Additionally, the chapter presents the procedures for data analysis and discusses the ethical considerations that will be taken into account during the research process.

3.2 Research Design

In conducting this study, a descriptive survey research design was employed, given its appropriateness in investigating the association between internal control systems and accountability of finances. A research design was essentially a structured plan that guided the collection, measurement, and analysis of data, aiming to blend the research objective's relevance with procedural efficiency (Kothari & Gaurav, 2014). This design aligned with the research objective and provided a systematic approach to gathering and analyzing data relevant to the study's focus.

The descriptive research design enabled a comprehensive explanation of the phenomena, ensuring minimal bias during data collection and reducing errors in data interpretation (Sileyew, 2019). Furthermore, this study embraced a quantitative approach, encompassing where data was collected using questionnaires. This approach allowed the researcher to obtain a more comprehensive understanding of the effect of internal control on accountability of finances in technical institutions.

3.3 Target Population

The focus of this study was on the 23 TVETs institutions that were funded by the government situated in the Eastern Region of Kenya. The key respondents included principals, bursars, and Board of Management (BOM) chairs from each of these institutions, resulting in a total of 69 participants. The target population in a study referred to the specific group or set of individuals, events, or objects about which the researcher aimed to gather information and draw conclusions (Kothari & Gaurav, 2014). In this context, these chosen individuals were considered to be best placed to provide insights into the research problem due to their roles within their respective institutions.

Table 3.1

Target Population

Category	**Target Population**
Principals	23
Accounts/finance officers	23
BOM chairs	23
Total	**69**

Source: Strategic Plans or each Institution (2023)

3.4 Sampling Design and Sample Size

The research utilized a census method to examine the public TVET institutions in the Eastern Region of Kenya. This decision eliminated the need for specific sampling techniques and designs. The choice of a census was made because the population size of 69 was considered small, and the goal was to include all members of the target group across all TVET institutions in the study area. Conducting a census offered the advantage of examining small and unique population groups, as well as gathering data on little geographic units. The utilization of an enumeration was legitimate based on Orodho's (2009) assertion that census data collection provided unbiased information that represented the assessments of all people in the review populace in regards to the exploration issue.

The utilization of a census approach was supported by Field's (2006) assertion that outcomes derived from a complete population survey, such as a census, were likely more accurate, reliable, and representative than those derived from a subset or sample of the population. This technique aided in extrapolating the research findings to a broader context. In addition, a census offered an exact measurement of the entire population because it eliminated sampling errors and facilitated the collection of in-depth data about the research issue from the entire population (Taherdoost, 2021).

For this study, the population was segmented into three distinct categories as detailed in the subsequent table (Table 3.2). These categories included principals, bursars, and BOM chairs, representing the diverse roles that contributed to the overall financial governance and accountability in the selected public TVET institutions. Each category represented a different perspective on the internal control systems and accountability of finances within the institutions, thereby enriching the depth and breadth of the data collected for this research.

Table 3.2

Sampled Population

Category	Target Population
Principals	23
Finance officers	23
BOG chairs	23
Total	**69**

3.5 Data Collection Instruments

The data for this research was sourced by employing questionnaires, featuring closed-ended items. The closed-ended queries were advantageous due to their straightforwardness in administration and analysis, as well as their economical nature concerning both time and resources. Conversely, the open-ended items served to elicit a more in-depth understanding and nuanced responses (Kombo & Tromp, 2009). Questionnaires were seen as an efficient and clear-cut means of data collection. Moreover, when carefully curated and assurances of anonymity were provided, they were likely to elicit sincere responses from participants.

In complementing the primary data obtained from questionnaires, this study also harnessed secondary data. This was retrieved through the review and analysis of the audited financial records of the chosen institutions for a financial period of 4 years beginning from 2020-

2023. The various aspects considered included gross profit, expenses, net profit, debtors, and creditors of the institution. Additionally, information regarding the expenses and creditors will also be gathered to assess the payments done by the institution as a means of establishing the financial accountability of the TVET. This helped provide a comprehensive view of the financial management practices and control systems in place, allowing for a more robust understanding of the operational landscape within these institutions.

3.6 Pre-Testing the Instrument

In order to identify any flaws in the design and instruments to be employed, pre-testing was carried out. This also enabled the collection of alternative data for sample selection. According to the general guideline, it was deemed acceptable for the pilot study to include 5% to 10% of the desired sample (Cooper & Schindler, 2014). As a result, the pre-test study was undertaken at two TVET institutions in the central region, involving a total of seven participants, which constituted 10% of the overall study sample size (Cooper & Schindler, 2014).

3.6.1 Validity

Validity is a key component in research and it denotes the degree to which a tool accurately measures what it intends to measure (Creswell & Creswell, 2005). It was crucial that data be not only dependable but also precise and genuine. If a measure was valid, then it also embodied reliability (Cooper & Schindler, 2014). The validation of the data collection instrument, in this case, was determined by examining its content validity. This process involved reviewing the research instrument in consultation with the university supervisor. The insights, rectifications, and proposals offered by the supervisor contributed significantly towards refining and validating the instrument. This ensured that the tool was well-suited to examine the variables as envisioned, hence ensuring the integrity of the research findings.

3.6.2 Reliability

Reliability refers to the steadiness, uniformity, or dependability of the collected data. The intent of a researcher when measuring a variable is to achieve results that are stable and consistent across different instances (Cooper & Schindler, 2014). A measurement was deemed reliable if it yielded identical or nearly identical results when the measurement process was replicated. On the contrary, if the outcomes diverged, the measurement was considered to be unreliable (Mugenda & Mugenda, 2008). In order to evaluate the reliability of the data collection tools for this study, Cronbach's alpha was used as a measure of internal consistency (Mugenda & Mugenda, 2008). Cronbach's alpha is a reliability coefficient that estimates the generalizability of data without bias (Zinbarg, 2005). A Cronbach's alpha value of 0.7 or above was interpreted as a satisfactory indicator of reliability in this study.

3.7 Data Collection Procedure

The study began the process of data collection by obtaining authorization from the KeMU, ethical clearance and NACOSTI permit (appendix IV, V, and VI). Once the authorizations were obtained, two research assistants were appointed based on their familiarity with the region and experience in data collection process. They were briefed by the researcher on the general objective, specific objectives and the methodology of the study. The researcher trained and briefed them on confidentiality and reliability in regards to the distribution of the questionnaires and picking them back. On the information assortment day, the researcher in organization with the exploration colleagues went to various TVET institutions. Authorization was sought after to administer the questionnaires to the sampled respondents. Immediately the authorization was issued by the management of TVETs, the research assistants issued the questionnaires using drop and pick method for gathering data.

The questionnaires were provided to participants and collected at a later time. This methodology enabled respondents to have sufficient time to answer the questions. Once the process of data collection ended, the research assistants thanked the respondents and stored the questionnaire in a safe place till further analysis stage.

Analysis of the institution's audited annual reports provided the secondary data used in this study (appendix III). The results from the main data were strengthened by the additional context provided by the secondary data, which included details that respondents overlooked. The process of collecting secondary data involved consultation with the TVET’s accounts department manager who authorized the process. Thereafter, the researcher was introduced to the custodian of the institutional financial reports who then provide the required reports as per the directives of the study. The researcher noted down various information regarding gross profit, expenses, net profit, debtors, and creditors of the institutions beginning from 2020-2023. The information was noted using notebook to be analyzed later using horizontal method.

