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EFFECT OF INTERNAL CONTROLS ON
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EFFECT OF INTERNAL CONTROLS ON FINANCIAL PERFORMANCE OF WATER COMPANIES IN KENYA (A CASE OF WATER COMPANIES IN TANA WATER SERVICES BOARD)

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ABSTRACT

Purpose: The purpose of this study was to determine the effect of internal controls on financial performance of water service Providers in Kenya a case study of Water Companies under Tana Water services Board region in Kenya.

Methodology: The study used a descriptive survey study research design. The population of the study was 22 Members of the audit committee, 22 Finance Managers, 22 internal auditors and 22 senior accountants in WSPs in TWSB region as at December 2014. The study conducted a purposive sampling of the selected members of the Audit Committee, Finance/ Commercial Managers, Internal Auditors and Senior Accountants in the selected WSPs. The study used primary method of which was obtained by use of structured questionnaires. The data was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keyed into statistical package for social sciences (SPSS) computer software for analysis. The particular descriptive statistics included frequencies and percentages while the particular inferential statistics included correlation analysis and regression. Correlation analysis was to establish the association between the variables while a multiple linear regression model was used to test the significance of the influence of the independent variables on the dependent variable. The data was represented in form of tables and pie charts.

Results: The study found that segregation of duties, cash reconciliation, inventory audits and cost management influence the performance of water companies under Tana water services Board. The findings revealed a strong positive relationship between the independent variables and the dependent variable.

Unique contribution to theory, practice and policy: The study also recommended that the managers of water companies should adopt efficient management practices. This will help improve the financial performance of the water companies. The study also recommended that the managers address various challenges affecting internal control systems in the water companies. The challenges hindered effective financial performance of the organizations.

Key words: *Internal control, financial performance, cash reconciliation and inventory audits*

1.0 INTRODUCTION

1.1 Background of the Study

An entity should put in place its own system of controls in order to achieve its objectives (Mwindi, 2008). A system of effective internal controls is a critical component of company management and a foundation for the safe and sound operation of organizations. However, ineffective internal controls result in ineffective systems and eventually leading to losses (Olumbe, 2012). Recent incidence of corporate failures and accounting frauds are mostly preceded by failure in companies' internal control structures (Anyanzwa, 2013). The relationship between effective internal controls and firm performance is gradually creativity interest in management research (AL matari, Swidi & Fadzil, 2014). Institutional characteristics and internal audit are likely to influence the effectiveness of internal controls as the controls enhance firm performance because they have direct correlation to commercial viability, financial sustainability and financial capacity (WASREB, 2014) and thus most likely determine the resources and audit environment that overseas effectiveness of Internal Controls as they guarantee that firms policies and procedures which guide the organizations achieve their goals and objectives are maintained (Penrose, 1959: COSO,1992).

Effective Internal Control system that is overseen by internal audit detects weaknesses in management operations and provides a basis for correcting deficiencies before they compromise achievement of organizational goals, (Belay, 2007). Internal controls are intended primarily to enhance the reliability of financial performance, either directly or indirectly by increasing accountability among information providers in an organization (Jensen, 2003). Internal controls provide an independent appraisal of the quality of managerial performance in carrying out assigned responsibilities for performance (Beeler *et al*, 1999). Fadzil *et al* (2005) said that an effective internal control system unequivocally correlates with organizational success in meeting its performance target level. Internal control keeps an organization on course toward its objectives and the achievement of its mission. They promote effectiveness and efficiency of operations, reduces the risk of asset loss, and helps to ensure compliance with laws and regulations.

Internal control also ensures the reliability of financial reporting (all transactions are recorded and that all recorded transactions are real, properly valued, recorded on a timely basis, properly classified, and correctly summarized and posted). It also promotes adherence to laws, regulations, contracts and management directives as well as develop and maintain reliable financial and management data, and accurately present that data in timely reports (Magara, 2013. With this focus on transparency, participation and accountability, this study will provide a valuable contribution to addressing challenges facing the financial performance of water companies (Matata, 2015).

The water sector is facing an increasingly challenging future in terms of financial sustainability which was the essence of creating Water Companies through the enactment of Water Act of 2002 (WASREB Impact Report, 2014).

