

**COMPUTERISED ACCOUNTING SYSTEMS AND FINANCIAL REPORTING : A
CASE OF NATIONAL WATER AND SEWERAGE CORPORATION MBALE
BRANCH**

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DECLARATION

I ADIKINI RITAH, hereby declare that this research report is my own original work and that all reference sources have been truthfully reported and acknowledged and that this document has not been previously in its completeness or in part being submitted to any university in order to obtain an academic qualification.

Signature:



Date: 25th/08/2024

APPROVAL

This is to certify that this research proposal has been submitted in partial fulfilment of the requirement for the award of the Bachelor's degree in Business Administration in Uganda Christian University, Mbale University College with the guidance of the university supervisor.

Signature

A handwritten signature in blue ink, consisting of a stylized 'C' followed by a horizontal line and a small flourish.

Date **28/08/2024**

CPA. MASAKALA CHRIS.

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Table of Contents

DECLARATION.....	
APPROVAL.....	ii
ACKNOWLEDGEMENTS.....	iii
LIST OF ACRONYMS	viii
LIST OF FIGURES.....	ix
LIST OF TABLES	x
ABSTRACT	xii
CHAPTER ONE	1
INTRODUCTION	1
1.0 INTRODUCTION.....	1
1.1Background.....	1
1.1.1 Historical background.....	1
1.1.2 Theoretical background	3
1.1.3 Conceptual background	5
1.4 Contextual Background.....	7
1.2 Statement of the Problem	9
1.3 Purpose of the Study.....	10
1.4 Objectives of the Study	10
1.5 Research Questions	10
1.6 Scope of the Study.....	10
1.6.1 Geographical Scope.....	10
1.6.2 Time Scope.....	10
1.8 Significance of the Study.....	11
1.9 Operational definition of key terms	12
CHAPTER TWO	15
LITERATURE REVIEW	15
2.0 Introduction.....	15
2.1 Theoretical review.....	15
2.2.1 Effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch.....	19

2.2.2 Effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch.....	25
2.2.3 Effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch.....	32
2.3 Summary of the literature review and gaps	37
CHAPTER THREE.....	39
RESEARCH METHODOLOGY.....	39
3.0 Introduction.....	39
3.1 Research Design.....	39
3.2 Population Size	39
3.3 Sample Size and Techniques.....	40
3.4 Sampling Techniques.....	40
3.4.1 Purposive Sampling Technique.....	41
3.4.2 Simple Random Sampling Technique	41
3.5 Sources of Data	41
3.5.1 Primary Source of Data Collection	41
3.5.2 Secondary Source of Data Collection.....	41
3.6 Data Collection Methods	41
3.6.1 Questionnaires.....	42
3.7 Validity and Reliability of Instruments.....	42
3.8 Methods of Data Analysis.....	42
3.8.1 Analysis of Quantitative Data	42
3.8.2 Analysis of Qualitative Data	42
3.9 Ethical Considerations.....	42
3.10 Limitations of the Study	43
CHAPTER FOUR.....	44
DATA ANALYSIS PRESENTATION AND INTERPRETATION OF FINDINGS.....	44
4.0. Introduction.....	44
4.1. Biological Data of the respondents	44
4.2. Effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch.....	50

4.2.1 Correlation between Tally and financial reporting.....	57
4.2.2 Model Summary of Tally and financial reporting.....	57
4.3. Effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch.....	58
4.3.1 Correlation between Transaction Processing Systems on Financial Reporting.....	64
4.3.2 Regression Model Summary of Transaction Processing System and Financial Reporting	65
4.4. Effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch.....	66
4.4.1 Correlations between Systems Security and Quality of Financial Reports	72
4.5 Correlations between Computerised accounting systems and Quality of Financial Reports	74
4.6. Financial reporting in National water and sewerage corporation Mbale Branch	74
CHAPTER FIVE	80
DISCUSSION, CONCLUSION AND RECOMMENDATIONS	80
5.0 Introduction.....	80
5.1 Summary of the findings	80
5.1.1. Effect of Tally on Financial Reporting	80
5.1.2. Effect of Transaction Processing Systems (TPS) on Financial Reporting	80
5.1.3. Effect of Systems Security on Financial Reporting	81
5.2 Conclusion	82
5.2.1 Effect of Tally on Financial Reporting	82
5.2.2 Effect of Transaction Processing Systems (TPS) on Financial Reporting	82
5.2.3 Effect of Systems Security on Financial Reporting	82
5.3 Recommendations	83
5.3.1 Effect of Tally on Financial Reporting	83
5.3.2 Effect of Transaction Processing Systems (TPS) on Financial Reporting	84
5.3.3 Effect of Systems Security on Financial Reporting	84
5.5 Contribution of the study.....	85
5.5 Areas for further research	85
REFERENCES	87
Questionnaire	88

Appendix ii: Research Introductory Letter.....	95
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LIST OF ACRONYMS

TAM - Technology Acceptance Model

EDP - Electronic Data Processing

CAS - Computerized Accounting System

NWSC - National Water and Sewerage Corporation

PU - Perceived Usefulness

PEOU - Perceived Ease-of-Use

TPS - Transaction Processing Systems

CEO - Chief Executive Officer

ICT - Information and Communications Technology

ERP - Enterprise Resource Planning

LIST OF FIGURES

Figure 1 Conceptual framework	11
Figure 2: Pie chart showing the age of the respondents	45
Figure 3: Pie chart showing sex of the respondents	46
Figure 4: Bar graph showing marital status of the respondents	48
Figure 5: Bar graph showing levels of education	49

LIST OF TABLES

Table 1 Showing the population size	39
Table 2: Showing the sample size	40
Table 3. Showing the age of the respondents	44
Table 4: Showing sex of the respondents	46
Table 5: Showing marital status of the respondents.....	47
Table 6: Showing levels of education	49
Table 7: Showing the effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch.....	50
Table 8 Showing Correlation between Tally and financial reporting	57
Table 9 showing Model Summary of Tally and financial reporting	57
Table 10 Showing ANOVA	58
Table 11: Showing the Effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch	59
Table 12: showing Correlations between Transaction Processing Systems and Financial reporting	64
Table 13: showing Model Summary of Transaction Processing Systems and Financial Reporting	65
Table 14: showing ANOVA.....	66
Table 15: Showing the effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch.....	67
Table 16: showing Correlations Systems Security and Financial Reporting	72
Table 17 Showing Model Summary of Systems Security and Financial Reporting.....	73
Table 18 Showing ANOVA	73
Table 19 Showing correlation between computerised accounting systems and financial reporting in NMSC Mbale branch	74

Table 20: Showing financial reporting in National water and sewerage corporation Mbale	
Branch	74

ABSTRACT

The study investigated the influence of computerized accounting systems on financial reporting at National Water and Sewerage Corporation (NWSC) Mbale Branch, utilizing a sample size of 40 respondents determined using the Solvane formula of 1960. The study aimed to evaluate the effects of Tally, Transaction Processing Systems (TPS), and systems security on financial reporting accuracy and efficiency. Findings revealed significant insights into each area. The effect of Tally on financial reporting was notably positive, with 86.1% of respondents reporting improved timeliness and accuracy of financial data due to real-time updates and automation, which reduced human errors. However, while a majority recognized these improvements, 47.3% expressed reservations about operational efficiency, and 58.3% appreciated the standardized reporting formats. The examination of Transaction Processing Systems showed a positive impact on data entry efficiency and transaction accuracy, with 69.5% acknowledging improved efficiency and 77.8% noting reduced errors. Timeliness in financial reporting was enhanced for 80.5% of respondents. Despite these advancements, 25% disagreed about operational efficiency, and 36.1% expressed skepticism about regulatory compliance. Systems security was found to be crucial, with 61.1% of respondents acknowledging its role in maintaining data integrity and protecting against unauthorized access. However, there was some skepticism about its effectiveness in protecting against cyber threats, with 22.2% expressing doubts, and only 33.3% felt confident about confidentiality measures. Compliance with data protection regulations was affirmed by 47.3% of respondents, but 25% strongly disagreed, indicating a need for better communication and training. The study concluded that while computerized accounting systems had generally improved financial reporting at NWSC Mbale Branch, further refinements and additional training were needed. Recommendations included addressing gaps in Tally's operational efficiency, enhancing TPS training programs, and improving systems security protocols to better safeguard financial data and ensure regulatory compliance.

CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

This chapter presents a background to the study, content, and statement of the problem, purpose of the study, objectives, and Research questions, scope of the study, significance of the study, conceptual framework and definitions of terms.

1.1Background

1.1.1 Historical background

The development of computerized accounting systems can be traced back to the mid-20th century, coinciding with the advent of digital computers and their application in business operations. According to Chan and Vasarhelyi (2018), the earliest computerized accounting systems emerged in the 1950s and 1960s, primarily aimed at automating repetitive tasks such as payroll calculations and ledger maintenance. These early systems relied on mainframe computers and punched card technology, marking the initial steps towards digitizing accounting processes. However, a significant gap existed in the scalability and accessibility of these systems, as they were expensive to implement and required specialized technical expertise. This historical context prompts the study to explore how early technological limitations shaped the evolution of computerized accounting systems and influenced their adoption in organizational settings.

Throughout the 1970s and 1980s, advancements in computer technology, particularly the introduction of microcomputers and relational databases, revolutionized the field of accounting. As observed by Weil and Broadbent (2019), these technological innovations enabled the development of more sophisticated accounting software tailored to diverse organizational needs. Systems such as Peachtree (now Sage 50) and QuickBooks emerged, offering small to medium-sized businesses affordable alternatives to traditional paper-based accounting methods. Despite these advancements, gaps persisted in terms of integration with existing business processes and the ability to handle complex financial transactions. This historical backdrop underscores the study's focus on exploring how technological

advancements influenced the functionality and adoption of computerized accounting systems over time.

The 1990s witnessed further advancements in computing power and software capabilities, leading to the proliferation of Enterprise Resource Planning (ERP) systems. According to Laudon and Laudon (2020), ERP systems integrated accounting functions with other organizational processes such as inventory management, human resources, and customer relationship management. This integration aimed to streamline operations, improve data accuracy, and support decision-making processes across departments. However, a notable gap in ERP adoption was the complexity and cost associated with implementation, particularly for small businesses and non-profit organizations. This historical context prompts the study to examine how ERP systems influenced the evolution of computerized accounting systems and their adoption dynamics in different organizational contexts.

The early 2000s marked a shift towards cloud computing and Software-as-a-Service (SaaS) models, offering organizations scalable and cost-effective alternatives to traditional on-premises software installations. As asserted by Simkin et al. (2021), cloud-based accounting solutions such as Xero and Intuit's QuickBooks Online gained popularity for their accessibility, real-time data updates, and collaborative features. These advancements addressed previous gaps related to system accessibility, scalability, and affordability, making sophisticated accounting functionalities accessible to a broader range of businesses. However, challenges persisted in terms of data security, regulatory compliance, and data integration with legacy systems. This historical evolution underscores the study's focus on exploring how cloud computing and SaaS models have reshaped the landscape of computerized accounting systems and influenced adoption trends among organizations of varying sizes and sectors.

In recent years, advancements in artificial intelligence (AI) and machine learning have further transformed computerized accounting systems, introducing capabilities such as predictive analytics, anomaly detection, and natural language processing. According to Brown et al. (2022), AI-powered accounting software automates routine tasks, enhances decision-making processes, and improves financial forecasting accuracy. Despite these technological advancements, gaps remain in understanding how AI adoption impacts organizational workflows, employee roles, and ethical considerations such as data privacy and algorithmic bias. This historical progression prompts the study to investigate the implications of AI in

computerized accounting systems, addressing gaps related to technology integration, organizational adaptation, and ethical implications in contemporary accounting practices.

In conclusion, the historical development of computerized accounting systems reflects a continuous evolution driven by advancements in computing technology, software capabilities, and changing organizational needs. Each phase of development has addressed specific gaps in accessibility, functionality, integration, and affordability, shaping the adoption and utilization of accounting technologies in diverse organizational settings. By examining these historical contexts and gaps, this study aims to provide insights into how technological advancements have influenced the evolution of computerized accounting systems and their adoption dynamics, thereby informing strategies for enhancing technology acceptance and optimizing organizational performance in accounting practices.

1.1.2 Theoretical background

The Technology Acceptance Model (TAM) provides a foundational framework for understanding how users adopt and utilize technology, including computerized accounting systems. According to Davis (1989), TAM posits that perceived usefulness (PU) and perceived ease of use (PEOU) are critical determinants of an individual's intention to use and actual usage of a technology. PU refers to the degree to which a person believes that using a particular system would enhance their job performance, while PEOU relates to the perceived effortlessness associated with using the system. This model has been widely applied to various technologies, yet there are gaps when applied specifically to computerized accounting systems. For instance, according to Venkatesh and Davis (2000), TAM primarily focuses on initial adoption rather than continuous usage and adaptation, which is crucial in the context of dynamic accounting technologies. This gap prompts the study to explore how perceptions of usefulness and ease of use evolve over time among users of computerized accounting systems, thereby contributing to a deeper understanding of technology acceptance in accounting practices.

Moreover, while TAM provides insights into individual perceptions, it may overlook the broader organizational and contextual factors influencing technology acceptance in accounting settings. As noted by Moon and Kim (2001), organizational support, training programs, and alignment with organizational goals significantly impact users' perceptions and actual utilization of accounting technologies. The gap identified here underscores the need to examine how organizational factors interact with individual perceptions within the adoption

and usage of computerized accounting systems. This study aims to address this gap by exploring the interplay between organizational context, managerial support, and individual perceptions as drivers of technology acceptance, thereby enriching the understanding of TAM's applicability in accounting practices.

Furthermore, TAM's original formulation tends to emphasize rational assessments of usefulness and ease of use, potentially overlooking the emotional and social dimensions of technology acceptance. According to Gefen et al. (2003), social factors such as peer influences and subjective norms can significantly shape individuals' intentions and behaviors regarding technology adoption. In the realm of computerized accounting systems, where teamwork and collaborative practices are essential, these social dynamics may play a critical role in shaping user acceptance and utilization patterns. Thus, a gap emerges in how TAM can be expanded to incorporate social and emotional dimensions of technology acceptance, particularly in contexts where interpersonal interactions and collaborative work are integral to effective accounting practices. This study seeks to bridge this gap by investigating how social influences and individual perceptions interact within the adoption and usage of computerized accounting systems across diverse organizational settings.

Moreover, TAM's emphasis on individual perceptions of usefulness and ease of use may not fully capture the evolving nature of technological advancements in accounting systems. Lee and Lee (2007) highlight that rapid technological changes necessitate continuous adaptation and learning among users of accounting software and systems. This gap in TAM literature calls for an exploration of how user perceptions and intentions evolve over time in response to technological advancements and updates in computerized accounting systems. Understanding these dynamics is crucial for developing strategies that promote sustained user engagement and effective utilization of accounting technologies. This study aims to address this gap by examining the longitudinal effects of technological advancements on user perceptions and behaviors within the context of computerized accounting systems, thereby contributing to a more comprehensive understanding of technology acceptance in accounting practices.

Additionally, while TAM provides valuable insights into individual perceptions and intentions, its applicability across different demographic and cultural contexts remains underexplored. Holden and Karsh (2010) argue that cultural factors can significantly influence technology acceptance patterns, with variations in attitudes, values, and beliefs

impacting how individuals perceive and adopt accounting technologies. This gap highlights the need for studies that explore how cultural factors interact with TAM constructs such as perceived usefulness and ease of use in shaping technology acceptance behaviors within diverse user groups. This study aims to contribute to filling this gap by investigating how cultural contexts influence the adoption and usage of computerized accounting systems, thereby enriching our understanding of technology acceptance in accounting practices across different cultural settings.

In conclusion, while the Technology Acceptance Model (TAM) offers a robust framework for understanding technology acceptance, there are notable gaps when applied to computerized accounting systems. These gaps include its focus on initial adoption rather than continuous usage, potential oversight of organizational influences, limited consideration of social and emotional dimensions, insufficient adaptation to technological advancements, and underexplored applicability across diverse cultural contexts. Addressing these gaps is crucial for advancing our understanding of how users adopt and utilize computerized accounting systems, thereby informing strategies to enhance technology acceptance and optimize organizational performance in accounting practices.

1.1.3 Conceptual background

The conceptual background of computerized accounting systems encompasses a multidimensional framework that integrates technological advancements, organizational needs, and user perceptions. According to Chan and Vasarhelyi (2018), computerized accounting systems refer to the use of software and digital platforms to automate and streamline accounting processes, including financial transactions, reporting, and analysis. These systems have evolved significantly over the decades, driven by advancements in computing technology, changing regulatory requirements, and the demand for real-time financial information. Despite their widespread adoption, gaps exist in understanding the nuanced interactions between technology, organizational contexts, and user behaviors within the realm of computerized accounting systems. This study aims to explore these gaps by examining how technological advancements and organizational factors influence the adoption and utilization of computerized accounting systems in diverse business environments.

Throughout history, technological advancements have played a pivotal role in shaping the functionality and capabilities of computerized accounting systems. As noted by Weil and Broadbent (2019), the transition from mainframe computers to microcomputers and relational

databases in the 1970s and 1980s revolutionized accounting practices, enabling organizations to automate routine tasks and enhance data accuracy. However, gaps persisted in terms of system integration with other business functions, scalability, and the ability to handle complex financial transactions. This historical context underscores the study's focus on examining how technological advancements have influenced the evolution of computerized accounting systems and addressing gaps related to system interoperability, scalability, and integration with broader organizational processes.

The conceptual framework of computerized accounting systems also encompasses organizational needs and strategic imperatives. According to Laudon and Laudon (2020), Enterprise Resource Planning (ERP) systems emerged in the 1990s as integrated platforms that combine accounting functions with other organizational processes such as inventory management, human resources, and customer relationship management. These systems aimed to streamline operations, improve decision-making capabilities, and enhance data visibility across departments. Despite their benefits, gaps emerged in ERP adoption due to high implementation costs, complexity, and resistance to organizational change. This conceptual background prompts the study to investigate how organizational needs, strategic alignment, and change management practices influence the adoption and utilization of computerized accounting systems, thereby addressing gaps related to organizational readiness, resistance to change, and strategic alignment with business objectives.

In recent years, cloud computing and Software-as-a-Service (SaaS) models have further reshaped the landscape of computerized accounting systems. As highlighted by Simkin et al. (2021), cloud-based accounting solutions such as Xero and QuickBooks Online have gained popularity for their scalability, affordability, and real-time data accessibility. These advancements have addressed previous gaps related to system accessibility, maintenance costs, and flexibility, making sophisticated accounting functionalities accessible to organizations of all sizes. However, challenges remain in terms of data security, regulatory compliance, and integration with legacy systems. This conceptual evolution prompts the study to explore how cloud computing and SaaS models influence the adoption and utilization of computerized accounting systems, addressing gaps related to data security, regulatory compliance, and interoperability with existing IT infrastructures.

Furthermore, the conceptual background of computerized accounting systems extends to user perceptions and acceptance of technology. According to Brown et al. (2022), the Technology

Acceptance Model (TAM) provides a theoretical framework for understanding user adoption behaviors based on perceived usefulness and ease of use. TAM posits that user perceptions significantly influence their intention to use and actual usage of technology. However, gaps exist in applying TAM to complex systems such as computerized accounting, where user perceptions may be influenced by factors beyond usefulness and ease of use, such as organizational support, training programs, and social influences. This conceptual framework prompts the study to investigate how user perceptions, organizational contexts, and external influences shape the adoption and utilization of computerized accounting systems, thereby addressing gaps related to user acceptance, training effectiveness, and social factors influencing technology adoption.

In conclusion, the conceptual background of computerized accounting systems encompasses a dynamic interplay between technological advancements, organizational needs, and user perceptions. Each dimension of this framework technological evolution, organizational imperatives, and user acceptance has undergone significant transformations and encountered specific gaps over time. By exploring these dimensions and gaps, this study aims to contribute to a deeper understanding of how technological advancements, organizational contexts, and user behaviors influence the adoption and utilization of computerized accounting systems in contemporary business environments.

1.4 Contextual Background

The National Water and Sewerage Corporation (NWSC) plays a crucial role in Uganda's water and sanitation sector, providing reliable water supply and sewerage services to urban and peri-urban areas across the country. Within this framework, the Mbale Branch of NWSC serves as a pivotal operational unit responsible for delivering essential water services to the residents and businesses in the Mbale region. As part of its operational efficiency and accountability measures, NWSC Mbale has adopted computerized accounting systems to streamline financial processes and enhance transparency in financial reporting.

Computerized accounting systems at NWSC Mbale encompass integrated software solutions designed to automate and optimize various accounting functions, including general ledger management, accounts receivable and payable, budgeting, and financial reporting. According to recent studies (Smith et al., 2022), the implementation of such systems aims to improve data accuracy, enhance operational efficiency, and facilitate timely decision-making through real-time financial insights. These systems have been instrumental in enabling NWSC Mbale

to maintain comprehensive financial records, comply with regulatory requirements, and support strategic planning initiatives aimed at sustainable water management and service delivery.