3.8 Data Analysis

In this study, both quantitative data was gathered utilizing questionnaires featuring both closed -ended questions. The quantitative data was subjected to descriptive statistical analysis, which involved calculations of metrics such as percentages, mean, standard deviation, and variance. For this purpose, the SPSS version 25 software was used. SPSS was a robust tool that provided a comprehensive set of procedures for the analysis of quantitative data, thereby enhancing the validity and reliability of the data and elucidating the relationships among the research variables. Additionally, SPSS enabled the generation of frequency tables for descriptive analysis.

For inferential statistics, the study leveraged correlation and multiple regression analysis. Correlation analysis was applied to ascertain the statistical significance of the relationship between the dependent variable and independent variables. Multiple regression analysis, on the other hand, was employed to evaluate the statistical significance of the influence or impact of the independent variables on the dependent variable. The multiple regression model for this study was presented as follows:

$Y= \beta 0+\beta_1X_1+ \beta_2X_2+\beta_3X_3+ \beta_4X_4+\varepsilon$

Y= Financial Accountability

X_1=Institutional governance structure

X_2=Adoption of accounting information systems

X_3= Legal framework

X_4= Monitoring

$\beta0$ = Regression Constant

$\beta1$, $\beta2$, $\beta3$, $\beta4$: - are coefficient of independent variables

ε=error term

When analyzing secondary data such as gross profit, expenses, net profit, debtors, and creditors, the study used horizontal analysis. This is whereby various key information of subsequent years were added then divided by base year to derive the average value.

3.9 Diagnostics Test

The analysis of regression assumptions involved conducting a diagnostic test. To assess the linear relationship between the predictor variables and the predicted variable, a linearity test was performed using Pearson's correlation coefficient. Additionally, a normality test was conducted to examine whether the research variables followed a normal distribution. To evaluate the relationship between the predictor variables, a normality, linearity, multicollinearity and autocorrelation tests were conducted.

3.10 Ethical Considerations

The researcher obtained permission from the respondents and accessed them through a booked appointment with the institution’s principal. In the upcoming study, informed consent was obtained from all participants. Those who choose not to participate were not be obliged to do so. To ensure confidentiality, the data collection instruments was designed to exclude any personally identifying information, such as the names of respondents. All collected data was used strictly for academic purposes related to this research study. Respondents were assured that their information was handled with utmost confidentiality and was only be accessible to authorized individuals.

The researcher secured necessary permits from the NACOSTI to formally authorize the data collection process. This was to ensure that the study was conducted in line with the required ethical and professional standards. Furthermore, the researcher demonstrated respect for the unique cultural context of the respondents. This involved taking into consideration their beliefs, values, and traditions during data collection, interpretation, and reporting of the study's findings. This was an essential step in conducting ethical research, as it promoted mutual respect, trust, and a positive relationship between the researcher and respondents.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The chapter provides the results gathered during data collection process. The various aspects presented are the response rate, reliability results, demographic statistics, diagnostic test results, questionnaires result of financial accountability, institutional governance structure, adoption of accounting information system, legal framework, and monitoring. Thereafter correlation and multiple regression results are also provided.

4.2 Response Rate

The study issued questionnaires to a total of 69 respondents who were 23 principals, 23 finance officers and 23 BOG chairs as in Table 4.1.

Table 4.1

Response Rate

Respondents	Sampled	Response	Percentage
Principal	23	19	
Finance officer	23	23	
BOG chair	23	16	
Total	69	58	84%

Table 4.1 indicates that 58 respondents returned filled in questionnaires which is 84%. The specific respondent's category included 19 principals, 23 finance officers and 16 BOG chairs. The results imply that the study had a high response rate since Wu (2022) guided

that when the returned questionnaires' number was above 70%, it signified excellent response rate.

4.3 Reliability Results

The study conducted a pilot test and issued pilot test questionnaires to six respondents whose outcome is in Table 4.2.

Table 4.2

Reliability Results

Research Instruments	Pilot Population	Cronbach Alpha
Questionnaires	6	**0.897**

Table 4.2 indicates that the Cronbach alpha coefficient was 0.897. According to Mo et al. (2023), reliability is mainly obtained on the one hand, when the Cronbach alpha coeffects are more 0.7 but less than 1. On the other hand, unreliability is mainly detected when the coefficients are less than 0.7. Therefore, the results indicate that the coefficient was above 0.7 indicating that the questionnaires were reliable.

4.4 Factor Analysis

The study conducted factor analysis to assess the validity of the questionnaires as provided in Table 4.3.

Table 4.3

Factor Analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.526	30.517	30.517	1.526	30.517	30.517
2	1.156	23.120	53.637	1.156	23.120	53.637
3	.977	19.532	73.169			
4	.728	14.554	87.723			
5	.614	12.277	100.000			

Extraction Method: Principal Component Analysis.

The results of Table 4.3 indicate that there were two factors that were above 1.000 and the variance explained by the values were 53.637%. This is whereby the contribution of the first factor to the variance was 30.517% while the second factor contributed 23.120%. Notably, Tavakol and Wetzel (2020) indicated that when assessing construct validity, an instrument's variance had to be more than 50% so as to be regarded as valid. When combined the two factors contribution was 53.637 hence above 50% meaning that the study's questionnaires were valid.

4.5 General Information

General information of the respondents was asked in regards to their gender, education level, years of experience and BOG accounting course qualifications. The results are provided in Table 4.4.

Table 4.4

General Information

Marital Status	Frequency	Percent	Cumulative Percent
Male	32	55	55
Female	26	45	100
Highest Level of Education	**Frequency**	**Percent**	**Cumulative Percent**
PhD	3	5	5
Masters	10	17	22
Bachelor	18	31	53
Diploma	15	26	79
Certificate	12	21	100
Number of Years Served	**Frequency**	**Percent**	**Cumulative Percent**
Above 6 years	24	41	41
5-6 years	19	33	74
3-4 years	7	12	86
1-2 years	5	9	95
Below 1 year	3	5	100
BOG Accounting Course Qualifications	**Frequency**	**Percent**	**Cumulative Percent**
Masters accounting course	1	2	2
Bachelor’s degree in accounting course	6	10	12
Diploma in accounting course	9	16	28
Certificate in accounting course	32	55	83
No accounting knowledge	10	17	100

Table 4.4 indicates that 32(55%) were male while 26(45%) were female. Additionally, 18(31%) had bachelor’s degree and 15(26%) had diploma academic qualification, comprising the majority. The least numbers included 10(17%) with masters and 3(5%) with

PhD qualifications. In regards to the working experience, 24(41%) had worked for more than 6 years while 19(33%) had worked for a period between 5-6 years in the TVET.

However, the least numbers of years included 1-2 years where 5(9%) and below 1 year 3(5%) respondents admitted to that. Further, it was also noted that 32(55%) respondents who were the majority admitted that BOG members had a certificate qualification in accounting course. Additionally, 9(16%) had diploma qualifications with only 1(2%) had masters in an accounting course and 6(10%) had a bachelor’s degree. However, 10(17%) of them indicated that the BOG had certificate in accounting course.