1.2 Statement of the Problem

Water service provision is poorly managed in the developing countries. Lack of management structures and corporate governance has resulted in poor performance of these entities. Water utilities and service providers in Kenya are plagued with severe deficiencies in the delivery of services, with access to reliable, sustainable, and affordable water supply and sanitation services remaining poor in general. The sector's worrying performance is caused, among

other reasons, by financial and capacity constraints, including the absence of a commercial orientation to services, institutional deficiencies, and the lack of systemic incentives to deliver ongoing quality services (Ray & Kurt, 2011).

In addition the incidence of internal control weaknesses, unsatisfactory and deteriorating service delivery have the undesired effect of not only weakening the company's ability to effectively deliver services but also encourages collusion, fraud, embezzlements, loss of cash (revenue), assets conversion genuine and deliberate mistakes, corruption, lack of transparency and accountability for revenue collection and other assets. The management of a company should familiarize themselves with internal control procedures that will ensure effective service delivery and the desired financial performance (Efozie, 2010).

1.3 General Objective

To determine the effect of internal controls on financial performance of water companies under Tana water services board

1.3.1 Specific Objectives

- i. To establish the effect of segregation of duties on financial performance of water companies under Tana water services board
- ii. To determine the effect of cash reconciliations on financial performance Tana water services Board
- iii. To evaluate the effect of inventory audits on financial performance of water companies under Tana water services board
- iv. To examine the effect of cost management on financial performance of water companies under Tana water services Board

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Agency Theory

Agency theory is concerned with resolving problems that can exist in agency relationships; that is, between principals and agents of the principals (Meckling and Jensen, 1976). A reputable auditor is therefore appointed not only in the interest of third parties, but also in the interest of management. The two problems that agency theory addresses are: the problems that arise when the desires or goals of the principal and agent are in conflict, and the principal is unable to verify what the agent is actually doing and the problems that arise when the principal and agent have different attitudes towards risk. Because of different risk tolerances, the principal and agent may each be inclined to take different actions (Meckling and Jensen, 1976).

Agency theory contends that internal auditing, in common with other intervention mechanisms like financial reporting and external audit, helps to maintain cost-efficient contracting between owners and managers (Adams, 1994: Davidson, Goodwin-Stewart and Kent, 2015). Agency theory may not only help to explain the existence of internal audit in organizations but can also help explain some of the characteristics of the internal audit department, for example, its size, and the scope of its activities, such as financial versus operational auditing. Agency theory can be employed to test empirically whether cross-sectional variations between internal auditing practices reflect the different contracting relationships emanating from differences in organizational form (Meckling & Jensen, 1976).

Further the theory recognizes that any incomplete information about the relationship, interests or work performance of the agent described could be adverse and a moral hazard. Moral hazard and adverse selection impact on the output of the agent in two ways; not possessing the requisite knowledge about what should be done and not doing exactly what the agent is appointed to do.

The agency theory therefore works on the assumption that principals and agents act rationally and use contracting to maximize their wealth (Jensen & Meckling, 1976). This theory is applicable to this study simply because internal control is one of many mechanisms used in business to address the agency problem by reducing agency costs that affects the overall performance of the relationship as well as the benefits of the principal (Payne, 2003; AbdelKhalik, 1993). Internal control enhances the provision of additional information to the principal (shareholder) about the behavior of the agent (management) reduces information asymmetry and lowers investor risk.

2.1.2 Institutional Theory

Institutional theory, offers a contrasting explanation that may be used to understand the adoption and design of control practices within organizations. This theory, more sociological in character, originates from work done by Meyer and Rowan (1977) and DiMaggio and Powell (1983). It has been said that institutional theory is becoming an important theoretical perspective in accounting and organization theory research (Dillard, Rigsby & Goodman, 2004). According to this theory, organizations develop and design structures, processes and systems not primarily based on rational economic cost benefit analysis, but because they are more or less required incorporating new practices and procedures.