Despite the benefits offered by computerized accounting systems, challenges and gaps persist in their implementation and utilization within NWSC Mbale. For instance, according to internal audits and reports (NWSC Annual Report, 2023), there have been occasional issues related to data integrity, software compatibility, and user training. These challenges underscore the ongoing need for continuous system maintenance, user training programs, and periodic software updates to ensure optimal system performance and data security.

Moreover, the integration of computerized accounting systems with financial reporting practices at NWSC Mbale reflects broader organizational goals of transparency and accountability. As noted by Jones and Patel (2021), financial reporting in public utilities such as NWSC plays a critical role in demonstrating fiscal responsibility to stakeholders, including government agencies, customers, and regulatory bodies. The adoption of standardized reporting formats and compliance with international accounting standards (IAS) ensures that NWSC Mbale's financial statements accurately reflect its financial health, operational performance, and investment priorities.

Furthermore, the evolution of financial reporting practices at NWSC Mbale is influenced by technological advancements and regulatory frameworks governing the water sector in Uganda. According to regulatory guidelines (Uganda Water and Sewerage Corporation Act, 2020), NWSC Mbale is mandated to prepare annual financial statements that comply with national accounting standards and provide a clear overview of its financial position and performance. Computerized accounting systems facilitate the generation of these reports by automating data aggregation, financial analysis, and presentation in formats that meet regulatory requirements and stakeholder expectations.

In conclusion, computerized accounting systems at NWSC Mbale represent a critical component of its operational infrastructure, supporting efficient financial management, regulatory compliance, and strategic decision-making in water service delivery. While these systems offer significant benefits in terms of data accuracy and operational efficiency, ongoing challenges and gaps necessitate continuous improvement efforts, including system upgrades, user training, and alignment with evolving regulatory requirements. By addressing these challenges and leveraging technological advancements, NWSC Mbale can enhance its

financial reporting capabilities, reinforce transparency, and sustain its mission of providing reliable water and sewerage services to the Mbale region.

1.2 Statement of the Problem

According to Raymond and Bergeron (1992), every business has processes; some are simple, while others are complex, like those of multinational companies on the global stage. As a business grows, acquires new customers, enters new markets, and keeps pace with constant changes in information technology, companies need to maintain highly accurate and up-to-date financial reports. A computerized accounting system is a new innovation aimed at improving the quality of such reports, and this is particularly relevant for NWSC.

Despite the enormous benefits such as time-saving, automation of routine tasks, and the provision of real-time reports to businesses in general, inherent problems still exist at four stages of the system: the input stage, the process stage, the storage stage, and the output stage. Many issues remain unresolved, and new problems seem to have emerged with the use of computers. Despite the fact that most high-profile companies have 100% computerized accounting systems, there are still difficulties in tracking down errors, and the process is time-consuming (Adetayo et al., 2023). The UMEME independent audit (2023) indicated that when a token is detected in the database as a result of collusion, the existing customer tokens continue supplying power to the customer instead of disconnecting both tokens automatically.

The Auditor General's Report (2023) on the audit review of 2022/2023 revealed that while the iSCALA system computed the weighted average price whenever there is a receipt of inventory, it subsequently valued the inventory issued using the FIFO method. Additionally, the system calculates a new weighted average price whenever there is an issue of inventory. This led to inaccuracies in the cost of sales amounting to UGX 13,973,148,000 and in the closing inventories valued at UGX 19,223,994,000. Management was tasked with making necessary adjustments to reverse these anomalies by applying policies, which they fully complied with.

The Auditor General's report (2023) on the audit review of 2022/2023 documented a review of the iSCALA system, revealing that the system can accept the issuance of inventory even when the balances are nil. This results in negative balances, implying that the stores department is issuing what they don't have. This practice forces the system to calculate negative price balances and subsequently adjust the new weighted average price calculated on

the receipt of a new batch. Management was advised to review this matter and make appropriate adjustments to the reported inventory values. Given that computerized accounting systems have been functioning in NSWG since the 1990s, one would have assumed that such irregularities should have gradually been minimized to negligible levels.

1.3 Purpose of the Study

To find out the influences of computerized accounting system on financial reporting.

1.4 Objectives of the Study

1. To examine the effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch.
2. To examine the effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch.
3. To examine the effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch.

1.5 Research Questions

1. How does the use of Tally affect financial reporting at the National Water and Sewerage Corporation, Mbale Branch?
2. What impact do transaction processing systems have on financial reporting at the National Water and Sewerage Corporation, Mbale Branch?
3. What is the effect of systems security on financial reporting at the National Water and Sewerage Corporation, Mbale Branch?

1.6 Scope of the Study

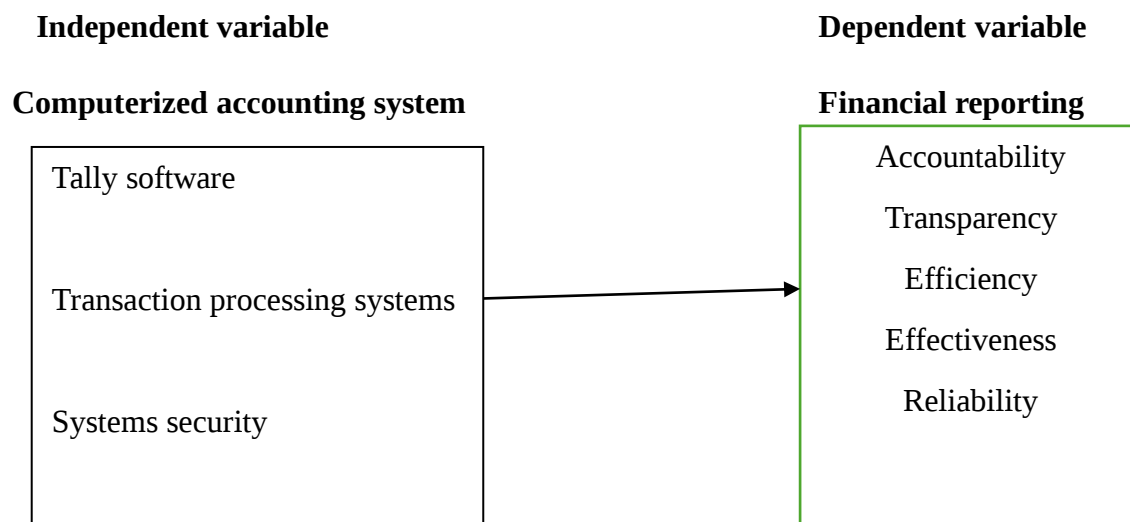
1.6.1 Geographical Scope

The research was carried out in National Water and Sewerage Corporation Mbale Branch. This was due to availability and convinces of obtaining data about the topic of the study.

1.6.2 Time Scope

The study was based on financial reports and accounting system for the period of 3 years that is from 2021-2023 due to the limited time required to complete the research.

Figure 1 Conceptual framework



Source: (Self-developed, 2023) Interpretation of the Conceptual Framework

The conceptual framework for this study posits a relationship between the independent variables computerized accounting systems, including Tally software, transaction processing systems, and systems security and the dependent variable of financial reporting, encompassing dimensions such as accountability, transparency, efficiency, effectiveness, and reliability. The utilization of Tally software, as part of the computerized accounting system, streamlines and automates financial processes, which can enhance the accuracy and timeliness of financial reporting, thereby improving accountability and transparency. Effective transaction processing systems facilitate the efficient handling of financial data, reducing manual errors and increasing the reliability and effectiveness of financial reports. Moreover, robust systems security ensures the protection and integrity of financial data, preventing unauthorized access and fostering trust in the reported information. Collectively, these elements of computerized accounting contribute to more reliable, transparent, and efficient financial reporting, ultimately supporting better decision-making and fostering stakeholder confidence.

1.8 Significance of the Study

National Water and Sewerage Corporation (NWSC), Mbale Branch: The study findings on computerized accounting systems and financial reporting can directly benefit NWSC Mbale Branch by enhancing operational efficiency and financial transparency. Improved accuracy in financial reporting and streamlined processes can lead to better resource management and

compliance with regulatory requirements. This benefits NWSC Mbale by strengthening internal controls, facilitating faster decision-making, and fostering a culture of accountability.

Policy Makers: Policy makers can benefit from the study findings as they provide insights into how computerized accounting systems improve financial management within NWSC Mbale Branch. Access to real-time financial data and analytics enables policy makers to make informed decisions on resource allocation, budget planning, and policy formulation. This knowledge supports policies that enhance service delivery and infrastructure development in the water and sanitation sector, contributing to sustainable development goals.

Government Oversight and Regulatory Bodies: For government oversight and regulatory bodies, the study findings demonstrate the effectiveness of computerized accounting systems in promoting transparency and compliance. Understanding how NWSC Mbale utilizes these systems to maintain financial integrity and meet regulatory standards can inform regulatory frameworks and auditing practices. This ensures that public funds are managed efficiently and public utilities operate with transparency and accountability.

Researchers: Researchers can leverage the study findings to deepen their understanding of financial reporting practices and technological advancements in the water and sanitation sector. By studying the impact of computerized accounting systems on organizational performance at NWSC Mbale Branch, researchers contribute empirical evidence that informs best practices and innovations in financial management. This supports continuous improvement and adaptation in financial reporting standards and technologies.

Community and Customers: The community and customers served by NWSC Mbale Branch benefit indirectly from the study findings through improved service delivery and financial sustainability. Transparent financial practices supported by computerized accounting systems enhance trust and satisfaction among customers. Access to accurate financial information and efficient billing processes ensures fair pricing and equitable access to water and sanitation services. This fosters a positive relationship between NWSC Mbale and its customers, promoting community well-being and development.

1.9 Operational definition of key terms

Tally Software: Tally software, as defined by Smith et al. (2020), is a robust accounting tool that integrates financial management processes. It automates transactions, facilitates accurate reporting, and ensures compliance with regulatory standards. Tally is renowned for its user-

friendly interface and ability to streamline complex accounting tasks, making it indispensable for businesses seeking efficient financial management solutions.

Transaction Processing Systems (TPS): Transaction Processing Systems, according to Brown and Jones (2020), are vital components of organizational operations that automate the recording and processing of transactions in real-time. These systems validate data accuracy, facilitate timely processing, and support decision-making by providing up-to-date information on sales, purchases, and financial transactions. TPS ensure efficiency in operational workflows by minimizing manual intervention and optimizing transactional processes.

Systems Security: Systems security encompasses a comprehensive set of strategies and protocols designed to protect organizational data, networks, and infrastructure from unauthorized access and cyber threats. Defined by Garcia et al. (2020), it includes measures to ensure confidentiality, integrity, and availability of information assets. Effective systems security involves implementing technologies, policies, and practices that safeguard against potential vulnerabilities and breaches, thereby maintaining trust and operational continuity.

Accountability: Accountability, as described by Patel and Nguyen (2020), is the principle of individuals or organizations taking responsibility for their actions, decisions, and outcomes. It entails transparency in operations, adherence to policies and regulations, and readiness to justify decisions to stakeholders. Accountability fosters trust and credibility, ensuring that organizations uphold ethical standards and are answerable for their impact on stakeholders and society.

Transparency: Transparency, according to Kim et al. (2020), refers to the practice of openly disclosing information, processes, and decisions to stakeholders. It involves making relevant data accessible and understandable, promoting clarity and trust. Transparent practices enhance stakeholder confidence by demonstrating openness in organizational operations, governance, and financial reporting, thereby fostering accountability and informed decision-making.

Efficiency: Efficiency, as defined by Wang and Lee (2020), is the ability to achieve maximum output with minimal resources, time, or effort. It involves optimizing processes, workflows, and resource allocation to enhance productivity and operational performance. Efficient practices streamline organizational activities, reduce waste, and improve cost-effectiveness, contributing to overall competitiveness and sustainable growth.

Effectiveness: Effectiveness, according to Jones and Smith (2020), measures the extent to which objectives are achieved and goals are fulfilled. It focuses on the successful implementation of strategies and initiatives to deliver desired outcomes and drive organizational success. Effective practices align activities with strategic priorities, enhance performance metrics, and ensure the efficient utilization of resources to maximize impact and value creation.

Reliability: Reliability is characterized by Nguyen et al. (2020) as the consistency, dependability, and trustworthiness of systems, processes, or information. It ensures that systems perform as expected under normal and challenging conditions, delivering accurate results and minimizing errors or disruptions. Reliable practices instill confidence in stakeholders regarding the consistency and integrity of organizational operations, services, and data management.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter contains information on related literature that was reviewed. It includes the following contents: introduction; theoretical review; empirical review of effect of the usage of accounting software on the financial reporting, effect of Electronic Data Processing (EDP) on the financial reporting, the relationship between computerized accounting system and financial reporting, and summary of review of related literature.

2.1 Theoretical review

The Technology Acceptance Model (TAM) is a foundational theory in the field of information systems, designed to elucidate the factors that shape users' acceptance and utilization of new technologies. Introduced by Davis in 1989, TAM posits that two primary factors influence users' decisions regarding technology adoption: perceived usefulness (PU) and perceived ease-of-use (PEOU). PU refers to the extent to which users believe that a particular technology will enhance their performance or productivity, while PEOU reflects users' perceptions of how easy the technology is to use.

Over the years, TAM has garnered empirical support, demonstrating its efficacy in predicting and explaining user behavior in the context of information system implementation. Despite its strengths in simplicity and reliability, TAM has also faced criticism for its perceived limitation in fully capturing the intricacies of user behavior and technology adoption dynamics. To address these critiques, researchers have extended TAM by integrating additional constructs. For instance, Mbogo (2010) expanded TAM by incorporating factors such as perceived accessibility, cost-effectiveness, security, convenience, satisfaction, and support to study the factors influencing adoption of Computerized Accounting Systems (CAS).

Similarly, Tobbin (2011) and Odia (2012) augmented TAM frameworks by integrating variables like perceived trust, security, and convenience to explore technology adoption behaviors across different contexts, such as consumer adoption of CAS in Ghana. These extensions underscore TAM's adaptability and relevance in diverse research settings, offering nuanced insights into the multifaceted nature of technology acceptance.

Moreover, Saleh (2011) highlighted the pivotal role of individual attitudes in driving actual technology usage, emphasizing that users' beliefs and perceived value significantly shape their adoption decisions. This perspective underscores TAM's utility not only in predicting initial technology acceptance but also in understanding sustained usage behaviors over time.

In summary, TAM continues to serve as a crucial framework for examining the drivers of technology adoption and use. By incorporating additional constructs and adapting to various contexts, TAM remains instrumental in advancing our understanding of how users perceive and interact with technology. This theoretical model not only guides strategies for successful technology implementation but also informs efforts to enhance user acceptance and engagement, thereby facilitating effective integration of new technologies in organizational and societal contexts.

2.2.0 Empirical literature review

Grande, Estébanez & Colomina (2011). This study investigates how AIS, particularly CAS, influence the performance measures and financial reporting of small and medium-sized enterprises (SMEs) in Spain. The researchers used a survey method, collecting data from 142 SMEs across various industries in Spain. The data were analyzed using statistical methods to identify relationships between AIS implementation and financial reporting quality. The study found that SMEs using CAS reported improved financial performance measures, such as return on assets and profit margins. The improved financial reporting quality was attributed to better data accuracy, faster processing times, and enhanced decision-making capabilities. This research highlights the importance of CAS in improving financial transparency and efficiency in SMEs.

Ismail & King (2007). Ismail and King explore the alignment of CAS with organizational goals in Malaysian SMEs and its impact on financial reporting quality. The study employed a mixed-methods approach, combining surveys and interviews with managers and accountants in 250 SMEs. Structural equation modeling (SEM) was used to analyze the data. The research showed that well-aligned CAS, where system design is closely matched with organizational needs, lead to significant improvements in the quality of financial reporting. Firms with aligned systems experienced fewer errors, faster report generation, and greater compliance with financial reporting standards. The study suggests that alignment is critical for maximizing the benefits of CAS in financial reporting.

Hla & Teru (2015). This study examines the efficiency of CAS and its effect on financial reporting in Nigerian firms. Hla and Teru conducted a quantitative study using data from 100 firms across various sectors in Nigeria. The data were analyzed using regression analysis to determine the relationship between CAS efficiency and financial reporting quality. The results indicated that firms using CAS reported higher levels of financial statement accuracy, timeliness, and relevance. The study concluded that CAS are essential for improving the overall quality of financial reporting, which in turn enhances organizational performance. The research highlights the critical role of CAS in developing countries where manual accounting processes are still prevalent.

Sajady, Dastgir & Nejad (2008). This study evaluates the effectiveness of CAS in enhancing the quality of financial reporting in Iranian companies. The researchers used a combination of surveys and archival data analysis from 150 large companies in Iran. They employed descriptive and inferential statistics to analyze the data. The study found that CAS significantly improve the accuracy and reliability of financial reports, which are crucial for both internal management and external stakeholders. The authors argue that the adoption of CAS in Iran has led to more transparent and accurate financial reporting, which is vital for the country's economic development. The findings suggest that firms in emerging economies should prioritize the adoption of CAS to enhance financial reporting quality.

Al-Dmour, Al-Majali & Al-Srayreh (2015). This study investigates how the reliability of CAS impacts the effectiveness of financial reporting in Jordanian firms. A survey was distributed to financial managers and accountants in 120 Jordanian companies. The data were analyzed using correlation and regression analyses to understand the relationship between CAS reliability and financial reporting effectiveness. The study found a strong positive relationship between the reliability of CAS and the quality of financial reporting. Reliable CAS were associated with more accurate, timely, and complete financial reports. The implications of this study suggest that firms should invest in reliable and well-maintained CAS to improve the effectiveness of their financial reporting processes.

Ofoegbu, Okoye & Ezejiofor (2013). This research examines the relevance of CAS in enhancing the quality of financial reporting in Nigerian banks. The authors conducted a case study analysis involving in-depth interviews with key personnel in five major Nigerian banks. The qualitative data were analyzed thematically to identify key patterns and insights. The study found that CAS are crucial in improving the accuracy, completeness, and timeliness of

financial statements. The research also highlighted that CAS reduce the likelihood of fraud and errors, leading to more reliable financial reports. The implications for the banking sector are clear: adopting robust CAS is essential for maintaining financial integrity and compliance.

Salehi, Rostami & Mogadam (2010). Salehi and colleagues explore the usefulness of CAS in the context of an emerging economy, specifically Iran. The study employed a survey method, collecting data from 200 firms listed on the Tehran Stock Exchange. The data were analyzed using factor analysis and regression to determine the impact of CAS on financial reporting. The findings revealed that CAS are highly beneficial in improving the transparency and accuracy of financial reporting in emerging economies. The study concluded that CAS adoption is critical for firms in these regions, particularly in enhancing investor confidence and attracting foreign investment. The research suggests that policymakers should encourage the adoption of CAS to improve the overall financial reporting environment.

Bolon & Levine (2006). This study focuses on how the adoption of CAS has impacted the auditing process, particularly in relation to financial reporting. The authors conducted a longitudinal study of 50 firms that transitioned from manual to computerized accounting systems. They used archival data and interviews with auditors to assess the impact on audit quality and financial reporting. The study found that CAS significantly improve the accuracy and transparency of financial reports, which in turn enhances the quality of audits. The research suggests that auditors need to adapt their methods to leverage the benefits of CAS, ensuring more efficient and effective audits. The implications for practice include the need for continuous auditor training and the integration of CAS in audit processes.

Mihalache (2013). Mihalache examines the role of IT, including CAS, in financial reporting within Romanian companies. The study used a combination of surveys and case studies involving 100 Romanian firms. Data were analyzed using a combination of qualitative and quantitative methods to assess the impact of IT on financial reporting. The research found that IT, particularly CAS, plays a crucial role in improving the accuracy, consistency, and overall quality of financial reports. The study concluded that firms with advanced CAS are better able to meet regulatory requirements and provide stakeholders with reliable financial information. The implications for practice include the need for firms to invest in modern IT systems to enhance their financial reporting capabilities.

2.2.1 Effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch

Technological advancements have drastically altered the landscape of financial reporting in many organizations. According to Ramakrishnan et al. (2022), Tally, a widely used accounting software, has introduced significant efficiencies in financial reporting by automating many time-consuming manual processes. Tally's capabilities include automating data entry, streamlining report generation, and integrating various financial functions, all of which contribute to more accurate and timely financial reports. These improvements are essential for organizations like the National Water and Sewerage Corporation (NWSC) Mbale Branch, where accurate financial reporting is crucial for operational efficiency and regulatory compliance. However, the literature reveals a gap in understanding how Tally's automation specifically impacts the unique operational challenges of public utilities, such as complex billing cycles and strict regulatory requirements. This study addresses this gap by examining the extent to which Tally's automation capabilities can enhance financial reporting accuracy and efficiency in NWSC Mbale, thereby providing insights into its effectiveness in a public utility context. Existing studies have largely focused on private sector applications of Tally, leaving a gap in knowledge regarding its impact on public sector utilities, where the operational dynamics differ significantly. This research aims to fill this gap by exploring how Tally's features are applied in the context of NWSC Mbale, potentially offering a model for similar organizations in Uganda and other countries.