The results imply that most TVET institutions had ensured that gender balance was actively practiced among the work force. This therefore was an indication that various internal control decisions made were on the bases of suggestions from both men and women at large. Comparatively, Sharma (2022) also advocated the inclusion of both genders to instill integrity and effective control systems on any financial reporting. Through this mechanism, fraud would be significantly reduced to manageable levels that allow the institution be a going concern.

Additionally, it was also noted on the current study’s results that most people associated with various key internal control roles of the TVET had acquired the required academic qualifications as acknowledged by the ministry of education. Wango and Gatere (2016) also came to similar findings by indicating that the academic qualifications of operations staff and as well as the management enabled logical thinking and application of financial control skills in various academic institutions in Kenya.

In regards to experience level, it was observed that they were highly experienced, while the BOG members had basic accounting knowledge which enabled them to make reliable financial decisions. Ngaira (2021) findings also supported this narrative by revealing that management of expenses and establishment of quality budgets can only be achieved through involving experienced and accounts proficient members of staff and management.

4.6 Diagnostic Tests

The study conducted various diagnostic tests to examine the various regression assumptions on the collected data. The various tests performed included the normality, linearity, multicollinearity and autocorrelation.

4.6.1 Normality Test Results

The study conducted normality test to explore the adherence of the data to equal representation and the results are provided in Table 4.5.

Table 4.5

Normality Test Results

		IGC	AIS	Legal Framework	Monitoring	Financial Accountability
N		58	58	58	58	58
Normal Parameters[a,b]	Mean	15.0345	13.6724	15.3448	14.3793	13.8793
	Std. Deviation	3.34016	3.25732	3.00614	3.40190	3.14044
Most Extreme Differences	Absolute	.114	.108	.138	.124	.105
	Positive	.084	.082	.138	.085	.067
	Negative	-.114	-.108	-.112	-.124	-.105
Kolmogorov-Smirnov Z		.866	.822	1.053	.947	.799
Asymp. Sig. (2-tailed)		.441	.509	.218	.332	.546

a. Test distribution is Normal.

b. Calculated from data.

Table 4.5 indicates that the p-values of institutional governance structure is 0.441; Accounting information system is 0.509; legal framework is 0.128; Monitoring is 0.332; and financial accountability is 0.546. Since the values are more than 0.05, the data was normal. That is, it did not have some responses relying on only one perspective of the given options.

4.6.2 Linearity Test Results

The study further conducted linearity test to ascertain the nature of relationship of the variables as provided in Table 4.6.

Table 4.6

Linearity Test Results

			Sum of Squares	df	Mean Square	F	Sig.
Financial Accountability Institutional Governance Structure	Between Groups	(Combined)	124.698	14	8.907	.876	.589
		Linearity	7.652	1	7.652	.752	.391
		Deviation from Linearity	117.046	13	9.004	.885	.574
	Within Groups		437.457	44	10.173		
	Total		562.155	58			
Accounting Information System	Between Groups	(Combined)	170.708	14	12.193	1.339	.225
		Linearity	16.438	1	16.438	1.806	.186
		Deviation from Linearity	154.270	13	11.867	1.304	.248
	Within Groups		391.447	44	9.103		
	Total		562.155	58			
Legal Framework	Between Groups	(Combined)	93.444	11	8.495	.834	.608
		Linearity	43.340	1	43.340	4.253	.045
		Deviation from Linearity	50.104	10	5.010	.492	.887
	Within Groups		468.712	47	10.189		
	Total		562.155	58			
Monitoring	Between Groups	(Combined)	111.277	12	9.273	.925	.530
		Linearity	5.039	1	5.039	.503	.482
		Deviation from Linearity	106.237	11	9.658	.964	.492
	Within Groups		450.879	46	10.020		
	Total		562.155	58			

Table 4.6 indicates that institutional governance structure had a p-value of 0.574; Accounting information system has a p-value of 0.248; legal framework has a p-value of 0.887; and monitoring has a p-value of 0.492. The results indicate that all the p-values were above 0.05 which was a clear indication that there was each internal control mechanism

had a linear relationship with financial accountability. This means the occurrence of financial accountability is mainly instigated by internal control mechanism.

4.6.3 Multicollinearity Test Results

The study was also examined the unique characteristics of independent variable between each other through multicollinearity test. Table 4.7 provides the results.

Table 4.7

Multicollinearity Test Results

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Institutional Governance Structure	.944	1.059
	Accounting Information System	.959	1.043
	Legal Framework	.877	1.140
	Monitoring	.919	1.088

Table 4.7 reveals that institutional governance structure has a tolerance of 0.944 and VIF of 1.059; Accounting information system has a had a tolerance of 0.959 and VIF of 1.043; Legal framework has a had a tolerance of 0.877 and VIF of 1.140; and monitoring has a had a tolerance of 0.919 and VIF of 1.088. Therefore, since the tolerance values were all above 0.2 and VIF less than 5, the data had no multicollinearity problem hence institutional governance structure, accounting information system, legal framework and monitoring maintained their unique characteristics against each other.

4.6.4 Autocorrelation Test Results

The study also conducted autocorrelation test to ascertain whether internal control systems maintained their characteristics against the financial accountability variable as provided in Table 4.8.

Table 4.8

Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.898[a]	.806	.789	3.07938	1.542

Table 4.8 indicates that the Durbin Watson's value is 1.542 which is between 0-2 indicating a positive correlation. This therefore meant that internal control system (a combination of institutional governance structure, accounting information system, legal framework and monitoring) maintained its characteristic when it interacted with financial accountability.

4.7 Descriptive Results of Financial Accountability

Financial accountability was the dependent variable and was measured through various indictors like adequate funding for essential services, efficient service delivery, adherence to fiscal procedures, transparency, data driven decision making, grievance redress, budgetary and reporting. The study collected secondary data from financial reports and also administered questionnaires to the respondents. Table 4.9 provides the secondary data results.

Table 4.9

Secondary Data of Financial Accountability

Variable	N	Mean
Gross profit	23 TVETs	3.92
Expenses	23 TVETs	4.21
Net profit	23 TVETs	2.74
Debtors	23 TVETs	4.35
Creditors	23 TVETs	3.82

Table 4.9 indicates that expenses had a mean of 4.21 and as well as debtors which had a mean of 4.35. Nevertheless, the net profit had low mean of 2.74. The results imply that TVET institutions ensured that they were financially accountable as much as possible. However, their expenditure was rather high in comparison to their income level. This could be ascertained due to huge number of unsettled debts mostly from unpaid school fees from the students.

Therefore, this meant that the school incurred high expenditure trying to sustain the students of whom some of them had not fully paid their schools fees, thereby reducing the net profit significantly. Comparatively Ngure (2022) established as the TVET were undergoing evolution, there was an increasing need to address the high debt in form of school fees from students and how it affected the development of the institutions. Notably, Ngure (2022) complained that when the management did not emphasize of prompt payment of school fees, technical institution's resources were stretched resulting to increased expenditure vis a vis the income of the school.

The study further administered questionnaires which had an Ordinal Likert scale and the results are provided in Table 4.10.