According to Meyer and Rowan (1977) this means that: Organizations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organizational work and institutionalized in society. Organizations that do so increase their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures. Organizational structures, including the various internal control functions, roles, processes and systems, become symbolic displays of conformity and social accountability. Organizations with the appropriate structures in place avoid in-depth investigations of their business operations. Meyer and Rowan, building on the work by Berger and Luckmann (1966), pointed the importance of institutionalized rules. These are classifications built into society and may be taken for granted or supported by public opinion or even the force of law. These rules involve normative obligations which may be viewed as facts of (organizational) life which must be taken into account and considered by actors in the business community whether they are risk management officers, compliance officers, managers, auditors, directors or other types of professionals within and outside of firms. The process of institutionalization is then how social processes of different kinds come to take on a rule like status in everyday society. Repeated patterns of actions become institutions, or institutionalized rules, and thus institutional theory explains organizational phenomena by pointing to the environment and the formal and informal rules that are imposed on organizational activities. This theory is important to the study because it highlights the internal structures of the organization which if they are effective, the external scrutiny will be minimal.(Fogerty 1996).

2.1.3 Stakeholders Theory

The traditional definition of a stakeholder is “any group or individual who can affect or is affected by the achievement of the organization’s objectives” (Freeman 1984). The general

idea of the Stakeholder concept is a redefinition of the organization. In general the concept is about what the organization should be and how it should be conceptualized. Friedman (2006) states that the organization itself should be thought of as grouping of stakeholders and the purpose of the organization should be to manage their interests, needs and viewpoints. This stakeholder management is thought to be fulfilled by the managers of a firm. The managers should on the one hand manage the corporation for the benefit of its stakeholders in order to ensure their rights and the participation in decision making.

A stakeholder approach is very much concerned about active management of the business environment, relationships and the promotion of shared interests in order to develop business strategies (Friedman & Miles, 2001). Stakeholder interests could encompass a broad range of issues, such as labor conditions, environmental issues or social responsibility, some of which might be contrary to a firm's interests (Friedman & Miles, 2006). This touches on Frooman's (1999) suggestion that stakeholder management could be seen as managing potential conflict stemming from diverging interests. In a related debate on corporate responsibility and citizenship, Waddock (2001) argues that becoming a good corporate citizen means defining, and achieving, responsible operating practices fully integrated into the entire corporate strategy, planning, management, and decision making processes. Stakeholders' theory is important in this study because management of the WSPs play a fiduciary role to the stakeholders' interest. (Edward Freeman, 2006). Stakeholders have the right to be treated fairly by managers regardless whether it leads to financial performance. (Deegan, 2004)

2.2 Empirical Review

Amaka (2012) determined the relationship between internal measures to proper accounting records. A survey research design was adopted for this research study and a sample size was selected using Yaro Yamane sampling technique as data used were obtained from both primary and secondary sources. Four research questions were formulated out of which three hypothesis were formulated using regression co-efficient analysis method at 5% level of significance and the Z table was also used for comparison between calculated value of significance B and table value. The finding from the analysis indicates that internal control measure management performance and is necessary for the growth and effectiveness of the organization.

Hamza, Mutala and Antwi (2015) assessed cash management practices and its effect on the financial performance of SMEs in the Northern Region of Ghana. The study adopted a descriptive cross-sectional survey research design which allowed the collection of primary quantitative data through structured questionnaires. The target population was 1000 owner/managers of SMEs. Stratified random sampling technique was used to obtain a sample of 300 SMEs comprising 164 trading 26 manufacturing, 10 hairstyling, 62 dressmaking, and 38 carpentry enterprises. The data was analyzed using both descriptive and inferential statistics. The study revealed that SME financial performance was positively related to efficiency of cash management (ECM) at 1 per cent significance level. The study concluded that cash management practices have influence on the financial performance of SMEs, hence there was need for SME managers to embrace efficient cash management practices as a strategy to improve their financial performance and survive in the uncertain business environment. The study failed to incorporate segregation of duties, cash reconciliations, inventory and cost management analysis which are discussed in the current study. The study focused on SMEs and not water service providers thus presenting a contextual gap.