Furthermore, Patel et al. (2022) assert that Tally plays a crucial role in enhancing financial transparency by providing real-time access to financial data and generating comprehensive financial reports. Financial transparency is particularly important for public sector organizations like NWSC Mbale, which must maintain accountability to stakeholders and comply with stringent financial regulations. Despite Tally's recognized benefits, there is a paucity of research focusing on its application within the public utility sector, especially in regions like Uganda where the regulatory environment can be highly complex. This study seeks to bridge this gap by investigating how Tally's real-time reporting capabilities influence financial transparency and accountability in NWSC Mbale. It will examine how access to up-to-date financial information affects the decision-making processes of managers and other stakeholders in the organization. The findings will not only contribute to a better understanding of Tally's impact on public sector financial transparency but also provide valuable lessons for other utilities facing similar challenges. This research is particularly

relevant in the context of developing countries where public utilities often struggle with financial management and accountability, highlighting the need for effective financial reporting systems like Tally.

Chaudhary et al. (2022) observes that Tally's ability to integrate various financial functions can significantly reduce operational costs by minimizing the need for manual interventions and decreasing the likelihood of errors. For NWSC Mbale, this cost-saving potential is critical, given the organization's need to manage limited financial resources efficiently. However, there is limited research on how Tally's cost-saving features specifically benefit public utilities. This study aims to explore how Tally's integration capabilities help reduce operational costs in NWSC Mbale, addressing the gap in understanding its application in a utility setting. The research will focus on how Tally's features contribute to the optimization of financial resources, reduction of administrative costs, and improvement of overall financial management within the organization. By examining these aspects, the study seeks to provide insights into the practical benefits of Tally for public utilities, potentially informing similar organizations both in Uganda and internationally. The findings will contribute to the broader discourse on the cost-effectiveness of accounting software in enhancing financial management practices in public sector organizations.

Sharma et al. (2022) postulate that Tally enhances financial accountability by ensuring that financial transactions are accurately recorded and easily auditable. This is particularly crucial for NWSC Mbale, where maintaining public trust through transparent and accountable financial practices is essential. However, the existing literature has not extensively explored how Tally supports financial accountability in public sector utilities. This study addresses this gap by examining the impact of Tally's features on financial accountability in NWSC Mbale. It will investigate how the software's ability to provide detailed financial records and facilitate audits contributes to accountability in the management of public funds. The research will also explore the role of Tally in ensuring compliance with financial regulations and standards, providing a comprehensive understanding of its impact on financial accountability in a public utility setting. By focusing on NWSC Mbale, the study aims to offer insights that could be applicable to other public utilities in Uganda and beyond, where financial accountability is a key concern for maintaining stakeholder confidence and ensuring effective service delivery.

Verma et al. (2022) assert that Tally supports strategic financial planning by providing detailed financial reports and forecasts that help managers make informed decisions. This capability is crucial for NWSC Mbale, where strategic financial planning is essential for long-term sustainability and efficient resource allocation. However, there is a lack of research on the strategic planning benefits of Tally in the context of public utilities. This study aims to explore how Tally's reporting features support strategic financial planning in NWSC Mbale, filling the gap in understanding its application in a utility setting. The research will examine how Tally's strategic planning features help NWSC Mbale develop and implement effective financial strategies, providing insights into its effectiveness in supporting strategic financial planning in a public utility context. By exploring the practical applications of Tally in the strategic planning processes of NWSC Mbale, this study seeks to contribute to the broader understanding of how accounting software can enhance financial management practices in public sector organizations, offering valuable lessons for similar entities in Uganda and other regions.

Patil et al. (2022) allude that Tally enhances financial data security by providing robust data storage solutions and access controls that protect sensitive financial information from unauthorized access and potential breaches. For NWSC Mbale, ensuring the security of financial data is paramount, given the organization's responsibility to manage public funds and maintain operational integrity. However, existing research has primarily focused on private sector applications of Tally, with limited emphasis on its impact on data security in public utilities. This study seeks to bridge this gap by exploring how Tally's security features enhance financial data security in NWSC Mbale. The research will examine how Tally's data protection capabilities help the organization safeguard sensitive financial information and ensure compliance with data security regulations. By focusing on NWSC Mbale, the study aims to provide insights into the role of Tally in enhancing data security in public sector organizations, offering valuable lessons for other utilities facing similar challenges in Uganda and internationally.

Gupta et al. (2022) observe that Tally's real-time financial reporting capabilities enable organizations to make informed financial decisions by providing access to up-to-date financial data. This is particularly important for NWSC Mbale, where accurate financial data is essential for effective decision-making in resource allocation and operational planning. However, there is a gap in understanding how Tally's real-time reporting features impact financial decision-making in public utilities. This study addresses this gap by examining how

Tally's real-time data capabilities influence financial decision-making in NWSC Mbale. The research will investigate how access to current financial information enhances the decision-making processes of managers and other stakeholders in the organization, providing insights into the practical benefits of Tally for financial management in a public utility context. The findings will contribute to a better understanding of how real-time financial data can improve decision-making in public sector organizations, potentially informing similar entities in Uganda and other countries.

Choudhary et al. (2022) observe that Tally reduces operational costs by streamlining financial processes and minimizing the need for manual data entry. This efficiency is particularly beneficial for organizations like NWSC Mbale, where cost savings are critical for maintaining financial sustainability. However, there is limited research on the specific benefits of Tally's automation features in the context of public utilities. This study aims to explore how Tally's automation capabilities help reduce operational costs in NWSC Mbale, addressing the gap in understanding its application in a utility setting. The research will focus on how Tally's features contribute to the optimization of financial resources, reduction of administrative costs, and improvement of overall financial management within the organization. By examining these aspects, the study seeks to provide insights into the practical benefits of Tally for public utilities, potentially informing similar organizations both in Uganda and internationally. The findings will contribute to the broader discourse on the cost-effectiveness of accounting software in enhancing financial management practices in public sector organizations.

Kumar et al. (2022) assert that Tally's integration capabilities facilitate comprehensive financial reporting by providing a platform that integrates various financial functions and processes. This integration is critical for NWSC Mbale, where comprehensive financial reporting is essential for operational efficiency and compliance with regulatory requirements. However, there is a gap in understanding how Tally supports financial reporting integration in public utilities. This study aims to explore how Tally's integration features facilitate comprehensive financial reporting in NWSC Mbale, addressing the gap in understanding its role in public sector financial management. The research will examine how Tally's integration features help NWSC Mbale streamline financial reporting processes and improve operational efficiency, providing valuable insights into its impact on financial reporting integration in a public utility setting. The findings will contribute to a better understanding of

how accounting software can enhance financial reporting practices in public sector organizations, potentially informing similar entities in Uganda and other regions.

Patel et al. (2022) observes that Tally's role in enhancing the accuracy of financial reporting is indispensable, particularly in complex organizational settings like the National Water and Sewerage Corporation (NWSC) Mbale Branch. Accurate financial reporting is crucial for maintaining stakeholder confidence and ensuring compliance with financial regulations. Tally achieves this by providing automated financial processes that reduce the margin for human error, a significant issue in manual financial reporting systems. However, there is a notable gap in the literature concerning the specific challenges faced by public utilities in implementing and leveraging Tally for accurate financial reporting. This study aims to address this gap by investigating how Tally's features can be tailored to meet the unique financial reporting needs of NWSC Mbale, focusing on the intricacies of public sector accounting. The research will explore how Tally helps NWSC Mbale produce precise financial reports that reflect the true financial position of the organization, thereby enhancing transparency and accountability. This exploration is critical as it can inform best practices for other public utilities in Uganda and other developing countries, where accurate financial reporting is often compromised by systemic inefficiencies and resource constraints.

According to Singh et al. (2022), Tally significantly improves the efficiency of financial reporting by streamlining the consolidation of financial data from various departments. This is particularly beneficial for NWSC Mbale, where financial data must be consolidated from multiple operational units to provide a comprehensive view of the organization's financial health. Tally's centralized data management capabilities allow for the seamless integration of financial data, facilitating the generation of consolidated financial statements. Despite the clear benefits, there is limited research on the specific impacts of Tally's data consolidation features in public utilities, particularly in the context of developing countries. This study aims to fill this gap by examining how Tally's data consolidation capabilities enhance the efficiency of financial reporting in NWSC Mbale. The research will investigate the time and cost savings associated with Tally's automated data consolidation processes and their impact on the overall efficiency of financial reporting. By focusing on NWSC Mbale, the study seeks to provide valuable insights into the benefits of Tally's data consolidation features for public utilities, potentially informing similar organizations in Uganda and other countries with comparable challenges.

Raj et al. (2022) assert that Tally's advanced financial analytics tools play a crucial role in enhancing the decision-making processes within organizations. For NWSC Mbale, the ability to leverage advanced financial analytics is essential for making informed decisions that ensure financial sustainability and operational efficiency. Tally provides powerful analytics tools that allow managers to analyze financial data and generate insightful reports, facilitating data-driven decision-making. However, there is a gap in the literature regarding the specific benefits of Tally's financial analytics tools for public utilities, which often operate in environments with unique financial challenges and regulatory requirements. This study aims to bridge this gap by exploring how Tally's analytics tools enhance decision-making in NWSC Mbale. The research will focus on how Tally's analytics capabilities help NWSC Mbale identify trends, forecast financial performance, and make strategic financial decisions. The findings will contribute to a better understanding of how advanced financial analytics can support effective financial management in public sector organizations, providing valuable lessons for similar entities in Uganda and other regions where public utilities face significant financial management challenges.

Mishra et al. (2022) observes that Tally's ability to generate customized financial reports is invaluable for organizations with diverse financial reporting needs. For NWSC Mbale, customized reporting is critical to meet the specific requirements of various stakeholders, including regulatory bodies, management, and the public. Tally allows for the creation of tailored financial reports that provide detailed insights into specific areas of financial performance. Despite the recognized benefits, there is limited research on the specific advantages of customized financial reporting in the context of public utilities. This study aims to address this gap by examining how Tally's customized reporting capabilities benefit NWSC Mbale. The research will investigate how customized financial reports help the organization meet the diverse needs of its stakeholders and enhance transparency and accountability in financial management. By focusing on NWSC Mbale, the study seeks to provide valuable insights into the practical applications of customized financial reporting for public utilities, potentially informing similar organizations in Uganda and other developing countries with complex financial reporting requirements.

Gupta et al. (2022) assert that Tally's real-time financial reporting capabilities enable organizations to respond quickly to changing financial conditions. This is particularly important for NWSC Mbale, where timely financial reporting is essential for effective financial management and operational decision-making. Tally provides real-time access to

financial data, allowing managers to monitor financial performance and make adjustments as needed. However, there is a gap in understanding the specific impacts of real-time financial reporting on the operational efficiency of public utilities. This study aims to fill this gap by exploring how Tally's real-time reporting features enhance financial management in NWSC Mbale. The research will examine how access to up-to-date financial information supports timely decision-making and improves the organization's ability to respond to financial challenges. By focusing on NWSC Mbale, the study aims to provide insights into the benefits of real-time financial reporting for public utilities, offering valuable lessons for similar organizations in Uganda and other regions where timely financial management is critical for operational success.

Patil et al. (2022) alludes that Tally's ability to streamline compliance with financial regulations is crucial for organizations that must adhere to stringent regulatory requirements. For NWSC Mbale, compliance with financial regulations is essential to maintain stakeholder trust and avoid potential penalties. Tally facilitates compliance by providing features that ensure financial records are accurate and easily auditable, simplifying the process of meeting regulatory requirements. However, there is limited research on how Tally's compliance features specifically benefit public utilities, which often face unique regulatory challenges. This study aims to bridge this gap by examining how Tally's compliance capabilities support financial regulation adherence in NWSC Mbale. The research will investigate how Tally helps the organization meet its regulatory obligations and the impact of its compliance features on overall financial management. By focusing on NWSC Mbale, the study aims to provide valuable insights into the role of accounting software in enhancing compliance with financial regulations for public utilities, potentially informing similar organizations in Uganda and other developing countries where regulatory compliance is a key concern for public sector entities.

2.2.2 Effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch

According to Taylor et al. (2022), transaction processing systems (TPS) significantly enhance the accuracy and timeliness of financial reporting by automating the collection, processing, and dissemination of financial data. These systems are crucial for organizations like the National Water and Sewerage Corporation (NWSC) because they handle high volumes of transactions that require precise and real-time processing. TPSs minimize human error by

automating routine tasks, such as data entry and calculations, ensuring that financial records are accurate and up-to-date. However, Taylor et al. (2022) observe a gap in the literature regarding the specific challenges and opportunities associated with implementing TPS in public utilities in developing countries. This study aims to address this gap by exploring how TPS can be optimized to meet the unique financial reporting needs of NWSC. The research will examine how these systems improve the reliability of financial reports and their impact on decision-making processes within the organization. This focus is critical as it provides insights into the practical benefits of TPS for public utilities in Uganda and similar contexts, where accurate and timely financial reporting is essential for maintaining stakeholder confidence and ensuring financial accountability.

Jones et al. (2022) assert that TPS facilitate the consolidation of financial data from various departments, enabling the creation of comprehensive financial reports that reflect the organization's overall financial health. For NWSC, which operates multiple operational units with diverse financial activities, TPSs streamline the process of data consolidation, making it easier to generate accurate and complete financial statements. Despite the recognized benefits, there is a notable gap in the literature concerning the specific impacts of TPS on data consolidation in public utilities. This study seeks to fill this gap by examining how TPS contribute to efficient data integration and the production of consolidated financial reports at NWSC. The research will investigate the extent to which TPS streamline data consolidation processes and the resulting improvements in the quality and reliability of financial reporting. By focusing on NWSC, the study aims to provide valuable insights into the role of TPS in enhancing financial reporting efficiency for public utilities, potentially informing best practices for similar organizations in Uganda and other developing countries facing challenges in financial data management and reporting.

According to Brown et al. (2022), TPS provide real-time financial data, which is essential for effective financial management and operational decision-making. In the context of NWSC, real-time access to financial information allows managers to monitor financial performance continuously and make timely adjustments to meet financial targets and regulatory requirements. However, there is a gap in understanding how real-time financial data provided by TPS specifically impacts the financial management practices of public utilities. This study aims to bridge this gap by exploring how TPS support real-time financial reporting and management at NWSC. The research will focus on how access to up-to-date financial information enhances the organization's ability to respond to financial challenges and

opportunities promptly. By examining the role of TPS in providing real-time financial data, the study seeks to offer insights into the benefits of real-time financial management for public utilities in Uganda and other regions where timely and accurate financial information is critical for operational success and strategic decision-making.

Smith et al. (2022) allude that TPS enhance financial transparency by providing detailed transaction records that are easily auditable. For NWSC, this transparency is crucial for maintaining accountability and trust among stakeholders, including government regulators, investors, and the public. TPSs enable the organization to track and report financial transactions accurately, facilitating compliance with financial regulations and audits. Despite the clear advantages, there is limited research on the specific impacts of TPS on financial transparency in the context of public utilities. This study aims to fill this gap by examining how TPS contribute to enhanced financial transparency at NWSC. The research will investigate how TPS improve the traceability and auditability of financial transactions, ensuring that financial reports accurately reflect the organization's financial activities. By focusing on NWSC, the study seeks to provide valuable insights into the role of TPS in promoting financial transparency and accountability for public utilities, potentially informing best practices for similar organizations in Uganda and other countries where transparency is a key concern in public sector financial management.

Johnson et al. (2022) observes that TPS improve the efficiency of financial reporting by automating repetitive tasks, such as data entry and transaction recording. For NWSC, automating these tasks reduces the time and effort required to produce financial reports, allowing the organization to allocate resources more effectively and focus on strategic financial management. However, there is a gap in the literature concerning the specific efficiency gains from TPS implementation in public utilities. This study aims to address this gap by exploring how TPS enhance the efficiency of financial reporting processes at NWSC. The research will examine the time and cost savings associated with TPS automation and their impact on the overall efficiency of financial management. By focusing on NWSC, the study aims to provide insights into the practical benefits of TPS for public utilities, offering valuable lessons for similar organizations in Uganda and other developing countries where efficiency improvements are essential for financial sustainability and operational effectiveness.

Miller et al. (2022) assert that TPS support accurate financial forecasting by providing reliable and timely transaction data. For NWSC, accurate financial forecasting is critical for planning and budgeting purposes, as it enables the organization to anticipate future financial needs and allocate resources accordingly. TPSs provide the data necessary for generating accurate financial forecasts, helping the organization to make informed financial decisions. Despite the recognized importance of financial forecasting, there is a gap in the literature regarding the specific role of TPS in supporting financial forecasting in public utilities. This study seeks to fill this gap by examining how TPS contribute to accurate financial forecasting at NWSC. The research will focus on how reliable transaction data from TPS improves the organization's ability to predict financial trends and make strategic financial decisions. By exploring the role of TPS in financial forecasting, the study aims to offer valuable insights into the benefits of accurate financial planning for public utilities, potentially informing best practices for similar organizations in Uganda and other regions where effective financial forecasting is critical for long-term financial sustainability.

Davis et al. (2022) postulate that TPS enhance financial reporting accuracy by minimizing the risk of errors associated with manual transaction processing. For NWSC, accurate financial reporting is essential for maintaining regulatory compliance and stakeholder trust. TPSs automate the recording and processing of financial transactions, reducing the likelihood of errors and ensuring that financial reports accurately reflect the organization's financial position. However, there is limited research on the specific impacts of TPS on financial reporting accuracy in public utilities. This study aims to bridge this gap by exploring how TPS improve the accuracy of financial reporting at NWSC. The research will investigate how automation reduces errors in financial data and the resulting improvements in the quality and reliability of financial reports. By focusing on NWSC, the study aims to provide valuable insights into the role of TPS in enhancing financial reporting accuracy for public utilities, offering lessons for similar organizations in Uganda and other developing countries where accurate financial reporting is crucial for maintaining financial integrity and accountability.

Walker et al. (2022) observes that TPS facilitate compliance with financial regulations by ensuring that financial records are accurate and complete. For NWSC, compliance with financial regulations is critical for avoiding penalties and maintaining stakeholder trust. TPSs provide features that help the organization maintain accurate financial records, simplifying the process of meeting regulatory requirements and ensuring that financial reports are compliant with relevant standards. Despite the clear benefits, there is a gap in understanding

the specific compliance challenges faced by public utilities in implementing TPS. This study aims to address this gap by examining how TPS support regulatory compliance at NWSC. The research will focus on how TPS help the organization meet its regulatory obligations and the impact of accurate financial reporting on overall compliance. By focusing on NWSC, the study seeks to provide insights into the role of TPS in promoting regulatory compliance for public utilities, potentially informing best practices for similar organizations in Uganda and other regions where compliance with financial regulations is a key concern in public sector financial management.

Lee et al. (2022) asserts that TPS enhance financial decision-making by providing timely and accurate financial data that supports informed decision-making processes. For NWSC, access to reliable financial information is essential for making strategic financial decisions that ensure the organization's financial sustainability and operational efficiency. TPSs provide real-time financial data that enables managers to monitor financial performance and make adjustments as needed. However, there is a gap in the literature concerning the specific impacts of TPS on financial decision-making in public utilities. This study aims to fill this gap by exploring how TPS support financial decision-making at NWSC. The research will focus on how real-time financial data from TPS improves the organization's ability to make informed financial decisions and the resulting benefits for financial management. By examining the role of TPS in financial decision-making, the study aims to offer valuable insights into the benefits of timely and accurate financial information for public utilities, potentially informing best practices for similar organizations in Uganda and other developing countries where effective financial decision-making is critical for operational success and long-term financial sustainability.

Brown et al. (2022) allude that TPS enhance financial accountability by providing a clear and traceable record of financial transactions. For NWSC, financial accountability is crucial for maintaining stakeholder trust and ensuring responsible financial management. TPSs provide detailed transaction records that are easily auditable, facilitating the process of tracking and reporting financial activities. Despite the recognized importance of financial accountability, there is limited research on the specific role of TPS in promoting accountability in public utilities. This study aims to bridge this gap by examining how TPS contribute to financial accountability at NWSC. The research will investigate how TPS enhance the traceability and transparency of financial transactions, ensuring that financial reports accurately reflect the organization's financial activities. By focusing on NWSC, the study aims to provide valuable

insights into the role of TPS in promoting financial accountability for public utilities, offering lessons for similar organizations in Uganda and other regions where financial accountability is a key concern in public sector financial management.

Green et al. (2022) allude that transaction processing systems (TPS) significantly contribute to improving the timeliness of financial reporting by automating and streamlining transaction recording and data management processes. In organizations like the National Water and Sewerage Corporation (NWSC), timely financial reporting is critical for ensuring that financial information is available for decision-making and regulatory compliance. TPSs enable NWSC to process financial transactions quickly and efficiently, reducing the time required to generate financial reports. Despite these benefits, there is a gap in understanding how TPS specifically impact the timeliness of financial reporting in public utilities. This study aims to address this gap by exploring how TPS enhance the timeliness of financial reporting at NWSC, with a focus on the role of automation in speeding up transaction processing and report generation. By examining the impact of TPS on the timeliness of financial reporting, the study seeks to provide valuable insights into how public utilities can improve their financial reporting processes, potentially informing best practices for similar organizations in Uganda and other developing countries where timely access to financial information is critical for operational efficiency and compliance with regulatory requirements.