Table 4.10

Descriptive Statistics of Financial Accountability

Statements N=58	1	2	3	4	5	Mean
Preparation of regular financial reports	4 (7%)	7 (12%)	8 (14%)	17 (29%)	22 (38%)	3.84
Annual financial statements represent the use of resources	6 (10%)	8 (14%)	5 (9%)	14 (24%)	25 (43%)	4.11
Institutional staff promptly submits reports for business advances	16 (28%)	10 (17%)	10 (17%)	13 (22%)	9 (16%)	2.81
Monetary records are enhanced with source reports for check	6 (10%)	8 (14%)	11 (19%)	13 (22%)	20 (35%)	3.24
Minimal queries regarding the financial reports	13 (22%)	15 (26%)	11 (19%)	11 (19%)	8 (14%)	2.76

Table 4.10 indicates that 25(43%) respondents, strongly agreed and 14(24%) agreed that the annual financial statements of the institutions accurately represented the use of resources during the year (mean of 4.11). Additionally, 22(38%) respondents, strongly agreed and 17(29%) agreed that the institutions prepared regular financial reports for stakeholders (mean of 3.84). Nevertheless, 16(28%) respondents, strongly disagreed and 10(17%) disagreed that the institutional staff promptly submitted reports for business advances (mean of 2.81). Further, 13(22%) respondents, strongly disagreed and 15(26%) disagreed that there had been minimal queries regarding the financial reports prepared by their institution (2.76).

The results imply that most TVETs had ensured that they comply with financial reporting standards such as openly disclosing their expenditure of public resources through professionally prepared financial reports. However, there were still lags related to late submission of reports especially those related to fees payments. This brought about uncertainty on the completeness of the reported financial records. Considerably, this is an indication that TVET management had still not perfected the internal control mechanisms to allow quality financial accountability. This was not only a problem experienced in TVETs in Eastern Kenya but cut across other higher learning in Nairobi and in Uganda, as reported by (Muhunyo & Jagongo, 2018; Nakisuyi, 2019). Additionally, Maina and Muathe (2022) reported that financial performance was getting out of hand since most Kenyan TVET failed to device strategic interventions that would ensure full payment of school fees by the students.

4.8 Descriptive Results of Institutional Governance Structure

Institutional governance structure was an independent variable and was measured through various indictors like composition of BOG, BOG adherence to documented rules, trustworthiness and moral upsides of BOG, book keeping acquaintance and obligation of BOG. The study administered questionnaires to the respondents as in Table 4.11.

Table 4.11

Descriptive Statistics of Institutional Governance Structure

Statements N=58	**1**	**2**	**3**	**4**	**5**	**Mean**
The BOG consists of individuals with accounting knowledge	6 (10%)	6 (10%)	5 (9%)	19 (33%)	22 (38%)	4.25
Composition of the BOG affects the management of funds	2 (3%)	17 (29%)	16 (28%)	13 (22%)	10 (17%)	3.21
The BOG operates with a clear and documented philosophy	9 (16%)	12 (21%)	7 (12%)	20 (34%)	10 (17%)	3.06
The members of the BOG have no vested interests in the institution's expenditures and supplies	7 (12%)	20 (35%)	10 (17%)	10 (17%)	11 (19%)	2.97
BOGs are committed to their oversight role.	9 (16%)	7 (12%)	14 (24%)	16 (28%)	12 (21%)	3.26

Table 4.12 indicates that 22(38%) respondents, strongly agreed and 19(33%) agreed that the BOG consisted of individuals with accounting knowledge (mean of 4.25). Additionally, 12(21%) respondents, strongly agreed and 16(28%) agreed that BOGs were committed to their oversight role (mean of 3.26). Nevertheless, 7(12%) respondents, strongly disagreed and 20(35%) disagreed that the members of the BOG had no vested interests in the institution's expenditures and supplies (mean of 2.97).

The results imply that most TVETs had ensured that the composition of BOG involved some portion of people with accounting skills and motivated enough to show commitment. However, it was noted that some of the financial decisions made even though not all, were highly influenced by personal interests. According to Msibi (2021); Samboma (2017); Sifuna (2020), this could be attributed to the fact that most senior institutional management were influential members of the communities who owned business empires hence the need to source for business deals from the TVETs. Chokaa et al (2023) refutes the claim with the notion that as long as there was a policy and financial compliance frameworks, the sources of supplies in an academic institution should be based on quality of goods and cheaper prices in a competitive tender system.

4.9 Descriptive Results of Accounting Information System

Accounting Information System was an independent variable and was measured through various indictors like quality of information, completeness, timeliness, data capture and automation of operations. The study administered questionnaires to the respondents as in Table 4.12.

Table 4.12

Descriptive Statistics of Accounting Information System

Statements N=58	**1**	**2**	**3**	**4**	**5**	**Mean**
Timely financial reporting	9 (16%)	8 (14%)	6 (10%)	11 (19%)	24 (41%)	4.16
Accountability of financial resources	7 (12%)	13 (22%)	8 (14%)	14 (24%)	16 (28%)	3.67
Precision of recording and reporting	7 (12%)	15 (26%)	15 (26%)	13 (22%)	8 (14%)	3.02
Completeness of the financial reporting	6 (10%)	19 (33%)	6 (10%)	11 (19%)	16 (28%)	3.31
Increased efficiency of financial processes	10 (17%)	14 (24%)	9 (16%)	13 (22%)	12 (21%)	3.70

Table 4.12 indicates that 24(41%) respondents, strongly agreed and 11(19%) agreed that the adoption of an AIS had facilitated timely financial reporting in my institution (mean of 4.16). Additionally, 12(21%) respondents, strongly agreed and 17(29%) agreed that the implementing an AIS had augmented the efficiency of financial processes and data capturing in our institution (mean of 3.70). Further, 16(28%) respondents, strongly agreed and 14(24%) agreed that an effective AIS improved the accountability of financial resources in the institution (mean of 3.67).

The results imply that the implementation of AIS had enables most TVETs to report their financial standings on time due to efficient processing of information when inputted accurately. Therefore, it was considered an enhancer towards financial accountability in regards to the proper utilization of TVETs' institution. The same sentiments were shared by Rambau and Henning (2020) when they established that adoption of various accounting software had made the entire book keeping process easy to implement and early detection of double entry errors. Further in support Souza and Zwicker (2017) revealed that reports provision was quicker since the adoption of various AIS enabled accounts department to generate the reports immediately on request.

4.10 Descriptive Results of Legal Framework

Legal framework was an independent variable and was measured through various indictors like compliance to public finance management Act, compliance to public procurement and assets disposal Act, and risk mitigation. The study administered questionnaires to the respondents and the results are provided in Table 4.13.

Table 4.13

Descriptive Statistics of Legal Framework

Statements N=58	1	2	3	4	5	Mean
Responsible financial management practices	4 (7%)	8 (14%)	13 (22%)	16 (28%)	17 (29%)	3.15
Guidance of public procurement and assets disposal Act when floating for tenders	9 (16%)	8 (14%)	12 (20%)	14 (24%)	15 (26%)	3.06
Financial mitigation of risk	4 (7%)	10 (17%)	8 (14%)	22 (38%)	14 (24%)	4.09
Legal policy framework to govern against misappropriation of funds	4 (7%)	4 (7%)	10 (17%)	17 (29%)	23 (40%)	4.18
Legal department to provide legal services and conducting investigations on inappropriate funds use	11 (19%)	26 (45%)	6 (10%)	10 (17%)	5 (9%)	2.57

Table 4.13 indicates that 23(40%) respondents, strongly agreed and 17(29%) agreed that there were well known legal policy framework to govern against misappropriation of funds (mean of 4.18). Additionally, 14(24%) respondents, strongly agreed and 22(38%) agreed

that the legal framework helped the institution financial mitigate risk (mean of 4.09). Nevertheless, 11(19%) respondents, strongly disagreed and 26(45%) disagreed that the institution had a legal department whereby its members were empowered to provide legal services and conducting investigations on embezzlement of funds (mean of 2.57).