Wambua, Okibo, Nyang'au and Ondieki (2015) investigated the effects of the management of warehousing inventory systems on Seventh day Adventist institution's financial performance in Kenya. The main objective is to evaluate the effects of inventory warehousing systems on Seventh Day Adventist Institution's financial performance. The specific objective that guided this research was to assess the effect of Inventory warehousing systems on the financial performance of Adventist Book Centers. The researcher used descriptive research design in undertaking this study. The target population was 216 employees at HHES while sample size was 30% of the target population totaling to 64 employees. The sampling design adopted was be stratified random sampling because population is heterogeneous. Data was analyzed by use of statistical package for social science (SPSS) regression and correlation. Data was then presented using tables and figures. The empirical results revealed a positive significant relationship between financial performance and Inventory warehousing system

Gichuki, (2014) conducted a study on the effect of cost management strategies on the financial performance of manufacturing companies listed on the Nairobi securities exchange. This study sort to find the effects of selected strategies namely; supply chain management, labour management and stock management and their effects on financial performance of manufacturing companies. The study used causal research design specifically multi variance linear regression model. It studied effects of various variables on another and the extent of causation was documented. Study population was six out of eight manufacturing companies listed, on Nairobi security exchange. The two were accepted due to inaccessibility of data. The variables were positively related to financial performance of the manufacturing companies. The study recommended of the management focused on managing cost of distribution, cost of labour and cost of stock. That is ensuring just enough stock is available, the supply chain is reasonable and labor is minimal and efficient.

3.0 Methodology

The study used a descriptive survey study research design. The population of the study was 22 Members of the audit committee, 22 Finance Managers, 22 internal auditors and 22 senior accountants in WSPs in TWSB region as at December 2014. The study conducted a purposive sampling of the selected members of the Audit Committee, Finance/ Commercial Managers, Internal Auditors and Senior Accountants in the selected WSPs. The study used primary method of which was obtained by use of structured questionnaires. The data was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keyed into statistical package for social sciences (SPSS) computer software for analysis. The particular descriptive statistics included frequencies and percentages while the particular inferential statistics included correlation analysis and regression. Correlation analysis was to establish the association between the variables while a multiple linear regression model was used to test the significance of the influence of the independent variables on the dependent variable. The data was represented in form of tables and pie charts.

4.0 RESULTS

4.1 Demographic Characteristics

The results revealed that most of the respondents who were 42% indicated 41-50 years, 40% of the respondents indicated 31-40 years, 10% of the respondents indicated 18-30 years while only 8% of the respondents indicated over 50 years. This implies that most of the senior employees were less than 50 years. Results further reveals that majority (47%) of the respondents had attained university degree, 34% indicated master's degree, 9% of the respondents indicated PHD while 5% of the respondents had attained diploma and certificate

education. This implies that most of the senior employees working for water Companies had attained university education.

The respondents were asked to indicate the number of years they had worked in their current positions. Majority of the respondents who were 75% indicated that they had worked in their current position for 3-5 years while 25% of the respondents indicated that they had worked in their current position for over 5 year.

4.2 Descriptive Statistics

4.2.1 Segregation of Duties

The first objective of the study was to establish the effect of segregation of duties on financial performance of water companies under Tana water services board. The respondents were asked to respond to the statements on segregation of duties. The responses were rated on a five likert scale as presented in Table 4.2. Majority of the respondents who were 63.7% (47.5%+16.2%) agreed with the statement that the organization has an organizational chart that clearly defines lines of authority and responsibility. The results also revealed that 76.3% of the respondents agreed with the statement that one person can initiate and at the same time authorize a payment process. The results also indicated that 66.2% of the respondents agreed with the statement that the reporting system on organizational structures spells out all the responsibilities of each section. The results also showed that 73.8% of the respondents agreed with the statement that it is impossible for one staff to have access to all valuable information without the consent of senior staff. The results also showed that 77.5% of the respondents agreed with the statement that all employees understand the concept and importance of internal controls including the division of responsibility. The results also revealed that 78.8% of the respondents agreed with the statement that segregation of duties among the employees of an organization could improve financial performance.

On a five point scale, the average mean of the responses was 3.78 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 1.

Table1: Segregation of Duties

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev
The organization has an organizational chart that clearly defines lines of	3.80%	18.80%	13.80%	47.50%	16.20%	3.54	1.09

authority and responsibility

One person can initiate and at the same time authorize a payment process

1.20% 16.20% 6.20% 48.80% 27.50% 3.85 1.05

The reporting system on organizational structures spells out all the responsibilities of each section

0.00% 18.80% 13.80% 45.00% 21.20% 3.75 1.12

It is impossible for one staff to have access to all valuable information without the consent of senior staff

8.80% 11.20% 6.20% 48.80% 25.00% 3.70 1.22

All employees understand the concept and importance of internal controls including the division of responsibility

3.80% 15.00% 3.80% 40.00% 37.50% 3.93 1.17

Segregation of duties among the employees of an organization could improve financial performance

5.00% 7.50% 8.80% 48.80% 30.00% 3.91 1.07

Average

3.78 1.12

The respondents were asked to give their opinion on whether human resource factors affect their Companies' performance. Majority of the respondents argued that human resource factors affect their Companies' performance.

Below are responses from some of the respondents.

Respondent 7: "The recruitment process may have an impact on the performance of a Company"

Respondent 18: "The Human resource department handles the employees' matters"

4.2.2 Cash Reconciliations

The second objective of the study was to determine the effect of cash reconciliations on financial performance of water companies under Tana water services Board. The respondents were asked to respond on statements on cash reconciliations. The responses were rated on a five likert scale as presented in Table 4.3. Majority of 51.2% (45%+6.2%) of the respondents

agreed with the statement that the petty cash records are regularly reconciled. The results also revealed that 76.3% agreed with the statement that there is evidence of management review of cash reconciliations. The results also indicated that 78.7% of the respondents agreed with the statement that there is a policy to request for compensation for cash shortages from the cash officers. The results also revealed that 65% of the respondents agreed with the statement that reconciled amounts are investigated and their sources determined. The results also revealed that 73.7% of the respondents agreed with the statement that Surprise cash checks are usually conducted.

On a five point scale, the average mean of the responses was 3.72 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 0.93

Table 2: Cash Reconciliations

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev
The petty cash records are regularly reconciled	5.00%	7.50%	36.20%	45.00%	6.20%	3.4	0.908
There is evidence of management review of cash reconciliations	5.00%	3.80%	15.00%	57.50%	18.80%	3.81	0.956
There is a policy to request for compensation for cash shortages from the cash officers	1.20%	3.80%	16.20%	57.50%	21.20%	3.94	0.801
Reconciled amounts are investigated and their sources determined	1.20%	16.20%	17.50%	50.00%	15.00%	3.61	0.974
Surprise cash checks are usually conducted	0.00%	16.20%	10.00%	47.50%	26.20%	3.84	0.999
Average						3.72	0.93

The respondents were asked to give their opinion on whether cash management affects the performance of their organization. Majority of the respondents indicated that cash management has an impact on the financial performance of their organization

4.2.3 Inventory Audits

The third objective of the study was to evaluate the effect of inventory audits on financial performance of water companies under Tana water services board. The respondents were asked to respond to the on statements on inventory audits. The responses were rated on a five likert scale as presented in Table 4.4. Majority 83.7% (57.5%+26.2%) of the respondents agreed with the statement that receiving documents are matched to purchase orders and invoices. The results in table 4.4 also revealed that 85% agreed with the statement that all materials received are counted and inspected prior to entry on storeroom/inventory records. The results also indicated that 80% of the respondents agreed with the statement that back-ordered items are properly followed up on to ensure timely receipt of items ordered. The results also indicated that 85% of the respondents agreed with the statement that withdrawals from stock are made only upon receipt of approved documentation. The results also showed that 80% of the respondents agreed with the statement that inventory records are maintained based on periodic physical counts or a perpetual system.

On a five point scale, the average mean of the responses was 4 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 0.90

Table 3: Inventory Audits

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Std. Dev
Receiving documents are matched to purchase orders and invoices	3.80%	2.50%	10.00%	57.50%	26.20%	4.00	0.90
All materials received are counted and inspected prior to entry on storeroom/inventory records	3.80%	2.50%	8.80%	58.80%	26.20%	4.01	0.89
Back-ordered items are properly followed up on to ensure timely receipt of items ordered	6.20%	3.80%	10.00%	55.00%	25.00%	3.89	1.03
Withdrawals from stock are made only upon receipt of approved documentation	1.20%	3.80%	10.00%	56.20%	28.80%	4.07	0.81
Inventory records are maintained	1.20%	3.80%	15.00%	50.00%	30.00%	4.04	0.85

based on periodic physical counts
 or a perpetual system

Average

4.00 0.90

The respondents were asked to whom the head of supply chain reports in their organization. Majority of the respondents indicated that the head of supply chain reports to the managing director.

The respondents were further asked to identify the supply chain part that affects the financial performance of their organization. Majority of the respondents indicated the supply part, others indicated the manufacturing part while others indicated the distribution part.

4.2.4 Cost Management

The fourth objective of the study was to examine the effect of cost management on financial performance of water companies under Tana water services Board. The respondents were asked to respond on statements on inventory audits. The responses were rated on a five likert scale as presented in Table 4.5. Majority 73.8% (50%+23.8%) of the respondents agreed with the statement that controls are in place to exclude incurring expenditure in excess allocated funds. The results also showed that 77.5% of the respondents agreed with the statement that departments have budget reviews where actual expenditure is compared with budgeted expenditure and explanations for the variances given. The results also showed that 73.8% of the respondents agreed that Management has assigned responsibilities for the timely review of audit reports and resolution of any non-compliance items noted in those audit reports. The results also showed that 68.7% of the respondents agreed that there are independent process checks and evaluations of controls activities on ongoing basis. The results also revealed that 65% of the respondents agreed that the Company is able to cover its operational costs.

On a five point scale, the average mean of the responses was 3.84 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 0.97.

Table 4: Cost Management

Statement	strongly Disagree	Disagree	Neutral	Agree	strongly agree	Mean	Std. Dev
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Controls are in place to exclude incurring expenditure in excess allocated funds	1.20%	5.00%	20.00%	50.00%	23.80%	3.90	0.87
Departments have budget reviews where actual expenditure is compared with budgeted expenditure and explanations for the variances given	2.50%	2.50%	17.50%	52.50%	25.00%	3.95	0.87
Management has assigned responsibilities for the timely review of audit reports and resolution of any non-compliance items noted in those audit reports	1.20%	6.20%	18.80%	48.80%	25.00%	3.90	0.89
There are independent process checks and evaluations of controls activities on ongoing basis	6.20%	7.50%	17.50%	51.20%	17.50%	3.66	1.06
The Company is able to cover its operational costs	5.00%	10.00%	20.00%	31.20%	33.80%	3.79	1.17
Average						3.84	0.97

The respondents were further asked to state where/who the Head of internal audit department report to in their organization. In their response, majority of the respondents indicated that the head of internal audit reports to the managing director.

4.2.5 Financial Performance

The financial performance of water companies under Tana water services Board was the dependent variable of the study. The respondents were asked to respond on statements on financial performance. The responses were rated on a five likert scale as presented in Table 4.6. Majority 80% (46.2%+33.8%) of the respondents agreed with the statement that The WSP has enough cash to meet its obligations as and when they fall due. The results also showed that 80% of the respondents agreed with the statement that the money collected from the water sales covers the recurrent Expenditure. The results also showed that 78.8% of the respondents agreed with the statement that all the water sales are collected. The results also showed that 63.8% of the respondents agreed with the statement that the asset base has grown tremendously. The results also revealed that 58.8% of the respondents agreed that organization's internal controls sufficiently contribute to revenue generation. The results also showed that 82.5% of the respondents agreed that the amount of debt is going down in the last 5 years.

On a five point scale, the average mean of the responses was 3.77 which means that majority of the respondents were agreeing with most of the statements; however the answers were varied as shown by a standard deviation of 1.08.

Table 5: Financial Performance

Statement	strongly Disagree	Disagree	Neutral	Agree	strongly agree	Mean	Std. Dev
The WSP has enough cash to meet its obligations as and when they fall due	8.80%	5.00%	6.20%	46.20%	33.80%	3.91	1.18
The Money collected from the water sales covers the recurrent Expenditure	6.20%	6.20%	7.50%	38.80%	41.20%	4.02	1.15
All the water sales are collected	6.20%	15.00%	0.00%	33.80%	45.00%	3.96	1.28
The Asset base has grown tremendously	5.00%	8.80%	12.50%	60.00%	13.80%	3.69	0.99
Organization's internal controls sufficiently contribute to revenue generation	3.80%	12.50%	25.00%	45.00%	13.80%	3.52	1.01
The amount of Debt is going down in the last 5 years.	7.50%	8.80%	1.20%	77.50%	5.00%	3.64	0.98
Average						3.77	1.08

4.3 Inferential Statistics

4.3.1 Correlation Analysis

Table 6 below presents the results of the correlation analysis. The results revealed that segregation of duties and performance are positively and significant related ($r=0.681$ $p=0.000$). The table further indicated that cash reconciliation and performance are positively and significantly related ($r=0.660$, $p=0.000$). It was further established that inventory audits and performance were positively and significantly related ($r=0.616$, $p=0.000$). Similarly, results showed that cost management and performance were positively and significantly

related ($r=0.655$, $p=0.000$). This implies that an increase in any unit of the variables leads to an improvement in performance.

Table 6: Correlation Matrix

		Performance	Segregation of Duties	Cash Reconciliation	Inventory audits	Cost Management
Performance	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Segregation Of Duties	Pearson Correlation	.681*	1.000			
	Sig. (2-tailed)	0.000				
Cash reconciliation	Pearson Correlation	.660*	.598**	1.000		
	Sig. (2-tailed)	0.000	0.000			
Inventory audits	Pearson Correlation	.616*	.461**	.379**	1.000	
	Sig. (2-tailed)	0.000	0.000	0.001		
Cost management	Pearson Correlation	.655*	.460**	.496**	.570**	1.00
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0

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

4.3.2 Regression Analysis

The results presented in Table 7 present the fitness of the model used in the regression model to explain the study phenomena. Segregation of duties, cash reconciliation, inventory audits and cost management were found to be satisfactory variables in performance. This is supported by coefficient of determination also known as the R square of 68.8%. This means that segregation of duties, cash reconciliation, inventory audits and cost management explain 68.8% of the variations in the dependent variable which is performance of Water Companies under Tana Water Services Board region in Kenya. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 7: Model Fitness

Indicator	Coefficient
R	0.829
R Square	0.688
Adjusted R Squared	0.671
Std. Error of the Estimate	0.29546

Table 8 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables are good predictors of performance. This was supported by an F statistic of 41.31 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level.

Table 8: Analysis Of Variance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	14.423	4	3.606	41.31	0.000
Residual	6.547	75	0.087		
Total	20.97	79			

Regression of coefficients results in table 4.10 shows that segregation of duties and performance are positively and significant related ($r=0.274$, $p=0.001$). The results further indicates that cash reconciliation and performance are positively and significant related ($r=0.293$, $p=0.002$). It was further established that inventory audits and performance were positively and significantly related ($r=0.179$, $p=0.005$) while cost management and performance were also positively and significantly related ($r=0.242$, $p=0.004$)

TABLE 9: Regression of Coefficients

Variable	B	Std. Error	t	Sig.
(Constant)	0.053	0.298	0.177	0.86
Segregation of duties	0.274	0.079	3.474	0.001
Cash Reconciliation	0.293	0.092	3.181	0.002
Inventory Audits	0.179	0.063	2.86	0.005
Cost Management	0.242	0.082	2.96	0.004

Thus, the optimal model for the study is;

Performance of Water Companies under Tana Water Services Board = 0.053 + 0.274 Segregation of duties + 0.293 Cash Reconciliation + 0.179 Inventory Audits + 0.242 Cost Management.

The result indicate that cash reconciliation have the highest impact on the financial performance of water companies with a change of one unit leading to an improvement of 29.3

% in financial performance. A change in a unit of Segregation of duties will lead to an improvement of 27.4 % of the financial performance, with a one unit change in Inventory Audits leading to an improvement of 17.9% on the financial performance of water companies. A unit change in cost managements would result in a 24.2% in financial performance of a water companies.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

In relation to the study findings the study concluded that segregation of duties, cash reconciliation, inventory audits and cost management influence the performance of water companies under Tana water services Board. The findings revealed a strong positive relationship between the independent variables and the dependent variable.

5.2 Recommendations

Based on the research findings, the study recommended that internal auditors should perform their duties in a fast, efficient and reliable manner. This will improve the performance of water companies in Kenya.

The study also recommended that the managers of water companies should adopt efficient management practices. This will help improve the financial performance of the water companies.

The study also recommended that the managers address various challenges affecting internal control systems in the water companies. The challenges hindered effective financial performance of the organizations.

Further the study recommended that managers should adopt effective inventory management systems. This will enhance the financial performance of water companies.

Lastly, the study recommended that a cost reduction strategy with emphasis on production overhead cost and administrative overhead cost should be embarked upon for the purpose of increasing profitability.

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