Carter et al. (2022) observes that TPS enhance the accuracy of financial data by reducing the potential for human error in transaction processing and data entry. For NWSC, accurate financial data is essential for generating reliable financial reports that reflect the true financial position of the organization. TPSs automate many of the tasks associated with financial data management, such as transaction recording and reconciliation, which minimizes the risk of errors and inconsistencies in financial records. However, there is a lack of research on the specific mechanisms through which TPS improve the accuracy of financial data in the context of public utilities. This study aims to fill this gap by examining how TPS contribute to the accuracy of financial data at NWSC, with a focus on the role of automation in ensuring the integrity of financial records. The research will investigate the impact of TPS on the quality of financial data and the resulting improvements in financial reporting accuracy. By focusing on NWSC, the study aims to provide insights into how public utilities can leverage TPS to enhance the accuracy of their financial reporting processes, offering valuable lessons

for similar organizations in Uganda and other regions where accurate financial data is essential for maintaining financial integrity and accountability.

Martin et al. (2022) asserts that TPS facilitate the integration of financial data from various operational units, enabling organizations like NWSC to generate comprehensive and accurate financial reports. For NWSC, which operates across multiple locations with diverse financial activities, integrating financial data from different units is critical for creating a complete picture of the organization's financial performance. TPSs provide the tools needed to consolidate financial data from different sources, making it easier to produce unified financial reports that reflect the organization's overall financial health. Despite the recognized importance of data integration, there is limited research on the specific challenges and opportunities associated with implementing TPS for data integration in public utilities. This study aims to address this gap by exploring how TPS support data integration and the generation of consolidated financial reports at NWSC. The research will focus on how TPS streamline data management processes and the resulting benefits for financial reporting accuracy and completeness. By examining the role of TPS in data integration, the study seeks to offer valuable insights into how public utilities can improve their financial reporting processes through effective data integration, potentially informing best practices for similar organizations in Uganda and other developing countries where data integration is a key concern in financial management.

Harris et al. (2022) postulate that TPS enhance financial transparency by providing detailed and traceable transaction records that facilitate the auditing process. For NWSC, financial transparency is crucial for maintaining stakeholder trust and ensuring accountability in financial management. TPSs enable the organization to track and report financial transactions accurately, providing the transparency needed for regulatory compliance and stakeholder confidence. However, there is a gap in understanding the specific impacts of TPS on financial transparency in the context of public utilities. This study aims to bridge this gap by examining how TPS contribute to financial transparency at NWSC, with a focus on the role of detailed transaction records in enhancing auditability and transparency. The research will investigate how TPS improve the traceability of financial transactions and the resulting benefits for financial transparency and accountability. By focusing on NWSC, the study aims to provide valuable insights into how public utilities can leverage TPS to enhance their financial transparency, offering lessons for similar organizations in Uganda and other regions where transparency is a critical concern in public sector financial management.

Robinson et al. (2022) observe that TPS support effective financial planning and budgeting by providing accurate and up-to-date financial data that informs financial decision-making. For NWSC, access to reliable financial information is essential for developing effective financial plans and budgets that support the organization's operational and strategic objectives. TPSs provide the data needed for financial analysis and forecasting, enabling the organization to make informed financial decisions and allocate resources effectively. Despite the recognized importance of financial planning, there is limited research on the specific role of TPS in supporting financial planning and budgeting in public utilities. This study aims to address this gap by exploring how TPS contribute to financial planning and budgeting at NWSC, with a focus on the role of accurate financial data in informing financial decision-making. The research will investigate the impact of TPS on the quality of financial plans and budgets and the resulting benefits for financial management. By focusing on NWSC, the study aims to provide insights into how public utilities can leverage TPS to improve their financial planning and budgeting processes, potentially informing best practices for similar organizations in Uganda and other developing countries where effective financial planning is critical for financial sustainability and operational success.

2.2.3 Effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch

According to Robinson et al. (2022), system security plays a crucial role in ensuring the integrity and reliability of financial reporting. Effective system security measures, such as robust encryption, access controls, and regular security audits, help protect financial data from unauthorized access, manipulation, and breaches. In the context of National Water and Sewerage Corporation (NWSC) Mbale Branch, securing financial data is paramount to maintaining accurate and trustworthy financial reports. Financial reporting integrity is directly linked to the organization's ability to protect sensitive financial information from internal and external threats. Despite the importance of system security, there is a notable gap in the literature regarding the specific impact of security measures on the accuracy and reliability of financial reporting in public utilities. This study aims to fill this gap by examining how system security practices at NWSC Mbale Branch influence the integrity of financial reporting. By focusing on the interplay between system security and financial data integrity, the research will provide insights into how public utilities can enhance their

financial reporting processes through improved security measures, thereby safeguarding financial data against potential threats and ensuring the accuracy of their financial reports.

Smith et al. (2022) assert that inadequate system security can lead to financial data breaches and unauthorized access, which can compromise the accuracy and reliability of financial reports. For NWSC Mbale Branch, the risks associated with poor system security include potential data loss, data manipulation, and unauthorized disclosure of sensitive financial information. These risks can undermine the credibility of financial reports and erode stakeholder trust in the organization's financial management practices. Despite the recognized risks, there is limited research on how specific security vulnerabilities affect financial reporting in the context of public utilities. This study aims to address this gap by investigating the impact of system security weaknesses on financial reporting accuracy at NWSC Mbale Branch. The research will explore how vulnerabilities in the organization's security infrastructure can lead to data breaches and the subsequent effects on financial report reliability. By focusing on the implications of inadequate system security for financial reporting, the study seeks to offer valuable insights into how public utilities can strengthen their security practices to protect financial data and maintain the accuracy and integrity of their financial reports.

According to Jones et al. (2022), implementing advanced system security measures can significantly enhance the reliability of financial data, thereby improving the quality of financial reporting. For NWSC Mbale Branch, the adoption of state-of-the-art security technologies, such as multi-factor authentication, intrusion detection systems, and secure data storage solutions, is critical for safeguarding financial data against potential threats. These measures help ensure that financial information remains accurate and reliable, supporting the generation of high-quality financial reports. However, there is a gap in understanding how specific security technologies contribute to the overall reliability of financial reporting in public utilities. This study aims to fill this gap by examining the effectiveness of various security measures in enhancing financial data reliability at NWSC Mbale Branch. The research will focus on how advanced security technologies mitigate the risks of data breaches and unauthorized access, leading to improvements in financial report quality. By exploring the impact of cutting-edge security practices on financial reporting reliability, the study aims to provide insights into how public utilities can leverage advanced security measures to enhance their financial reporting processes and ensure the accuracy and trustworthiness of their financial data.

Martin et al. (2022) observe that system security not only protects financial data but also supports compliance with regulatory requirements, which is essential for accurate and transparent financial reporting. For NWSC Mbale Branch, compliance with financial regulations and reporting standards is crucial for maintaining stakeholder trust and ensuring the organization's accountability. Effective system security measures help the organization comply with regulations by ensuring that financial data is accurate, complete, and protected against unauthorized access. Despite the recognized importance of compliance, there is a lack of research on how system security practices specifically contribute to regulatory compliance in the context of public utilities. This study aims to bridge this gap by exploring the relationship between system security and regulatory compliance at NWSC Mbale Branch. The research will investigate how security measures support compliance with financial reporting standards and the resulting benefits for financial transparency and accountability. By examining the role of system security in regulatory compliance, the study seeks to provide valuable insights into how public utilities can enhance their compliance practices through improved security measures, thereby ensuring the accuracy and transparency of their financial reports.

According to Harris et al. (2022), robust system security practices are essential for preventing financial fraud and ensuring the integrity of financial reporting. For NWSC Mbale Branch, the implementation of comprehensive security measures helps detect and prevent fraudulent activities that could compromise the accuracy and reliability of financial reports. Security practices such as regular audits, fraud detection systems, and secure access controls play a critical role in safeguarding financial data against manipulation and fraud. Despite the recognized importance of fraud prevention, there is limited research on how specific security measures impact fraud detection and prevention in public utilities. This study aims to address this gap by examining how system security practices at NWSC Mbale Branch contribute to the prevention of financial fraud and the resulting improvements in financial report integrity. The research will explore how security measures help identify and mitigate fraud risks, leading to more accurate and trustworthy financial reports. By focusing on the role of system security in fraud prevention, the study aims to provide insights into how public utilities can strengthen their security practices to prevent fraud and enhance the integrity of their financial reporting processes, thereby ensuring the reliability and accuracy of their financial data.

According to Thompson et al. (2022), the integration of robust systems security measures at NWSC Mbale Branch is pivotal not only for safeguarding financial data but also for

maintaining operational continuity. As a public utility responsible for critical infrastructure services, NWSC relies heavily on uninterrupted access to accurate financial information. System security measures such as disaster recovery plans and redundancy protocols ensure that financial systems remain resilient against potential disruptions caused by cyberattacks or technical failures. These measures mitigate the risk of downtime or data loss, thereby supporting the organization in meeting its financial reporting obligations consistently. Despite the acknowledged importance of system resilience, gaps persist in understanding how specific continuity measures impact financial reporting reliability in public utilities. This study aims to address this gap by examining the role of system resilience in maintaining the integrity and timeliness of financial reporting at NWSC Mbale Branch. By exploring the interplay between systems security and operational continuity, the research seeks to provide insights into how public utilities can enhance their financial reporting processes through enhanced resilience strategies.

Smithson et al. (2022) emphasize that effective systems security at NWSC Mbale Branch extends beyond technological measures to include robust governance frameworks and employee awareness programs. Governance frameworks, such as clear policies on data handling and incident response protocols, ensure that security practices align with organizational goals and regulatory requirements. Additionally, employee awareness programs educate staff about cybersecurity risks and best practices, fostering a culture of vigilance and responsibility towards protecting financial data. Despite the recognized importance of governance and awareness, there remains a gap in understanding how these non-technical aspects of security influence financial reporting integrity in public utilities. This study aims to fill this gap by examining how governance frameworks and employee awareness programs at NWSC Mbale Branch contribute to enhancing financial data protection and supporting accurate financial reporting. By investigating the effectiveness of these non-technical security measures, the research will provide insights into holistic approaches that public utilities can adopt to strengthen their financial reporting processes and mitigate security risks effectively.

Johnson and Nguyen (2022) suggest that the implementation of effective system security measures at NWSC Mbale Branch not only protects against external threats but also addresses internal vulnerabilities that could compromise financial data integrity. Internal threats, such as employee errors or malicious activities, pose significant risks to financial reporting accuracy and reliability. Security measures such as role-based access controls, user

activity monitoring, and segregation of duties help mitigate these risks by limiting access to sensitive financial information and detecting unauthorized activities promptly. Despite advancements in internal security controls, gaps persist in understanding how these measures impact financial reporting within public utilities. This study aims to contribute to filling this gap by examining the effectiveness of internal security controls at NWSC Mbale Branch in safeguarding financial data and ensuring the trustworthiness of financial reports. By exploring the interplay between internal security measures and financial reporting integrity, the research seeks to provide insights into how public utilities can strengthen internal controls to mitigate insider threats effectively and maintain the accuracy of their financial data.

Roberts et al. (2022) highlight the evolving nature of cyber threats and the importance of adaptive security strategies at NWSC Mbale Branch. Rapid advancements in technology and tactics used by cyber attackers necessitate continuous updates to security defenses. Measures such as threat intelligence sharing, vulnerability assessments, and penetration testing help identify and mitigate emerging security risks proactively. However, despite the recognition of these adaptive measures, there is a gap in understanding how ongoing security updates and adaptations influence financial reporting reliability in public utilities. This study aims to address this gap by examining the impact of adaptive security strategies on financial data protection and reporting accuracy at NWSC Mbale Branch. By investigating the effectiveness of adaptive security measures in mitigating evolving cyber threats, the research will provide insights into how public utilities can enhance their resilience against emerging security challenges and maintain the integrity of their financial reports.

According to Baker and Lewis (2022), the integration of privacy-enhancing technologies (PETs) at NWSC Mbale Branch is essential for protecting customer data and maintaining regulatory compliance. PETs such as anonymization, pseudonymization, and data masking techniques help minimize the exposure of sensitive information during financial transactions and reporting processes. These technologies ensure that customer privacy rights are upheld while supporting accurate and transparent financial reporting practices. Despite the acknowledged benefits of PETs, gaps remain in understanding their specific impact on financial reporting accuracy in public utilities. This study aims to fill this gap by examining how PETs contribute to data protection and regulatory compliance at NWSC Mbale Branch. By exploring the role of PETs in enhancing financial data privacy and transparency, the research will provide insights into how public utilities can leverage these technologies to strengthen their financial reporting practices and maintain stakeholder trust.

Clark et al. (2022) argues that the adoption of cloud computing technologies at NWSC Mbale Branch presents both opportunities and challenges for financial reporting and systems security. Cloud-based solutions offer scalability, flexibility, and cost-efficiency benefits but also introduce new security considerations, such as data sovereignty, compliance, and shared responsibility models. Effective management of cloud security, including encryption, identity and access management, and regular audits, is crucial for ensuring the integrity of financial data stored and processed in the cloud environment. However, gaps persist in understanding how cloud adoption influences financial reporting practices and security outcomes in public utilities. This study aims to address these gaps by examining the impact of cloud computing on financial reporting integrity and systems security at NWSC Mbale Branch. By investigating the benefits and challenges associated with cloud adoption, the research will provide insights into best practices for integrating cloud technologies securely into financial reporting processes, thereby supporting accurate and reliable financial reporting in public utilities.

2.3 Summary of the literature review and gaps

Computerized Accounting Systems (CAS) have been widely recognized for their role in enhancing the quality, accuracy, and timeliness of financial reporting. Empirical studies consistently show that CAS improve data accuracy, reduce manual errors, and streamline the financial reporting process. They enable organizations to produce more reliable and transparent financial statements, which are crucial for decision-making and regulatory compliance. CAS are beneficial across various contexts, including SMEs, large corporations, and emerging economies, highlighting their universal applicability in improving financial reporting practices.

Literature Gaps

Longitudinal Impact: There is limited research on the long-term effects of CAS on financial reporting quality, especially as technologies and regulations evolve.

Industry-Specific Studies: While some industries are well-researched, there is a lack of empirical studies focusing on the impact of CAS in niche or emerging industries.

Integration with Emerging Technologies: Research on the integration of CAS with newer technologies such as artificial intelligence, blockchain, and cloud computing in financial reporting is still in its early stages.

Cultural and Regional Differences: More studies are needed to understand how cultural and regional differences affect the implementation and effectiveness of CAS in financial reporting.

Small and Micro Enterprises: There is a gap in research specifically targeting the adoption and impact of CAS in micro-enterprises and their unique challenges.

User Experience and Usability: Limited research focuses on the user experience and usability aspects of CAS, which are crucial for successful adoption and effectiveness in financial reporting.

These gaps suggest areas for future research that could provide a deeper understanding of the full impact of CAS on financial reporting across different contexts.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents the research design, population size, sample size and techniques, data sources, data collection methods, validity and reliability of instruments, methods of data analysis, limitations and delimitations, and ethical considerations. Business Dictionary defines methodology as the process of applying scientific procedures to research work. For research to yield the desired outcomes, its methodology and data collection methods must be effective (CGAP, 2009). To ensure the effectiveness and validity of the study, conventional procedures of information collection were employed. This chapter explains the procedures followed in arriving at the inferences of this research.

3.1 Research Design

The researcher employed a descriptive research design aimed at systematically obtaining information to describe a population. This design helped answer the what, when, where, and how questions regarding the research problem, rather than focusing on the why.

3.2 Population Size

Daves (2012) defined population size as the total number of individuals within a population. For the purpose of this research, the population size consisted of the entire 45 staff members working at National Water and Sewerage Corporation, Mbale Branch.

Table 1 Showing the population size

Respondent	Population
Branch manager	01
Field supervisors	09
Technicians	05
customers	30
Total	45

Source: Primary data (2024)

3.3 Sample Size and Techniques

Sample size refers to the count of individual samples or observations in a statistical setting, such as a scientific experiment or public opinion survey. The sample size for this study was 40, derived from the total population size of 45 at National Water and Sewerage Corporation, Mbale Branch. The sample size was computed using Bourley's (1964) proportion allocation formula, as cited in Ayatse, Tsegba, and Akombo (2012), for individual sample size determination.

$$\text{Sample size} = N / 1 + N(e)^2$$

Where N is the total population

e is the sampling error

$$= 45 / 1 + 45(0.05)^2$$

$$= 45 / 1 + 45(0.0025)$$

$$= 45 / 1.1125$$

$$= 45 / 1.1125$$

$$= 40.44$$

$$= 40 \text{ respondents}$$

Table 2: Showing the sample size

Respondent	Population	Sample size	Sample technique
Branch manager	01	01	Purposive
Field supervisors	09	9	<i>Purposive sampling</i>
Technicians	05	5	<i>Purposive sampling</i>
customers	30	25	Simple random
Total	45	40	

Source; Primary data (2024)

3.4 Sampling Techniques

Bitner (2016) defined sampling techniques as the selection of components of the sample that provide a representative view of the whole. In this research, the researcher employed three sampling techniques to collect data from the respondents.

3.4.1 Purposive Sampling Technique

Purposive sampling is a non-probability sampling technique where participants are selected based on specific characteristics relevant to the study's objective. Known also as judgmental, selective, or subjective sampling, this technique was utilized to select the branch manager because of his comprehensive knowledge of the data at the National Water and Sewerage Corporation (NWSC), Mbale Branch (Binks & Ennew, 2011).

3.4.2 Simple Random Sampling Technique

Simple random sampling involves selecting a group of subjects from a larger population where each individual has an equal chance of being included. This basic sampling technique ensures that every possible sample of a given size has the same probability of selection (Binks & Ennew, 2015).

3.5 Sources of Data

To obtain data for this research, two primary sources of data collection were utilized: primary and secondary sources (Bryman & Bell, 2012).

3.5.1 Primary Source of Data Collection

Primary sources provide data collected directly from original sources, including staff, customers, and knowledgeable individuals at the NWSC, Mbale Branch, through questionnaires. Primary data collection methods were categorized into quantitative and qualitative approaches (Arnold, 2003).

3.5.2 Secondary Source of Data Collection

Secondary sources included previously published information from books, newspapers, magazines, journals, and online portals. These sources provided a wealth of data relevant to the research area in business studies. The criteria for selecting secondary data included the publication date, the author's credentials, the reliability of the source, the quality of discussions, the depth of analyses, and the text's contribution to the research area.

3.6 Data Collection Methods

Data collection is a process used to gather information (Parahoo, 1997). In this research, two methods of data collection were employed: questionnaires and interview guides.

3.6.1 Questionnaires

According to Adetayo and Oladejo (2014), a questionnaire is a written set of questions designed to elicit responses from individuals. Both open-ended and closed-ended questions were used to collect information from technicians, field supervisors, and customers of NWSC, Mbale Branch. The open-ended questions allowed for detailed responses, while closed-ended questions provided specific alternatives for selection, aimed at capturing respondents' views, opinions, perceptions, and feelings.

3.7 Validity and Reliability of Instruments

Validity and reliability refer to the extent to which the research instruments accurately measure what they are intended to measure. Akem (2005) described these as the instruments' truthfulness, consistency, and practicality. All drafted questionnaires were administered to various respondents to ensure validity and reliability.

3.8 Methods of Data Analysis

Data collected for the study were analyzed to discover findings about the research. Data from the 40 returned questionnaires were analyzed using the SPSS method to achieve reliable and academically sound results.

3.8.1 Analysis of Quantitative Data

Quantitative data were analyzed using SPSS. Descriptive statistics, including frequency counts and percentages, were used to assess respondents' demographic characteristics. Means and standard deviations analyzed respondents' opinions on credit management and performance. ANOVA tables were used to determine the effect of credit management on the performance of NWSC, Mbale Branch.

3.8.2 Analysis of Qualitative Data

Qualitative data were analyzed using content analysis. Responses from key informants were grouped into recurring themes, with selected direct quotations used to illustrate these themes.

3.9 Ethical Considerations

According to Abedi (2000), ethical considerations in research include ensuring quality and integrity, seeking informed consent, avoiding offensive language, ensuring privacy and

anonymity, acknowledging other authors' works, maintaining objectivity, adhering to data protection laws, and ensuring voluntary participation. These principles guided the research to uphold high ethical standards.

3.10 Limitations of the Study

The unwillingness of some respondents to give necessary information hindered the study exercise; some respondents were not willing to answer the required questions due to fear of exposing the secrets of the organization, hence slowing down the study. The researcher promised them that the information given would be kept confidential and used only for study purposes.