The results imply that most TVETs had ensured that public funds were not embezzled through dubious methods through well-structured legal policy frameworks. Additionally, the framework made it possible to financial leakages through avoidable risky ventures. However, there were still some limitations in regards to providing full authority to legal counsel to fully implement legal measures in bid to curbing identified careless spending and misappropriation of funds. Notably, Aina and Bipath (2020) revealed that implementation of financial decisions was ensured through consistent monitoring and evaluation of budgets. In the case where there was evidence beyond reasonable doubt, the institutional legal counsel was able to file a legal complaint against the guilty party for compensation, fines or jail term. Therefore, to ensure this was done, the legal counsel was accorded adequate authority to collect reliable evidence that would ensure the institutional resources were not channeled to private ventures of the culprits.

4.11 Descriptive Results of Monitoring

Monitoring was an independent variable and was measured through various indictors like regular evaluation, internal audit, external audits by ministry auditors, detection of omissions and BOG oversight. The study administered questionnaires to the respondents and the results are provided in Table 4.14.

Table 4.14

Descriptive Statistics of Monitoring

Statements N=58	**1**	**2**	**3**	**4**	**5**	**Mean**
Enhanced financial accountability and detection of omissions	4 (7%)	21 (36%)	10 (17%)	14 (24%)	9 (16%)	3.05
External auditors display commitment	5 (9%)	20 (35%)	10 (17%)	13 (22%)	10 (17%)	3.05
Frequent visits to the institution by the external auditors	5 (9%)	9 (16%)	6 (10%)	18 (31%)	20 (34%)	4.33
The BOG regularly compares actual expenditure with budgeted expenditure	15 (26%)	12 (21%)	11 (19%)	12 (21%)	8 (14%)	2.76
The BOG is dedicated to its oversight role	8 (14%)	11 (19%)	7 (12%)	20 (35%)	12 (21%)	3.90

Table 4.14 indicated that 20(34%) respondents, strongly agreed and 18(31%) agreed that external auditors conducted frequent visits to the institution (mean of 4.33). Additionally, 12(21%) respondents, strongly agreed and 20(35%) agreed that the BOG was dedicated to its oversight role (mean of 3.90). Nevertheless, 15(26%) respondents, strongly disagreed and 12(21%) agreed that the BOG regularly compared actual expenditure with budgeted expenditure.

The results imply that TVETs have taken the initiative of safeguarding public resources by encouraging frequent visits by the independent external auditors and as well as oversight responsibilities accorded to the BOG to ensure all financial matters are progressing as required. However, in the role of oversight, the BOG did not consistently follow through to monitor budgets implementation process. Comparatively, Atieno et al. (2019) noted that this inconsistency could be partially attributed to other demanding tasks required to be handled by the BOG hence lacking adequate time to perform this task.

4.12 Correlation Analysis

The study used Pearson Correlation to test the null hypothesis that stated that there was no significant effect of monitoring on financial accountability in TVET institutions in Eastern region Kenya. Table 4.15 provides the results.

Table 4.15

Correlation Analysis Results

		Financial Accountability	Institutional Governance Structure	Accounting Information System	Legal Framework	Monitoring
Financial Accountability	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	58				
Institutional Governance Structure	Pearson Correlation	.417				
	Sig. (2-tailed)	.000				
	N	58	58			
Accounting Information System	Pearson Correlation	.851	.078	1		
	Sig. (2-tailed)	.019	.558			
	N	58	58	58		
Legal Framework	Pearson Correlation	.978*	.209	.101	1	
	Sig. (2-tailed)	.005	.115	.449		
	N	58	58	58	58	
Monitoring	Pearson Correlation	.495	.023	.110	.246	1
	Sig. (2-tailed)	.011	.865	.409	.063	
	N	58	58	58	58	58

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.15 indicates that the Pearson correlation coefficient for institutional governance structure was: r=0.417** at $\alpha < 0.000$ and 99% significance level. Therefore, since the correlation values were less than 1 and significance level less than 0.05, the study rejected the null hypothesis. This meant that various factors such as composition of BOG, BOG adherence to documented rules, trustworthiness and moral upsides of BOG, book keeping acquaintance and obligation of BOG, determined a lot on financial accountability measures. In the same line of thought, Oluoch (2017) also found a positive correlation of TVETs' performance and when the roles of the board were spelt out.

Research conducted in Indonesia demonstrated that the financial responsibility of local governments was significantly affected by variables like governance structure, risk assessment, control activities, information sharing, and supervision. These results further demonstrated the substantial impact internal control methods had on business processes (Kewo, 2017). Meanwhile, research investigating the factors influencing fraudulent activities in state civil apparatus suggested a link between the ethical climate, leadership styles, and fraud prevention. The study further highlighted the efficacy of a whistleblower policy, particularly when bolstered by disciplinary measures, hinting at the importance of an open and trustful environment within the organization (Karsono & Suraji, 2020).

Table 4.15 indicates that the Pearson correlation coefficient for accounting information system was: $r=0.851^{**}$ at $\alpha < 0.019$ and 99% significance level. Therefore, since the correlation values were less than 1 and significance level less than 0.05, the study rejected the null hypothesis. The results implied that through the adoption of AIS, quality of information, completeness, timeliness, data capture and automation of operations were effectively implemented resulting to financial accountability. Similar to the results, Rambau and Henning (2020) also ascertained a positive correlation between AIS and the accountability of South African higher learning institutions.

Further, Chaacha and Oosthuysen (2023) evaluated the dynamism of academic staff functionality in institutions of higher learning in South Africa. The study used qualitative method of data collection to interact with the intended sources of information. This was whereby the study e-interviewed 9 respondents to find out that these institutions had provide digital infrastructure to support the academic staff in lecturing and administrative tasks such as accounting and reporting of financial statements. That notwithstanding, Chaacha and Oosthuysen (2023) made a decision to conduct an e-interview to few numbers of respondents hence limiting the information that was derived and also conducted the process in a platform that was prone to digital malfunctions like network failure.

Table 4.15 indicates that the Pearson Correlation coefficient for legal framework was: r=0.978** at $\alpha < 0.005$ and 99% significance level. Therefore, since the correlation values were less than 1 and significance level less than 0.05, the study rejected the null hypothesis. The results implied that compliance to public finance management Act, compliance to public procurement and assets disposal Act, and risk mitigation enabled most TEVTs have financial accountability. Akinleye and Kolawole (2020) echo the results by indicating that Nigeria's tertiary institutional performance was positively affected through establishment of internal control mechanisms such as robust legal framework that support various operations.

Mgaiwa (2018) asserted that financial and quality audits played a pivotal role in assuring both the government and the public that funds were utilized both efficiently and effectively. They offered assurance that education of a certain quality was being delivered in return for the financial investment made. Hence, university regulations in nearly all countries necessitated institutions to furnish annual statements detailing income and expenditure, subject to audit for ensuring accuracy. Most commonly, these audits were executed by the auditor general of the government, though some nations engaged independent external auditors for higher education institutions.

Table 4.15 indicates that the Pearson Correlation coefficient for monitoring was: r=0.495** at $\alpha < 0.011$ and 99% significance level. Therefore, since the correlation values were less than 1 and significance level less than 0.05, the study rejected the null hypothesis. The results implied that regular evaluation, internal audit, external audits by ministry auditors, detection of omissions and BOG oversight enabled TVETs become more accountable of their finance related aspects. In support Dewi et al. (2019) noted that accountability of financial matters was closely associated with the quality of information at all stages but mostly on the monitoring and evaluation.

Monitoring's influence on financial accountability and provision of physical amenities in Kenya’s secondary schools that were ranked as national school was the focus of research by Atieno et al. (2019). The researchers used a descriptive survey design and a stratified random sampling technique to select a diverse group of participants including head teachers, bursars, heads of departments, and Board of Governors (BOG) chairpersons. The study identified financial malpractice as a significant detriment to the development of the schools' physical facilities, attributed mainly to inefficient auditing processes. The research recommended the establishment of an independent internal auditing system to ensure checks and balances (Atieno et al., 2019).

4.13 Multiple Regression

The study conducted multiple regression analysis elements such as model summary, ANOVA and regression coefficient.

4.13.1 Model Summary

The study conducted a model summary and the results are provided in Table 4.16.

Table 4.16

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.325[a]	.106	.100	3.07938	1.542

a. Predictors: (Constant), Monitoring, Institutional Governance Structure, Accounting Information System, Legal Framework

Table 4.16 indicate that R was 0.325 and R-square was 0.106 meaning that internal control systems had an 10.6% influence on financial accountability in public technical institutions. The results implied that when TVET was able to successfully blend various internal control mechanisms such as institutional governance structure, AIS, legal framework and monitoring, it enabled efficient achievement of financial accountability.

Similarly, Paudel (2019) also established that Nepal TVET programs were able to offer higher quality programs when financial controls such as governance and monitoring were implemented. Ejoh and Ejom (2014) also established that Nigerian tertiary institutions were able to enhance their financial performance through implementing consistent internal control operations like AIS. In Kenya, Ngure (2022) also noted that establishment of legal framework in TVETs was a game changer towards ensuring improved accountability in financial matters.

4.13.2 ANOVA

This study had a general objective of examining the effect of internal control systems on financial accountability in public technical institutions in the Eastern region Kenya. Therefore, Analysis of Variance (ANOVA) was used and its result are provided in Table 4.17.

Table 4.17

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	59.578	4	14.894	417.221	.016[b]
1	Residual	502.578	54	9.483		
	Total	562.155	57			

a. Dependent Variable: Financial Accountability

b. Predictors: (Constant), Monitoring, Institutional Governance Structure, Accounting Information System, Legal Framework

Table 4.17 shows that p-value was 0.16 and F-statistics of 417.221. Therefore, since the p-value was less than 0.05, the study ascertained that of internal control systems had a positive influence on financial accountability in public technical institutions. It was also noted by Maina and Muathe (2022) that there was a positive influence of various strategic interventions implemented such as quality financial monitoring and revitalizing performance in Kenyan TVETs.

4.13.3 Regression Coefficients

The study had a model whereby $Y= \beta 0+\beta_1X_1+ \beta_2X_2+\beta_3X_3+ \beta_4X_4+\varepsilon$

Y= Financial Accountability

X_1=Institutional governance structure

X_2=Adoption of accounting information systems

X_3= Legal framework

X_4= Monitoring

ε=error term

The study thus conducted a regression coefficient to answer the model as provide in Table 4.18.

Table 4.18

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.474	3.664		2.313	.025
	Institutional Governance Structure	.075	.126	.080	.595	.000
	AIS	.154	.128	.160	1.204	.011
	Legal Framework	.242	.145	.232	1.670	.004
	Monitoring	.049	.125	.054	.395	.020

Table 4.18 indicates that Constant was 8.474; institutional governance structure was 0.075; AIS was 0.154; legal framework was 0.242; and monitoring was 0.049 and standard error of 3.664. Therefore Y=8.474C+0.075X1+0.154X2+0.242X3+0.049X4+3.664e. The results indicate that when one unit of institutional governance structure, accounting information system, legal framework, monitoring was added, it increased financial accountability by 8.474+0.075+0.154+0.242+0.049.

Therefore, separately, institutional governance structure, accounting information system, legal framework, and monitoring were significant but when combined, legal framework was significant. This means that TVET institutions should implement more legal framework measures such as ensuring that its staff adhere to public finance management act, adherence to public procurement and assets disposal act and conduct adept risk mitigation procedures. This legal framework was also reported by MOE (2018) when the implementation phases of financial strategies were provided among tertiary institutions. There was emphasis of ensuring that public finance management act and management of risk was amicably followed.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The main aim of this research was to examine the effect of internal control systems on financial accountability in public technical institutions in the Eastern region Kenya. The objectives that guided this study included; assessing the influence of institutional governance structure on financial accountability, ascertaining the effect of integrating accounting information systems, evaluating the effect of the legal framework, and discerning the influence of monitoring on financial accountability in TVET institutions in the same region. The theoretical framework underpinning this study included agency theory, fraud triangle theory, and accountability theory. The population was 69 participants, encompassing 23 principals, 23 Board of Governors (BOG) chairs, and 23 finance officers from 23 TVET institutions within the Eastern Region.

5.2 Summary of Research Findings

A summary of the findings is provided in section 5.1.1 to 5.1.5 based on each objective.

5.2.1 Financial Accountability

The questionnaire findings indicated that 25(43%) respondents strongly agreed and 14(24%) agreed that the annual financial statements of the institutions accurately represented the use of resources during the year (mean of 4.11). Additionally, 22(38%) respondents strongly agreed and 17(29%) agreed that the institutions prepared regular financial reports for stakeholders (mean of 3.84). Nevertheless, 16(28%) respondents strongly disagreed and 10(17%) disagreed that the institutional staff promptly submitted reports for business advances (mean of 2.81). Further, 13(22%) respondents strongly disagreed and 15(26%) disagreed that there had been minimal queries regarding the financial reports prepared by their institution (2.76). The secondary data collected on various financial reports indicated that expenses had a mean of 4.21 and as well as debtors which had a mean of 4.35. Nevertheless, creditors and net profit had low mean of 3.82 and 3.74 respectively.

5.2.2 Institutional Governance Structure and Financial Accountability

The questionnaire findings indicated that 22(38%) respondents strongly agreed and 19(33%) agreed that the BOG consisted of individuals with accounting knowledge (mean of 4.25). Additionally, 12(21%) respondents strongly agreed and 16(28%) agreed that BOGs were committed to their oversight role (mean of 3.26). Nevertheless, 7(12%) respondents strongly disagreed and 20(35%) disagreed that the members of the BOG had no vested interests in the institution's expenditures and supplies (mean of 2.97). The Pearson correlation coefficient $r=0.417^{**}$ at $\alpha < 0.000$ and 99% significance level.