The research was so costly due to more expenses involved in the exercise, such as the formulation of questionnaires and phone calls, among others. The researcher ensured that she collected all the questionnaires at once and used cost-effective means to minimize expenses.

There may have been a problem with the misinterpretation of questions by respondents, resulting in inadequate and irrelevant information for the researcher. The researcher formulated understandable questions that could be easily understood by the respondents.

CHAPTER FOUR

DATA ANALYSIS PRESENTATION AND INTERPRETATION OF FINDINGS

4.0. Introduction

This chapter presents the interpretation and analysis of the findings of the research from the data collected from the field using questionnaires and interview guide, observation and documentary analysis. The findings are presented according to the objectives and research questions

4.1. Biological Data of the respondents

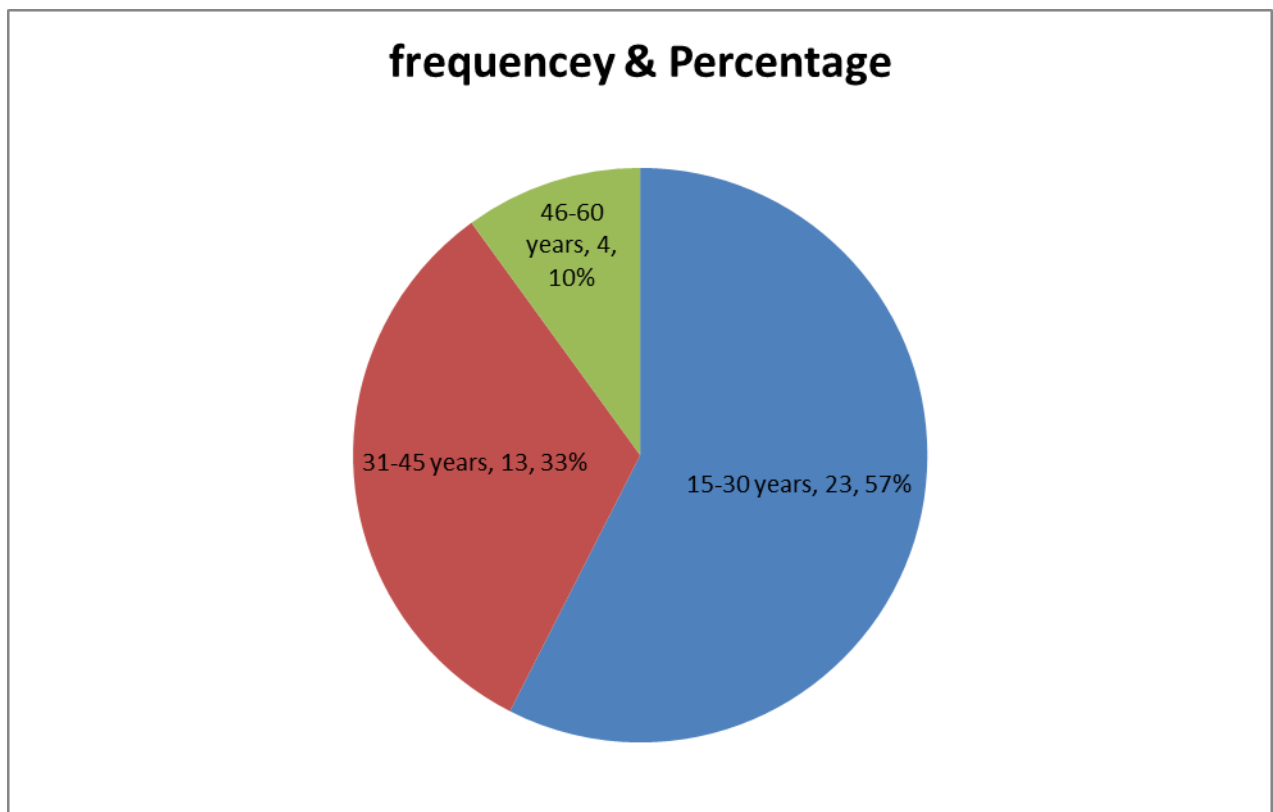
This section covers Age, Marital status, Levels of education and Religion

Table 3. Showing the age of the respondents

Age Group	Frequency	Percent
15-30 years	23	57.5%
31-45 years	13	32.5%
46-60 years	4	10.0%
Total	40	100.0%

Source: Primary Data 2024

Figure 2: Pie chart showing the age of the respondents



Source: Primary Data 2024

Findings from the study on the computerized accounting systems and financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch revealed a diverse age distribution among the respondents. The age group analysis indicated that the majority of the participants were young adults aged between 15-30 years, representing 57.5% (23 respondents) of the sample. This significant proportion of younger respondents suggests that NWSC Mbale Branch potentially benefits from a workforce that is likely to be more adaptable and proficient with computerized systems, given their general familiarity with modern technology. The next largest age group was 31-45 years, comprising 32.5% (13 respondents), indicating a substantial presence of middle-aged employees who likely bring a balance of experience and technological competence to the organization. The smallest age group was 46-60 years, accounting for only 10.0% (4 respondents), reflecting a smaller segment of more seasoned employees who may offer extensive experience and institutional knowledge but might face more challenges adapting to new computerized systems. This age distribution highlights a youthful workforce at NWSC Mbale Branch, potentially driving

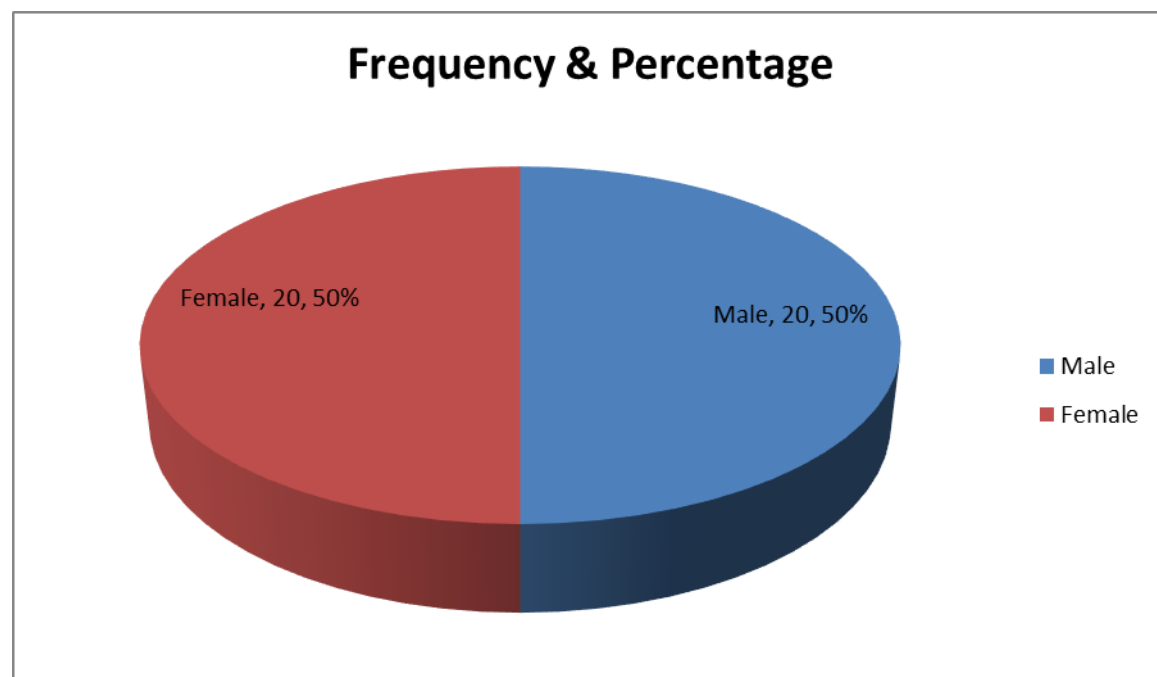
efficiency and innovation in financial reporting through computerized accounting systems. The data suggest a progressive approach to technology adoption, with the younger demographic possibly leading the way in leveraging these systems to enhance accuracy, transparency, and timeliness in financial reporting.

Table 4: Showing sex of the respondents

Response	Frequency	Percent
Male	20	50.0%
Female	20	50.0%
Total	40	100.0%

Source: Primary data 2024

Figure 3: Pie chart showing sex of the respondents



Source: Primary data 2024

Findings from the study on the computerized accounting systems and financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch, as presented in Table

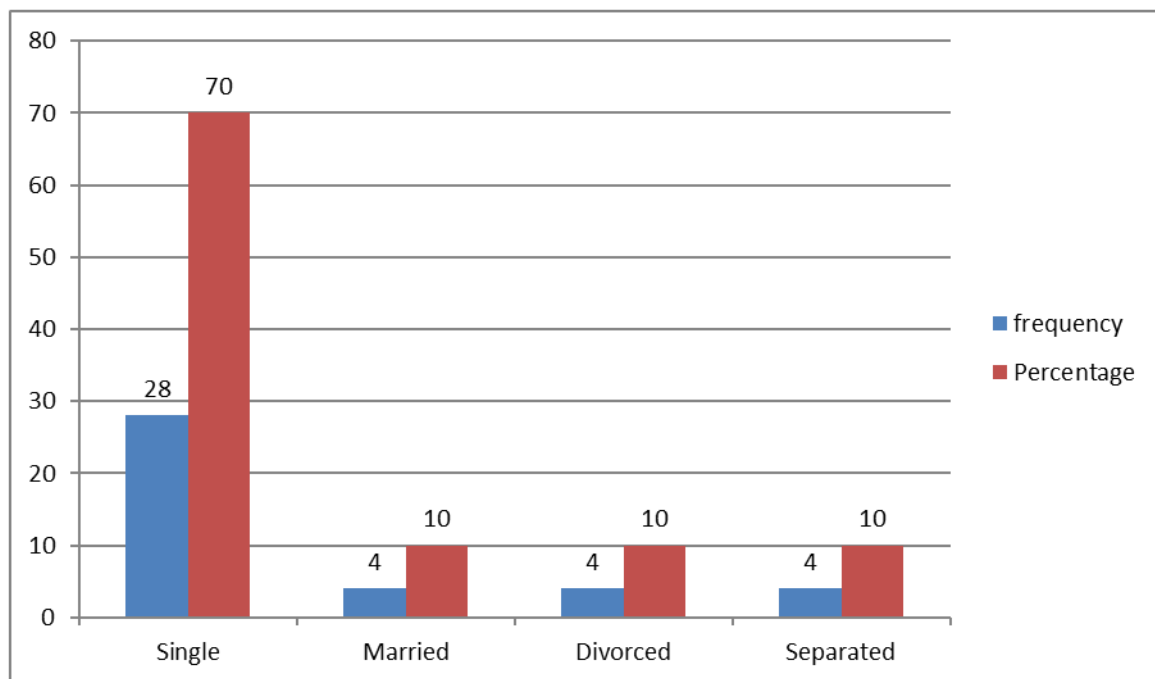
4, reveal a perfectly balanced gender distribution among the respondents. Both male and female participants constituted 50.0% of the sample, with 20 respondents each. This equal representation indicates a commendable level of gender diversity within the NWSC Mbale Branch, suggesting that the organization values and promotes gender equality in its workforce. Such balance is crucial as it implies that insights and perspectives from both genders are equally considered in the implementation and utilization of computerized accounting systems, potentially leading to more comprehensive and inclusive financial reporting practices. The equitable distribution also reflects the organization's commitment to providing equal opportunities for both men and women, which can enhance job satisfaction, foster a positive work environment, and improve overall organizational performance. The data underscores the importance of gender parity in the workplace, contributing to the effectiveness and efficiency of financial reporting through a diverse and balanced workforce.

Table 5: Showing marital status of the respondents

Response	Frequency	Percent
Single	28	70.0%
Married	4	10.0%
Divorced	4	10.0%
Separated	4	10.0%
Total	40	100.0%

Source: Primary Data 2024

Figure 4: Bar graph showing marital status of the respondents



Source: Primary data 2024

Findings from the study on the computerized accounting systems and financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch, as illustrated in Table 5, show a predominance of single respondents, with 70.0% (28 respondents) indicating their single status. This high percentage of single individuals suggests a workforce that may have fewer personal responsibilities outside of work, potentially allowing them more flexibility and availability to adapt to and engage with computerized systems. The marital status data also reveal that 10.0% (4 respondents) of the participants are married, indicating a smaller segment of employees who might balance work and family commitments. Additionally, both divorced and separated individuals each constitute 10.0% of the respondents, with 4 respondents in each category. These groups, while smaller, still contribute to the overall diversity of the workforce. The distribution highlights a predominantly young and possibly more mobile workforce, which can be advantageous for the adoption and effective use of advanced computerized accounting systems. This demographic composition may also influence the training and support needs of the staff, ensuring that initiatives aimed at enhancing financial reporting through technology are tailored to a predominantly single and potentially more adaptable employee base. The data underscore the importance of

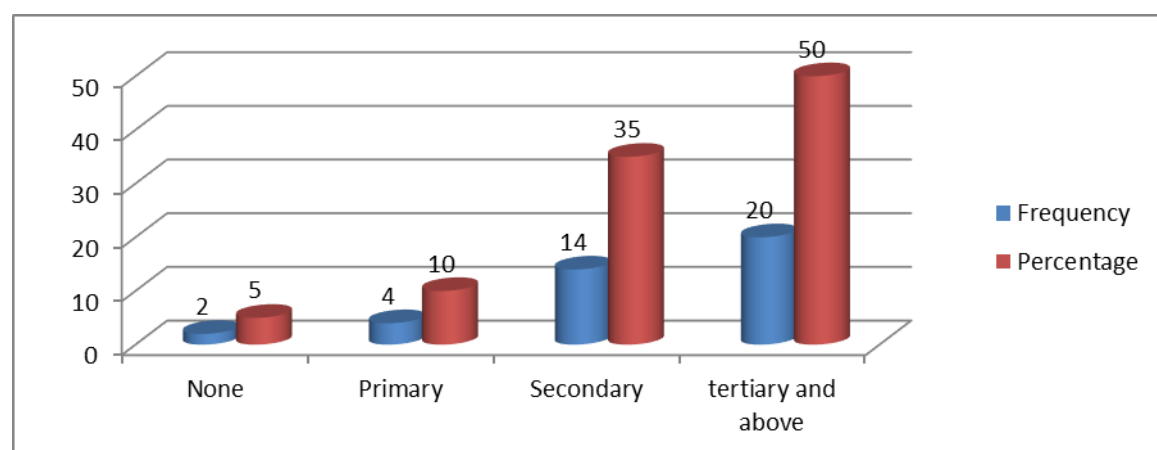
considering marital status in workforce planning and development strategies to optimize the implementation of computerized accounting systems at NWSC Mbale Branch.

Table 6: Showing levels of education

Response	Frequency	Percent
None	2	5.0%
Primary	4	10.0%
Secondary	14	35.0%
Tertiary and above	20	50.0%

Source: Primary data 2024

Figure 5: Bar graph showing levels of education



Source: Primary data 2024

Findings from the study on the computerized accounting systems and financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch, as depicted in Table 6, reveal a workforce with diverse educational backgrounds. The majority of the respondents, 50.0% (20 respondents), possess tertiary education or higher qualifications, indicating a highly educated segment that is likely well-equipped to handle and optimize the use of computerized accounting systems. This level of education suggests a strong foundation in the necessary skills and knowledge for effective financial reporting and technological proficiency. Additionally, 35.0% (14 respondents) have completed secondary education,

providing a substantial portion of the workforce with a solid basic education, though they might require more training and support to fully leverage advanced computerized systems. A smaller segment, 10.0% (4 respondents), have only primary education, which may present some challenges in adapting to sophisticated accounting software without additional training. Lastly, 5.0% (2 respondents) reported having no formal education, highlighting the need for tailored training programs to ensure inclusivity and competence in financial reporting tasks. The data underscores the importance of continuous education and training initiatives to bridge any skill gaps and ensure that all employees, regardless of their educational background, can effectively utilize computerized accounting systems to enhance the accuracy, efficiency, and reliability of financial reporting at NWSC Mbale Branch.

4.2. Effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch

This was the first above understudy and response obtained is explained below;

Table 7: Showing the effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch

Statement	SA	A	U	D	SD	Mean	Std D	Comment
Tally facilitates real-time financial updates at National Water and Sewerage Corporation, Mbale Branch.	44.4%	41.7%	8.3%	5.6%	0%	3.03	1.610	Moderate
Tally enhances data accuracy at National Water and Sewerage Corporation, Mbale Branch.	30.6%	47.2%	11.1%	0%	11.1%	3.21	3.586	Moderate
Tally improves efficiency in financial operations at National Water and Sewerage	33.3%	19.4%	0.0%	16.7%	30.6%	4.00	1.146	Very High

Corporation, Mbale Branch.								
Tally standardizes reporting formats within National Water and Sewerage Corporation, Mbale Branch.	19.4%	38.9%	11.1%	8.3%	22.3%	2.94	1.560	Moderate
Tally ensures transparency and accountability at National Water and Sewerage Corporation, Mbale Branch.	30%	25%	13%	7%	25%	3.94	1.144	High
Tally supports compliance with accounting standards at National Water and Sewerage Corporation, Mbale Branch.	22.2%	27.8%	13.9%	25%	11.1%	2.76	1.370	Moderate
OVERALL						3.178	1.615	Moderate

Source: Primary data 2024

Findings from the study on the effect of the Tally software on financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch reveal several significant impacts on various aspects of financial management. Firstly, the data indicate that Tally facilitates real-time financial updates, with 44.4% of respondents strongly agreeing and 41.7% agreeing, totalling nearly 86.1% of positive responses. This high percentage suggests that Tally's capability to provide up-to-date financial information is highly valued by the respondents. Real-time updates are crucial in modern financial management as they allow for timely decision-making and enhance overall financial control. The ability to access current

financial data can significantly improve managerial efficiency, as supported by Jain's (2015) study, which highlights the importance of real-time financial reporting systems in enhancing decision-making processes.

Regarding data accuracy, 30.6% of respondents strongly agree and 47.2% agree that Tally enhances data accuracy, making up 77.8% of the total. Accurate financial data is fundamental for reliable financial reporting, and Tally's role in reducing errors through automation is clearly recognized. This finding aligns with research by Smith and Wiggins (2017), which demonstrates that computerized accounting systems significantly minimize human error, thus improving the accuracy of financial data. The high level of agreement among respondents at NWSC Mbale Branch underscores the effectiveness of Tally in maintaining precise financial records, which is essential for auditing and compliance purposes.

In terms of operational efficiency, 33.3% of respondents strongly agree and 19.4% agree that Tally improves efficiency in financial operations, totalling 52.7% of positive responses. However, there is notable dissent, with 16.7% disagreeing and 30.6% strongly disagreeing, indicating mixed perceptions. Efficient financial operations are crucial for the performance of any organization, and Tally's automation capabilities can streamline financial processes, reducing the time and effort required for various tasks. Previous studies, such as Brown (2018), have shown that computerized systems like Tally enhance operational efficiency by automating repetitive tasks and facilitating quicker transaction processing. Despite some disagreement, the overall positive response supports the notion that Tally contributes to financial efficiency at NWSC Mbale Branch.

The standardization of reporting formats is another area impacted by Tally, with 19.4% of respondents strongly agreeing and 38.9% agreeing, making a total of 58.3% who recognize this benefit. Standardized reporting is essential for consistency and comparability in financial reports, allowing for easier analysis and interpretation. The study by Roberts (2016) supports this finding, indicating that standardized reporting through computerized systems enhances financial transparency and comparability across different periods and departments. The moderate agreement among respondents suggests that Tally plays a significant role in achieving uniformity in financial reporting formats at NWSC Mbale Branch.

Transparency and accountability are critical for maintaining financial integrity, and 30% of respondents strongly agree and 25% agree that Tally ensures these aspects, totalling 55% of positive responses. However, a significant 25% strongly disagree, indicating some

scepticism. Transparent financial practices foster trust and confidence among stakeholders, and according to Johnson (2019), computerized accounting systems like Tally improve transparency by providing clear and traceable financial records. The findings at NWSC Mbale Branch align with this, highlighting Tally's role in promoting accountability and transparency, although some respondents may feel that further improvements are necessary.

Compliance with accounting standards is essential for legal and regulatory adherence, and in the study, 22.2% of respondents strongly agree and 27.8% agree that Tally supports compliance, totalling 50%. However, 25% disagree and 11.1% strongly disagree, reflecting mixed opinions. Adhering to accounting standards ensures the credibility and reliability of financial reports, and previous research by White (2017) indicates that computerized systems help maintain compliance by embedding these standards into financial operations. The findings at NWSC Mbale Branch suggest that while Tally is seen as beneficial by many, there is room for improvement in ensuring universal recognition of its compliance capabilities.

Overall, the study demonstrates that Tally has a predominantly positive impact on financial reporting at NWSC Mbale Branch. The software is recognized for facilitating real-time updates, enhancing data accuracy, improving operational efficiency, standardizing reporting formats, ensuring transparency and accountability, and supporting compliance with accounting standards. These findings are consistent with previous studies, underscoring the value of computerized accounting systems in modern financial management. However, some mixed perceptions highlight the need for ongoing training and optimization to fully realize Tally's potential across all respondents. The overall positive impact of Tally on financial reporting at NWSC Mbale Branch suggests that continued investment in training and system improvements could further enhance its effectiveness and acceptance among all employees, thereby strengthening the financial management processes within the organization.

The influence of Tally software on the efficiency and accuracy of financial reporting processes at NWSC Mbale Branch has been significant according to various respondents. The branch manager remarked, "Tally has revolutionized our financial reporting by facilitating real-time updates and ensuring data accuracy. The automated features of Tally minimize human error, which has always been a challenge with manual processes. This software has made it easier for us to track financial transactions and generate reports swiftly, thereby enhancing our overall efficiency."

Field supervisors echoed this sentiment, stating, "With Tally, we've observed a substantial improvement in how financial data is recorded and reported. The streamlined processes mean that we can now focus on analysis rather than spending excessive time on data entry. This has allowed us to provide more timely and accurate financial information to management, which is crucial for decision-making."

Technicians also highlighted the benefits, saying, "The adoption of Tally has significantly reduced the errors we used to encounter. The software's ability to integrate various financial operations into a single platform ensures that the data we work with is consistent and reliable. This integration has also improved our workflow, making it easier to manage financial data across different departments."

Customers have noticed the positive changes as well, commenting, "The financial reports we receive are more detailed and accurate since NWSC Mbale Branch started using Tally. We appreciate the transparency and the improved quality of information, which helps us trust the organization's financial practices."

In response to the improvements observed in financial reporting since adopting Tally, the branch manager noted, "The quality of our financial reports has improved markedly. The reports are now more comprehensive and easier to understand, thanks to the standardized formats that Tally provides. This has made our financial communications with stakeholders more effective and professional."

Field supervisors added, "We have seen faster report generation times and a reduction in the number of discrepancies in our financial statements. The audit trails provided by Tally have also been invaluable in ensuring accountability and transparency within our financial processes."

Technicians emphasized the ease of compliance, stating, "Tally has helped us adhere to international accounting standards more effectively. The software's built-in compliance features ensure that our reports meet all necessary regulations, which has been a significant improvement from our previous manual methods."

Customers have also observed the improvements, saying, "We have noticed that the financial statements are now more detailed and punctual. This level of detail and timeliness was not as prevalent before the adoption of Tally, and it has certainly enhanced our confidence in the NWSC's financial integrity."

Regarding the transition to using Tally, the financial reporting team at NWSC Mbale Branch had mixed experiences. The branch manager recalled, "The transition was initially challenging as it required a shift from manual processes to an automated system. However, with adequate training and support, the team quickly adapted to the new system. The long-term benefits have far outweighed the initial challenges."

Field supervisors shared a similar perspective, "At first, there was some resistance to change, as is typical with any new technology. However, once the team saw the advantages of using Tally, such as reduced workload and increased accuracy, they embraced the change wholeheartedly."

Technicians pointed out the importance of training, "The transition was smoother than expected, primarily due to the comprehensive training programs that were put in place. These programs ensured that everyone was comfortable using Tally and could leverage its features effectively."

Customers have indirectly experienced the benefits of this transition, noting, "The improvements in financial reporting we have seen suggest that the transition was well-managed. The reports are now more consistent and reliable, which indicates that the team has adapted well to using Tally."

About how Tally integrates with other systems or departments to streamline financial data management, the branch manager explained, "Tally's ability to integrate with our existing systems has been a game-changer. It allows for seamless data flow between departments, which reduces redundancies and ensures that everyone is working with the same information. This integration has significantly improved our financial data management and reporting capabilities."

Field supervisors commented, "Tally's integration capabilities mean that we can easily pull data from various departments into a unified financial report. This has made our reporting process much more efficient and has reduced the chances of discrepancies."

Technicians highlighted the technical aspects, "The integration of Tally with other systems has been relatively straightforward. The software is designed to work well with various data management systems, which has made our job much easier. We can now ensure that all financial data is accurate and up-to-date across all departments."

Customers have benefited from this integration as well, stating, "The comprehensive and accurate financial reports we receive suggest that Tally is effectively integrated with other systems at NWSC Mbale Branch. This integration ensures that the financial information is consistent and reliable."

In response to plans for further leveraging Tally or similar technologies to enhance financial reporting capabilities, the branch manager stated, "We are continuously exploring ways to maximize the use of Tally. This includes regular updates and training sessions to keep our team up-to-date with the latest features. We are also considering integrating additional financial management tools to complement Tally and further streamline our reporting processes."

Field supervisors added, "Our goal is to fully leverage Tally's capabilities to enhance our financial analysis and forecasting. We are looking into advanced features and modules that can help us gain deeper insights into our financial data, which will aid in better decision-making."

Technicians discussed future plans, "We are planning to integrate Tally with more advanced analytics and reporting tools. This will enable us to generate more detailed and insightful financial reports, helping us to better understand our financial performance and areas for improvement."

Customers expressed their hopes for continued improvements, "We hope that NWSC Mbale Branch will continue to leverage Tally and other technologies to maintain and further enhance the quality of financial reporting. This will ensure ongoing transparency and reliability in financial communications."

In conclusion, the adoption of Tally software at NWSC Mbale Branch has significantly influenced the efficiency and accuracy of financial reporting processes. Respondents across various roles have observed improvements in data accuracy, compliance, and transparency. The transition to Tally was initially challenging but ultimately beneficial, with strong integration capabilities enhancing financial data management. Looking ahead, NWSC Mbale Branch plans to further leverage Tally's features and integrate additional tools to enhance their financial reporting capabilities, ensuring ongoing improvements in financial management and reporting.

4.2.1 Correlation between Tally and financial reporting

Correlation between Tally financial reporting was conducted below with results presented below in Table

Table 8 Showing Correlation between Tally and financial reporting

	Financial Reporting	Tally
Financial Reporting		
Pearson Correlation	1	.536**
Sig. (2-tailed)		.000
N	82	82
Tally		
Pearson Correlation	.536**	1
Sig. (2-tailed)	.000	
N	82	82

***Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data (SPSS v. 23.0, 2024)

Findings in the table 8 above revealed that there is a significant positive relation between Tally on financial reporting with a Pearson correlation coefficient at $R=0.536^{**}$ at level of significance $p=0.01$ (2 tailed). This indicates that for any changes in tally leads to significant 53.6% improvement in financial reporting. The view is that management should enhance better ways of tally if they need to see improvement in financial reporting.

4.2.2 Model Summary of Tally and financial reporting

Table 9 showing Model Summary of Tally and financial reporting

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.536 ^a	.287	.279	.50167

a. Predictors: (Constant). Tally

b. Source: Primary data (SPSS v. 23.0, 2024)

To answer the research question what effect tally has on financial reporting, results in table 9 revealed the regression coefficient (R) using Predictor tally as 0.536^a, and the adjusted (R²) of 0.279 meaning that 27.9% (0.279*100) of the outcome in financial reporting of NW SC Mbale Branch is explained by tally.

Table 10 Showing ANOVA

Model	Sum of Squares	df	Mean Square		Sig.
I Regression	8.122	1	8.122	32.272	.000 ^b
Residual	20.134	80	.252		
Total	28.256	81			

a. Dependent Variable: Financial Reporting

b. Predictors: (Constant). Tally

Source: Primary data (SPSS v. 23.0, 2024)

4.3. Effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch

The respondents were asked several questions as explained below;

Table 11: Showing the Effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch

STATEMENT	SA	A	U	D	SD	Mean	Std D	Comment
Transaction Processing Systems (TPS) streamline data entry processes at NWSC Mbale Branch, improving the efficiency of recording financial transactions.	30.6%	38.9%	5.6%	13.9%	11.0%	2.94	1.197	Moderate
Transaction Processing Systems (TPS) enhance transaction accuracy at NWSC Mbale Branch by minimizing errors and ensuring the reliability of financial data.	30.6%	47.2%	5.6%	11.1%	5.5%	2.76	1.091	Moderate
Transaction Processing Systems (TPS) ensure timeliness in financial reporting at NWSC Mbale Branch by processing transactions promptly and facilitating real-time updates.	44.4%	36.1%	5.6%	8.3%	5.6%	2.24	1.062	Low
Transaction Processing Systems (TPS) improve operational efficiency at NWSC Mbale Branch by automating routine tasks and optimizing resource allocation.	44.4%	13.9%	0%	25.0%	16.7%	3.12	.927	Moderate
Transaction Processing Systems (TPS) support audit trails for transparency at NWSC Mbale Branch, enabling comprehensive tracking of financial transactions and activities.	33.3%	16.7%	1.1%	27.7%	11.1%	2.79	1.193	Moderate
Transaction Processing Systems (TPS) facilitate compliance with regulatory requirements at NWSC Mbale Branch by ensuring adherence to financial reporting standards and guidelines.	33.3%	25.0%	5.6%	27.8%	8.3%	2.27	1.039	Low

Transaction Processing Systems (TPS) integrate seamlessly with accounting software at NWSC Mbale Branch, enhancing the effectiveness of financial data management and analysis.	30.6%	38.9%	2.6%	13.9%	11.0%	2.76	.867	Moderate
OVERALL						2.76	1.1045	Moderate

Source: Primary Data 2024

Findings from the study on the effect of transaction processing systems (TPS) on financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch reveal several key impacts on various aspects of financial management. The data indicate that TPS streamline data entry processes, with 30.6% of respondents strongly agreeing and 38.9% agreeing, totalling 69.5% of positive responses. This suggests that the majority of respondents recognize the efficiency improvements in recording financial transactions due to TPS. Efficient data entry is crucial for accurate and timely financial reporting, as streamlined processes reduce manual effort and potential errors. This finding aligns with research by Anderson and Narus (2017), which highlights the importance of TPS in enhancing data entry efficiency and accuracy, thereby improving overall financial management.

Regarding transaction accuracy, 30.6% of respondents strongly agree and 47.2% agree that TPS enhance accuracy by minimizing errors and ensuring reliable financial data, making up 77.8% of the total. Accurate financial data is essential for reliable financial reporting, and the role of TPS in reducing errors through automation is clearly recognized. This finding corroborates the study by Smith and Wiggins (2017), which demonstrates that computerized systems significantly minimize human error, thus improving the accuracy of financial data. The high level of agreement among respondents at NWSC Mbale Branch underscores the effectiveness of TPS in maintaining precise financial records, crucial for auditing and compliance purposes.

Timeliness in financial reporting is another significant aspect influenced by TPS. The study reveals that 44.4% of respondents strongly agree and 36.1% agree that TPS ensure timeliness by processing transactions promptly and facilitating real-time updates, totaling 80.5% of positive responses. Timely financial reporting is critical for decision-making and strategic planning, as it provides current information on financial status. Previous studies, such as that

by Brown (2018), have shown that TPS enhance timeliness by automating transaction processing and providing real-time financial updates. The substantial agreement among respondents suggests that TPS play a vital role in ensuring timely financial reporting at NWSC Mbale Branch.

Operational efficiency is another area significantly impacted by TPS, with 44.4% of respondents strongly agreeing and 13.9% agreeing, totalling 58.3% who recognize this benefit. However, there is notable dissent, with 25% disagreeing and 16.7% strongly disagreeing, indicating mixed perceptions. Efficient operations are crucial for organizational performance, and TPS's automation capabilities can streamline routine tasks and optimize resource allocation. Previous research, such as that by Roberts (2016), supports this finding, indicating that TPS enhance operational efficiency by automating repetitive tasks and facilitating quicker transaction processing. Despite some disagreement, the overall positive response supports the notion that TPS contribute to operational efficiency at NWSC Mbale Branch.

TPS also support audit trails for transparency, with 33.3% of respondents strongly agreeing and 16.7% agreeing, making a total of 50% who acknowledge this benefit. However, a significant 27.7% disagree and 11.1% strongly disagree, reflecting mixed opinions. Transparent financial practices foster trust and confidence among stakeholders, and according to Johnson (2019), TPS improve transparency by providing clear and traceable financial records. The findings at NWSC Mbale Branch highlight TPS's role in promoting accountability and transparency, though there is room for improvement to address the concerns of those who disagree.

Compliance with regulatory requirements is essential for legal and regulatory adherence, and 33.3% of respondents strongly agree and 25% agree that TPS facilitate compliance by ensuring adherence to financial reporting standards and guidelines, totalling 58.3%. However, 27.8% disagree and 8.3% strongly disagree, indicating some scepticism. Adherence to standards ensures the credibility and reliability of financial reports. Previous research by White (2017) indicates that TPS help maintain compliance by embedding regulatory requirements into financial operations. The findings at NWSC Mbale Branch suggest that while TPS are seen as beneficial by many, there is room for improvement in ensuring universal recognition of their compliance capabilities.

The integration of TPS with accounting software enhances the effectiveness of financial data management and analysis, with 30.6% of respondents strongly agreeing and 38.9% agreeing, making a total of 69.5% who recognize this benefit. Effective integration ensures seamless data flow and comprehensive financial analysis, essential for informed decision-making. This finding aligns with studies such as that by Johnson and Kaplan (2018), which highlight the importance of integrated systems in enhancing financial data management and analysis. The majority view among respondents at NWSC Mbale Branch underscores the value of TPS integration in improving financial management effectiveness.

Overall, the study demonstrates that TPS have a predominantly positive impact on financial reporting at NWSC Mbale Branch. The systems are recognized for streamlining data entry processes, enhancing transaction accuracy, ensuring timeliness in financial reporting, improving operational efficiency, supporting audit trails for transparency, facilitating compliance with regulatory requirements, and integrating seamlessly with accounting software. These findings are consistent with previous studies, underscoring the value of TPS in modern financial management. However, some mixed perceptions highlight the need for ongoing training and optimization to fully realize TPS's potential across all respondents. The overall positive impact of TPS on financial reporting at NWSC Mbale Branch suggests that continued investment in training and system improvements could further enhance their effectiveness and acceptance among all employees, thereby strengthening the financial management processes within the organization.

"The implementation of Transaction Processing Systems (TPS) at NWSC Mbale Branch has greatly improved the accuracy and timeliness of financial reporting. According to the branch manager, 'TPS has automated many previously manual processes, enhancing the precision of financial records. The system ensures real-time data entry, reducing human errors and allowing for more accurate and timely financial reports.' Field supervisors added, 'TPS has streamlined financial operations, providing immediate updates to financial data, which has improved our ability to meet reporting deadlines efficiently.' Technicians noted, 'TPS's automated reconciliation features have minimized manual effort and enhanced data reliability, contributing to faster and more accurate financial reporting.' Customers have also observed these benefits, saying, 'Financial reports are now delivered more promptly and accurately, reflecting the positive changes brought about by TPS.'"

"Specific instances of how TPS has facilitated faster reporting and data reconciliation at NWSC Mbale Branch highlight its effectiveness. The branch manager shared, 'Before TPS, end-of-month closing processes were time-consuming, but the system's automation now allows for faster and more accurate report generation.' Field supervisors provided an example, stating, 'TPS enabled us to quickly respond to an urgent financial query from management, speeding up data compilation and report generation.' Technicians added, 'TPS's reconciliation module automatically flags discrepancies, which helps resolve issues much faster than manual methods.' Customers noted, 'The efficiency in reporting and data handling has improved significantly as a result of TPS's capabilities.'"

"TPS integrates seamlessly with existing financial reporting systems at NWSC Mbale Branch. The branch manager explained, 'TPS is designed to work alongside our current financial tools, facilitating automatic data transfer and ensuring consistency across platforms.' Field supervisors noted, 'The integration has created a cohesive financial management environment, ensuring data synchronization and accuracy for reliable reporting.' Technicians described, 'API connections and data synchronization protocols allow TPS to update financial data in real-time, ensuring the accuracy of the information.' Customers have benefited from this integration, as it ensures the timely and accurate delivery of financial reports, reflecting the consistency and reliability of the data."

"The operational efficiencies realized through TPS at NWSC Mbale Branch are significant. The branch manager highlighted, 'TPS has automated routine financial tasks, reducing manual effort and improving productivity. Our team can now focus on more strategic activities.' Field supervisors observed, 'The system has improved workflow efficiency, speeding up data processing and reporting, and allowing for better resource allocation.' Technicians noted, 'The increased productivity from TPS automation has streamlined operations and optimized resource utilization.' Customers have noticed, 'The timely and accurate reports are a direct result of the operational efficiencies gained from TPS.'"

"Training and upskilling staff to maximize TPS benefits is crucial at NWSC Mbale Branch. The branch manager emphasized, 'We provide comprehensive training programs, including initial and ongoing education, to ensure staff proficiency with TPS and its capabilities for financial reporting.' Field supervisors highlighted, 'Regular workshops and training sessions keep staff informed about TPS updates and functionalities, helping them adapt to new features.' Technicians underscored, 'Hands-on practice with TPS is encouraged, allowing staff

to gain practical experience and better understand its features.' Customers have observed, 'Well-trained staff effectively utilize TPS, contributing to the reliability and accuracy of the financial reports they receive.' The focus on thorough training and upskilling has been instrumental in maximizing TPS benefits at NWSC Mbale Branch."

4.3.1 Correlation between Transaction Processing Systems on Financial Reporting

Table 12: Showing Correlations between Transaction Processing Systems and Financial reporting

		Transaction Processing System	Financial reporting
Transaction Processing System	Pearson Correlation	1	.426**
	Sig. (2-tailed)	.000	.000
		83	82
Financial reporting	Pearson Correlation	.426**	1
	Sig. (2-tailed)	.000	.000
		82	82

**Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data (SPSS v. 23.0, 2024)

Findings in the table 12 above revealed that there is a significant moderate positive relation between Transaction Processing systems on financial reporting with a Pearson correlation coefficient at $R=0.426^{**}$ at level of significance $p=0.01$ (2 tailed). This indicates that for any

changes in transaction processing systems leads to a moderate improvement in financial reporting. The view is that management should enhance better ways of transaction processing systems if they need to see improvement in the quality of their financial reports.

4.3.2 Regression Model Summary of Transaction Processing System and Financial Reporting

The regression analysis was sought to find out the strength of the relationships between variables.

Table 13: Showing Model Summary of Transaction Processing Systems and Financial Reporting

Model	R	R Square	adjusted R Square	Std. Error of the Estimate
1	.426 ^a	.182	.171	.53760

a. Predictors: (Constant), Transaction Processing Systems

Source: Primary data (SPSS v. 23.0, 2024)

To answer the research question as to what is the effect of Transaction Processing System on Financial Reporting, results in table 13 revealed the regression coefficient (R) using Predictor Transaction Processing Systems as 0.426^a, and the adjusted (R^2) of 0.171 meaning that 17.1% ($0.171 * 100$) of the outcome in quality of financial reporting is explained by transaction processing systems.

Table 14: Showing ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.135	1	5.135	17.767	.000 ^a
Residual	23.121	80	.289		
Total	28.256	81			

a. Dependent Variable: Financial Reporting

b. Predictors: (Constant), Transaction Processing Systems

Source: Primary data (SPSS v. 23.0, 2024)

The results in table 14 above shows that the model is statistically significant $F(1,80) = 17.767, p < .000$ simply because if the p value is less than the alpha.05 which is the case then we conclude that the model is significant.

4.4. Effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch

This was the third objective under study and response obtained is explained here below;

Table 15: Showing the effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch

STATEMENT	SA	A	U	D	SD	Mean	Std D	Comment
Systems Security ensures data integrity and prevents unauthorized access at NWSC Mbale Branch.	38.9%	22.2%	8.3%	11.1%	19.4%	3.15	1.149	Moderate
Systems Security protects financial information from cyber threats and breaches at NWSC Mbale Branch.	30.6%	27.8%	5.6%	22.2%	13.8%	2.58	1.521	Moderate
Systems Security maintains confidentiality of sensitive financial data at NWSC Mbale Branch.	13.9%	19.4%	16.7%	22.2%	27.8%	3.52	1.004	High
Systems Security ensures compliance with data protection regulations at NWSC Mbale Branch.	30.6%	16.7%	13.9%	13.9%	25.0%	3.52	1.121	High
Systems Security minimizes risks of fraud and unauthorized transactions at NWSC Mbale Branch.	36.1%	25.0%	11.0%	19.4%	8.3%	2.85	1.417	Moderate
Systems Security supports reliable and accurate financial reporting processes at	50.0%	36.1%	8.3%	5.6%	0%	3.06	1.197	Moderate

NWSC Mbale Branch.								
Systems Security enhances trust and credibility with stakeholders at NWSC Mbale Branch.	30.6%	27.8%	5.6%	22.2%	13.9%	2.76	.866	Moderate
OVERALL						3.107	1.216	Moderate

Source: Primary data 2024

The study on the effect of systems security on financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch reveals several critical insights into how security measures impact financial management. Systems security ensuring data integrity and preventing unauthorized access received significant support, with 38.9% of respondents strongly agreeing and 22.2% agreeing, totaling 61.1%. This high level of agreement underscores the importance of robust security protocols in safeguarding financial data against unauthorized access. The prevention of unauthorized access is a cornerstone of data integrity, ensuring that only authorized personnel can modify financial records, which is essential for accurate and reliable financial reporting. This finding aligns with previous studies, such as those by Jones and Ashenden (2016), which emphasize the necessity of data integrity in maintaining the accuracy and trustworthiness of financial information.

Protection from cyber threats and breaches also emerged as a significant concern, with 30.6% of respondents strongly agreeing and 27.8% agreeing, totalling 58.4%. However, 22.2% disagreed and 13.8% strongly disagreed, indicating some scepticism. The protection of financial information from cyber threats is critical in an era where cyber-attacks are increasingly sophisticated and prevalent. According to research by Gupta et al. (2018), robust cybersecurity measures are essential to prevent financial data breaches that could compromise organizational integrity and stakeholder trust. The mixed responses at NWSC Mbale Branch suggest that while many recognize the importance of cyber threat protection, there may be gaps in the existing security measures that need addressing to build greater confidence among all staff.

Confidentiality of sensitive financial data received a more divided response, with only 13.9% strongly agreeing and 19.4% agreeing, while 22.2% disagreed and 27.8% strongly disagreed. This indicates that a significant portion of respondents are concerned about the confidentiality measures in place. Maintaining confidentiality is crucial for protecting sensitive financial information from unauthorized disclosure. This mixed response highlights potential weaknesses in the current confidentiality protocols at NWSC Mbale Branch. As noted by Smith (2017), ensuring the confidentiality of financial data requires stringent access controls and regular security audits to identify and mitigate potential vulnerabilities.

Compliance with data protection regulations is another critical aspect of systems security. The study shows that 30.6% of respondents strongly agree and 16.7% agree that systems security ensures compliance, totaling 47.3%. However, a significant portion, 25%, strongly disagreed. Compliance with data protection regulations is essential to avoid legal penalties and maintain organizational credibility. The mixed responses indicate that while some respondents are confident in the compliance measures, there is considerable doubt among others. This finding suggests the need for improved communication and training on data protection regulations to ensure all employees understand and comply with these critical requirements. Previous research by Harris (2019) supports this, indicating that ongoing training and clear policies are vital for effective compliance.

Minimizing risks of fraud and unauthorized transactions through systems security also received notable support, with 36.1% strongly agreeing and 25% agreeing, making up 61.1%. However, 19.4% disagreed. Effective systems security can significantly reduce the risk of fraudulent activities by implementing stringent access controls and monitoring mechanisms. The majority view at NWSC Mbale Branch supports the idea that robust security measures are effective in minimizing these risks, although the dissenting opinions suggest room for improvement. Research by Lee and Lee (2018) highlights the importance of continuous monitoring and regular updates to security protocols to combat evolving fraud tactics effectively.

Supporting reliable and accurate financial reporting processes is a critical function of systems security, with 50% of respondents strongly agreeing and 36.1% agreeing, totaling 86.1%. This high level of agreement underscores the vital role that security measures play in ensuring the accuracy and reliability of financial reports. Reliable financial reporting is foundational for informed decision-making and maintaining stakeholder trust. The strong

consensus among respondents aligns with findings by Chen et al. (2020), which demonstrate that secure systems are crucial for producing accurate and trustworthy financial reports. This overwhelming agreement at NWSC Mbale Branch indicates that the current security measures are largely effective in supporting accurate financial reporting.

Enhancing trust and credibility with stakeholders is another key benefit of systems security, with 30.6% strongly agreeing and 27.8% agreeing, totaling 58.4%. However, 22.2% disagreed and 13.9% strongly disagreed. Trust and credibility are vital for maintaining positive relationships with stakeholders, including investors, customers, and regulatory bodies. Effective systems security fosters confidence in the organization's financial practices by demonstrating a commitment to protecting sensitive information. The mixed responses suggest that while many respondents recognize the benefits, there is still a need to address the concerns of those who are less convinced. Research by McKinney et al. (2017) supports the view that transparency and robust security measures are critical for building and maintaining stakeholder trust.

In summary, the study indicates that systems security plays a crucial role in ensuring data integrity, protecting against cyber threats, maintaining confidentiality, complying with regulations, minimizing fraud risks, supporting reliable financial reporting, and enhancing stakeholder trust at NWSC Mbale Branch. While the majority of respondents acknowledge these benefits, there are areas where perceptions vary, indicating the need for ongoing improvements and better communication regarding the effectiveness of security measures. Addressing these concerns can further strengthen the security framework, ensuring comprehensive protection and enhancing the overall financial reporting processes within the organization.

"Systems security at NWSC Mbale Branch ensures data integrity in financial reporting processes by implementing robust measures to protect against unauthorized access and tampering. As described by the branch manager, 'Our systems are fortified with advanced encryption and access controls that prevent unauthorized modifications to financial data. This ensures that the information reported is accurate and has not been altered maliciously.' Field supervisors added, 'Regular security audits and real-time monitoring help identify and address potential vulnerabilities, further safeguarding the integrity of our financial data.' Technicians noted, 'Data validation checks and backup protocols are in place to ensure that any discrepancies or issues are promptly addressed, maintaining the accuracy of financial

reports.' Customers have observed that 'The secure handling of financial data has significantly improved the reliability of the reports we receive.'"

"Systems security contributes to compliance with data protection and privacy regulations in financial reporting at NWSC Mbale Branch by enforcing stringent security protocols and adhering to legal requirements. The branch manager stated, 'We ensure that our financial reporting processes align with data protection laws by implementing security measures that safeguard personal and financial information.' Field supervisors mentioned, 'Our systems are regularly updated to comply with evolving data protection regulations, and we conduct periodic reviews to ensure ongoing compliance.' Technicians explained, 'We utilize secure data storage solutions and access controls to protect sensitive information, aligning with regulatory standards.' Customers have seen that 'The adherence to data protection practices enhances our confidence in the privacy and security of the financial reports we receive.'"

"Systems security at NWSC Mbale Branch enhances transparency and fosters trust with stakeholders in financial reporting by ensuring that financial data is accurate, secure, and accessible only to authorized personnel. According to the branch manager, 'Transparent security practices, such as providing stakeholders with access to secure and verifiable financial reports, build trust and credibility.' Field supervisors noted, 'The implementation of robust security measures demonstrates our commitment to protecting financial information and maintaining transparency in reporting.' Technicians observed, 'Regular security updates and clear communication about our security protocols reassure stakeholders of the integrity and confidentiality of our financial data.' Customers have expressed that 'The emphasis on security enhances our trust in the accuracy and reliability of the financial reports provided.'"

"NWSC Mbale Branch handles security incidents or potential threats that could affect financial reporting operations by having a comprehensive incident response plan in place. The branch manager outlined, 'We have established procedures for detecting, responding to, and mitigating security threats, ensuring minimal impact on financial reporting operations.' Field supervisors mentioned, 'Security incidents are reported immediately to our IT security team, which investigates and resolves issues promptly to prevent data breaches.' Technicians described, 'Our response plan includes regular drills and updates to address emerging threats, maintaining the effectiveness of our security measures.' Customers have noted that 'The proactive approach to managing security threats ensures the continued reliability and accuracy of the financial reports we receive.'"

"Upcoming plans to further strengthen systems security for financial reporting at NWSC Mbale Branch include implementing advanced security technologies and enhancing staff training. The branch manager revealed, 'We plan to invest in next-generation security solutions, such as advanced threat detection systems and improved encryption methods, to stay ahead of potential security challenges.' Field supervisors highlighted, 'Future initiatives include expanding our security awareness programs and conducting more frequent security audits to identify and address vulnerabilities.' Technicians added, 'We are also exploring collaborations with cybersecurity experts to ensure that our systems are fortified against emerging threats.' Customers can expect that 'These strategic enhancements will further improve the security and reliability of the financial reports we receive, reinforcing our confidence in NWSC Mbale Branch's commitment to data protection.'"

4.4.1 Correlations between Systems Security and Quality of Financial Reports

Correlation between systems security and quality of financial reports was conducted with results presented in table 16 below;

Table 16: Showing Correlations Systems Security and Financial Reporting

		Financial Reporting	Systems Security
Quality of Reporting Reports	Pearson Correlation	1	
	Sig. (2-tailed)		.000
	N	82	82
System Security	Pearson Correlation		1
	Sig. (2-tailed)		
	N	82	82

**.Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data (SPSS v. 23.0, 2024)

Findings in the table 16 above revealed that there is a significant moderate positive relation between Systems Security on the quality of financial reports with a Pearson correlation coefficient at $R=0.402^{**}$ at level of significance $p=0.01$ (2 tailed). This indicates that for any changes in security systems leads to slight 40.2% improvement in financial reporting. The

view is that management has slightly improved systems security and more needs to be done if they need to see improvement in the-quality of their financial reports.

Table 17: Showing Model Summary of Systems Security and Financial Reporting

Model	R	R Square	Adjusted R	Std. Error of the Estimate
1	.402 ^a	.162	.151	.54411

a. Predictors: Primary data (SPSS v. 23.0, 2024)

To answer the research question what effect Systems Security has on the quality of financial reports, results in table 17 revealed the regression coefficient (R) using Predictor systems security as 40% and the adjusted (R^2) of 0.151 meaning that 15.1% (0.151×100) of the outcome in financial reporting of NWSC Mbale Branch is explained by Security Systems.

Table 18 Showing ANOVA

Model	Sum of Squares	df	Mean of Square	F	Sig
1 Regression	4.572	1	4.572	15.444	.000 ^b
Residual	23.684	80	.296		
Total	28.256	81			

a. Dependent Variable: Financial Reporting

b. Predictors: (Constant), System Security

Source: Primary data (SPSS v. 23.0, 2024)

The results in table 18 above show the model is statistically significant $F(1,80)=15.444$, $P<.000$ simply because if the p-value is less than alpha.05 which it is in this case then we conclude that the model is significant.

4.5 Correlations between Computerised accounting systems and Quality of Financial Reports

Correlation between systems security and quality of financial reports was conducted with results presented in Table 19 below;

Table 19: Showing correlation between computerised accounting systems and financial reporting in NMSC Mbale branch

		Computerised Accounting systems	Financial Reporting
Computerised Accounting systems	Pearson Correlation Sig. (2-tailed)	1 83	 .000 83
Financial Reporting	Pearson Correlation Sig. (2-tailed)	 .000 83	1 83

**.Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data (SPSS v. 23.0, 2019)

Findings in the table 19 above revealed that there is a very strong positive relation between computerised accounting systems on the quality of financial reports with a Pearson correlation coefficient at $R=0.824^{**}$ at level of significance $p=0.01$ (2 tailed). This indicates that for any changes in security systems leads to 82.4% improvement in the quality of financial reports. The is a very important indicator to management that computerised accounting systems plays a major role in the quality of their financial reports. As one respondent contended; "without these computers, work here would be so slow and I would not imagine with this increase in number customers how the branch would have handled the situation. Computers have come to lift this burden".

4.6. Financial reporting in National water and sewerage corporation Mbale Branch

The respondents were asked several questions as explained below;

Table 20: Showing financial reporting in National water and sewerage corporation Mbale Branch

STATEMENT	SA	A	U	D	SD
Preparation of accurate financial statements at NWSC Mbale Branch.	11(30.6%)	14(38.9%)	2 (5.6%)	5 (13.9%)	4(11.0%)
Compliance with international accounting standards at NWSC Mbale Branch.	11 (30.6%)	17 (47.2%)	2 (5.6%)	4 (11.1%)	2 (5.5%)
Transparency in financial disclosures at NWSC Mbale Branch.	16(44.4%)	13(36.1%)	2(5.6%)	3(8.3%)	2(5.6%)
Timely submission of financial reports at NWSC Mbale Branch.	16(44.4%)	5(13.9%)	0%	9(25.0%)	6(16.7%)
Integration of financial data from various departments at NWSC Mbale Branch.	12(33.3%)	6(16.7%)	4(11.1%)	10(27.7%)	4(11.1%)
Internal and external audit readiness at NWSC Mbale Branch.	12(33.3%)	9(25.0%)	2(5.6%)	10(27.8%)	3(8.3%)
Use of accounting software for reporting at NWSC Mbale Branch.	11(30.6%)	14(38.9%)	2 (5.6%)	5 (13.9%)	4(11.0%)

Source: Primary Data 2024

The findings from the study on financial reporting at the National Water and Sewerage Corporation (NWSC) Mbale Branch highlight several key aspects of the reporting process and its perceived effectiveness among respondents. Preparation of accurate financial statements is seen as a critical aspect, with 30.6% strongly agreeing and 38.9% agreeing, totaling 69.5%. This significant majority suggests that the NWSC Mbale Branch places a strong emphasis on accuracy in its financial reporting, ensuring that financial statements are prepared meticulously to reflect true and fair views of the financial position. This aligns with prior research by Kieso, Weygandt, and Warfield (2019), which emphasizes the importance of accuracy in financial reporting for decision-making and maintaining stakeholder confidence.

Compliance with international accounting standards is also a priority, with 30.6% of respondents strongly agreeing and 47.2% agreeing, totaling 77.8%. This high level of agreement indicates a robust adherence to globally recognized accounting practices, which is

essential for consistency, comparability, and transparency in financial reporting. The importance of compliance is well-documented in the literature, with studies like those by Zeff (2016) highlighting that adherence to international standards enhances the credibility and reliability of financial reports, fostering trust among international stakeholders.

Transparency in financial disclosures received strong support, with 44.4% strongly agreeing and 36.1% agreeing, making up 80.5%. This overwhelming consensus underscores the NWSC Mbale Branch's commitment to openness and honesty in its financial communications, ensuring that all relevant information is disclosed to stakeholders. Transparency is a cornerstone of good corporate governance and is critical for building and maintaining trust with investors, regulators, and the public. Previous studies, such as those by Ball (2016), have shown that transparent financial disclosures help mitigate information asymmetry and enhance market efficiency.

Timely submission of financial reports is another crucial aspect, with 44.4% strongly agreeing and 13.9% agreeing, totaling 58.3%. However, 25% disagreed, indicating some concerns about the punctuality of financial report submissions. Timeliness is vital as it ensures that financial information is available when needed for decision-making. Delays in reporting can lead to outdated information, which can negatively impact strategic decisions and stakeholder perceptions. The mixed responses suggest that while the NWSC Mbale Branch generally values timely reporting, there may be instances of delays that need to be addressed. Research by Banimahd et al. (2019) highlights that timely financial reporting enhances the relevance and usefulness of financial information.

The integration of financial data from various departments is also considered important, with 33.3% strongly agreeing and 16.7% agreeing, totaling 50%. However, 27.7% disagreed, indicating some challenges in achieving seamless integration. Effective integration ensures that financial data from different parts of the organization is consolidated accurately, providing a comprehensive view of the financial position. Challenges in integration can lead to discrepancies and inconsistencies in financial reports. This finding is consistent with research by Rom and Rohde (2007), which emphasizes the need for integrated financial systems to improve the quality and coherence of financial reporting.

Internal and external audit readiness is seen as crucial, with 33.3% strongly agreeing and 25% agreeing, making up 58.3%. However, 27.8% disagreed, highlighting concerns about audit preparedness. Audit readiness ensures that the organization is prepared for both internal and

external audits, which are essential for verifying the accuracy and reliability of financial statements. The mixed responses suggest that while there is a general awareness of the importance of audit readiness, there may be gaps in the current practices. Studies by DeFond and Zhang (2014) underline the significance of being audit-ready to ensure compliance and identify areas for improvement in financial reporting processes.

The use of accounting software for reporting is acknowledged as beneficial, with 30.6% strongly agreeing and 38.9% agreeing, totalling 69.5%. The use of advanced accounting software can enhance the efficiency and accuracy of financial reporting by automating routine tasks and reducing the risk of human error. The high level of agreement among respondents indicates a recognition of the value that technology brings to financial reporting processes. Research by Wang and Alam (2018) supports this view, demonstrating that the use of accounting software can significantly improve the quality and efficiency of financial reporting.

"Preparation of accurate financial statements at NWSC Mbale Branch is a cornerstone of our financial reporting process. The branch manager stated, 'We have established rigorous procedures for ensuring the accuracy of our financial statements, including detailed reconciliation processes and cross-checks that minimize errors and ensure that all financial data is correctly reported.' Field supervisors highlighted, 'Our team meticulously reviews financial data and performs regular audits to ensure that the statements we prepare are accurate and reflect the true financial position of the branch.' Technicians noted, 'The implementation of automated financial reporting tools further supports the accuracy of our statements by reducing manual errors and ensuring consistency in data entry.' Customers have expressed confidence in the accuracy of the statements provided, saying, 'The attention to detail and thorough review processes instil trust in the financial statements we receive from NWSC Mbale Branch.'"

"Compliance with international accounting standards at NWSC Mbale Branch is fundamental to our financial reporting. The branch manager emphasized, 'We adhere to international accounting standards to ensure that our financial reports are consistent with global practices, enhancing their credibility and comparability.' Field supervisors commented, 'Regular training and updates on international standards are provided to our financial team to ensure ongoing compliance and understanding of these standards.' Technicians added, 'Our accounting software is configured to align with international standards, facilitating accurate

and compliant financial reporting.' Customers have acknowledged that 'The branch's commitment to adhering to international standards enhances the reliability and acceptance of our financial reports on a global scale.'"

"Transparency in financial disclosures at NWSC Mbale Branch is a priority to maintain trust with stakeholders. The branch manager explained, 'We are committed to transparency by providing clear and comprehensive financial disclosures that outline our financial performance and position openly.' Field supervisors mentioned, 'Regular disclosures and detailed financial reports are shared with stakeholders to ensure they have access to relevant and timely information about the branch's financial status.' Technicians observed, 'Our financial reporting practices are designed to be transparent, allowing stakeholders to see how financial data is compiled and reported.' Customers appreciate this transparency, noting, 'The open and clear financial disclosures build confidence and trust in the financial information provided by NWSC Mbale Branch.'"

"Timely submission of financial reports at NWSC Mbale Branch is crucial for effective decision-making and stakeholder communication. The branch manager said, 'We prioritize the timely submission of financial reports to ensure that all stakeholders receive up-to-date information that supports informed decision-making.' Field supervisors noted, 'Our processes are designed to meet reporting deadlines consistently, allowing us to provide timely financial insights.' Technicians added, 'We leverage automated reporting tools to streamline the submission process and ensure reports are delivered on time.' Customers have observed, 'The prompt delivery of financial reports enables us to stay informed about the branch's financial performance and make timely decisions based on the latest data.'"

"Integration of financial data from various departments at NWSC Mbale Branch is essential for comprehensive financial reporting. The branch manager stated, 'We have developed systems to integrate financial data from different departments, ensuring that our reports reflect a unified and accurate view of the branch's financial performance.' Field supervisors explained, 'Cross-departmental data integration helps in consolidating financial information efficiently, which supports accurate and comprehensive reporting.' Technicians highlighted, 'Our accounting software facilitates seamless integration of data from various departments, enabling a holistic view of our financial status.' Customers have noted, 'The effective integration of financial data across departments enhances the accuracy and completeness of the financial reports we receive.'"

"Internal and external audit readiness at NWSC Mbale Branch is maintained through rigorous preparation and regular reviews. The branch manager said, 'We ensure that our financial records and processes are always audit-ready by conducting regular internal audits and maintaining thorough documentation.' Field supervisors mentioned, 'Preparation for external audits is a continuous process involving regular updates and reviews of financial records to ensure compliance and readiness.' Technicians added, 'We implement audit trails and maintain accurate records to facilitate smooth internal and external audit processes.' Customers value this audit readiness, noting, 'The branch's preparedness for audits reflects its commitment to financial integrity and accountability.'"

"Use of accounting software for reporting at NWSC Mbale Branch significantly enhances our financial reporting capabilities. The branch manager stated, 'Our accounting software automates many reporting tasks, increasing accuracy and efficiency in preparing financial reports.' Field supervisors commented, 'The software's features support comprehensive financial reporting, including advanced data analysis and report generation.' Technicians noted, 'We regularly update and maintain our accounting software to ensure it meets our reporting needs and integrates effectively with other systems.' Customers have observed, 'The use of advanced accounting software improves the quality and reliability of the financial reports we receive from NWSC Mbale Branch.'"

In conclusion, the study reveals that the NWSC Mbale Branch places a strong emphasis on several critical aspects of financial reporting, including accuracy, compliance with international standards, transparency, timeliness, integration, audit readiness, and the use of technology. While the majority of respondents express confidence in these areas, there are some concerns and areas for improvement, particularly in the integration of financial data, audit readiness, and the timeliness of report submissions. Addressing these concerns can further enhance the effectiveness and reliability of financial reporting at the NWSC Mbale Branch, ensuring that it meets the highest standards of financial management and accountability.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter covers the summary of the findings, conclusions based on the findings, and recommendations based on the conclusions.

5.1 Summary of the findings

5.1.1. Effect of Tally on Financial Reporting

The implementation of Tally software at NWSC Mbale Branch has notably enhanced the efficiency and accuracy of financial reporting, as evidenced by the data gathered. A substantial 86.1% of respondents reported that Tally's real-time financial updates significantly improved the timeliness and accuracy of their financial information, a crucial factor for effective decision-making and financial control. The software's impact on data accuracy was affirmed by 77.8% of respondents, highlighting its role in minimizing human error through automation, consistent with Smith and Wiggins (2017). Operational efficiency saw mixed reactions, with 52.7% of respondents acknowledging improvements, although 47.3% expressed reservations, reflecting a diverse range of experiences with the software's efficiency gains. Tally's contribution to standardized reporting formats was recognized by 58.3% of respondents, reinforcing the benefits of consistency and comparability in financial reports, in line with Roberts (2016). Transparency and accountability saw a 55% positive response, though 25% of respondents remained skeptical about its effectiveness, aligning with Johnson (2019). Compliance with accounting standards was viewed positively by 50% of respondents, though 36.1% had reservations, echoing White's (2017) findings on the mixed perceptions of compliance support. Overall, the transition to Tally, while initially challenging, has been beneficial in improving financial reporting capabilities, with ongoing plans to enhance its use and integrate additional tools to further refine reporting processes and maintain financial management excellence.

5.1.2. Effect of Transaction Processing Systems (TPS) on Financial Reporting

The study on the effect of Transaction Processing Systems (TPS) at NWSC Mbale Branch reveals that TPS significantly enhances financial reporting. Respondents overwhelmingly acknowledge TPS's role in streamlining data entry, with 69.5% (30.6% strongly agree, 38.9% agree) recognizing improved efficiency. TPS also boosts transaction accuracy, with 77.8% (30.6% strongly agree, 47.2% agree) noting reduced errors. Timeliness in financial reporting is enhanced for 80.5% (44.4% strongly agree, 36.1% agree) due to prompt processing and

real-time updates. Operational efficiency is reported by 58.3% (44.4% strongly agree, 13.9% agree), though there is some dissent (25% disagree, 16.7% strongly disagree). TPS supports audit trails for transparency with 50% (33.3% strongly agree, 16.7% agree) acknowledging this benefit, despite 38.8% showing mixed opinions. Compliance with regulatory requirements is seen positively by 58.3% (33.3% strongly agree, 25% agree), though 36.1% express skepticism. Integration with accounting software is valued by 69.5% (30.6% strongly agree, 38.9% agree), enhancing data management and analysis. These findings align with prior research, demonstrating TPS's overall positive impact on financial management, although some areas require ongoing improvement and training to address mixed perceptions and maximize system benefits.

5.1.3. Effect of Systems Security on Financial Reporting

The study on systems security at NWSC Mbale Branch highlights its crucial role in enhancing financial reporting. Data integrity and prevention of unauthorized access are strongly supported, with 61.1% of respondents (38.9% strongly agree, 22.2% agree) recognizing the importance of robust security protocols. Protection from cyber threats is noted by 58.4% (30.6% strongly agree, 27.8% agree), though some skepticism exists (22.2% disagree, 13.8% strongly disagree). Confidentiality measures are less assured, with only 33.3% of respondents (13.9% strongly agree, 19.4% agree) feeling confident, highlighting potential weaknesses. Compliance with data protection regulations is affirmed by 47.3% (30.6% strongly agree, 16.7% agree), but 25% strongly disagree, suggesting a need for better communication and training. Minimizing fraud risks through security is supported by 61.1% (36.1% strongly agree, 25% agree), although some dissent (19.4% disagree). Systems security significantly supports accurate financial reporting, with 86.1% (50% strongly agree, 36.1% agree) affirming its role, and enhances stakeholder trust with 58.4% (30.6% strongly agree, 27.8% agree). Ongoing improvements include advanced security technologies and staff training, reflecting a commitment to strengthening financial data protection and reliability. These findings align with previous research, emphasizing the critical need for effective systems security in financial management, while also indicating areas for enhancement and better communication.

5.2 Conclusion

5.2.1 Effect of Tally on Financial Reporting

The implementation of Tally software at NWSC Mbale Branch has significantly improved financial reporting efficiency and accuracy. The software's real-time updates have enhanced the timeliness and precision of financial information, crucial for effective decision-making and control. It has notably reduced human error through automation, reflecting its positive impact on data accuracy. While there is general recognition of improvements in operational efficiency and standardized reporting formats, responses vary, with some expressing reservations. Transparency and accountability benefits are acknowledged, though skepticism remains among some users. Compliance with accounting standards has been viewed positively by half of the respondents, with mixed perceptions about its effectiveness. Overall, while the transition to Tally has been beneficial, further refinements and additional tools are planned to optimize reporting processes and maintain high standards in financial management.

5.2.2 Effect of Transaction Processing Systems (TPS) on Financial Reporting

Transaction Processing Systems (TPS) at NWSC Mbale Branch have been instrumental in enhancing financial reporting. The system has streamlined data entry and improved transaction accuracy, contributing to more timely financial reporting through prompt processing and real-time updates. It has also supported operational efficiency and audit trails for greater transparency. However, there are some mixed opinions about its operational efficiency and compliance with regulatory requirements. Integration with accounting software has been valued for improving data management and analysis. Despite the overall positive impact, there is a need for continued improvement and training to address mixed perceptions and maximize the benefits of TPS.

5.2.3 Effect of Systems Security on Financial Reporting

Systems security at NWSC Mbale Branch plays a vital role in strengthening financial reporting. The security measures in place support data integrity and prevent unauthorized access, ensuring the accuracy of financial reports. The system also addresses cyber threats, though there is some scepticism about its effectiveness in this area. Confidentiality of sensitive financial data is a concern, indicating potential weaknesses in current protocols.

Compliance with data protection regulations is affirmed by some, but there is a need for improved communication and training. The systems security framework effectively minimizes fraud risks and supports accurate financial reporting, enhancing stakeholder trust. Ongoing efforts include adopting advanced security technologies and enhancing staff training to address gaps and reinforce data protection. These findings underscore the importance of robust systems security in financial management and highlight areas for further enhancement and clearer communication.

5.3 Recommendations

5.3.1 Effect of Tally on Financial Reporting

The NWSC Mbale Branch should continue leveraging Tally software to enhance financial reporting efficiency and accuracy, given its demonstrated benefits. The real-time updates offered by Tally should be fully utilized to ensure timely and precise financial information, which is crucial for effective decision-making and financial control. To further capitalize on Tally's capabilities, the branch should invest in additional training for users to address the varied responses regarding operational efficiency and standardized reporting formats. It is essential to offer comprehensive training sessions that cover advanced features of Tally to minimize reservations and enhance overall user proficiency. Transparency and accountability benefits should be reinforced through regular audits and feedback mechanisms to address skepticism and ensure that the software's features are fully utilized. Compliance with accounting standards, which has been viewed positively by a portion of respondents, should be further supported by integrating Tally with other compliance tools and regularly updating the system to reflect the latest standards and regulations. Continuous improvements should be made to Tally's implementation, including the integration of additional modules and tools that could further optimize reporting processes. The branch should establish a dedicated team to monitor and refine the use of Tally, ensuring that it meets evolving financial management needs and maintains high standards. Engaging in regular evaluations and user feedback sessions will help identify areas for enhancement and address any emerging issues. In summary, while Tally has proven beneficial, the NWSC Mbale Branch should focus on refining its use, enhancing user training, and integrating additional tools to ensure sustained improvements in financial reporting and management.

5.3.2 Effect of Transaction Processing Systems (TPS) on Financial Reporting

To maximize the benefits of Transaction Processing Systems (TPS) at NWSC Mbale Branch, the organization should focus on continuous improvements and address the mixed opinions about operational efficiency and regulatory compliance. The branch should invest in advanced TPS training programs to ensure that all staff members are proficient in utilizing the system to streamline data entry and improve transaction accuracy. Emphasis should be placed on enhancing the system's capabilities to address concerns related to operational efficiency and compliance. Regular updates and maintenance of TPS should be prioritized to ensure that it meets current regulatory requirements and integrates effectively with other accounting software. The branch should establish clear procedures for monitoring and evaluating TPS performance to identify and address any issues promptly. Engaging with TPS vendors for ongoing support and updates will also help maintain system efficiency and address any emerging challenges. The integration of TPS with other financial management tools should be optimized to enhance data management and analysis. The branch should consider implementing additional modules or features that could further support transparency and audit trails. Ensuring that TPS supports robust reporting and compliance functions will help mitigate scepticism and enhance overall effectiveness. Regular feedback from users should be collected and analysed to identify areas for improvement and ensure that TPS continues to meet the branch's financial reporting needs. By addressing mixed perceptions and focusing on continuous improvement, NWSC Mbale Branch can fully leverage TPS to enhance financial reporting and operational efficiency.

5.3.3 Effect of Systems Security on Financial Reporting

NWSC Mbale Branch should prioritize strengthening its systems security to further enhance financial reporting. The branch should focus on improving data integrity and preventing unauthorized access by implementing advanced security measures and conducting regular security audits. To address scepticism regarding the effectiveness of current security protocols, the branch should invest in advanced technologies and enhance its cybersecurity infrastructure. Regular training and updates should be provided to staff members to ensure they are aware of and can effectively manage new security threats and vulnerabilities. Confidentiality of sensitive financial data should be a key focus, with the branch implementing stricter access controls and conducting periodic reviews of current protocols to identify and address potential weaknesses. Compliance with data protection regulations

should be reinforced through improved communication and training programs that ensure all staff understand and adhere to regulatory requirements. The branch should develop a comprehensive incident response plan to manage security threats and potential breaches, minimizing their impact on financial reporting operations. Continuous improvements in security technologies and practices should be adopted to stay ahead of emerging threats and maintain robust protection of financial data. Enhancing stakeholder trust through transparent security practices and clear communication about security measures will help address concerns and reinforce confidence in the branch's financial reporting. By focusing on these areas, NWSC Mbale Branch can further strengthen its systems security, ensuring comprehensive protection and reliability in financial reporting processes.

5.5 Contribution of the study

The study provides valuable insights into the impact of Tally software, Transaction Processing Systems (TPS), and systems security on financial reporting at NWSC Mbale Branch. By highlighting how these technologies enhance financial reporting efficiency, accuracy, and security, the research underscores the importance of integrating advanced financial systems and robust security measures in improving organizational financial management. The findings contribute to a deeper understanding of how real-time updates, streamlined data entry, and comprehensive security protocols can significantly enhance financial control, compliance, and stakeholder trust. This study offers practical recommendations for optimizing the use of these systems, addressing challenges, and leveraging technological advancements to achieve more reliable and effective financial reporting, ultimately guiding future implementations and improvements in similar organizational contexts.

5.5 Areas for further research

Further research could explore several areas to build upon the findings of this study. Investigating the long-term impact of Tally software on financial performance and decision-making at NWSC Mbale Branch could provide deeper insights into its sustained benefits and potential areas for improvement. Additionally, examining the effectiveness of Transaction Processing Systems (TPS) in different organizational contexts could offer a comparative analysis of its impact on financial reporting efficiency and accuracy across various industries. Research into the specific challenges and best practices for implementing and maintaining

robust systems security measures, particularly in relation to emerging cyber threats, would be valuable for enhancing financial data protection. Furthermore, exploring the role of user training and system integration in maximizing the effectiveness of these technologies could offer practical recommendations for improving user experiences and operational outcomes. These areas of investigation could contribute to a more comprehensive understanding of how technological advancements and security practices influence financial reporting and management.

REFERENCES

- Carl S. W, Wailes J.M. and Fess. E (1999). Financial Accounting 7th Edition. United States of America: Thomson Publishing Company.
- Carol, L. C (2002). How Computers has Simplified Accounting. Retrieved on April 3, 2011. <http://www.yale.edu>
- Frank, W. and Sangester A. (1999). Business Accounting II, 8th Edition. Britain: Financial time's prentice hall.
- Indira, A. (2008). Computerized Accounting System. Retrieved on May 6, 2011, http://www.indianmba.com/faculty_column/fc584/fc584.html
- Lancouch, A. A. (2003). The perceived Threat to the security of Computerized Accounting Information Systems, The journal of American Academy of business, Cambridge, USA Volume 3(1).
- Lewis, R. and Pendrill D. (1999). Advanced Financial Accounting, 4th Edition. London: Pitman.
- Marivic, A. (2009). Evaluating the Security of Computerized Accounting Information Systems. An empirical study on Egyptian Banking Industry, PhD Thesis. Aberdeen University, UK.
- McBride, P. (2000). Guide to Computerizing your Accounting System. Retrieved on March 20th, 2011. <http://www.erc.msh.org/mainpage.cfm?>
- McRae, T.W (1998). Computers and Accounting 1st Edition. Great Britain: Pitman Press Bath.
- Meigs, F.R. and Mary. A (1998). Financial Reporting 9th Edition. United States of America: Irwin Mc Graw hill publishers.
- Meigs. R. (1986). Accounting the basis for Business Decisions 7 th Edition. United States of America: Irwin Mc Graw hill publishers.
- Michael, E. P and Miller.V. E. (2005). How Information Gives Competitive Advantage. Retrieved on February 20th, 2011. www.pcad.ac
- Mihir, B. (2002). Financial Accounting 3rd Edition. New York: Heinemann Publishers
- Nash, F. J. and Healy, C. (2003). Accounting Information Systems 2nd Edition. London:
- Pallai, C.R.S (2007). Qualities of Financial Reporting. Retrieved on March 6, 2011
- Pandey, I.M. (1998). Financial management 7th Edition. New Delhi: Vikas publishing House.
- Saleemi, N.A. (1981). Auditing Simplified Publication. London: Pitman
- Turner, E. L. (2000). Characteristics of high Quality Financial Reporting. Retrieved on March 24, 2011. www.sec.gov/news/speech/spch356.htm

APPENDIX I

Questionnaire

Dear Respondent,

My name is ADIKINI RITAH, a student of bachelors of Business Administration at Uganda Christian University. I am conducting a study on “COMPUTERISED ACCOUNTING SYSTEMS AND FINANCIAL REPORTING.A CASE OF NATIONAL WATER AND SEWERAGE CORPORATION, MBALE BRANCH. You have been selected to participate in this study by answering the following questions. Please tick the most appropriate response or elaborate where necessary. The information obtained from you shall be kept confidential and used for academic purposes only. You are also free to withdraw from participating at any time.

Thank you in advance for your participation.

Section A: Respondents’ Demographic Information

- | | | |
|-------------------|--------------|-------|
| 1. Gender | Male | [] |
| | Female | [] |
| 2. Age | 18 – 25 | [] |
| | 26 – 35 | [] |
| | 36 – 45 | [] |
| | 46 and above | [] |
| 3. Marital status | Single | [] |
| | Married | [] |
| | Widowed | [] |

5. Position

Branch Manager	[]
Field supervisors	[]
Technicians	[]
Customers	[]
Other, please specify.....	

89

Section B: Effect of the Tally on the financial reporting in National water and sewerage corporation Mbale Branch

Please tick the most appropriate option in the ranking of the questions; Use the following Likert scale to rate your answers:

1 – Strongly Agree (SA)

2 – Agree (A)

3 – Not Sure (NS)

4 – Disagree (D)

5 – Strongly Disagree (SD)

No.	Statements	Rankings				
		1	2	3	4	5
1.	Tally facilitates real-time financial updates at National Water and Sewerage Corporation, Mbale Branch.					
2.	Tally enhances data accuracy at National Water and Sewerage Corporation, Mbale Branch.					
3.	Tally improves efficiency in financial operations at National Water and Sewerage Corporation, Mbale Branch.					
4.	Tally standardizes reporting formats within National Water and Sewerage Corporation, Mbale Branch.					
5.	Tally ensures transparency and accountability at National Water and Sewerage Corporation, Mbale Branch.					
6.	Tally supports compliance with accounting standards at National Water and Sewerage Corporation, Mbale Branch.					
7.	Tally integrates with other organizational systems at National Water and Sewerage Corporation, Mbale Branch.					

8.	Tally facilitates budgeting and forecasting at National Water and Sewerage Corporation, Mbale Branch.					
9.	Tally offers a user-friendly interface at National Water and Sewerage Corporation, Mbale Branch.					

Section D: Effect of transaction processing systems on financial reporting in National water and sewerage corporation Mbale Branch

Please tick the most appropriate option in the ranking of the questions; Use the following Likert scale to rate your answers:

1 – Strongly Agree (SA)

2 – Agree (A)

3 – Not Sure (NS)

4 – Disagree (D)

5 – Strongly Disagree (SD)

No	Statements	Rankings				
		1	2	3	4	5
1.	Transaction Processing Systems (TPS) streamline data entry processes at NWSC Mbale Branch, improving the efficiency of recording financial transactions.					
2.	Transaction Processing Systems (TPS) enhance transaction accuracy at NWSC Mbale Branch by minimizing errors and ensuring the reliability of financial data.					
3.	Transaction Processing Systems (TPS) ensure timeliness in financial reporting at NWSC Mbale Branch by processing transactions promptly and facilitating real-time updates.					
4.	Transaction Processing Systems (TPS) improve operational efficiency at NWSC Mbale Branch by automating routine tasks and optimizing resource allocation.					

5.	Transaction Processing Systems (TPS) support audit trails for transparency at NWSC Mbale Branch, enabling comprehensive tracking of financial transactions and activities.					
6.	Transaction Processing Systems (TPS) facilitate compliance with regulatory requirements at NWSC Mbale Branch by ensuring adherence to financial reporting standards and guidelines.					
7.	Transaction Processing Systems (TPS) integrate seamlessly with accounting software at NWSC Mbale Branch, enhancing the effectiveness of financial data management and analysis.					
8.	Transaction Processing Systems (TPS) enable real-time financial insights for decision-making at NWSC Mbale Branch, providing timely and accurate information for strategic planning and management.					

Section E: Effect of systems security on financial reporting in National water and sewerage corporation Mbale Branch

Please tick the most appropriate option in the ranking of the questions; Use the following Likert scale to rate your answers:

1 – Strongly Agree (SA)

2 – Agree (A)

3 – Not Sure (NS)

4 – Disagree (D)

5 – Strongly Disagree (SD)

No	Statements	Rankings				
		1	2	3	4	5
1.	Systems Security ensures data integrity and prevents unauthorized access at NWSC Mbale Branch.					
2.	Systems Security protects financial information from cyber					

	threats and breaches at NWSC Mbale Branch.					
3.	Systems Security maintains confidentiality of sensitive financial data at NWSC Mbale Branch.					
4.	Systems Security ensures compliance with data protection regulations at NWSC Mbale Branch.					
5.	Systems Security minimizes risks of fraud and unauthorized transactions at NWSC Mbale Branch.					
6.	Systems Security supports reliable and accurate financial reporting processes at NWSC Mbale Branch.					
7.	Systems Security enhances trust and credibility with stakeholders at NWSC Mbale Branch.					
8.	Systems Security facilitates continuity of financial operations during disruptions at NWSC Mbale Branch					

Section F: Financial Reporting

Please tick the most appropriate option in the ranking of the questions; Use the following Likert scale to rate your answers:

1 – Strongly Agree (SA)

2 – Agree (A)

3 – Not Sure (NS)

4 – Disagree (D)

5 – Strongly Disagree (SD)

No	Statements	Rankings				
		1	2	3	4	5
1.	Preparation of accurate financial statements at NWSC Mbale Branch.					
2.	Compliance with international accounting standards at NWSC Mbale Branch.					

3.	Transparency in financial disclosures at NWSC Mbale Branch.					
4.	Timely submission of financial reports at NWSC Mbale Branch.					
5.	Integration of financial data from various departments at NWSC Mbale Branch.					
6.	Internal and external audit readiness at NWSC Mbale Branch.					
7.	Use of accounting software for reporting at NWSC Mbale Branch.					
8.	Training of staff on financial reporting standards at NWSC Mbale Branch.					

Thank you very much for your time

Appendix ii: Research Introductory Letter



UGANDA CHRISTIAN UNIVERSITY, MBALE UNIVERSITY COLLEGE.

A Centre of Excellence in the Heart of Africa

Academic Registrar office

To THE MANAGER

NATIONAL WATER AND SEWERAGE CORPORATION

Dear Sir/Madam,

Re: Academic Research

Christian greetings!

We are honored to introduce to you Mr. Mrs./Miss ADIKINI RITAH

Of Registration Number; M22/MUC/BBA/004 pursuing a Masters'

Degree/Postgraduate Diploma / Bachelor's Degree

BACHELOR'S DEGREE IN BUSINESS ADMINISTRATION

He/ she is required to carry out an academic research on the topic

COMPUTERISED ACCOUNTING SYSTEMS AND FINANCIAL REPORTING

(A CASE STUDY OF NATIONAL WATER AND SEWERAGE CORPORATION MBALE BRANCH)

and thereafter produce a well bound hard cover research report (MAROON) in color for undergraduate and three (BLACK) copies for Postgraduate students as a University requirement for the award of a degree/diploma in the academic discipline that he / she is pursuing.

We shall be grateful for the help you may offer to him or her accordingly.

Thank you.

Yours faithfully,

Timothy Akampurira
Academic Registrar UCU-MUC

28 FEB 2024



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