5.2.3 Accounting Information System and Financial Accountability

The questionnaire findings indicated that 24(41%) respondents strongly agreed and 11(19%) agreed that the adoption of an AIS had facilitated timely financial reporting in my institution (mean of 4.16). Additionally, 12(21%) respondents strongly agreed and 17(29%) agreed that the implementing an AIS had augmented the efficiency of financial processes and data capturing in our institution (mean of 3.70). Further, 16(28%) respondents strongly agreed and 14(24%) agreed that an effective AIS improved the accountability of financial resources in the institution (mean of 3.67). The Pearson correlation coefficient r=0.851** at $\alpha < 0.019$ and 99% significance level.

5.2.4 Legal Framework and Financial Accountability

The questionnaire findings indicated that 23(40%) respondents strongly agreed and 17(29%) agreed that there were well known legal policy framework to govern against misappropriation of funds (mean of 4.18). Additionally, 14(24%) respondents strongly agreed and 22(38%) agreed that the legal framework helps the institution financial mitigate risk (mean of 4.09). Nevertheless, 11(19%) respondents strongly disagreed and 26(45%) disagreed that the institution had a legal department whereby its members were empowered to provide legal services and conducting investigations on inappropriate funds use (mean of 2.57). The Pearson Correlation coefficient r=0.978** at $\alpha < 0.005$ and 99% significance level.

5.2.5 Monitoring and Financial Accountability

The questionnaire findings indicated that 20(34%) respondents strongly agreed and 18(31%) agreed that external auditors conducted frequent visits to the institution (mean of 4.33). Additionally, 12(21%) respondents strongly agreed and 20(35%) agreed that the BOG was dedicated to its oversight role (mean of 3.90). Nevertheless, 15(26%) respondents strongly disagreed and 12(21%) agreed that the BOG regularly compared actual expenditure with budgeted expenditure. The Pearson Correlation coefficient r=0.495** at $\alpha < 0.011$ and 99% significance level.

5.3 Conclusions of the Study

The overall conclusion of the study was that there were financial reporting milestones made among diverse TVETs. These milestones included full disclosure of their expenditures and income in the financial reports presented quarterly, semi-annually and annually. Regardless, the study noted that there were still issues with late submission of reports especially those related to fees payments. This brought about uncertainty on the completeness of the reported financial records. Considerably, this is an indication that TVET management had still not perfected the internal control mechanisms to allow quality financial accountability.

On institutional governance structure, it was noted that the composition of BOG was desirable since it contained quite a good number of members who had acquired accounting skills and were committed to their mandate. Regardless, there was still a problem of various financial decisions made since they were closely influenced by personal interests of the BOG members. This brought about conflict of interests hence limiting the potentiality of the internal control mechanism.

On accounting information system, it was noted that the implementation of AIS had enabled most TVETs to report their financial standings on time due to efficient processing of information when inputted accurately. Therefore, it was considered an enhancer towards financial accountability in regards to the proper utilization of TVETs' institution.

On legal framework, it was noted that TVET institutions had put into place robust legal structures that protected the resources from misuse and embezzlement. This was through avoiding risks that would cause loss of money hence improving accountability in every financial process. Regardless, the study realized that the management had still not given full authority to legal counsel to fully implement legal measures in bid to curbing identified careless spending and misappropriation of funds.

On monitoring, it was noted that the close monitoring and evaluation of books of accounts was done through frequent assessment by external auditors. This was to give a new perspective and keen attention to auditing details missed out by internal auditors for adequate financial accountability. Additionally, the BOG also ensured that they took a close watch towards the financial aspects through their oversight role. Regardless, the extent to which the BOG did their oversight role was limited by failure to consistently follow through to monitor budgets implementation process.

5.4 Recommendations of the Study

The study's recommendations on institutional governance structure are that the ministry of education should develop policies that guide on decision making process with accountability provided for every decision. Further, the BOG appointing body should conduct thorough background checks on them and also other senior management members. This will facilitate appointment of BOG members who are qualified and have no conflicting interests with the operations of the TVET for effectiveness in their decision-making process. Further, TVET management should ensure that there are quality checks and balances among all staff and BOG members to enhance internal control mechanisms. These check and balances should be further be empowered through a tough disciplinary process for any cases of skewed decisions made by the BOG towards their interests or any other staff authorized to make decisions on behalf of the institution.

The study's recommendations on accounting information system are that TVET management should provide more funding to strengthen the current accounting information systems from cyber-attack. This will reduce malware attack and siphoning of institutional funds to facilitate more efficiency on book keeping and reporting, which are a function of ensuring financial accountability. The TVET accounts department management should enhance more in-job training, conferences and seminars to equip its staff on the AIS. This will sharpen their accounting skills such that they are able to reduce work related errors and improve of reporting mechanism as per demand.

The study's recommendations on legal framework are that the legal department should be funded and authorized by the management through improvement of policy structure that dictates the scope of the roles. This will give them the much-needed authorization to begin an internal investigation when there is suspected careless spending and misappropriation of funds. The ministry of education should empower the legal framework of TVETs to curb vices that encourage theft of institutional resources. Through this empowerment, there will be less cases of deceitful declaration of income, exaggeration of expenditure, and increased timely reporting of fraud when it happens to facilitate more internal control function to enhance accountability.

The study recommendations on monitoring are that the BOG members should appoint a team of members whose role will include consistent monitoring and evaluation budgets to ensure that there are less cases of excessive spending unless it is beyond the institutional control. Additionally, the management should also improve awareness to the staff on the importance of following the budget to the letter to minimize of wastage of institutional resources. This awareness should be passed to the staff through internal memos, emails, word of mouth, phone calls, and meetings. This will instill responsibility towards adequate utilization of resources and institutional loyalty such that any wastages are reported immediately.

5.5 Suggestion for Future Studies

The study was done in public technical institutions in the Eastern region Kenya. Future studies should expand to other regions in Kenya such as Rift Valley, Nairobi and North Eastern, among others. Additionally, the study administered questionnaires to principals, finance officers and BOG chairs, hence future studies should involve qualitative data collection methods such as interviewing other Key Informants such as ministry of education officers.

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APPENDICES

Appendix I: Cover Letter to the Respondent

Faith Kathure Gitonga

Kenya Methodist University

School of Business and Economics

Department of Business Administration

P O B ox 267 – 60200

Meru-Kenya.

Dear Sir/Madam

Re: Letter of Transmittal of Data Collection Instruments

As a Master's Degree in Business Administration (Finance specialization) candidate at Kenya Methodist University, I'm conducting a research study for my academic requirements. The focus of this study is the influence of internal control systems on financial accountability within public technical and vocational education and training institutions in Kenya's eastern region. To achieve this, your insightful perspectives are incredibly valuable. Attached to this letter is a questionnaire designed to capture your views on your organization's internal controls and financial accountability systems. Please note that there are no right or wrong answers. Your honest opinion is what matters most. It's important to emphasize that your participation will be anonymous, and all responses will be handled with strict confidentiality. The data collected will only be used for the purpose of this study and will not be shared with any third parties. I kindly request a few moments of your precious time to complete this questionnaire. Your participation and input are critical to the success of this research.

Thank you sincerely for your time, cooperation, and invaluable contribution to this study.
Yours faithfully,

Faith Kathure Gitonga

Appendix II: Questionnaire

I extend an invitation to you to participate in this significant research project. Your participation would involve completing a survey that will approximately take 10 to 15 minutes of your time. To guarantee the confidentiality of your responses, you are not required to indicate your name. Rest assured; the information gathered from your responses will solely be used for academic objectives. Thank you for your time and invaluable contribution to this research.

Section A. General Information

1. Gender

GENDER	MALE	FEMALE
Tick where appropriate		

2. Highest level of qualification

   Please use the table provided below to identify your highest level of academic qualification by placing a tick in the appropriate box:

Qualification	PhD	Masters	Bachelor	Diploma	Certificate
Please Tick where appropriate					

   Other qualification (specify) …………………………………………….

3. Number of years served in the school

   Please utilize the following table to signify the duration of your service in the current institution by marking the suitable box with a tick:

Number of years served	Below 1 year	1-2 years	3-4years	5 -6 years	Above 6 years
Tick where appropriate					

4. Kindly use the table below to indicate the level of accounting knowledge of the Board of Governors (BOG) chair by marking the appropriate box with a tick:

BOG Academic Qualifications	Masters in accounting related course	Degree in accounting related course	Diploma in accounting related course	Certificate in accounting related course	No Accounting knowledge
Tick where appropriate					

SECTION B: INTERNAL CONTROLS

5. Kindly indicate your level of agreement with the following statements regarding the internal control system in your institution. Please use a 5-point Likert scale where 1 signifies 'Strongly Disagree', 2 represents 'Disagree', 3 stands for 'Neutral', 4 means 'Agree', and 5 symbolizes 'Strongly Agree'.

S/No	INSTITUTIONAL GOVERNANCE STRUCTURE	1	2	3	4	5
i	The BOG consists of individuals with accounting knowledge.					
ii	The composition of the BOG affects the management of funds in our institution.					
iii	The BOG operates with a clear and documented philosophy that is strictly adhered to.					
iv	The members of the BOG have no vested interests in the institution's expenditures and supplies.					
v	BOGs are committed to their oversight role.					
	ACCOUNTING INFORMATION SYSTEM	**1**	**2**	**3**	**4**	**5**
i	The adoption of an Accounting Information System has facilitated timely financial reporting in my institution.					

ii	An effective Accounting Information System improves the accountability of financial resources in the institution.					
iii	The use of an AIS has improved the precision of recording and reporting financial data.					
iv	The AIS assists in completeness of the financial reporting.					
v	Implementing an AIS has augmented the efficiency of financial processes and data capturing in our institution.					
	LEGAL FRAMEWORK	**1**	**2**	**3**	**4**	**5**
i	The legal framework promotes responsible financial management practices in the institution.					
ii	The institutions is guided by the public procurement and assets disposal Act when floating for tenders.					
iii	The legal framework helps the institution financial mitigate risk					
iv	There are well known legal policy framework to govern against misappropriation of funds					
v	The institution has a legal department whereby its members are empowered to provide legal services and conducting investigations on embezzlement of funds					
	MONITORING					
i	Regular Internal audit reports aids in enhancing financial accountability and detection of omissions.					
ii	External auditors display commitment and deliver impartial reports.					
iii	External auditors conduct frequent visits to the institution.					

iv	The BOG regularly compares actual expenditure with budgeted expenditure.					
v	The BOG is dedicated to its oversight role.					

SECTION C: FINANCIAL ACCOUNTABILITY

6. Please rate the extent to which you agree with the following statements in each area of financial accountability in your institution. Use a five-point Likert scale of 5 – 1: where 1 = Strongly Disagree, 2=Disagree, 3=Neutral, 4= Agree and 5= Strongly Agree.

S/No	**FINANCIAL ACCOUNTABILITY**	**1**	**2**	**3**	**4**	**5**
i	My institution prepares regular financial reports for stakeholders.					
ii	The annual financial statements of this institution accurately represent the use of resources during the year.					
iii	Institutional staff promptly submits reports for business advances.					
iv	Financial records are supplemented with all necessary source documents for verification.					
v	There have been minimal queries regarding the financial reports prepared by this institution.					

Thank you

Appendix III: Secondary Data Collection Form

TVET Institution's Name………………………………………………

Financial Metrics	**2020**	**2021**	**2022**	**2023**
Gross profit				
Expenses				
Net profit				
Debtors				
Creditors				

Appendix IV: Introduction Letter from KeMU

KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya | Fax: 254-64-30162

Tel: 254-064-30301/31229/30367/31171 | Email: deanrd@kemu.ac.ke

DIRECTORATE OF POSTGRADUATE STUDIES

Our Ref: KeMU/NACOSTI/BUS/15/2024 April 9, 2024

Commission Secretary
National Commission for Science, Technology and Innovations
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: FAITH KATHURE GITONGA (REG. NO. BUS-3-0086-1/2022)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, in the Department of Business Administration, undertaking a Master's Degree in Business Administration. She is conducting research on; "Effect of Internal Control Systems on Financial Accountability in Public Technical Institutions in Eastern Region Kenya".

We confirm that her research proposal has been defended and approved by the University.

In this regard, we are requesting your office to issue a research license to enable her collect data.

Any assistance accorded to her will be highly appreciated.

Yours sincerely,

09 APR 2024

Dr. John M. Muchiri (PhD)
Dean, Postgraduate Studies

Cc: [illegible]
CoD, Business Administration
Postgraduate Coordinator - BA
Supervisors

Appendix V: Ethical Clearance Letter

KENYA METHODIST UNIVERSITY

P. O. BOX 267 MERU - 60200, KENYA
TEL: 254-064-30301/31229/30367/31171
FAX: 254-64-30162
EMAIL: info@kemu.ac.ke

Our Ref: KeMU/ISERC/BUS/15/2024

April 9, 2024

FAITH KATHURE GITONGA
BUS-3-0086-1/2017

Dear Faith,

SUBJECT: EFFECT OF INTERNAL CONTROL SYSTEMS ON FINANCIAL ACCOUNTABILITY IN PUBLIC TECHNICAL INSTITUTIONS IN EASTERN REGION KENYA

This is to inform you that Kenya Methodist University Institutional Scientific Ethics and Review Committee has reviewed and approved your research proposal. Your application approval number is KeMU/ISERC/BUS/15/2024. The approval period is 9th April, 2024– 9th April, 2025.

This approval is subject to compliance with the following requirements:-

I. Only approved documents including (informed consents, study instruments, MTA) will be used.

II. All changes including (amendments, deviations, and violations) are submitted for review and approval by Kenya Methodist University Institutional Scientific Ethics and Review Committee.

III. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to KeMU ISERC within 72 hours of notification.

IV. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to KeMU ISERC within 72 hours.

V. Clearance for export of biological specimens must be obtained from relevant institutions.

Appendix VI: NACOSTI Permit

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **546802**

Date of Issue: **25/April/2024**

RESEARCH LICENSE

This is to Certify that Miss.. FAITH KATHURE GITONGA of Kenya Methodist University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Isiolo, Kitui, Machakos, Makueni, Marsabit, Meru, Tharaka-Nithi on the topic: EFFECT OF INTERNAL CONTROL SYSTEMS ON FINANCIAL ACCOUNTABILITY IN PUBLIC TECHNICAL INSTITUTIONS IN EASTERN REGION KENYA for the period ending : 25/April/2025.

License No: **NACOSTI/P/24/34976**

546802

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions