EFFECT OF RESOURCE ALLOCATION STRATEGY ON THE PERFORMANCE OF WATER SERVICES BOARDS IN KENYA

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DECLARATION

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

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DEDICATION

This thesis is especially dedicated to my entire family members for their love, encouragement and support throughout my studies

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I most sincerely thank the almighty God for giving me good health to carry out this research. I salute my supervisors Dr.Mike Iravo Amuhaya and Dr. Antony Waititu who have devotedly guided and encouraged me through the project. I am convinced that without their support, this study would not have been a success. I am also grateful to my family members who encouraged me to move on amid challenges and tight schedules. I greatly appreciate the encouragement of my classmates throughout the Programme who were always available with useful suggestions. Lastly but not least, I thank all my friends, even though they are not mentioned as individuals. I appreciate the contribution and supports towards making this study a success.

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ABBREVIATIONS

ERS	Economic Recovery Strategy
HMIS	Health Management Information System
MOH	Ministry of Health
OPM	Office of the Prime Minister
PC	Performance Contracting
PSR	Public Sector Reforms
RAC:	Resource Allocation Criteria
RBM:	Results- Based Management
RBV:	Resource-Based View
SCA:	Sustainable Competitive Advantage
TAPs	Technology Action Plans
TNAs	Technology Needs Assessments
WSBs	Water Services Boards

DEFINITION OF TERMS

Strategy: Fundamental pattern of present and planned resource deployments and environmental interactions that indicates how the organization will achieve its objectives (Huselid, 2007).

Resource allocation: Refers to how an organization's available resources that is capital, operating and human resources are aligned with its strategic vision and priorities (Chen, 2002).

Corporate strategy: Relationship between an enterprise and its environment.

Organizational Performance: Is a set of financial and nonfinancial indicators which offer information on the degree of achievement of objectives and results (Lebans & Euske, 2006).

Human Resources: Refers to the human aspect in an organization whose efforts are essentially required for accomplishment of tasks (Chandler, 2005).

Financial resources: The term resources may have diverse meanings. However in this case, resources mean material resources in form of finances and immaterial which may take the form of human capital (employees) for significance in project planning (Cannon, 2009).

Technological Development: Information technology is defined as technologies that ensure a more accurate and cost effective knowledge to support decision making, reduces mental and physical efforts in solving certain tasks; reduces or

eliminates inefficient practices, it rivals the manual system and improves services rendered to customers (Joglekar & Ford, 2005).

Strategic information and technology: Is typically a long-term action plan for achieving a goal, set in the context of a rapidly changing technology environment. For any IT strategy to be effective it must have measurable links to a business strategy (Afsal, 2016).

Administrative/ Support staff: these are the organization workers who offer support in the company and are not in the managerial level.

ABSTRACT

The purpose of the study was to establish the effect of resource allocation strategy on the performance of water services boards in Kenya. This was achieved by looking at the following specific objectives: To evaluate the influence of strategic staff development on the performance of Water Services Board in Kenya, to establish the influence of strategic financial resources on the performance of Water Services Boards in Kenya, to investigate the influence of strategic infrastructural development on the performance of Water Services Boards in Kenya, to establish the influence of strategic technological resources on the performance of Water Services Boards in Kenya and to investigate the moderating effect of government regulation on the performance of Water Services Boards in Kenya. The study adopted both descriptive and correlational designs. The target population of this study was employees of water services board in Kenya. The researcher used stratified random sampling technique to select a sample size of 150 employees from the population of the employees of water services boards. The strata were that of senior management, middle management, supervisory and administration/ support staffs. Within each of the four strata simple random sampling was done to identify individual respondents who were issued with a questionnaire to respond to research statements. Primary data was collected using semi-structured questionnaires. The questionnaires were administered by the help of research assistants in each and every department. The collected data was analyzed using SPSS software. Factor analysis was done to establish the appropriateness of the questionnaire constructs. Both descriptive and inferential statistics were used. Descriptive statistics involved the use of averages, frequency and percentage, tables, charts and graphs. On the other hand, inferential statistics included the use of bivariate analysis and the study used the Pearson correlation coefficient. The study also ran a multiple regression model in order to establish the effect of strategic staff development, strategic financial resources, strategic infrastructure development, and strategic technological development on performance of water service boards. The study findings indicated that the pressure to provide water to the rapidly growing population in Kenya has made it mandatory for the water services boards to come up with clear cut strategies to meet these demands. This has been the major motivation for the adoption of strategic planning, with clear cut throat to resource allocation strategy to enhance performance of the institutions. The study findings indicated that strategic staff development, strategic financial resources, strategic infrastructural development and strategic technological deployment positively influenced performance of water Services Boards. The study recommends that the water services board should ensure that they have the right resources in the organization and allocated well for the right purpose and at the right time. The water services board management needs to provide strict accountability measures for its staff so that all resource allocation decisions are thoroughly vetted, and that there is monitoring system for all allocations. This would also ensure that all resource allocation decisions serve the best interest of the organization. The study recommends that water service board management should initiate a policy of providing opportunities for leadership development for its staff. This will help them to engage closely and creatively with activities that will improve the strategic performance of the organization. The study also recommends that water services board executive should demonstrate commitment toward empowering company employees, and to develop staff to fill future vacancies.

CHAPTER ONE

INTRODUCTION

This chapter gives the overview of the effect of resource allocation strategy on the performance of water services board in Kenya. This chapter presents the background of the study, the statement of the problem, the study objectives, the hypotheses, the scope and justification of the study. The limitations of the study are also presented on this chapter.

1.1 Background of the Study

The role of resources in strategy can be seen in the definition of strategy. Originally, the word strategy was derived from the Greek word *strategos*, meaning *general*; therefore, it can be described as an "art of the general (Steiner et al., 2012). Correspondingly, the determination of the main long-term aims and targets of the firm, with implementation of methods of activities and assigning of the critical resources to execute these aims, can be also considered as a definition of strategy (Sterling, 2013).

The aggregate deployment of resources must be considered in light of the organization's strategic goals, not just in relationship to new ideas or initiatives under consideration. Factors that affect and ultimately comprise a company's strategy stream continuously from these intended and emergent sources. Regardless of the source, however, they then must flow through a common filter the resource allocation process. This is because a company's actual strategy is manifest only through the stream of new products, processes, services and acquisitions to which resources are allocated. The resource allocation process acts like a filter that determines which intended and/or emergent initiatives get funding and pass through, and which proposals are denied resources (Sterling, 2013).

Thomas (2012) stated that there are two features of strategy: strategic position and structure plan. According to Katz, the strategic position is the real association or the real connection between the organization and its environment at an exact moment of time. Steiner, Miner and Gray (2012) added that obtaining resources earlier,

specifically “tangible or intangible” assets that will situate the organization in a beneficial position in the future, is considered as a “strategic position”. On the other hand, the structure plan is the proposed relation in the future, which includes a number of corporate goals as well as activities that are necessary to achieve these goals (Sterling, 2013). Katz expressed the notion that the group of people, at an exact moment of time, who enforce a collection of resources inside a competitive environment, can be called an “enterprise’s strategic posture”.

Many researchers have highlighted the importance of focusing on internal strengths and weaknesses as a source of competitive advantage, resulting in a better and more favourable situation. For instance, Barney (2006) reported that strategic alternatives must be driven from an analysis of the exclusive skills and capabilities of the firm rather than the firm’s external environment; further “analysing a firm's skills and capabilities can be a source of more accurate expectations.

Hrebiniak (2011) identified how changes in the external environment can justify the resources and capabilities required as the steady base from which the firm can determine its identity. Hrebiniak (2011) also emphasized that a business should be described based on its capabilities to provide stronger strategy, rather being described according to the requirements it aims to satisfy. Therefore, it is important for strategists and executives to understand that investigating a firm’s internal assets provides a more reasonable analysis for formulating strategies than concentrating on what the firm should do to meet demand (Lo´pez, 2005).

The resource allocation process is a complex, diffused process that occurs at every level, every day, in all companies. For example, a saleswoman must decide which customer to call on today, and which customer she will not visit. When meeting with the customer, she must decide which products to emphasize in the conversation, and which to ignore. Every day that an engineer who is a member of multiple product development teams comes to work, he or she needs to decide which of those projects to work on that day, and which to put on the back burner. Senior managers regularly decide which projects or capital investments to fund, and which ones to kill. Each of

these types of decisions, occurring at all levels of the organization every day, comprises its resource allocation process (Lo´pez, 2005).

The implementation of organisational strategy is a recurring theme in both strategic management and organizational science. Continuous academic research and empirical evidence show that successful strategy implementation has a significant impact on organizational performance (Thompson & Strickland, 2012) and it is vital for attainment of operational efficiency and consequently, realization of organizational effectiveness. In the same vein, Sproull and Hofmeister (2006) also view effective strategy implementation as critical to the smooth functioning of an organization whilst (Noble, 2009) confirm its indispensability as an essential ingredient in the method for success of both public and private organizations.

According to Stonich (2012), successful firm performance depends on effective implementation and rationalization of the basic strategic elements. Strategy implementation involves the actions of establishing policies and annual objectives and allocating resources so that a formulated strategy can be accomplished. "A firm's performance generally has been considered to be the result of a strategic management process which contains all possible situations and activities, including the external environment, and internal factors, including a firm's size, age and structure, and strategy choices"

David (2013) argued that strategic management is the art and science of formulating, implementing, and evaluating the cross-functional decisions that enable an organization to achieve its objectives. As the definition implies, strategic management focuses on integrating management, finance/accounting, production/operations, research and development, information systems, and other factors, and matching them with external environmental factors in order to achieve organizational success. Schendel and Hofer (2012) add that the goal of strategic management is to determine a firm’s strengths and weaknesses, and then match its resources with the threats and opportunities in the environment in order to achieve long-term viability. According to Hunger and Wheelen (2006) “Organizations that engage in strategic management generally outperform those that do not. The attainment of an appropriate match or fit

between an organization's environment and its strategy, structure, and processes has positive effects on the organization's performance. For the purpose of this study, the study focused on five variables namely strategic staff development, strategic financial resources, strategic infrastructure development, strategic information and technology deployment and government regulation and how they affected performance of water service boards.

The issue of firm performance has been central in strategy research and encompasses most other questions that have been raised in the field. For instance, why firms differ, how they behave, how they choose strategies and how they are managed (Scholes, 2011). The last three decades have witnessed the proliferation of scholarly debates, business interest and studies regarding the role of strategic planning in the achievement of sustainable competitive advantage (SCA) and organizational performance.

Organizations are downsizing, rightsizing, re-engineering, and reinventing them. Change theories and models abound, each seeking to direct organizations along the path to successful change. However, these efforts are yet to provide sound conceptual, theoretical, and empirical underpinnings in the field of strategy literature and practice, a phenomenon that is considered to be undermining the status of the strategy field (Maholtra & Hinings, 2005). Interestingly, the spread of theoretical perspectives through which change has been studied in organizational settings has appeared to add to (rather than resolve) the confusion and complexity surrounding the concept and critics have questioned the value of the strategic programs being heralded as sources of competitive advantage.

Over the past decade, public administrators have been encouraged to be "effective strategists if their organizations are to fulfill their missions and satisfy their constituents" (Amit & Schoemaker, 2011). Despite the wisdom of these suggestions, it is argued that, for organizations in general, strategy and strategic planning have not lived up to their expectations (Thompson & Strickland, 2013), and many organizations have failed to experience successful strategy implementation. This may be attributed partly to the fact that relatively few organizations make a link between

realistic objectives and resource strategies, for example operations, technology and people. Furthermore, in government, it is argued that the actual implementation of strategic management processes has occurred relatively infrequently and the results achieved vary widely (Vinzant & Vinzant, 2009). Given the change in ethos which has occurred in the public sector, it would seem fair to argue that culture change is fundamental to the achievement of successful strategic change.

A lack of real autonomy, highly publicized resource allocation and a critical political environment are considered to make the use of strategic management extremely challenging in public sector organizations. As vein, Sproull and Hofmeister (2006) notes, most organizations‟ best-formulated strategies fail to produce superior performance for the firm due to poor implementation. Most strategic thinkers are of the view that formulated strategy is best implemented within an organization environment that is supportive of requirements of each strategy. Some of the elements accounting for this supportive environment have touched on leadership, organization structure, organization culture and provision of all other needed economic resources.

The role of this climate in the success of strategy implementation is seen in a wide range of literature that advocates for development of organizational cultures and climate for facilitating strategy implementation through programs such as organization development and change, human resource management, organization learning and creating of learning organizations. Some empirical analysis relates the strategy implementation environment with the degree of success in strategy implementation. Some studies show that the failure rate in strategy implementation may go as high as above 70% due to lack of supportive organization environment (Kovacic & Bosilj-Vuksic, 2005). In spite of this reality most attention in strategic management has been given to strategy formulation process ignoring the role of implementation activities (Beecroft, 2009).

1.1.1 Resource Allocation Strategy in Kenya

In Kenya, the need to benchmark and measure performance in public sector organization is becoming more intense. With the devolution of powers to the county

levels, pressure will even increase as public firms will be operating close to citizens who constitute the public. Since 2000, the MOH has allocated 10 percent of its funds on the basis of a Resource Allocation Criteria (RAC) formula. The formula is only applied to the recurrent budget in allocating money to curative care (hospitals and sub-district hospitals) and Rural Health Facilities (health centers and dispensaries).

The RAC was designed to bring an end to the long-standing incrementalist practice of resource allocation that fails to address variations in need in different regions of the country. Under the incrementalist approach, the ministry merely increased district allocations by a flat rate, without regard to factors such as poverty rates, local population characteristics, service use, and caseloads or relative burden of disease. Implementing the RAC formula attempts to address the need for a transparent, objective, efficient, and equitable resource allocation process.

A major potential constraint to the equity impact of such formulas is the poor quality of data used in the formula. Workload and morbidity data captured by the ministry's Health Management Information System (HMIS) reflect wide variations in reporting rates across regions and over time. The ministry acknowledges the challenges involved in using the RAC formula; for one thing, ministry officials are inadequately trained in its use, sometimes resulting in misuse and miscalculations. Also, the aggregation levels within databases are too high, obfuscating potentially wide health or wealth discrepancies that might exist within regions. Fixing this problem would require more data collection at sub-district levels. Finally, the ministry acknowledges a weak framework for monitoring RAC implementation. For example, government officials report an ongoing need to track centrally purchased supplies and resources that go directly to the counties.

Reforms seek to transform the public service from a process orientation to result management culture to facilitate the achievement of the Economic Recovery Strategy (ERS) and attain Millennium Development Goals (UNDP, 2008). The government launched the Civil Service Reform Programme, to enhance Public Service efficiency and productivity. The reforms were expected to facilitate equitable wealth distribution

necessary for poverty alleviation and create an enabling environment for investment and enhanced private sector growth (Republic of Kenya, 2003).

The Civil Service Programme was designed to proceed in three phases: Phase 1 – Cost containment; Phase 2 – Performance Improvement, and Phase 3 – Consolidation and sustenance of gains made by reform initiatives. While phases 1 and 2 succeeded in reducing the Civil Service workforce by 30% (from 272,000 in 1992 to 191,670 in 2003), productivity and performance remained a fleeting illusion. This paved way for introduction of Results-Based Management (RBM) guided by the Economic Recovery Strategy (ERS) for Wealth and Employment Creation (Republic of Kenya, 2003). In the 2003-2007 Public Service Reforms, the Government started implementing the Economic Recovery Strategy (ERS) for Wealth and Employment Creation (Republic of Kenya, 2003).

The ERS was based on the pillars of macro-economic stability, economic growth, strengthening the institutions of governance and rehabilitation of physical infrastructure as well as investment in human capital. The ERS also acknowledged the role of the Public Service as the key driver of the desired growth. The government proposed wide ranging Public Service Reforms in the Civil Service, Local Government and Public Enterprises (State Corporations). The reforms the government has initiated include rapid result initiative, performance contracting, Citizen Service delivery charter, transformational leadership value and ethics and institutional capacity building. With the advent of the Grand Coalition Government and the subsequent reorganization of Government, the Public Sector Reforms and Performance Contracting (PSR and PC) was formed under the Office of the Prime Minister (OPM).

According to the Presidential Circular No. 1, (2008), PSR and PC have an expanded mandate of coordinating and facilitating reforms in the wider Public Sector. PSR&PC has acknowledged the enormity of this task and has purposed to diligently undertake it so as to ensure customer satisfaction with public services, build the trust and confidence of citizens in the Government and create sustainable global competitiveness for Kenya. Through the strategic management process, ministries are

able to develop clear goals and objectives, and justify their budget and funding requirements. The system has promoted a new focus on emphasizing performance and result (Republic of Kenya, 2003; 2004; 2006).

1.2 Statement of the Problem

The allocation of resources has an influence on successful execution of management sanction plans. Failure to conveniently employ available resources or delayed implementation of recommended performance standards has resulted in unnecessarily high operation costs, uncoordinated public activities, and failure to attract and retain experienced and skilled personnel in the positions, thus affecting the function's performance (Farmer & Weele, 2010). The implementation of strategic plans involves translation of chosen strategy into organizational action. Proper implementation of strategic plans should lead to success in achieving set objectives of the organisation.

Coff (2009) found that poor resource allocation as one of the main reasons behind unsuccessful strategy execution in the British nationalized telecommunication industry which in furtherance affects performance of the firms. Similarly, Huchzermeier and Loch (2011) reported a weak connection between resource allocation policies and effective execution of strategy. However, the preceding findings run contrary with reality as distribution of resources ranks among factors which positively influence organization's successful strategy implementation.

A number of factors commonly prohibit effective resource allocation, including an overprotection of resources, too great emphasis on short-run financial criteria, organizational politics, vague strategy targets, a reluctance to take risks, and a lack of sufficient knowledge. Managers normally have many more tasks than they can do. Since the introduction of these allocation plans, the effect of this planning of resources allocation has not been established in public sector performance. The studies have focused on the effect of resource allocation on strategy implementation and not the effect of resource allocation strategy on organizational performance. Therefore this study sought to fill this gap by establishing the effect of resource allocation strategy on performance of Water Services Board in Kenya

1.3 Objectives of the Study

1.3.1 General Objectives

The general objective of the study was to establish the effect of resource allocation strategy on the performance of Water Services Board in Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives;

1. To evaluate the influence of strategic staff development on performance of Water Services Board in Kenya.
2. To establish the influence of strategic financial resources on performance of Water Services Boards in Kenya.
3. To assess the influence of strategic infrastructure development allocations on performance of Water Services Boards in Kenya.
4. To establish the influence of strategic information and technology deployment on performance of Water Services Boards in Kenya.
5. To establish the moderating effect of government regulations on the performance of Water Services Boards in Kenya.

1.4 Research Hypothesis

H_{o1}: Strategic staff development has no significant effect on the performance of water service boards in Kenya.

H_{o2}: Strategic financial resources have no significant effect on the performance of water service boards in Kenya.

H_{o3}: Strategic infrastructure development allocations have no significant effect on the performance of water service boards in Kenya.

H_{o4}: Strategic information and technology deployment has no significant effect on the performance of water service boards in Kenya.

H_{o5}: There is no moderating effect of government regulations on the performance of water services boards in Kenya.

1.5 Significance of the Study

It was hoped that the study could yield information that can be useful for future proper planning and decision making in water services board in Kenya to improve competence and meet their objective of increasing water provision and customer satisfaction in Kenya and most importantly, achieving vision 2030 dream of water provision for all in the republic.

The findings and recommendations of the study can also be useful to the management and directors of parastatals. This would assist them not to rely on haphazard personal experience or subjective expert judgment or on tradition or fashion in their management tasks but base their methods, decision and actions on concrete knowledge of issues of their strategy implementation supported by the findings. The researcher hoped that the study would form a basis for further research on how to enhance the competence of not only water services but other organizations. This may lead to the generation of new ideas for better and more efficient management of parastatals and other organizations in Kenya and globally.

1.6 Scope of the Study

The study was conducted at the eight regional Water Services Boards (WSBs) in Kenya namely: Athi Water Services Board, Tana Water Services Board, Coast Water Services Board, Lake Victoria South Water Services Board, Lake Victoria North Water Services Board, Northern Water Services Board, Rift Valley Water Services Board and Tana-Athi Water Services Board. The primary functions of the WSBs, as outlined in Section 53 of the Water Act 2002, includes: - efficient and economical provision of water services as authorized by licence, custodianship of Water Services Provision Assets, contracting, monitoring and enforcing agreements between WSBs

and WSPs, in accordance with the regulations set by WSRBs in the licenses and also maintaining and acquiring assets, planning development and management. The core mandate of WSBs is to ensure availability of sufficient potable water and sanitation services for the people of their respective regions through water services providers. The study focused on water services board was that there is still scarcity of clean water to the Kenyan citizens and being that the WSBs mandate is to provide sufficient and clean water to citizens, the study therefore looked at how resource allocation strategy would help the companies in achieving their goals and objectives.

1.7 Limitations of the Study

The nature of the study called for confidential information related to the performance of water service boards. Some of the bottlenecks that were experienced were lack of cooperation from some of the respondents to fill correctly the questionnaire as they overlooked the significance of the study due to confidentiality considerations. However, the attempted lack of commitment from some of the participants was resolved by the researcher through taking enough time to meet with all potential respondents and clarified to them the scope of the study and its significance to the organization. The respondents were also assured of confidentiality and ethical handling of the information for study purposes.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the information from other researchers who have carried out research in the same field of study in prior years. It also offers a critical analysis of previous studies that have been done by other scholars in the area. It finally presents the research gap which this research intends to examine.

2.2 Theoretical Framework

The study was guided by the implementation theory, resource based theory, system theory and regulation theory.

2.2.1 Implementation Theory

Implementation theory (Maskin, 1999) is a component of mechanism design. It provides an analytical framework for situations where resources have to be allocated among agents/users, but the information needed to make these allocation decisions is dispersed and privately held, and the agents/users possessing the private information behave strategically and are self-utility maximizers. In any situation where the information needed to make decisions is dispersed, it is necessary to have information exchange among the agents/users possessing the information. Allocation decisions are made after the in- formation exchange process terminates. Implementation theory provides a systematic methodology for designing an information exchange process followed by an allocation rule that leads to allocation decisions that are \optimal" with respect to some pre- specified performance metric.

The key concept in the development of implementation theory is that of game form or mechanism. A game form/mechanism consists of two components: A message/strategy space, that is, a communication alphabet through which the agents/users exchange information with one another. An allocation rule (called

outcome function) that determines the allocations after the communication and information exchange process terminates. Most mechanisms employ monetary incentives and payments to achieve desirable resource allocations. In such cases, the outcome function specifies the resource allocations as well as the monetary incentives and payments.

A game form along with the agents'/users' utilities defines a game. The allocations made (through the outcome function) at the equilibria of the game determine the result of the decentralized allocation problem. The key objectives in the design of a game form/mechanism are: To provide incentives to the strategic agents/users so that they prefer to participate in the allocation process rather than abstain from it. To obtain, at all equilibria of the game induced by the mechanism, allocations that are optimal with respect to some pre-specified performance metric (criterion). For example, it may be desirable that the allocations obtained by the game form/mechanism are the same as those obtained by the solution of the corresponding centralized allocation problem, to obtain a balanced budget at all equilibria of the game induced by the mechanism. That is, at all equilibria, the money received by some of the system's agents/users as part of the incentives provided by the mechanism must be equal to the money paid by the rest of the agents/users (Lakein, 2005)

Preparation of a solid strategic plan is no longer enough to ensure profitable success unless it links virtually every internal and external operations of an organization with a focus on customer needs. Successful strategy implementation is important to any organization. Kaplan and Norton (2009) emphasized that the strategy implementation could be more difficult than thinking up a good strategy. Fahy and Limerick (2013) explained that the real value of a decision surfaced only after the implementation of a decision. In other words, it will not be enough to select a good decision and effective results will not be attained unless the decision is adequately implemented.

There is no universally accepted definition of “strategy implementation”. Nevertheless, Tan (2004) has identified three distinct conceptions of the term: process, behavior and hybrid perspectives. Implementation is the process that turns plans into action assignments and ensures that such assignments are executed in a manner that

accomplishes the plan's stated objectives (Noble, 2009). Implementation was found to be a highly complex and interactive process with many variables impinging upon it more of a spring than a simple cascade. This theory is relevant to the study since it provides the mechanisms in which resources are allocated to meet the organizational goals. This theory addressed the dependent variable which is performance of water service boards in Kenya.

2.2.2 Resource-based theory

Resource based theory was developed in 1991 (Barney, 1991). The resource-based view (RBV) emphasizes the firm's resources as the fundamental determinants of competitive advantage and performance. It adopts two assumptions in analyzing sources of competitive advantage (Barney, 2006; Peteraf & Barney, 2003). First, this model assumes that firms within an industry may be heterogeneous with respect to the bundle of resources that they control. Second, it assumes that resource heterogeneity may persist over time because the resources used to implement firms' strategies are not perfectly mobile across firms (i.e., some of the resources cannot be traded in factor markets and are difficult to accumulate and imitate). Resource heterogeneity (or uniqueness) is considered a necessary condition for a resource bundle to contribute to a competitive advantage (Cool, Almeida Costa & Dierickx, 2002). The assumed heterogeneity and immobility are not, however, sufficient conditions for sustained competitive advantage (Peteraf & Barney, 2003).

According to Barney (2006), a firm resource must, in addition, be valuable, rare, and imperfectly imitable and substitutable in order to be source of a sustained competitive advantage. The RBV has developed very interesting contributions, among others, with regard to imitation with the concepts of isolating mechanisms (Kueng, 2010), time compression diseconomies, asset mass efficiencies, and causal ambiguity (Dierickx & Cool, 2009). Recently, much resource-based research has focused on intangible assets, which include information, knowledge, and dynamic capabilities (Mihm, 2010).

Scrutiny and assessment have pointed to a number of unresolved problems in the resource-based approach. These criticisms relate to the unit of analysis, the circularity

or tautological nature of the resource-based theory, the exogenous nature of value, the neglect of the environment, the condition of heterogeneity, and the behavioral assumption underlying the condition of non-imitability. Foss (1998) states that the resource-based perspective does not escape the general problem of finding the appropriate unit of analysis. Most contributions within the RBV take the individual resource as the relevant unit of analysis to study competitive advantage. However, Foss (1998) points out that this choice may only be legitimated if the relevant resources are sufficiently well-defined and free-standing.

Lyneis and Cooper (2011) asserts the circularity of the resource-based view they also identified a second important problem, namely the exogenous nature of value in the RBV and because of its tautology and its exogenous determination of value Lyneis and Cooper (2011) conclude that the resource-based view has contributed very little to the explanation or prediction of competitive advantage and recommend that scholars address core connections between resources and the environment because, while resources represent what can be done, the competitive environment represents what must be done to compete effectively in satisfying customer needs. This theory is relevant to the study since resources are given the major role of assisting companies in achieving higher organizational performance. It prescribes that organizations position themselves strategically based on their resources and capabilities rather than their products and services. This theory addressed two variables in the study namely strategic staff development and strategic financial resources.

2.2.3 Systems Theory

Systems theory springs from biology and its content free and applicable to many fields of study. It is not actually a theory but a rather high level abstraction. Systems Theory can be defined as a working hypothesis, the main function of which is to provide a theoretical model for explaining, predicting, and controlling phenomenon (Bertalanffy, 1962). This is a popular theory which applies in all planning activities. According to Mugenda and Mugenda (2003), the systems theory argues that a system consists of various components or sub-systems which must function together for the whole system/ plan to work. This implies that if one sub-system fails, the whole

system is put in jeopardy. For instance, this means that for banks to operate effectively it should have the prerequisite full capacity to operate and develop strategies to deal with all risks.

System theory is crucial in explaining operational strategies and resource allocation. If an organization structure of a firm does not facilitate good communication, then departmental conflict may arise. The consequences of poor communication may be reflected in the performance of the overall organization. It is therefore important to formulate an organization culture that will facilitate proper communication between employees, management, suppliers and customers. A management information system is an important tool to facilitate effective communication. For instance, a firm may use a management information system to store and prepare information for managerial decision making. This theory is relevant to the study as it helps in understanding organizations as systems. From the theory, organizations interact with outside world which are often referred to as systems. Sections of organizations interact amongst themselves to see a certain objective met. This theory addressed two variables namely strategic infrastructural development and strategic technology deployment.

2.2.4 Regulation Theory

The first group of regulation theories account for regulation from the point of view of aiming for public interest. Regulation theory was developed first in 1970 (Arrow, 1970). This public interest can be further described as the best possible allocation of scarce resources for individual and collective goods. In western economies, the allocation of scarce resources is to a significant extent coordinated by the market mechanism. In theory, it can even be demonstrated that, under certain circumstances, the allocation of resources by means of the market mechanism is optimal (Arrow, 1985).

These conditions are frequently not adhered to in practice hence the allocation of resources is not optimal and a demand for methods for improving the allocation arises (Bator, 1958). One of the methods of achieving efficiency in the allocation of resources is government regulation (Arrow, 1970; Shubik, 1970). According to public

interest theory, government regulation is the instrument for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results.

In the first place, regulation can improve the allocation by facilitating, maintaining, or imitating market operation. The exchange of goods and production factors in markets assumes the definition, allocation and assertion of individual property rights and freedom to contract (Pejovich, 1979). The guarantee of property rights and any necessary enforcement of contract compliance can be more efficiently organized collectively than individually. Furthermore, the costs of market transactions are reduced by property and contract law. The freedom to contract can, however, also be used to achieve cooperation between parties opposed to market operation.

Agreements between producers give rise to prices deviating from the marginal costs and an inefficient quantity of goods is put on the market. Antimonopoly legislations aimed at maintaining the market operation through monitoring the creation of positions of economic power and by prohibiting competition limiting agreements or punishing the misuse thereof (Shubik, 1970). Imperfect competition can also result from the special characteristics of the production process in relation to the magnitude of the demand in the market. At a given magnitude of demand average total costs would be minimized if the production were to be concentrated in one company.

In that case a natural monopoly exists. If several companies produce the same total quantity of goods, the unit costs of production rise. An example of how such a situation arises is when the production process requires a great deal of capital. In that case, the fixed costs can continue to decline as production increases. Especially in the case of modest marginal costs that hardly rise, if at all, average total costs may persistently fall (Baumol, 1977). In such cases it is desirable, from the point of view of productive efficiency, to concentrate the production in a single company. A monopolist striving for maximization of profits will, however, set a price that deviates from the marginal costs. The stimulation of productive efficiency in the production process then acts to the detriment of the aim for allocative efficiency.

Natural monopolies are then either put under control of the state, as happens in many European countries, or highly regulated, as for example in the United States. In the latter case, regulation consists of barring entry to the market and the enforcement of price rules that promote efficient allocation (Braeutigam, 1989). In this way, the market results of perfect competition are stimulated. Examples of companies assumed at some time to have possessed the characteristics of a natural monopoly are railways, electricity distribution, gas and oil pipelines, telecommunication networks and drinking water distribution. This theory is relevant to the study since it looked at the public interest in regard to allocation of resources by ensuring that there is no imperfect competition and that's why most governments regulate operations of firms to ensure the client will not be overcharged for service delivered. This theory addressed the moderating variable, government regulation.

2.3 Conceptual Framework.

According to Bogdan and Biklen (2007) a conceptual framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/synthetical aspects of a process or system being conceived. It was intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate the situation.

The resources and the competitive environment condition of firms' strategy. The firm strategy and performance in turn affect the competitive environment and resources, and all these changes generate new information which in turn creates new learning opportunities and may lead to the creation and development of new resources. The study's conceptual framework was as hypothesized in the Figure 2.1 below.

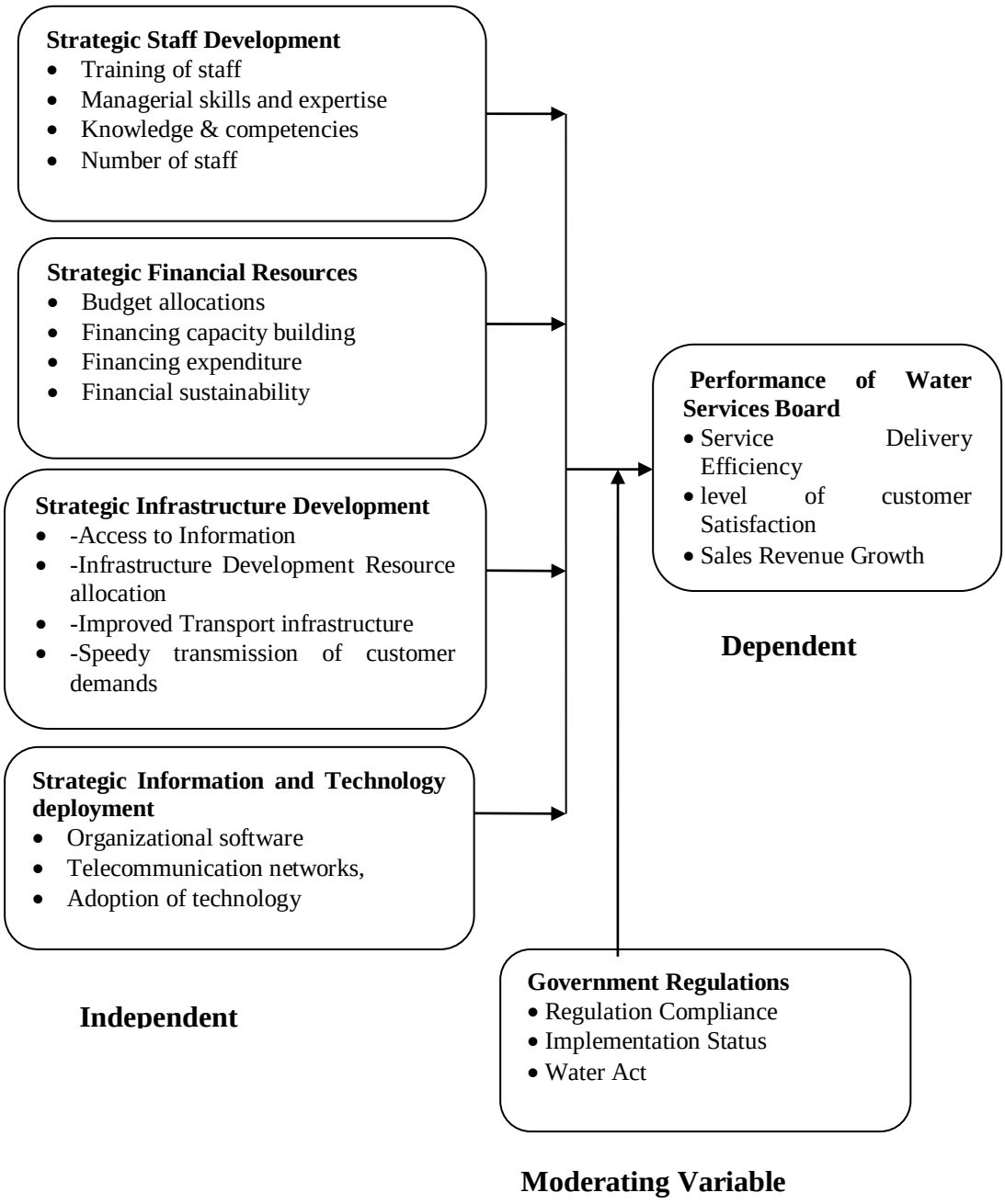

Figure 2.1: Conceptual Framework

2.3.1 Strategic Staff Development

Strategic staff development entails acquisition of unique competencies as addressed in the resource-based view theory. Cascio (2008) pointed out that organizations are managed by staff /people and that without people organizations cannot exist. Every organization is made up of people, who perform specialized work, that are coordinated to enhance the value of services or goods that are wanted by customers. Cascio further explains that as economies become global the most important organizations' asset becomes the skills and cumulative learning of its workforce. A workforce that is skillful and knowledgeable at doing complex tasks keeps an organization competitive and attracts foreign investments. Consequently, how the workforce is selected, trained and managed determines to a large extent how successful and competitive an organization will be. Greater employee productivity benefits organizations and ultimately improves their competitive position relative to that of rivals, and also improves workers' welfare due to higher purchasing power.

People and their collective skills, abilities and experience coupled with their ability to deploy these in the interests of the employing organisations are now recognised as making a significant contribution to organizations' success and constituting a major source of competitive advantage (Agolla, 2018; Waiganjo, Mukulu, & Kahiri, 2012). The practices of strategic human resource namely: resourcing, training and development, employee relations, and reward management are concerned with how people are employed, and managed in organizations so as to achieve superior performance through the strategic deployment of a highly committed and capable workforce (Agolla, 2018; Golja & Slivar, 2015; Waiganjo, Mukulu, & Kahiri, 2012).

The concept of human resources refers to the firm's employees (Daft, 2003), such as managers, researchers, technicians, engineers, sales people and financial staff. Indeed, Chandler (2005) considered "technical, marketing, and administrative skills" as one of the most significant types of resources. However, the definition of human resources can be expressed broadly to include some organizational activities. To illustrate this point, both "human resource management (HRM)" and "human resources (HR)" have

always been used to describe the functions of managing employees (Robert & Duncan, 2007).

Regardless of the definition of HR, it has received significant attention in the literature and is considered a requirement for any effective quality development process and top management should give it a high level of attention and priority in their programs. An organization's resources are scarce in the conventional economic sense that they are finite. Similarly, 'labour' is regarded as a resource in conventional economics. Strategic questions include the allocation of scarce resources within an enterprise. It is therefore not surprising that the management of employees has come to be considered from a strategic perspective by many scholars, and in recent years has increasingly been regarded as a potential source of competitive advantage (Becker & Huselid, 2008). As Guest (2008) notes, it is hard to find any 'common themes' that link the various approaches to HRM, 'beyond general statements about the importance of human resources and about the need to consider them strategically'.

2.3.2 Strategic Financial Resources

Financial resources are critical for financing strategic organizational resources and expanding business activities in line with organization's strategic objectives (Yusuf, 1995). This concurs with previous studies that have found availability of adequate business finance is a critical factor in sustaining long-term investment leading to business success (Dye & Webster, 1997). Grant (1995, 2002) argued that an organization should allocate financial resources in priority areas in order to obtain maximum returns from the investment in question which will consequently lead to improved performance. Barney (2007) contends that access to reliable sources of funding and ability to generate acceptable returns on invested money determines the ability of the organization to attract more funding from its stakeholders, consequently leading to improved performance.

Strategic plans may require financial and material investment. A good strategic plan therefore must be based on available resources and plan for the needed resources and how these will be acquired (Robson, 2007). Aiming for financial sustainability must

be a key goal among organizations if they are going to implement the strategic plans effectively. Cannon (2009) defined sustainability as the ability of an organization to secure and manage sufficient resources to fulfill its mission effectively and consistently over time without excessive depending on others. Sustainability does not require an organization to be 100% self-sustaining. Sustainability is a continuum, a process in which an organization should aim to become less dependent on donor funding. At one extreme is complete dependence on a single foreign donor while complete financial autonomy is at the other. Too many organisations find themselves in the first category and very few are financially autonomous (Cannon, 2009). While complete financial autonomy may not be possible with many organisations, all of them can move themselves towards greater sustainability.

New strategic plans may require financial and material investment. When organisations fail to raise the amount of financial and material resources required by the new strategic plan they will not implement the strategic plan effectively. A strategic plan will determine the direction and priorities of the organization. If the priorities are not thought through in the contexts of donors the organisations may not be able to attract the funding required to implement the strategic plan. A good strategic plan therefore must be based on available resources and plan for the needed resources and how these will be acquired (Arhin-Tenkorang, 2011). Aiming for financial sustainability must be a key goal among organisations if they are going to implement the strategic plans effectively. Some organisations have now begun to think about the need for raising own funds to supplement donor funding as means for financial and organizational sustainability.

2.3.3 Strategic Infrastructure Development

The technological Infrastructure can give an organization valuable assistance in implementing new policies, procedures and initiatives. Utilize technology to enhance and maintain communication and accountability for all relevant managers and operational employees throughout the change process, and to keep track of implementation and performance goals and their achievement. Infrastructure runs the applications that process transactions, handles the customer data that yield market

insights, and supports the analytical tools that help executives and managers make and communicate the decisions shaping complex organizations. In fact, infrastructure has made possible much of the corporate growth and rising productivity of recent years. According to Scott (2003), plans fall into one of the two categories: vision without substance and a budget without vision.

The identified problems of vision without substance are vagueness of future vision, lack of institutional vision, current position and time. Identified issues of budget without vision are questions as to what problem is being solved, what are the priorities and definition of the roles and responsibilities. With infrastructure projects being advocated for and financed by donors, budget without vision is likely to be the project plan. Pena-Mora (2011) has suggested some planning models and methods for infrastructure implementation. Further, Scott (2003) observes that planning as a tool can help in reducing waste by identifying the pre-requisites conditions for successful infrastructure implementation rather than "rushing into a complex e-Government strategy without having first finalized a national infrastructure policy.

Literature shows that planning and management of infrastructure projects has a very poor record in developing countries (Heeks, 2002). However, a careful review of reasons for failure identifies other factors whose presence or absence determines success or failure of projects. To begin with, the researcher looks at the output variables which are the benefits to be achieved if the initiative succeeds. The purpose of this is to clarify the goal of infrastructure projects. These goals may form a key element to the planning process as described above. Achievement of these goals helps to determine how to classify infrastructure projects. In addition, perceptions of, and reasons for infrastructure failure are reviewed and these helps to identify possible key variables.

2.3.4 Strategic Information and Technology Deployment

Technology comes from the needs of people and people's needs drive technology. Human's use what they know, try to learn more, design and create technology using their knowledge and intelligence. People provide the labor on which technology

depends; they are needed to provide the products and services we use every day. People are also the consumers of technology and the ones that buy consumer goods produced such as food, cars, homes (Joglekar & Ford, 2005).

Technology requires information to solve problems and to create new knowledge. Information comes from raw data that is processed by collecting, recording, classifying, calculating, storing, and retrieving it. Information can be found in many places: in computer files, books, etc., but it is only valuable when made use of it. We process information by collecting it, thinking about it, and applying it to meet our needs and wants (Joglekar & Ford, 2005).

ICT has been cited as one of the valuable resources and sources of competitive advantage which influence organizational performance. Information Communication Technology involves the introduction of modern ideas within an organization which is one of the driving forces of performance in hotels (GoK, 2007). Cagna (2007) proposed ICT as one of the ways for the survival of organizations today. Shimpton et al. (2006) stated that ICT can be sustained by involving human resources to manage, create, transfer and implement knowledge.

Iravo et al. (2013) states that one of the important questions in business has been why some organizations succeed and why others fail. Adei (2004) argues that information and communications technology has played a tremendous role in all areas of today's organizations success and is expected to drive organizations to greater and efficient performance. It provides the opportunity for organizations to be in any location on the globe, even the remotest of locality and establish transactions oceans away within fragments of time.

The use of adaptation technologies has been broadly defined as "the application of technology in order to reduce the vulnerability, or enhance the resilience, of a natural or human system to the impacts of climate change". In the water sector, site-specific solutions need to be considered within the broader context of integrated water management approaches. A lack of regard for particular contexts, alongside poor planning, as well as overemphasis on short-term outcomes, or failure to account for

possible climatic consequences and adaptation limits, can result in maladaptation or "an adaptation that does not succeed in reducing vulnerability but increases it instead" (Mikhial & Yoder, 2008).

Water represents a particularly complex sector, due to the intrinsic linkage between freshwater resources and other sectors and ecosystems. Technologies can only be deployed if certain requirements are fulfilled: there is no guarantee that a technology that works well in one country will deliver as expected in a different country. For instance, dam and water diversions in one location can have an impact on the water balance and micro-climate in a different part of an ecosystem.

In least developed countries, technological application is supported by various processes and institutional arrangements. Support on technology include Technology Needs Assessments (TNAs), which identify, prioritise and highlight technology needs, and Technology Action Plans (TAPs), which are developed on the basis of TNAs to address specific barriers, and identify targets, budgets and responsible stakeholders for prioritised technologies. TAPs specifically relevant to the water sector have been created by many countries. For example, Cambodia has addressed the transfer and diffusion of small dams, reservoirs, and micro catchments (Mikhial & Yoder, 2008).

2.3.5 Government Regulation as a Moderating Factor

Kenya is a water scarce country (Onjala, 2006) and faces numerous management challenges. It is in this recognition that the Government prioritized increasing access to sustainable and affordable water services within its overall policy framework of the economic recovery strategy for wealth and employment creation. The sector has thus undergone major structural reforms aimed at improving service provision. The Government through the Ministry of Water and Irrigation found it necessary to modernize the sector to conform to emerging challenges like climate change, population pressure, environmental degradation, and limited endowment of water resources, temporal variation in the availability of water, national policies, increased water-use conflicts, rapid urbanization and the challenges of low-income areas.

To be able therefore to implement the water sector reforms successfully, there was need to strength institutional structures improve the administrative machineries and promote institutional capacities and finally try to enable the staff through training and motivation. Water services board has therefore to come up with working tools to monitor and evaluate the performance of the institutions for better results which would therefore improve the success of water sector reforms in the country (Qureshi, 2008).

Lack of adequate donor funds and inadequate budgetary allocations have negatively affected the implementation of the reforms because capital intensive water infrastructure developments have not been erected to serve the increasing population in the board area. This has therefore greatly adversely affected the successful implementation in the water services board area of jurisdiction. Delay in affecting the transfer plan of both capital assets and staff has negatively affected the smooth implementation of the water sector reforms (Onjala, 2006).

The water sector reforms were occasioned by the inability of existing institutional structural arrangements and proper administrative machinery to effectively and efficiently provide safe, clean and reliable water for the growing population in a coordinated manner. The institutions were almost being run down due to rampant corruption in awarding of consultancy services, project designs and construction of water catchments facilities like dams and general infrastructures to boost water service delivery. The well-organized corruption cartels in the water institutions have continued to adversely affect the approved budgetary allocation from treasury due to misuse and open diversion of funds. The water service delivery institutions have had major challenges in mobilizing funds from donor partners because of the much publicized corruption in the institutions that should attract the funds. The institutions also lack proper master plan, action plans and comprehensive frameworks which can be presented for any sound financial external support (Onjala, 2006).

2.3.6 Organizational Performance

Performance is referred to as being about doing the work, as well as being about the results achieved. It can be defined as the outcomes of work because they provide the strongest linkage to the strategic goals of an organization, customer satisfaction and economic contributions. The term "Performance Management and Measurement" refers to any integrated, systematic approach to improving organizational performance to achieve strategic aims and promote an organization's mission and values.

According to Chen (2002), organizational performance means the "transformation of inputs into outputs for achieving certain outcomes. With regard to its content, performance informs about the relation between minimal and effective cost (economy), between effective cost and realized output (efficiency) and between output and achieved outcome (effectiveness)". There are various ways to understand organization performance but in this study, it has been judged upon the growth of the company. Performance can be explained as all the activities or investment carried out in the firm in the given period of time. It can be measured by total amount of revenue collected for the goods or services sold. Growth revenue defines as total amount of money collected by the company for the goods they sold in a specific time and this amount is calculated before any expenses are subtracted (Chen, 2002).

Effectiveness of the organization depends on the three basics performance determinants: Efficiency and process reliability, Human resource and relations, Innovation and adaptation to environment (Gowry, 2011). Efficiency is defined as a term practiced by organization or firm to use people and resources to carry out important operations in way which minimizes the costs. When the resources will be used in a proper way as compared to the competitors the cost of operation will decrease and the profit margin will increase. Efficiency is important when the competitive strategy of the firm offers products and services at lower rates than the competitors. Human resource relation is defined as trust organizational commitment, collective identification and cooperation among the employees (Gowry, 2011). Innovative adaption includes increase in market share, sales growth from year to year, generating and maintaining loyal customer base.

Organizational performance is normally looked at in terms of outcomes. There are a number of measures that can be taken into consideration when measuring performance for example using of productivity, efficiency, effectiveness and quality (Ahuja, 1992). Efficiency and effectiveness - efficiency is the ability to produce the desired outcomes by using as minimal resources as possible while effectiveness is the ability of employees to meet the desired objectives or target (Stoner, 2006). Productivity is expressed as a ratio of output to that of input (Stoner, Freeman & Gilbert, 1995). It is a measure of how the individual, organization and industry converts input resources into goods and services. The measure of how much output is produced per unit of resources employed (Lipsey, 2009). Quality is the characteristic of products or services that bear an ability to satisfy the stated or implied needs (Kotler & Armstrong, 2002). It is increasingly achieving better products and services at a progressively more competitive price (Stoner, 2006).

2.4 Empirical Review

This section presents previous studies done that relates to the current research. Empirical results are presented according to the variables under investigation in this study.

2.4.1 Influence of Strategic Staff Development Strategy on Performance

Huselid (2007) studied on the relationship between HR practices and corporate performance. The study developed and validated indexes of high-involvement HR practices through factor analysis. His work supports a configurationally view of HR practices, where techniques tend to work synchronously. He found high-involvement HR practices to be strongly and positively linked to various measures of organizational performance, including work attachment, firm financial performance, and productivity.

In another study, Delaney and Huselid (2006) found that practices consistent with a high involvement HR strategy, such as highly selective staffing, incentive compensation and training, have been positively linked to organizational performance.

However, Delaney and Huselid efforts to establish the impact of internal consistency among such practices by considering the interaction effects on pairs of strategies were not particularly successful.

Katou and Budhwar (2006) in their study of 178 manufacturing firms found support with the universalistic model and reported that HR policies of recruitment, training, promotion, incentives, benefits, involvement and health and safety are positively related to organizational performance. Using a sample of banks, Richard and Johnson (2001) examined the impact of strategic HRM effectiveness on a number of performance variables. They found that strategic HR effectiveness was directly related to employee turnover and the relationship between this measure and return on equity was stronger among banks with higher capital intensity.

Tessema and Soeters (2006) examined how, when and to what extent HR practices affect performance in Eritrea, Africa's youngest and poorest country. They reported that successful implementation of HR practices could enhance individual and the civil service organization of Eritrea, but the economic and political environment within which HR practices operate are not conducive. Their study tried to shed some light on the HRM performance debate within the context of a developing country. On the other hand, Singh (2003) from his survey of 84 companies found a significant relationship between strategic HR orientation index and firm performance.

Paul and Anantharaman (2003) in their study of 35 Indian software companies determined, developed and tested a causal model linking HRM with organizational performance through an intervening process. They observed that not even a single HR practice has direct causal connection with organizational financial performance, though HR practices have an indirect influence on the operational and financial performance of the organization.

2.4.2 Influence of Strategic Financial Resources on Performance

According to a study conducted by Adams and Colebourne (2009) they established that financial management, in service organizations, has been a constraint and an obstacle to other functions that contribute to service delivery and they thus suggested

an enlightened approach to finance in service organizations. This consists of more participative and positive approach where far from being an obstacle, it contributes to strategic planning, costing systems, personnel motivation, quality control, continued solvency, and keeping outsider's confidence in management. In particular the study finds that is a need to distinguish good costs that improves organizational capabilities and quality service delivery from bad costs that increase bureaucracy hence becoming obstacles to service delivery.

Blas and Limbambala (2001) in their study also noted that the allocation of resources flow through various layers of national and local government's institutions on their way to the facilities and as a result the urged that organisations ensure financial accountability by using monitoring, auditing and accounting mechanisms defined by the country legal and institutional framework to ensure that allocated funds are used for the intended purposes.

2.4.3 Influence of Strategic Infrastructure Development on Performance

Studying infrastructure facilities is crucial as there could be a set of distinctive issues involved which may help describe it as a critical feature in understanding organizational performance (Easterly, 2002; Delmon, 2008). In a study conducted by Easterly (2002), the study established the presence of adequate infrastructure facilities such as physical and organizational structure provides support for development of an organisation and/economy.

According to a study conducted by Delmon (2008), well-developed infrastructure facilities reduce the impact of interregional distances, integrating the local markets as well as connecting them at low cost to markets in other countries and regions. Similarly, Izquierdo and Vasallo's (2004) study pointed out that infrastructure facilities and economic development are positively correlated such that there are effects during the construction phase and during the usage of such facilities.

Further according to a study conducted by White, O'Connor, and Rowe (2004), unavailability of appropriate infrastructure could lead to excessive capital investments, support levels and inadequate organizational flexibility. Thus strained

access to infrastructure components like warehousing may have adverse implication for performance.

2.4.4 Influence of Strategic Information and Technology Deployment on Performance

Zwick (2003) looked into the lagged effects of information technology investments on efficiency in various types of organizations. He found that relative to investments in different areas, IT investments yield a substantially significant improvement in a wide range of organizations.

Andrews, Currim and Dewan (2006) summarized the characteristics such as nontechnology capital, research and development intensity, and advertising intensity, which an organization should possess for achieving higher returns for its investment in information technology. Andrews et al., found that the dispersion of information technology returns exists even after controlling for industry and firm effects.

Ginsberg and Venkatraman (2002) used the ability to electronically file (e-file) tax returns as the instrumental variable to study the effect of technology adoption on funds raised in the for-profit universe. They looked into the influence of competitive posture on firm's investment in new information technology and hence efficiency in terms of funds raised by the firm. The findings of Ginsberg and Venkatraman suggest that such competitive postures indicate investment in new technology and hence efficiency.

In the views of Babatunde, and Adebisi (2012) technological factors include technological aspects such as research and development activity, automation, technology incentives and the rate of technological change. They can determine barriers to entry, minimum efficient production level and influence outsourcing decisions. Furthermore, technological shifts can affect costs, quality, and lead to innovation. A technological innovation can have a sudden and dramatic effect on the environment of a firm. Firstly, technological developments can significantly alter the demand for an organization’s or industry’s products or service (Barnat, 2005; Business teacher, 2012).

According to Barnat (2005) technological change can decimate existing businesses and even entire industries, since it shifts demand from one product to another. Moreover, changes in technology can affect a firm's operations as well its products and services. He further said these changes might affect processing, methods, raw materials and service delivery. Therefore, marketers should keep track of the advancement and invention in technology, nature of changes in technological environment as well as the diversity in technology in their operating environment

2.4.5 Effect of Government Regulation

Regulation has been defined in numerous ways to suit the convenience of regulators who design it. Earlier definitions have only focused on the control role of regulators. One dominant approach is to define regulation as a sustained and focused control exercised by a public agency over activities that are valued by a community (Selznick 1985). Anyadike-Danes et al. (2008) in their study took a new approach, which involves 124 qualitative interviews with small business owners and 1205 small businesses by telephone interview, to analyze the relationship between regulation and small business performance. Their interviews with the 124 small business owners found that regulation generates multiple influences which can be enabling and motivating as well as constraining. These influences, operating simultaneously, shape the activities of small business owners and other stakeholders whose actions underpin small business performance, regardless of the owner and manager's awareness of such regulations. The impact of regulation on business performance depends on how business owners and other stakeholders respond to specific regulations. Agents' adaptations to regulation, and thus the business performance outcomes that result, depend on firms' internal resources and capabilities, and on the external product, labour and capital market conditions.

Proponents of regulation argue that the regulation has economic, social and environmental benefits, including sustaining a stable market economy, protecting the investors, employees, citizens, and the community and maintaining the market confidence and trust for business activities (Radaelli & Meuwese, 2009). Anyadike-Danes et al. (2008) found that business owners vary in their capacity to discover,

interpret and adapt to regulation. Those with greater resources – finance, equipment, management capability, workforce knowledge and skills – are better placed to deal positively with regulation.

Critics of regulation insist that regulations incur unnecessary burdens to small firms, thus impeding start-up, investment, innovation, employment growth, hence affect whole national economic performance (Arnold *et al.* 2008, 2011; Fiori *et al.* 2012). Moreover, small firms suffer disproportionately from state regulation and are disadvantaged by the unintended consequences of regulations aimed at large companies (Baldwin & Black, 2008; Baldwin et al. 2011).

Anyadike-Danes et al. (2008) found that where businesses lack the resources to develop new practices and products, their capacity to adapt to regulation is constrained. Smaller businesses also vary in the business objectives they seek to achieve and these also shape how they adapt to regulation. Various studies argue for the benefits of regulation for small business owners' activities. Tabone and Baldacchino (2003) found that the statutory audit requirements in UK generate benefits to the businesses by disciplining the business owners and protecting the businesses from misconduct. Blackburn and Hurt (2002) argue that employment regulations can benefit small employers by providing guidelines and clarification in setting employment conditions. However, the formalizations of the contractual arrangements undermine the flexibility of existing informal workplace relationships in small firms (Saridakis et al., 2008).

2.5 Critique of Existing Literature

From empirical literature reviewed it's evidenced that there has been quite a number of studies which have been done in strategic management and performance. However, there is scarcity of studies on the effect of resource allocation strategy on performance. Earlier studies on resource allocation strategy and firm performance have not been comprehensive. Most studies focused on one or two aspects or factors that enhance performance of firms. For example, Huselid (2007), Delaney and Huselid (2006), Katou and Budgwar (2006), Tessema and Soeters (2006) looked at

the influence on human resources. However, these studies did not address how strategic development of staff would affect the performance of the firms.

Further, the studies conducted by Adams and Colebourne (2009); Blas and Limbambala (2001) and Delmon looked at the influence of financial management on the firm's performance. They asserted that financial management especially within the service sector has been a major constraint to service delivery. However, these studies failed to look at the influence of strategic financial resources on the performance of water service boards. In order for the WSBs to function effectively they need to have an effective financial strategy which would help them tap into the right financial resources and funding.

From the review of the literature it was also established that the studies conducted by Zwick (2003) looked into the lagged effects of information technology investments, while Andrews, Currim and Dewan (2006) looked at the influence infrastructural developments on the firm while Babatunde, and Adebisi (2012) looked at the technological factors. These studies however failed to look at the effect with which infrastructural developments by the firms have on their performance. The rapidly changing economic conditions call for serious research to determine strategic factors to enhance performance of water service boards. From the foregoing, most studies have provided only partial explanations of strategic factors that account for organizational performance. This study sought to fill this gap by establishing the effect of resource allocation strategy on performance of Water Services Board in Kenya.

2.6 Research Gaps

One of the difficulties in this field of research is the lack of an established theoretical model of how organization resources might impact on performance. For example, Blatchford and Mortimore (2011) stress the importance of clearly specifying a model, derived from work and performance, to explain the relationship between work and performance. Such models would tend to stress the importance of organisational processes, as well as inputs. Generally, however, a 'black box' approach is taken,

whereby ‘resources’ are simply applied to a staffs and it is hypothesised that this will in itself generate better outcomes. Certainly, in studies which focus on the impact of resourcing, the processes and resource mix needed to ensure that additional inputs result in better outcomes are generally ignored. There are however, a number of researchers whose theoretical models may provide guidance as to the correct specification for empirical models (Carroll, 2011). Most of these models attempt to answer important theoretical questions in this field such as: what are the important factors that influence outcomes; what are the important inter-relationships; what are the important cross level interactions? Yet despite this work, much of the empirical literature has not referenced such models, so that a coherent body of empirical evidence, that may be systematically tested, has not been built up.

Earlier studies on resource allocation strategy and firm performance have not been comprehensive. Most studies focused on one or two aspects or factors that enhance performance of firms. For example; Huselid (2007), Delaney and Huselid (2006), Katou and Budgwar (2006), Tessema and Soeters (2006), Zwick (2003), Andrews, Currim and Dewan (2006) and Babatunde and Adebisi (2012). Furthermore, methodological gaps generally exist in the study of firm performance. It is also noted that previous studies on resource allocation strategy have shown that the indicators and drivers of performance have multidimensional constructs and complex relationships. Therefore, this study sought to fill this gap by establishing the effect of resource allocation strategy on performance of Water Services Board in Kenya

2.7 Summary

The resource allocation process is a complex, diffused process that occurs at every level, every day, in all companies. If the criteria that guide prioritization decisions in this diffused resource allocation process are not carefully tied to the company’s intended strategy (and often they are not), significant disparities can develop between a company’s intended strategy and its actual strategy. Understanding and controlling the criteria by which day-to-day resource allocation decisions are made at all levels of the organization, therefore, is a key challenge in managing the process of defining and implementing strategy. Initiatives that receive funding and other resources from the

resource allocation process can be called strategic *actions,* as opposed to strategic *intentions.* Resources with a sustained rent-producing potential are referred to as strategic resources. In addition to building competitive advantage, resources may increase the firm's capacity to charge high prices and, thus, contribute to performance by helping the firm to appropriate the value linked to competitive advantage. Furthermore, resources may be used to erect entry barriers and so increase performance at the industry level.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is an approach and a set of supporting methods and guidelines to be used as a framework for carrying out the research Mugenda (2003). Mugenda (2003) explains that research methodology applies to ways the researcher comes close to problems and seeks answers to those problems. According to Mugenda and Mugenda (2003), research methodology includes research design, population and sample, data collection procedures, data analysis procedures and measurement of variables. The chapter establishes the procedure to be undertaken for the research methodology in an attempt to achieve the objectives of the study. In particular, this chapter discussed the research design. This chapter presented further the data collection and data analysis procedure.

3.2 Research Design

Research design is a comprehensive master plan of the research study to be undertaken, giving a general statement of the methods to be used. The function of a research design is to ensure that requisite data in accordance with the problem at hand is collected accurately and economically. Mugenda (2003) describes research design as an understanding of conditions for collection and analysis of data in a way that combines their relationships with the research to the economy of procedures.

This study used a correlational and descriptive survey research design. Lavrakas (2008) describes a descriptive survey research design as a systematic research method for collecting data from a representative sample of individuals using instruments composed of closed-ended and/or open-ended questions, observations, and interviews. It is one of the most widely used non-experimental research designs across disciplines to collect large amounts of survey data from a representative sample of individuals sampled from the targeted population. Since this study was concerned with discovery and deeper understanding of associations among different variables that affect

resource allocation strategy and performance, a descriptive study with correlational approach was used (Cooper & Schindler, 2011).

The choice of correlational research approach was because it was used to explore relationships between variables and to predict a subject score on one variable given his or her score on another variable. This method permits one to analyze interrelationships among a large number of variables in a single study. It also allows one to analyze how several variables either singly or in combination might affect a particular phenomenon being studied. The method also provides information concerning the degree of relationships between the variables being studied. Reviewed studies, for instance, Tseng (2007); Hoyt and Liepenberg (2010) used correlational survey research in their attempt to link ERM strategies to performance of firms.

3.3 Target population

According to Zikmund et al. (2010) and Kothari (2004), a population refers to all items in any field of inquiry and is also known as the 'universe'. Polit and Beck (2003) refer to population as the aggregate or totality of those conforming to a set of specifications. The target population refers to population to which the researcher wants to generalize the results of the study. Target population is also defined as all the members of a real or hypothetical set of people, events or objects to which a researcher wishes to generalize the results of the research study (Borg & Gall, 2001). The target population of this study was 362 employees both in managerial and non-managerial level from all the eight water services board in Kenya. These eight water service boards thus constituted the study's unit of analysis. The unit of observation constituted of the senior management, middle management, supervisory and administration/ support staffs as shown in Table 3.1 below. These water service boards have been selected since they are responsible for resource allocation at the different regions. Thus, these boards play a key role in ensuring there is efficiency in the utilization of the allocated resources.

Table 3.1: Population Matrix

Name of WSB	Senior managers	Middle level managers	Supervisory Staffs	Administration/ support staffs	Total
Northern WSB	5	8	7	14	**34**
Lake Victoria South	4	8	8	34	**54**
Lake Victoria North	4	5	5	16	**30**
Athi WSB	3	15	15	23	**56**
Tana WSB	5	7	7	68	**87**
Rift Valley WSB	4	6	5	16	**31**
Tana-Athi WSB	6	5	6	25	**42**
Coast WSB	4	5	4	15	**28**
Total	**35**	**59**	**57**	**211**	**362**

3.4 Sampling Frame

Lavrakas (2008) defines a sampling frame as a list of the target population from which the sample is selected and usually consists of a finite population. Gill and Johnson (2002) on the other hand describe a sampling frame as a list of members of the research population from which a random sample may be drawn. The sampling frame of the study was therefore the list of all the employees from the eight water services board namely; Athi Water Service Board; Coast Water Service Board; Lake Victoria North Water Services Board; Lake Victoria South Water Service Board; Northern Water Service Board; Rift Valley Water Services Board Kenya; Tana Water Services Board and Tanathi Water Services Board.

3.4.1 Sampling Technique and Sample Size

In an empirical study there is usually the population from which the researcher seeks to make inferences from, however studying the entire population is expensive and thus there is need to select a sample that is representative of the entire population. This was therefore determined by selecting an appropriate sample and thereafter selecting a sampling technique with which respondents were chosen.

A sample is a set of individuals selected from a population and is usually intended to represent the population in a research study (Neumann, 2000). Also, according to Hyndman (2008), a sample is a subset of a population. Therefore, the goal of a research was to examine a sample and then generalize the results to the population. How accurately we can generalize results from a given sample to the population depends on the representativeness of the sample. The study therefore adopted stratified sampling technique. The stratum comprised that of senior management, middle management, supervisory and administration/ support staffs. Within each of the four strata simple random sampling was done to identify individual respondents who will be issued with a questionnaire to respond to research statements. The appropriateness of simple random sampling was due to the fact that the respondents have an equal chance of being selected and as a result was likely to reduce the level of biasness in the study.

The sample size of this study was 150 employees which represents 41% of the total population of 362 employees. The sample of 150 was generated using Israel formula for a population less than 10000.

$$n = p(1-p)\left(\frac{z}{d}\right)^2$$

Where:

n'= sample size;

z= the table value for the level of confidence, for instance;

95% level of confidence =1.96,

90% level of confidence =1.645,

99% level of confidence=2.576

d= margin of error; Precision level desired or the significance level which was 0.08 (8%) for the study

p= proportion to be estimated, Israel (1992) recommends that if you don't know the value of p then you should assume p=0.5

Therefore, the sample size was 150 employees was obtained as follows;

$$0.5(1-0.5)\left(\frac{1.96}{0.08}\right)^2 = 150$$

A random sampling design was used to identify the 150 employees.

Table 3.2: Sample Matrix

Strata	**Population**	**Sample**	**Percentage Sample**
Senior Management	35	14	41
Middle Management	59	25	41
Supervisory	57	25	41
Support staff	211	87	41
Total	**362**	**150**	**41**

3.5 Data Collection Instrument

The study relied on primary data. The primary data was collected using semi-structured questionnaire which comprised of both open and closed ended questions. Kothari (2004) describe primary data as those which are collected afresh and for the first time, and thus happen to be original in character. The main advantage of close ended questions was that they are easier to analyze since they are in an immediate usable form. They are also easy to administer because each item is followed by an alternative answers and is economical (Kothari, 2004).

3.6 Data Collection Procedures

Louis, Lawrence and Morrison (2007) describes primary data as those items that are original to the problem under study while Ember and Ember (2009) describe primary data as data collected by the investigator in various field sites explicitly for a comparative study. The primary data was collected using structured questionnaire which comprised of closed ended questions. The questionnaires were delivered to the respondents by the researcher with an introduction letter from the University. The

questionnaires were delivered to the respondents by the researcher with an introduction letter from the University. The researcher made follow ups to pick the fully completed questionnaires from the respondents in the event that respondents did not fill immediately.

3.7 Pilot Testing

According to Saunders, Thornhill and Lewis (2009), pilot testing refines the questionnaire so that respondents will have no problems in answering the question. For high precision pilot studies, 1% to 10% of the sample should constitute the pilot test size (Lancaster, Dodd & Williamson, 2010). For purposes of this study the pilot test was conducted using questionnaires administered to 10% of the sample size of the study and these were not part of the study. This translates to 15 questionnaires.

3.7.1 Validity Test

The study questionnaire was subjected to a panel of experts to assess if it captured all the items it was intended to measure, and their expert opinion was incorporated to ensure face validity. Content validity was sought by pre-testing the questionnaire on a section of the study sample and arising modifications incorporated for clarity, comprehensiveness, relevance, meaning and requisite depth. This also gave the researcher a feel of the expected responses and data for the study. The foregoing efforts are to ensure that the study instrument measures what it was intended to measure and reduce to insignificant levels systematic error or non-random error.

Construct validity was enlisted by designing a set of items that match the theoretical latency of the constructs based on modified versions of prior studies and instruments for the study variables. A deliberate effort to ensure that these are in line with the conceptual framework as derived from the literature review was made. This was in line with Cooper and Schindler (2011) proposition that in reality researchers should confine their efforts to face, content, construct and concurrent validities.

3.7.2 Reliability Test

This study employed a three step measure to enlist reliability. First, it developed the questionnaire instruments based on items that were previously used by other researchers with acceptable tested reliability levels. Secondly, it used a pre-tested questionnaire with a sample of the respondents and emerging revisions done accordingly. Finally, the Cronbach's Alpha coefficient (α) was used to measure internal consistency and stability of scales used in the research instrument. Internal consistency measures the correlations between different items on the same test (or the same subscale on a larger test) and whether several items that propose to measure the same general construct produce similar scores. Castillo (2009) provide the following rules of thumb: >0.9 – Excellent, >0.8 – Good, >0.7 – Acceptable, >0.6 – Questionable, >0.5 – Poor and <0.5 – Unacceptable. Nunnally (1978) suggested that as a rule of thumb, a reliability coefficient value of above 0.7 was statistically reliable and acceptable for a study. This study employed this standard to measure the extent to which the presented set of items measured individual latency of the variable under examination.

3.8 Data Analysis and Presentation

Once the data from the field has been obtained they then have to undergo rigorous steps in order to convert them into a form that can be readily understood by the end-user, thus data analysis and presentation refers to the sets of procedures that was followed in analyzing the collected data to so as to present them in a in a logical and scientific manner.

3.8.1 Data Analysis

The purpose of any research undertaken is to provide information in order to help answer the research question (Saunders et al., 2003; Zikmund, 2010). Therefore, the researcher gathered raw data that was processed to generate the needed information. Zikmund (2010) notes that there are diverse kinds of analytical methods that can be used in analyzing data, however, care must be taken to ensure that appropriate

analytical methods are chosen in order to arrive at the correct conclusions. Data analysis was thus quantitatively using the statistical package for social scientists (SPSS V20) for both descriptive and inferential statistics. Prior to any analyses, data was made ready and cleaned through checking for errors and completeness, editing, coding, transcribing and entering them directly into SPSS software. Qualitative data was analysed through content analysis since it involved discussions in prose.

Data analysis process started with factor analysis which was used to establish the appropriateness of the questionnaire constructs. Specifically factor loadings were used to establish the weights of the various statements on extracted factors. But before factor analysis was conducted the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was performed to determine whether adequate correlation exists between the individual items contained within each of the sections of the questionnaire. According to Field (2000) a data set is regarded as adequate and appropriate for statistical analysis, if the value of KMO is greater than 0.5.

Descriptive Statistics were used in transforming the raw data into a form that can be easily understood and interpreted. This was usually the first form of analysis where averages are calculated, frequency distributions given and percentage distributions provided. According to Adejimi, Oyediran and Ogunsanmi (2010), descriptive statistics is a method of presenting data quantitatively and describing it in a manageable form.

Bivariate analysis was also used. This involved the analysis of effect of individual independent variable on dependent variables. To conduct bivariate analysis the study used Pearson correlation coefficient. This correlation coefficient ranges between -1 and 1 and it thus measured the degree to which two variables are linearly related. The higher the magnitude of the correlation coefficient the higher the degree of association between two variables.

Further to the descriptive statistics and bivariate analysis the study used regression analysis. This analysis tested the statistical significance of the various independent variables on the chosen dependent variables. Faraway (2002), states that multiple

linear regressions are used in situations where the number of independent variables are more than one. The study used the following multivariate regression model;

$$Y = B_o + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + \varepsilon \quad \text{..... (i)}$$

Where; Y was the performance of water services, X_1, X_2, X_3 and X_4 represents staff development strategy, availability of finances, infrastructure development, information and technology deployment and government regulations respectively. β_0 represents the constant term of regression while β_1, β_2, β_3, β_4, and β_5 represents the regression coefficients while ε represents the error term of regression which was assumed to be randomly distributed.

$$Y = B_o + B_1 X + B_2 X \ * Z + \varepsilon \quad \text{..... (ii)}$$

Where X= f(X_1, X_2, X_3, X_4)= Resource Allocation

Z= Government Regulation (moderator)

ε = error term

3.8.2 Hypothesis Testing

The study before running the final multivariate regression analysis as indicated above performed univariate analysis as outlined in table 3.1 below.

Table 3.3:Hypothesis Testing

Hypotheses	Hypothesis Test	Regression Model
Hypothesis 1: Staff Development strategy has a no significant effect on the performance of water service boards in Kenya.	$H_{0:}\ \beta_1=0$ Ha: $\beta_1 \neq 0$ Reject H_0 if p <0.05, Otherwise fail to reject the H_0	$Y = \beta_0 + \beta_1 X_1 + \varepsilon$ Where: Y= Performance of Water Services Board. β_0= intercept , β_1 = Coefficient for X_1 X_1= staff development ε = Error term
Hypothesis 2: Availability of finances has no significant effect on the performance of water service boards in Kenya.	$H_{0:}\ \beta_2=0$ $H_{a:}\ \beta_2 \neq 0$ Reject H_0 if p <0.05, Otherwise fail to reject the H_0	$Y = \beta_0 + \beta_2 X_2 + \varepsilon$ Where: Y= Performance of Water Services Board. β_0= intercept, β_2 = Coefficient for X_2 X_2= Availability of Finances ε = Error term
Hypothesis 3: Infrastructure development has no significant effect on	$H_{0:}\ \beta_3=0$ $H_{a:}\ \beta_3 \neq 0$	$Y = \beta_0 + \beta_3 X_3 + \varepsilon$ Where:

Hypotheses	Hypothesis Test	Regression Model
the performance of water service boards in Kenya.	Reject H_0 if p <0.05, Otherwise fail to reject the H_0	Y= Performance of Water Services Board. β_0= intercept; β_3 = Coefficient for X_3 X_3= Infrastructure development ε = Error term
Hypothesis 4: There is a no significant effect of information and technology deployment on the performance of water services boards in Kenya.	$H_{0:}$ $\beta_4=0$ $H_{a:}$ $\beta_4 \neq 0$ Reject H_0 if p <0.05, Otherwise fail to reject the H_0	$Y = \beta_0 + \beta_4 X_4 + \varepsilon$ Where: Y= Performance of Water Services Board. β_0= intercept; β_3 = Coefficient for X_4 X4= Information and technology deployment ε = Error term
Hypothesis 5: There is no significant effect of Government Regulation on the performance of water services boars in Kenya.	$H_{0:}$ $\beta_5=0$ $H_{a:}$ $\beta_5 \neq 0$ Reject H_0 if p <0.05, Otherwise fail to reject the H_0	$Y = \beta_0 + \beta_5 X_5 + \varepsilon$ Where: Y= Organizational competitiveness. β_0= intercept; β_3 = Coefficient for X_5 X_5= Government Regulation. ε = Error term

3.9 Ethical Considerations

This study ensured that issues concerning confidentiality, honesty among respondents/participants and data collections were observed. To observe confidentiality, respondents were protected through non-disclosure of their identity and from those whose interests conflict with those of the interviewee (DiCicco-Bloom & Crabtree, 2006). Moreover, since the respondents may not want their identities disclosed, care was taken to guarantee anonymity of the research participants. On the academic perspective, the researcher presented the introduction letter from Jomo Kenyatta University of Agriculture and Technology and the research permit from NACOSTI to the respondents to assure them of the academic nature of the data to be collected. In terms of data collection, the researcher sought permission from the Water Service Boards as well as notified all potential respondents beforehand regarding the nature and objective of the study.

CHAPTER FOUR

RESEARCH, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter deals with the analysis of data. The data analysis is in harmony with the specific objectives where patterns were investigated, interpreted and inferences drawn on them. The specific objectives of the study addressed were to establish the effect of strategic staff development, strategic financial resources availability, strategic infrastructure development, strategic information and technology and government regulation on the performance of Water Services Board in Kenya. This chapter disclosed the study findings in relation to the variables of study. A detailed discussion has also been provided as the current findings are compared to findings of other studies in related areas.

4.2 Response Rate

The number of questionnaires, administered to all the respondents, was 150. A total of 117 questionnaires were properly filled and returned from the employees in Water Services Board in Kenya. This represented an overall successful response rate of 78%. According to Mugenda and Mugenda (2003), a response rate of 50% or more is adequate. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good.

Table 4.1: Response Rate

Response rate	Frequency	Percent
Returned	117	78%
Unreturned	33	22%
Total	150	100%

4.3 Demographic Information

This section presents the general demographic information of the respondents which entails the gender, age, level of education and experience of the respondents.

4.3.1 Gender of the Respondents

The respondents were asked to indicate their gender. Results were presented in Figure 4.1. Fifty Four percent (54%) of the respondents were male and 46% were female. This implies that the industry adheres to the constitutional requirement of one third gender rule during employment. According to Ellis et al. (2007), in spite of women being major actors in Kenya's economy, and notably in agriculture and the informal business sector, men dominate in the formal sector citing the ratio of men to women in formal sector as 0.74: 0.26.

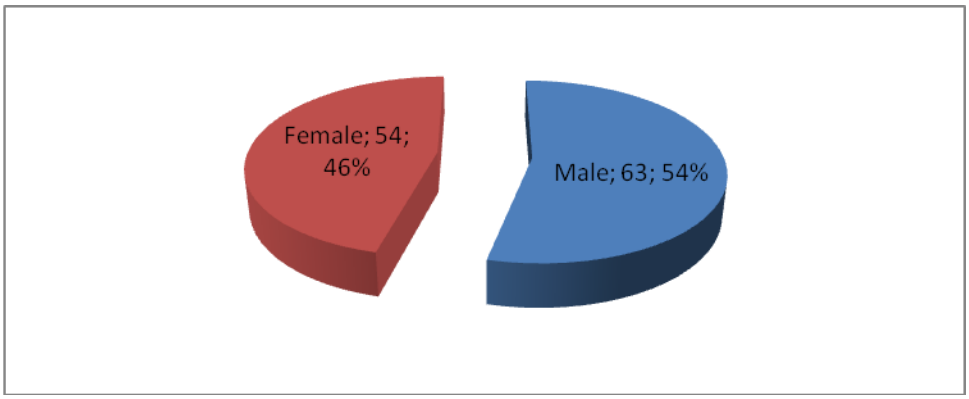

Figure 4.1: Gender of the Respondents

4.3.2 Age of the Respondents

The respondents were asked to indicate their age brackets. Results in Figure 4.2 revealed that 49.6% of the respondents were aged between 40 years and above while 34.2% of the respondents were aged between 30 to 40 years and 16.2% were between 20 and 30 years. The finding of the study implies that the industry is dominated by young people who are at their career peak and thus knowledgeable on resource allocation strategy that can enhance performance in their respective firms. The age of the staff may have an important implication for succession planning and

decision making on the overall strategic direction of the insurance firms. The findings imply that Kenyan i firms have already put the succession planning process into perspective due to the large numbers of young employees they are dissolving into their workforce.

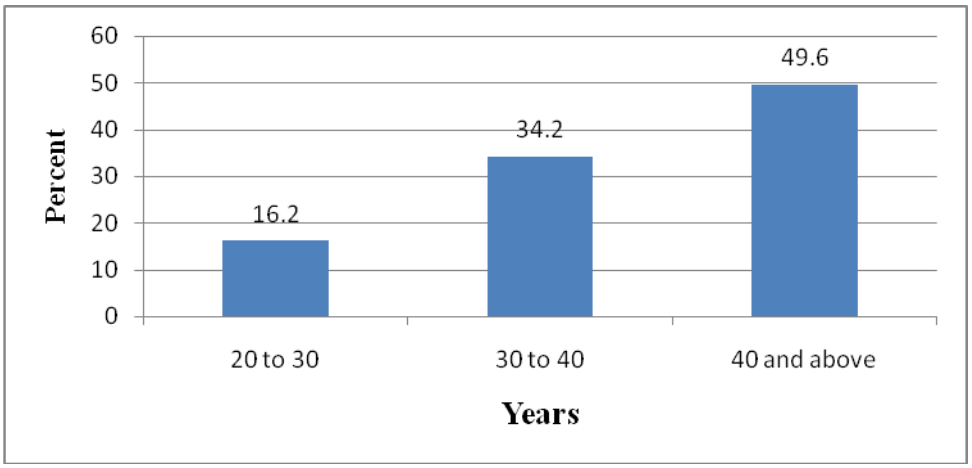

Figure 4.2: Age Bracket of the Respondents

4.3.3 Level of Education

The respondents were asked to indicate their highest level of education. The findings in Figure 4.3 illustrate that 43.6% of the respondents had reached university level, while 26.5% of the respondents had attained a diploma and 22.2% had attained post graduate level. Only 7.7% of the respondents had attained certificates. The findings imply that most of the respondents had high level of education which could have contributed to accurate responses. The high level of education of respondent indicates that many employees have attained a given level of education and qualifications to secure their jobs, hence more knowledge on resource allocation strategy and performance.

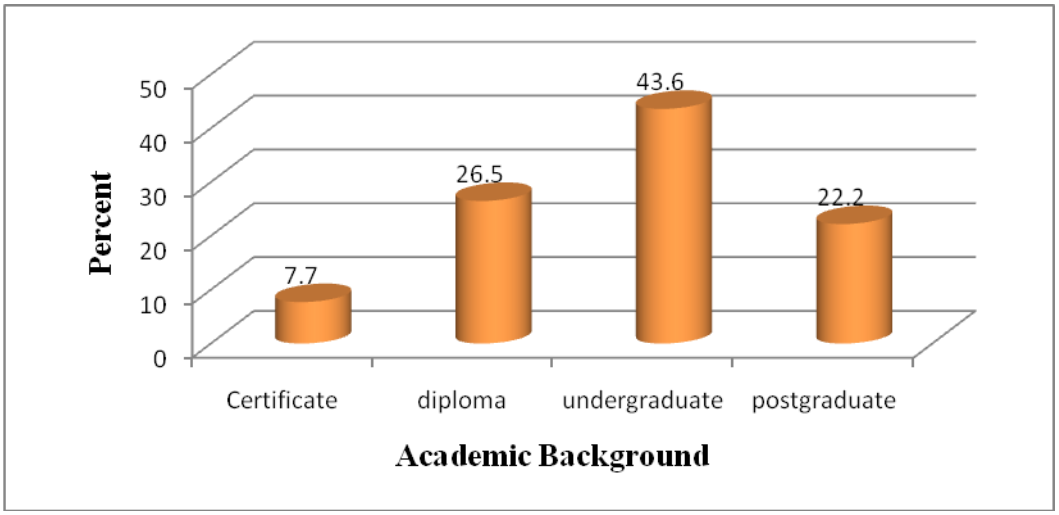

Figure 4.3: Level of Education

4.3.4 Years worked in Current Position

The study sought to find out the years the respondents had worked in their present capacity in the organization. Figure 4.4 shows that 37% of the respondents indicated they had worked for the organization in the current capacity for 3 to 5 years while 26% indicated 5 to 7 years, 20% of the respondent indicated over 7 years and 7% indicated less than 3 years. The findings imply that the respondents had worked long enough in the firms and hence had knowledge about the issues that the researcher was looking for.

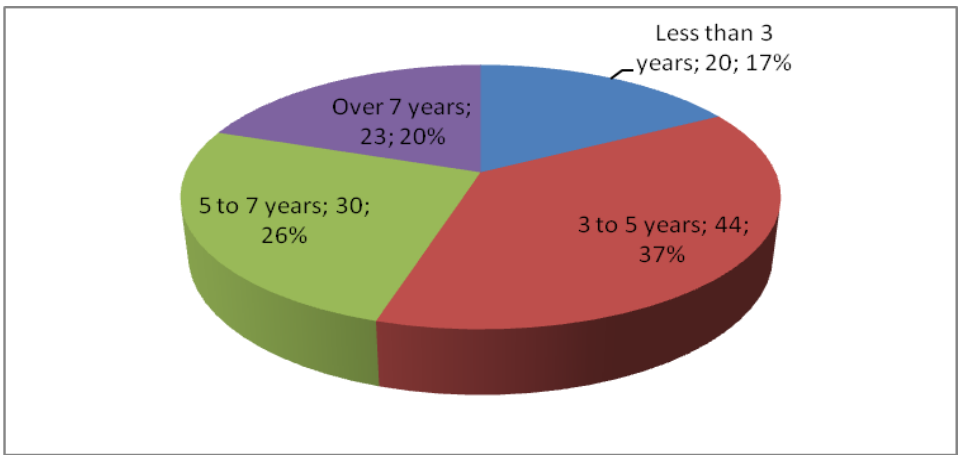

Figure 4.4: Years worked in Current Position

4.3.5 Years worked in the Industry (Experience)

The study sought to find out the years the respondents had worked in the industry. Figure 4.5 shows that 26.5% of the respondents indicated they had worked in the industry for10 to 15 years while another 26.5% indicated 5 to 10 years, 22.2% of the respondent indicated 2 to 5, 17.1% of the respondent indicated over 15 years and 7.7% indicated less than 2 years. The findings imply that the respondents had worked long enough in the firms and hence had knowledge about the issues that the researcher was looking for.

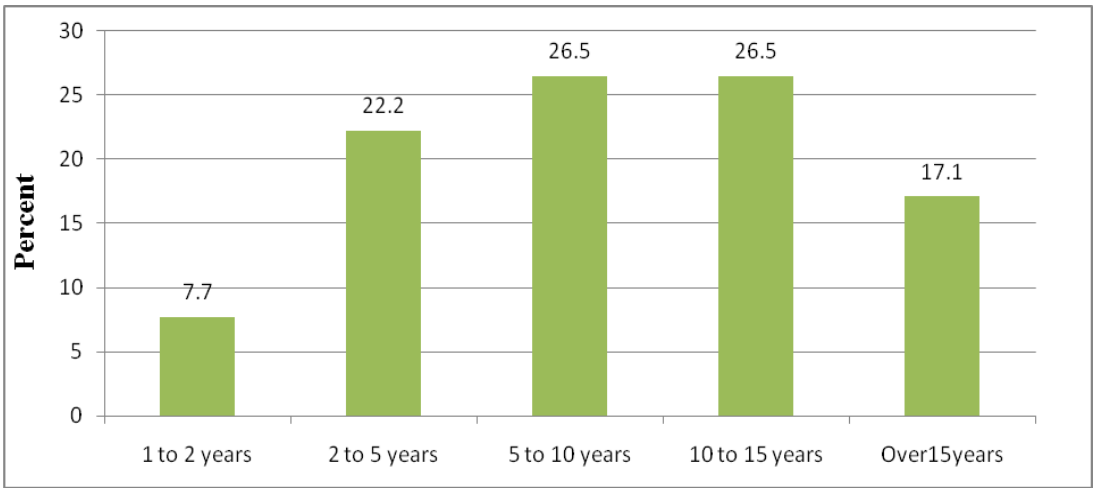

Figure 4.5: Years worked in the Industry

4.4 Performance

This section presents the results and discussions of the dependent variable performance of water service boards. The results outlined are reliability tests, sampling adequacy, factor analysis and descriptive statistics.

4.4.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on performance, a coefficient of 0.871 was found as shown in Table 4.2. These results corroborate findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these

recommendations, the statements under the performance variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

Table 4.2: Reliability Test for Performance

Variable	Performance
Number of items	7
Cronbach's Alpha	0.871

4.4.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.3 showed that the KMO statistic was 0.778 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 470.450 with 21 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.3. These results provide an excellent justification for further statistical analysis to be conducted.

Table 4.3: Performance KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.778
Bartlett's Chi- Square	470.475
Bartlett's df	21
Bartlett's Sig.	0

4.4.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 7 statements on performance can be factored into 1 factor. The total variance explained by the extracted factor is 57.074% as shown in Table 4.4.

Table 4.4: Performance Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.995	57.074	57.074	3.995	57.074	57.074
2	0.995	14.212	71.286			
3	0.774	11.055	82.341			
4	0.573	8.187	90.528			
5	0.293	4.181	94.708			
6	0.251	3.586	98.295			
7	0.119	1.705	100			

Extraction Method: Principal Component Analysis.

Table 4.5 shows the factor loadings for performance statements. All the seven factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Table 4.5: Performance Factor Analysis Component Matrix

Statement	Component
Funds from the parent ministry/donor partners meant for the board are sometimes diverted to other water boards or misappropriated	0.866
It is difficult to sustain the water sector reforms implementation due to lack of enough financial funding?	0.839
There has been an increase in the number of water meter connections to consumers	0.828
The Board receives timely and adequate budgetary allocations from the government and donor funding partners?	0.769
The current implementations status of water infrastructure projects within the Board is high	0.758
There are numerous maintenance of water assets and extensions of water distribution lines that have been implemented in the board area over the last two years	0.627
There has been a growth in water sales revenue.	0.543

Extraction Method: Principal Component Analysis.
a 1 components extracted.

4.4.4 Descriptive Analysis

The study sought to determine the performance of water services board in Kenya. Table 4.6 shows that 72.6% of the respondents agreed that there were numerous maintenance of water assets and extensions of water distribution lines that have been implemented in the board area over the last two years, 75.2% agreed that the current implementations status of water infrastructure projects within the Board was high and 71.8% agreed that there had been an increase in the number of water meter connections to consumers. In addition, 71.8% of the respondents agreed that there had been a growth in water sales revenue, 66.7% agreed that funds from the parent ministry/donor partners meant for the board are sometimes diverted to other water boards or misappropriated and 73.5% agreed that it was difficult to sustain the water sector reforms implementation due to lack of enough financial funding. Finally 73.5% of the respondents agreed that the Board received timely and adequate budgetary allocations from the government and donor funding partners. The mean score for the responses was 3.87 which indicate that many employees agreed to the statements regarding performance of water services board in Kenya.

The findings are in line with those of Chen (2002) who opined that organizational performance means the "transformation of inputs into outputs for achieving certain outcomes. With regard to its content, performance informs about the relation between minimal and effective cost (economy), between effective cost and realized output (efficiency) and between output and achieved outcome (effectiveness)". There are various ways to understand organization performance but in this study, it has been judged upon the growth of the company. Performance can be explained as all the activities or investment carried out in the firm in the given period of time. It can be measured by total amount of revenue collected for the goods or services sold. Growth revenue defines as total amount of money collected by the company for the goods they sold in a specific time and this amount is calculated before any expenses are subtracted (Chen, 2002). In furtherance, Gowry (2011) asserted that effectiveness of the organization depends on the three basics performance determinants: Efficiency and process reliability, Human resource and relations, Innovation and adaptation to environment.

Table 4.6: Performance Descriptive Statistics

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
There are numerous maintenance of water assets and extensions of water distribution lines that have been implemented in the board area over the last two years	3.4%	12.0%	12.0%	47.0%	25.6%	3.79
The current implementations status of water infrastructure projects within the Board is high	6.8%	9.4%	8.5%	48.7%	26.5%	3.79
There has been an increase in the number of water meter connections to consumers	0.0%	17.1%	11.1%	37.6%	34.2%	3.89
There has been a growth in water sales revenue.	1.7%	16.2%	10.3%	41.0%	30.8%	3.83
Funds from the parent ministry/donor partners meant for the board are sometimes diverted to other water boards or misappropriated	7.7%	12.8%	12.8%	24.8%	41.9%	3.8
It is difficult to sustain the water sector reforms implementation due to lack of enough financial funding?	6.0%	11.1%	9.4%	30.8%	42.7%	3.93
The Board receives timely and adequate budgetary allocations from the government and donor funding partners?	2.6%	11.1%	12.8%	23.9%	49.6%	4.07
Average	4.0%	12.8%	11.0%	36.3%	35.9%	3.87

4.4.5 Normality Test for Performance

Performance measures were subjected to normality test. Unlike the independent variables of the study, Performance being the dependent variable of the study was further subjected to a One-Sample Kolmogorov-Smirnov Test to test its normality. The following null and alternative hypotheses were as used:

H_1: The data is normally distributed

H_0: The data is not normally distributed

The results obtained in Table 4.7 indicated that Kolmogorov-Smirnov Z is 1.786 (p-value=0.313) the p-value is more than 0.05; we fail to accept the null hypothesis and accept the alternative hypothesis and conclude that the data was normally distributed.

Table 4.7: One-Sample Kolmogorov-Smirnov Test

		Performance
N		117
Normal Parameters a,b	Mean	3.8547
	Std. Deviation	0.86367
Most Extreme Differences	Absolute	0.165
	Positive	0.092
	Negative	-0.165
Kolmogorov-Smirnov Z		1.786
Asymp. Sig. (2-tailed)		0.313

a Test distribution is Normal.
b Calculated from data.

Figure 4.6 below shows the normality plot of performance which indicates that the dependent variable was normally distributed and that the probability of outliers was minimal. The findings imply that the responses were lying close to the line of normality. Furthermore, it implied that the data was ideal for multiple linear regression.

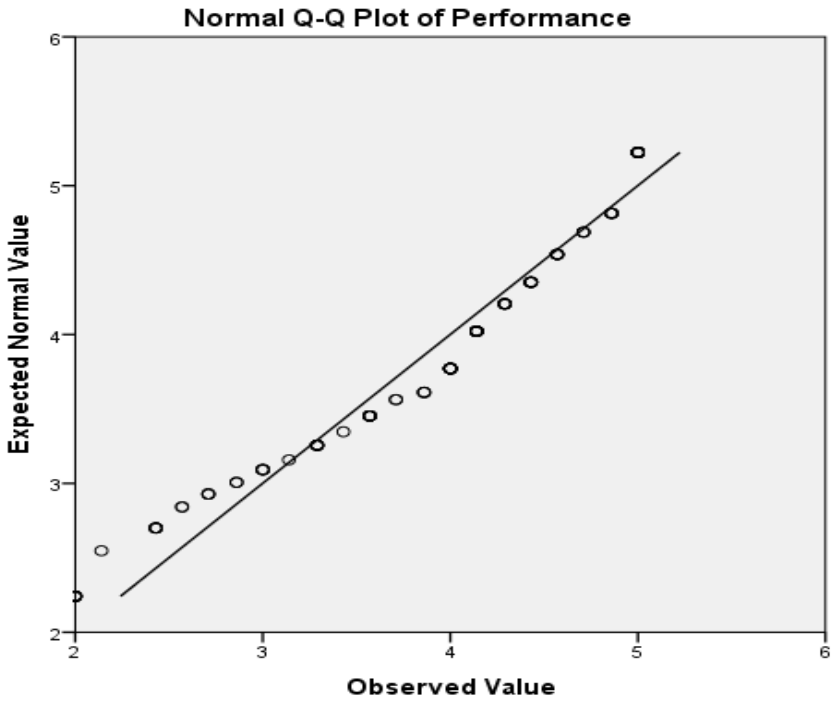

Figure 4.6: Normality Plot of Performance

4.5 Strategic Staff Development Strategy

This section presents the results and discussions of the first objective of the study. The results outlined are reliability tests, sampling adequacy, factor analysis, descriptive statistics and the inferential statistics.

4.5.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on staff development strategy, a coefficient of 0.855 was found as shown in Table 4.8. These results corroborates findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the staff development strategy variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

Table 4.8: Reliability Test for Staff Development Strategy

Variable	Staff Development
Number of items	13
Cronbach's Alpha	0.855

4.5.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.9 showed that the KMO statistic was 0.771 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 668.846 with 78 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.9. These results provide an excellent justification for further statistical analysis to be conducted.

Table 4.9: Staff Development KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.771
Bartlett's Chi- Square	668.846
Bartlett's df	78
Bartlett's Sig.	0.000

4.5.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 13 statements on staff development strategy can be factored into 1 factor. The total variance explained by the extracted factor is 37.289% as shown in Table 4.10.

Table 4.10: Staff Development Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.848	37.289	37.289	4.848	37.289	37.289
2	1.913	14.715	52.004			
3	1.358	10.444	62.448			
4	1.017	7.824	70.272			
5	0.728	5.598	75.87			
6	0.593	4.562	80.433			
7	0.586	4.508	84.941			
8	0.515	3.962	88.903			
9	0.446	3.428	92.331			
10	0.355	2.734	95.065			
11	0.284	2.187	97.252			
12	0.22	1.695	98.947			
13	0.137	1.053	100			

Extraction Method: Principal Component Analysis.

Table 4.11 shows the factor loadings for staff development strategy statements. All the thirteen factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported

by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Table 4.11: Staff Development Factor Analysis Component Matrix

Statement	Component
More emphasis on employees' training and empowerment is considered in our organisation	0.764
Reduction of the number of required personnel to perform organizational tasks ensures efficiency in the Utilisation of human resources	0.724
Managers closely monitor the day-to-day activities of employees to improve efficiency	0.717
Strategic questions include the allocation of scarce resources within an enterprise, and this includes the management of employees	0.693
We have a formal process of performance appraisals to provide feedback to employees.	0.641
Employees' better knowledge of general decisions of the organization is of utmost benefit to the organisation	0.612
Labour is regarded as a resource in conventional economics	0.612
Managers follow a regular schedule in providing feedback to employees.	0.58
HR processes: selection, appraisal, rewards, and development require resource management for its effectiveness	0.544
HRM functions 'address planned business changes' and are therefore 'considered strategic'	0.522
Resources are required for selection of the right candidates	0.489
HR, is a requirement for any effective quality development process and top management should give it a high level of attention and priority in their programs	0.488
We use performance appraisals primarily to help employees identify new skills to develop.	0.45

Extraction Method: Principal Component Analysis.
a 1 components extracted.

4.5.4 Descriptive Analysis

The study sought to find out the extent to which staff development affects the performance of Water Services Board. Figure 4.7 reveals that 55.6% of the respondents indicated to a high extent while 31.6% indicated to a very high extent, 8.5% indicated to a low extent and 4.3% indicated to a moderate extent. The findings

imply that staff development strategy affect the performance of water service board greatly and so measures should be put in place to ensure that the staff development strategy is operational and followed to the latter.

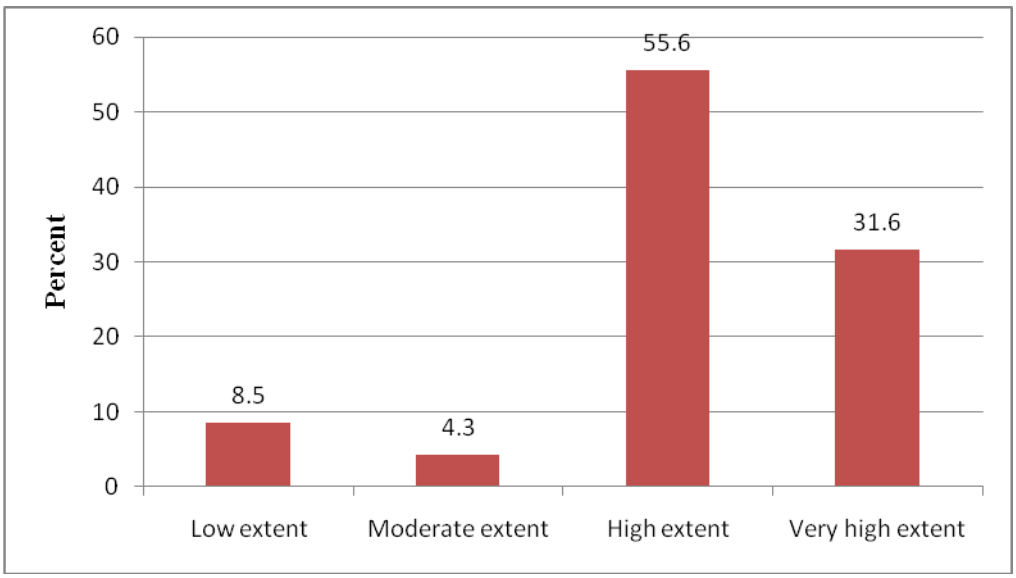

Figure 4.7: Extent to which Staff Development affect Performance

The first objective of the study was to evaluate the extent to which staff development affects the performance of Water Services Board in Kenya. Table 4.12 shows that 80.3% of the respondents agreed that HR, was a requirement for any effective quality development process and top management should give it a high level of attention and priority in their programs, 62.4% agreed that HR processes: selection, appraisal, rewards, and development required resource management for its effectiveness and 70.1% agreed that resources are required for selection of the right candidates. Seventy point nine percent of the respondents agreed that labour was regarded as a resource in conventional economics and 50.5% agreed that strategic questions included the allocation of scarce resources within an enterprise, and this included the management of employees.

Results disagree with those of Paul and Anantharaman (2003) who in their study of 35 Indian software companies determined, developed and tested a causal model linking HRM with organizational performance through an intervening process. They observed that not even a single HR practice has direct causal connection with

organizational financial performance, though HR practices have an indirect influence on the operational and financial performance of the organization.

Furthermore, 69.3% of the respondents agreed that HRM functions 'addressed planned business changes' and were therefore 'considered strategic', 58.2% agreed that more emphasis on employees' training and empowerment was considered in their organizations while 55.5% agreed that employees' better knowledge of general decisions of the organization was of utmost benefit to the organization and 58.2% agreed that reduction of the number of required personnel to perform organizational tasks ensured efficiency in the utilisation of human resources.

In addition, 68.4% of the respondents agreed that managers followed a regular schedule in providing feedback to employees, another 68.4% agreed that they had a formal process of performance appraisals to provide feedback to employees and 68.1% agreed that they used performance appraisals primarily to help employees identify new skills to develop. Finally, 50.4% of the respondents agreed that managers closely monitored the day-to-day activities of employees to improve efficiency. The mean score for responses for this section was 3.62 which indicates that majority of the respondents agreed that staff development strategy was a key determinant of performance of water services board.

The study findings are in agreement with those of Huselid (2007) who studied on the relationship between HR practices and corporate performance and found high-involvement HR practices to be strongly and positively linked to various measures of organizational performance, including work attachment, firm financial performance, and productivity. In another study, Delaney and Huselid (2006) found that practices consistent with a high involvement HR strategy, such as highly selective staffing, incentive compensation and training, have been positively linked to organizational performance. However, Delaney and Huselid efforts to establish the impact of internal consistency among such practices by considering the interaction effects on pairs of strategies were not particularly successful.

Table 4.12: Staff Development Strategy Descriptive Statistics

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
HR, is a requirement for any effective quality development process and top management should give it a high level of attention and priority in their programs	0.0%	5.1%	14.5%	48.7%	31.6%	4.07
HR processes: selection, appraisal, rewards, and development require resource management for its effectiveness	12.8%	12.0%	12.8%	43.6%	18.8%	3.44
Resources are required for selection of the right candidates	11.1%	7.7%	11.1%	35.9%	34.2%	3.74
Labour is regarded as a resource in conventional economics	5.1%	8.5%	15.4%	35.9%	35.0%	3.87
Strategic questions include the allocation of scarce resources within an enterprise, and this includes the management of employees	6.8%	20.5%	22.2%	27.4%	23.1%	3.39
HRM functions 'address planned business changes' and are therefore 'considered strategic'	1.7%	11.1%	17.9%	47.9%	21.4%	3.76
More emphasis on employees' training and empowerment is considered in our organisation	8.5%	15.4%	17.9%	30.8%	27.4%	3.53
Employees' better knowledge of general decisions of the organization is of utmost benefit to the organisation	5.1%	22.2%	17.1%	25.6%	29.9%	3.53
Reduction of the number of required personnel to	8.5%	22.2%	11.1%	36.8%	21.4%	3.4

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
perform organizational tasks ensures efficiency in the Utilisation of human resources						
Managers follow a regular schedule in providing feedback to employees.	8.5%	15.4%	7.7%	46.2%	22.2%	3.58
We have a formal process of performance appraisals to provide feedback to employees.	8.5%	8.5%	14.5%	41.0%	27.4%	3.7
We use performance appraisals primarily to help employees identify new skills to develop.	0.9%	18.1%	12.9%	54.3%	13.8%	3.62
Managers closely monitor the day-to-day activities of employees to improve efficiency	4.3%	12.8%	32.5%	35.9%	14.5%	3.44
Average	6.3%	13.8%	16.0%	39.2%	24.7%	3.62

4.5.5 Relationship between Staff Development and Performance

Table 4.13 shows the correlation results which indicate that there was a positive and significant relationship between staff development and performance of Water Services Board. This reveals that any positive change in staff development led to increased performance of Water Services Board. The relationship has been illustrated by the correlation co-efficient of 0.716, implying a positive relationship between staff development and performance of Water Services Board in Kenya. This was also evidenced by the p value of 0.000 which is less than that of critical value (0.05). The study findings are consistent with those of Katou and Budhwar (2006) who found support with the universalistic model and reported that HR policies of recruitment, training, promotion, incentives, benefits, involvement and health and safety are positively related to organizational performance.

Table 4.13: Relationship between Staff Development and Performance

Variable		Performance	Staff Development
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Staff Development	Pearson Correlation	0.716	1
	Sig. (2-tailed)	0.000	

The findings on Figure 4.8 show the relationship between staff development and performance of Water Services Board. The figure indicates that a positive relationship exists between staff development and performance of Water Services Board in Kenya.

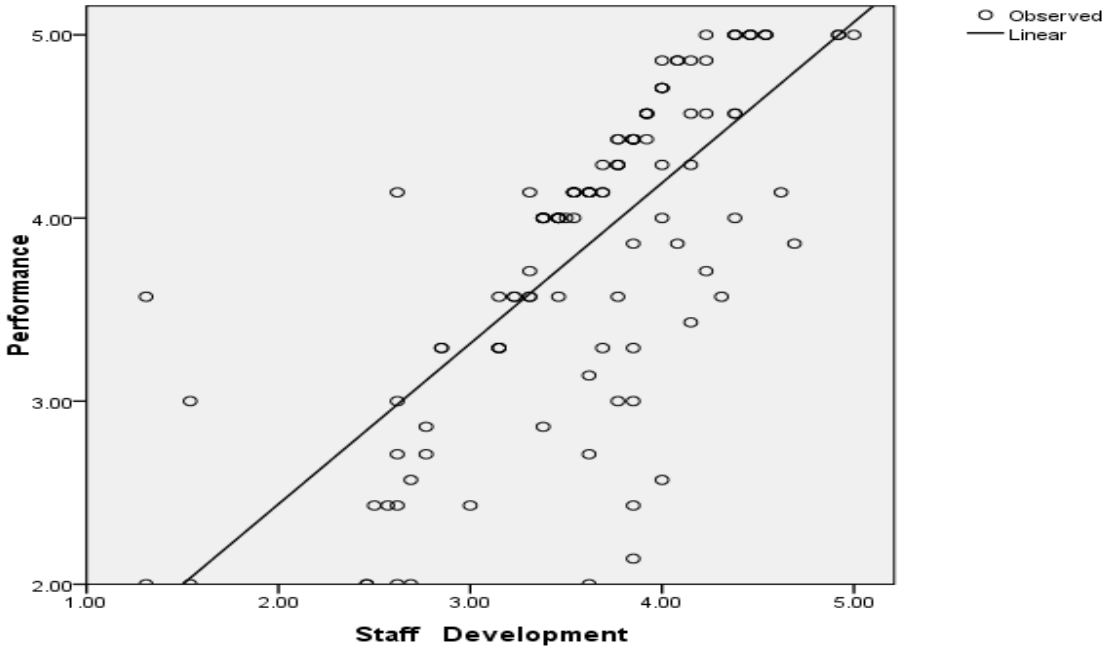

Figure 4.8: Linear Relationship between Staff Development and Performance

Regression analysis was conducted to empirically determine whether staff development strategy was a significant determinant of performance in water Services Board in Kenya. Regression results in Table 4.14 indicate the goodness of fit for the regression between staff development strategy and performance was satisfactory. An R squared of 0.513 indicates that 51.3% of the variations in performance are

explained by the variations in staff development strategy effectiveness. This implies that 48.7% of the unexplained variations in performance is accounted for by the other variables including financial resources availability, infrastructure development allocations and information and technology deployment.

Table 4.14: Model Summary for Staff Development

Indicator	Coefficient
R	0.716
R Square	0.513
Adjusted R Square	0.509
Std. Error of the Estimate	0.6054

The ANOVA table is presented in table 4.15. An F statistic of 121.086 indicated that the overall model was significant. The findings imply that staff development strategy was statistically significant in explaining performance of Water Services Board in Kenya. Similarly, using a sample of banks, Richard and Johnson (2001) examined the impact of strategic HRM effectiveness on a number of performance variables and found that strategic HR effectiveness was directly related to employee turnover and the relationship between this measure and return on equity was stronger among banks with higher capital intensity.

Table 4.15: ANOVA for Staff Development Strategy

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	44.379	1	44.379	121.086	0.000
Residual	42.149	115	0.367		
Total	86.528	116			

The staff development strategy coefficients are presented in table 4.16. The results show that staff development strategy contributes significantly to the model since the p-value for the constant and gradient are less than 0.05. The findings imply that one positive unit change in staff development strategy effectiveness led to a change in performance at the rate of 0.877. This confirms the positive effect of staff development strategy on performance. The study findings are in agreement with those of Huselid (2007) who studied on the relationship between HR practices and corporate performance and found high-involvement HR practices to be strongly and positively linked to various measures of organizational performance, including work attachment, firm financial performance, and productivity. In an another study, Delaney and Huselid (2006) found that practices consistent with a high involvement HR strategy, such as highly selective staffing, incentive compensation and training, have been positively linked to organizational performance. However, Delaney and Huselid efforts to establish the impact of internal consistency among such practices by considering the interaction effects on pairs of strategies were not particularly successful. The fitted equation is as shown below

$Y= 0.683 + 0.877X_1$

Table 4.16: Coefficients of Staff Development Strategy

Variable	Beta	Std. Error	t	Sig.
Constant	0.683	0.294	2.326	0.022
Staff Development	0.877	0.08	11.004	0.000

4.6 Strategic Financial Resources

This section presents the results and discussions of the second objective of the study. The results outlined are reliability tests, sampling adequacy, factor analysis, descriptive statistics and the inferential statistics.

4.6.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on availability of financial resources, a coefficient of 0.830 was found as shown in Table 4.17. These results corroborates findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the availability of resources variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

Table 4.17: Reliability Test for Financial Resources Availability

Variable	Financial Resources
Number of items	7
Cronbach's Alpha	0.83

4.6.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.18 showed that the KMO statistic was 0.769 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 336.332 with 21 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.18. These results provide an excellent justification for further statistical analysis to be conducted.

Table 4.18: Financial Resources Availability KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.769
Bartlett's Chi- Square	336.332
Bartlett's df	21
Bartlett's Sig.	0

4.6.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 7 statements on availability of financial resources can be factored into 1 factor. The total variance explained by the extracted factor is 50.518% as shown in Table 4.19.

Table 4.19: Financial Resources Availability Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.536	50.518	50.518	3.536	50.518	50.518
2	1.034	14.769	65.287			
3	0.738	10.549	75.836			
4	0.645	9.215	85.051			
5	0.508	7.263	92.313			
6	0.392	5.596	97.909			
7	0.146	2.091	100			

Extraction Method: Principal Component Analysis.

Table 4.20 shows the factor loadings for availability of financial resources statements. All the seven factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Table 4.20: Financial Resources Availability Factor Analysis Component Matrix

Statement	Component
In occasions where there are inadequate financial resources the Board is not able to implement some of its projects.	0.837
Financial resources are necessary for effective implementation of the Board's strategic Plan.	0.814
Inadequacy of financial resources within the Board is supplemented through borrowing so as to be able to attain the goals of the board.	0.77
Complete financial autonomy is hard to achieve and thus the board ensures they are sustainable.	0.689
Financial management of the resources within the board are hard to manage.	0.629
Aiming for financial sustainability must be a key goal among organizations if they are going to implement the strategic plans effectively	0.625
Financial resources are very essential for effective service delivery within the water service board.	0.564

Extraction Method: Principal Component Analysis.
a 1 components extracted.

4.6.4 Descriptive Analysis

The study sought to find out the extent to which availability of financial resources affects the performance of Water Services Board. Figure 4.9 reveals that 50.4% of the respondents indicated to a high extent while 11.1% indicated to a very high extent, 22.2% indicated to a moderate extent, 9.4% indicated to a low extent and 6.8% indicated to a very low extent. The findings imply that availability of financial resources affects the performance of water service board greatly and thus the correct

amount of finances should be allocated to the core operations of the organization to enhance profitability and increased performance.

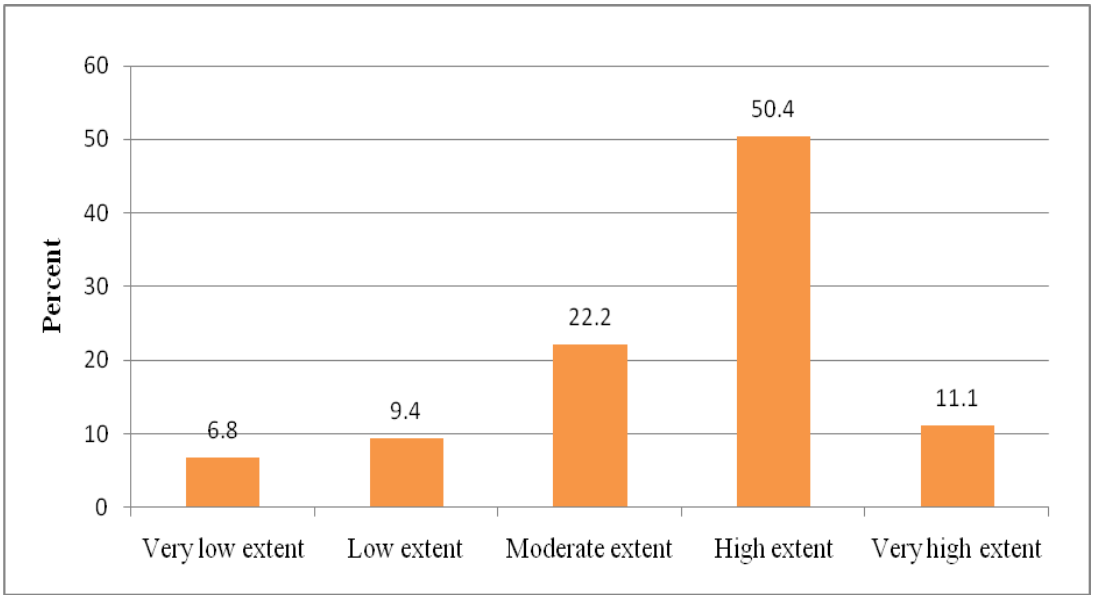

Figure 4.9: Extent to which Availability of Financial Resources affect Performance

The second objective of the study was to establish the influence of finances availability on the performance of Water Services Boards in Kenya. Table 4.21 illustrates that 76.9% of the respondents indicated that financial resources are very essential for effective service delivery within the water service board, 80.3% agreed that financial resources are necessary for effective implementation of the Board's strategic Plan and 76.1% agreed that in occasions where there were inadequate financial resources the Board was not able to implement some of its projects. In addition, 76.1% of the respondents agreed that inadequacy of financial resources within the Board was supplemented through borrowing so as to be able to attain the goals of the board, 63.2% of the respondents agreed that aiming for financial sustainability was a must key goal among organizations if they were going to implement the strategic plans effectively and 84.6% agreed that financial management of the resources within the board were hard to manage. Finally, 71.8%

of the respondents agreed that complete financial autonomy was hard to achieve and thus the board ensured they were sustainable. The mean score for responses for this section was 3.90 which indicates that majority of the respondents agreed that availability of finances was a key determinant of performance of water services board.

The study findings are in support of Blas and Limbambala (2001) who in their study noted that the allocation of resources flow through various layers of national and local government's institutions on their way to the facilities and as a result the urged that organisations ensure financial accountability by using monitoring, auditing and accounting mechanisms defined by the country legal and institutional framework to ensure that allocated funds are used for the intended purposes.

Table 4.21: Financial Resources Descriptive Statistics

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Financial resources are very essential for effective service delivery within the water service board.	5.1%	5.1%	12.8%	39.3%	37.6%	3.99
Financial resources are necessary for effective implementation of the Board's strategic Plan.	6.0%	8.5%	5.1%	48.7%	31.6%	3.91
In occasions where there are inadequate financial resources the Board is not able to implement some of its projects.	0.0%	12.8%	11.1%	37.6%	38.5%	4.02
Inadequacy of financial resources within the Board is supplemented through borrowing so as to be able to attain the goals of the board.	0.9%	8.5%	14.5%	47.0%	29.1%	3.95
Aiming for financial sustainability must be a key goal among organizations if they are going to implement the strategic plans effectively	1.7%	19.7%	15.4%	45.3%	17.9%	3.58
Financial management of the resources within the board are hard to manage.	1.7%	6.0%	7.7%	52.1%	32.5%	4.08
Complete financial autonomy is hard to achieve and thus the board ensures they are sustainable.	2.6%	12.8%	12.8%	47.0%	24.8%	3.79
Average	2.6%	10.5%	11.3%	45.3%	30.3%	3.90

4.6.5 Relationship between Financial Resources Availability and Performance

Table 4.22 shows the correlation results which indicate that there was a positive and significant relationship between availability of financial resources and performance of Water Services Board. This reveals that any positive change in finances

availability led to increased performance of Water Services Board. The relationship has been illustrated by the correlation co-efficient of 0.77, implying a positive relationship between financial resources availability and performance of Water Services Board in Kenya. This was also evidenced by the p value of 0.000 which is less than that of critical value (0.05)

Table 4.22: Relationship between Financial Resources Availability and Performance

Variable		Performance	Financial Resources
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Financial Resources	Pearson Correlation	0.77	1
	Sig. (2-tailed)	0.000	

The findings on Figure 4.10 show the relationship between finances availability and performance of Water Services Board. The figure indicates that a positive relationship exists between availability of financial resources and performance of Water Services Board in Kenya.

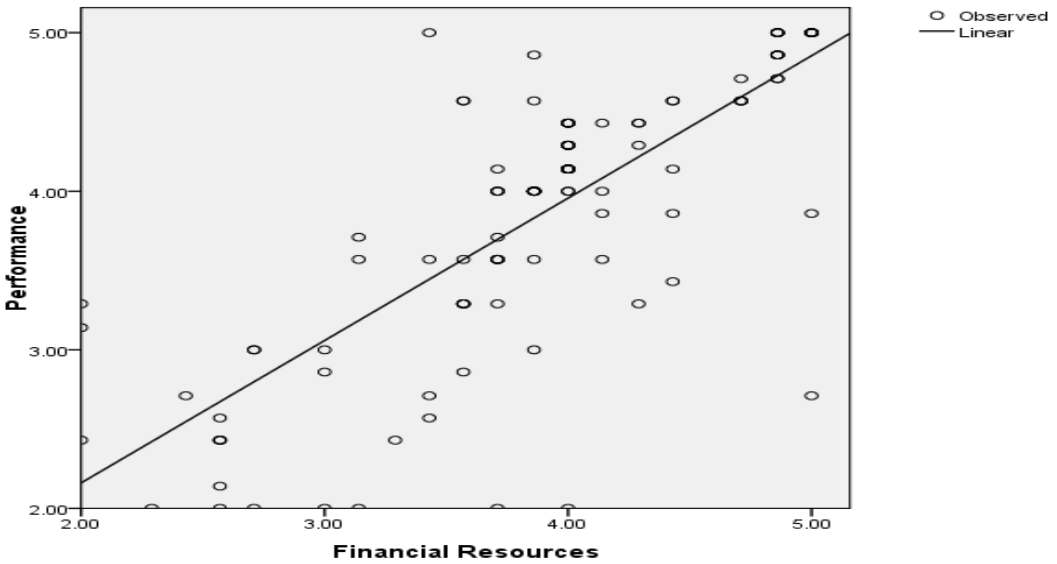

Figure 4.10: Linear Relationship between Finances Availability and Performance

Regression analysis was conducted to empirically determine whether availability of financial resources was a significant determinant of performance in water Services Board in Kenya. Regression results in Table 4.23 indicate the goodness of fit for the regression between availability of finances and performance was satisfactory. An R squared of 0.592 indicates that 59.2% of the variations in performance are explained by the variations in finances availability. This implies that 41.8% of the unexplained variations in performance is accounted for by the other variables including staff development strategy, infrastructure development allocations and information and technology deployment.

Table 4.23: Model Summary for Availability of Financial Resources

Indicator	Coefficient
R	0.77
R Square	0.592
Adjusted R Square	0.589
Std. Error of the Estimate	0.55391

The overall model significance is presented in table 4.24. An F statistic of 167.02 indicated that the overall model was significant since the significance of the F-statistic 0.000 is less than 0.05 meaning that null hypothesis is rejected and conclude that there is a significant relationship between availability of finances and performance of water Board Services. The findings imply that availability of finances was statistically significant in explaining performance of Water Services Board in Kenya.

The study findings are in support of Adams and Colebourne (2009) who established that financial management, in service organizations, has been a constraint and an obstacle to other functions that contribute to service delivery and they thus suggested an enlightened approach to finance in service organizations. This consists of more participative and positive approach where far from being an obstacle, it contributes to strategic planning, costing systems, personnel motivation, quality control, continued solvency, and keeping outsider's confidence in management. In particular the study

finds that is a need to distinguish good costs that improves organizational capabilities and quality service delivery from bad costs that increase bureaucracy hence becoming obstacles to service delivery.

Table 4.24: ANOVA for Finances Availability

Variable	Sum of Squares	df	Mean Square	F	Sig.
Regression	51.244	1	51.244	167.02	0.000
Residual	35.284	115	0.307		
Total	86.528	116			

The financial resources availability coefficients are presented in Table 4.25. The results show that availability of resources contributes significantly to the model since the p-value for the gradient are less than 0.05. The findings imply that one positive unit change in availability of resources led to a change in performance at the rate of 0.898. This confirms the positive effect of staff development strategy on performance. The fitted equation is as shown below

$$Y = 0.365 + 0.898X_2$$

Table 4.25: Coefficients of Availability of Resources

Variable	Beta	Std. Error	t	Sig.
Constant	0.365	0.275	1.328	0.187
Financial Resources	0.898	0.069	12.924	0.000

4.7 Strategic Infrastructure Development

This section presents the results and discussions of the third objective of the study. The results outlined are reliability tests, sampling adequacy, factor analysis, descriptive statistics and the inferential statistics.

4.7.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on infrastructure development allocations, a coefficient of 0.935 was found as shown in Table 4.26. These results corroborates findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the infrastructure development allocations variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

Table 4.26: Reliability Test for Infrastructure Development Allocations

Variable	Infrastructure Development
Number of items	11
Cronbach's Alpha	0.935

4.7.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.27 showed that the KMO statistic was 0.859 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 1132.96 with 55 degree of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.27. These results provide an excellent justification for further statistical analysis to be conducted.

Table 4.27: Infrastructure Development Allocations KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.859
Bartlett's Chi- Square	1132.96
Bartlett's df	55
Bartlett's Sig.	0

4.7.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 11 statements on infrastructure development allocations can be factored into 1 factor. The total variance explained by the extracted factor is 62.267% as shown in Table 4.28.

Table 4.28: Infrastructure Development Allocations Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.849	62.267	62.267	6.849	62.267	62.267
2	1.247	11.34	73.608			
3	0.772	7.017	80.625			
4	0.525	4.771	85.395			
5	0.427	3.878	89.273			
6	0.369	3.357	92.631			
7	0.288	2.617	95.248			
8	0.205	1.86	97.108			
9	0.14	1.27	98.378			
10	0.099	0.903	99.281			
11	0.079	0.719	100			

Extraction Method: Principal Component Analysis.

Table 4.29 shows the factor loadings for infrastructure development allocations statements. All the eleven factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Table 4.29: Infrastructure Development allocations Factor Analysis Component Matrix

Statement	Component
Infrastructure development is always allocated the highest resources for any development	0.91
Infrastructural development within the Board has led to easy classification of information and rapid preparation of comprehensive reports	0.901
Infrastructure development has led to simple and fast access to information to perform tasks	0.87
A trail of time and cost overruns on building and infrastructure projects in public and private sector, attributable to numerous factors that come into play during the projects' implementation	0.864
Investment in infrastructural development has led to reduction of duplications in tasks performed by the Board	0.843
Infrastructural development has led to reduction of paper works and bureaucratic excessive formalities.	0.823
There is enhanced speed of data transmission between various departments of organization due to infrastructural development	0.817
Speed of transmission customers' demands to the organization has been achieved as a result of infrastructural development	0.78
As a result of infrastructural development performing tasks and organizational activities has become more effective	0.644
The government and its development partners continue to allocate huge financial resources to finance infrastructure development	0.582
Clear communication channels are required to enhance and maintain communication and accountability for all relevant managers and operational employees	0.538

Extraction Method: Principal Component Analysis.

a 1 components extracted.

4.7.4 Descriptive Analysis

The study sought to find out the extent to which infrastructure development allocations affect the performance of Water Services Board. Figure 4.11 illustrates that 57.3% of the respondents indicated to a high extent while 23.9% indicated to a very high extent, 10.3% indicated to a moderate extent, 6% indicated to a low extent and 2.6% indicated to a very low extent. The findings imply that infrastructure development allocations affect the performance of water service board greatly and thus measures to ensure effective infrastructural development should be put in place to enhance profitability and increased performance.

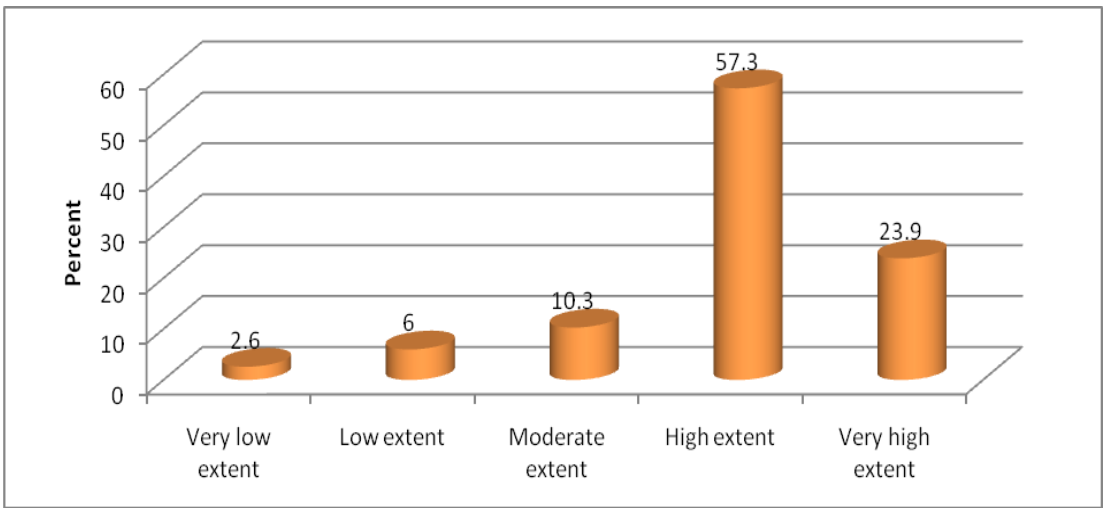

Figure 4.11: Extent to which Infrastructure Development Allocations affect Performance

The third objective of the study was to assess the effect of infrastructure development allocations on the performance of Water Services Boards in Kenya. Table 4.30 illustrates that 77.7% of the respondents agreed that clear communication channels are required to enhance and maintain communication and accountability for all relevant managers and operational employees, another 77.7% agreed that the government and its development partners should continue to allocate huge financial resources to finance infrastructure development and 77.8% agreed that a trail of time and cost overruns on building and infrastructure projects in public and private sector, attributable to numerous factors that come into play during the projects'

implementation. Studying infrastructure facilities is crucial as there could be a set of distinctive issues involved which may help describe it as a critical feature in understanding organizational performance (Easterly, 2002; Delmon, 2008).

Seventy six point nine percent (76.9) of the respondents agreed that infrastructure development was always allocated the highest resources for any development, 83.8% agreed that there was enhanced speed of data transmission between various departments of organization due to infrastructural development, 77% agreed that infrastructure development had led to simple and fast access to information to perform tasks and 74.4% agreed that infrastructural development within the Board had led to easy classification of information and rapid preparation of comprehensive reports. The study findings are in support of Easterly (2002) who established the presence of adequate infrastructure facilities such as physical and organizational structure provides support for development of an organisation and/economy.

In addition, 73.5% of the respondents agreed that investment in infrastructural development had led to reduction of duplications in tasks performed by the Board, 69.8% agreed that infrastructural development had led to reduction of paper works and bureaucratic excessive formalities while 75.3% agreed that as a result of infrastructural development, performing tasks and organizational activities had become more effective and finally, 82.9% of the respondents agreed that speed of transmission customers' demands to the organization had been achieved as a result of infrastructural development. The mean score for responses for this section was 4.02 which indicates that majority of the respondents agreed that infrastructure development was a key determinant of performance for water services board.

The study findings agree with those of Delmon (2008) who asserted that well-developed infrastructure facilities reduce the impact of interregional distances, integrating the local markets as well as connecting them at low cost to markets in other countries and regions. Similarly, Izquierdo and Vasallo's (2004) study pointed out that infrastructure facilities and economic development are positively correlated such that there are effects during the construction phase and during the usage of such facilities.

Table 4.30: Infrastructure Development Descriptive Statistics

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Clear communication channels are required to enhance and maintain communication and accountability for all relevant managers and operational employees	0.9%	12.8%	8.5%	42.7%	35.0%	3.98
The government and its development partners continue to allocate huge financial resources to finance infrastructure development	2.6%	11.1%	8.5%	42.7%	35.0%	3.97
A trail of time and cost overruns on building and infrastructure projects in public and private sector, attributable to numerous factors that come into play during the projects' implementation	0.0%	14.5%	7.7%	36.8%	41.0%	4.04
Infrastructure development is always allocated the highest resources for any development	0.9%	14.5%	7.7%	35.0%	41.9%	4.03
There is enhanced speed of data transmission between various departments of organization due to infrastructural development	0.0%	12.0%	4.3%	37.6%	46.2%	4.18
Infrastructure development has led to simple and fast access to information to perform tasks	1.7%	12.8%	8.5%	38.5%	38.5%	3.99
Infrastructural development within the Board has led to easy classification of information and rapid preparation of comprehensive reports	1.7%	12.0%	12.0%	34.2%	40.2%	3.99
Investment in infrastructural development has led to reduction of duplications in tasks performed by the Board	1.7%	13.7%	11.1%	28.2%	45.3%	4.02
Infrastructural development has led to reduction of paper works and bureaucratic excessive formalities.	1.7%	20.7%	7.8%	31.0%	38.8%	3.84
As a result of infrastructural development performing tasks and organizational activities has become more effective	2.6%	14.5%	7.7%	29.1%	46.2%	4.02
Speed of transmission customers' demands to the organization has been achieved as a result of infrastructural development	0.0%	7.7%	9.4%	33.3%	49.6%	4.25
Average	1.3%	13.3%	8.5%	35.4%	41.6%	4.03

4.7.5 Relationship between Infrastructure Development and Performance

Table 4.31 shows the correlation results which indicate that there was a positive and significant relationship between infrastructure development allocation and performance of Water Services Board. This reveals that any positive change in infrastructure development allocations led to increased performance of Water Services Board. The relationship has been illustrated by the correlation co-efficient of 0.686, implying a positive relationship between infrastructure development allocations and performance of Water Services Board in Kenya. This was also evidenced by the p value of 0.000 which is less than that of critical value (0.05)

Table 4.31: Relationship between Infrastructure Development and Performance

Variable		Performance	Infrastructure Development
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Infrastructure Development	Pearson Correlation	0.686	1
	Sig. (2-tailed)	0.000	

The findings on Figure 4.12 show the relationship between infrastructure development allocations and performance of Water Services Board. The figure indicates that a positive relationship exists between infrastructure development allocations and performance of Water Services Board in Kenya.

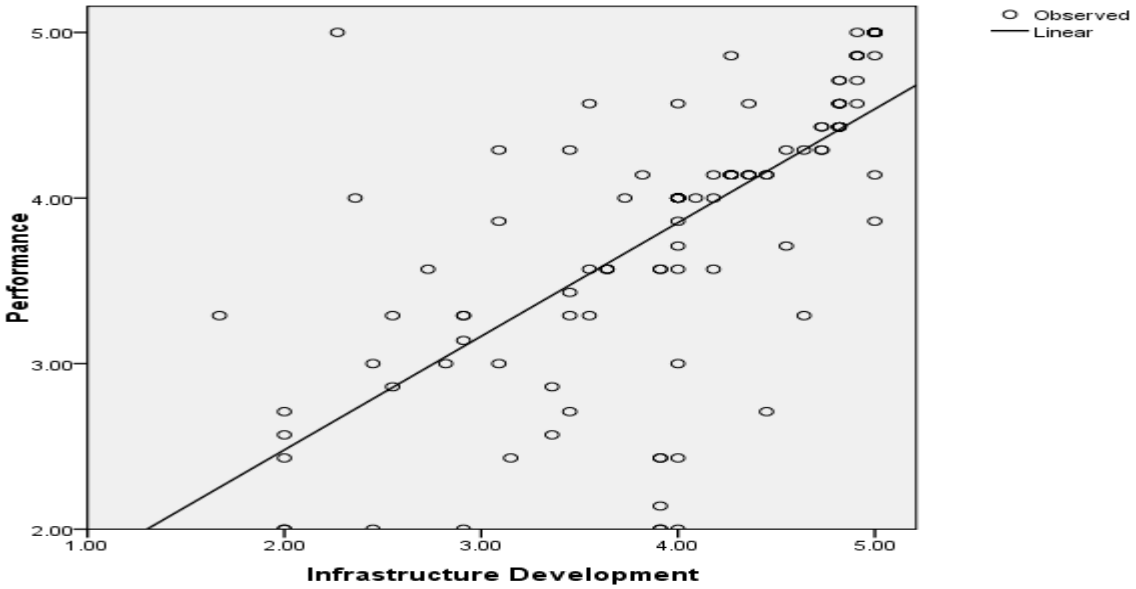

Figure 4.12: Linear Relationship between Infrastructure Development and Performance

Regression analysis was conducted to empirically determine whether infrastructure development allocation was a significant determinant of performance in water Services Board in Kenya. Regression results in Table 4.32 indicate the goodness of fit for the regression between infrastructure development allocation and performance was satisfactory. An R squared of 0.686 indicates that 68.6% of the variations in performance are explained by the variations in infrastructure development allocation. This implies that 31.4% of the unexplained variations in performance is accounted for by the other variables including staff development strategy, availability of resources and information and technology deployment.

Table 4.32: Model Summary for Infrastructure Development

Indicator	Coefficient
R	0.686
R Square	0.471
Adjusted R Square	0.466
Std. Error of the Estimate	0.6309

The overall model significance is presented in Table 4.33. An F statistic of 102.39 indicated that the overall model was significant since the significance of the F-statistic 0.000 is less than 0.05 meaning that null hypothesis is rejected and conclude that there is a significant relationship between infrastructure development allocation and performance of water Board Services. The findings imply that infrastructure development allocation was statistically significant in explaining performance of Water Services Board in Kenya. Results are in agreement with White, O'Connor, and Rowe (2004) who opined that unavailability of appropriate infrastructure could lead to excessive capital investments, support levels and inadequate organizational flexibility. Thus, strained access to infrastructure components like warehousing may have adverse implication for performance.

Table 4.33: ANOVA for Infrastructure Development

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	40.754	1	40.754	102.39	0.000
Residual	45.774	115	0.398		
Total	86.528	116			

The infrastructure development coefficients are presented in Table 4.34. The results show that infrastructure development allocation contributes significantly to the model since the p-value for constant and the gradient are less than 0.05. The findings imply that one positive unit change in infrastructure development allocation led to a change in performance at the rate of 0.686. This confirms the positive effect of infrastructure development allocation on performance. The fitted equation is as shown below

$Y= 1.106 + 0.686X_3$

Table 4.34: Coefficients of Infrastructure Development

Variable	Beta	Std. Error	t	Sig.
Constant	1.106	0.278	3.982	0.000
Infrastructure Development	0.686	0.068	10.119	0.000

4.8 Strategic Information and Technology Deployment

This section presents the results and discussions of the fourth objective of the study. The results outlined are reliability tests, sampling adequacy, factor analysis, descriptive statistics and the inferential statistics.

4.8.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on information and technology deployment, a coefficient of 0.871 was found as shown in Table 4.35. These results corroborates findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the information and technology deployment variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

Table 4.35: Reliability Test for Information and Technology Deployment

Variable	Information and Technology
Number of items	10
Cronbach's Alpha	0.871

4.8.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.36 showed that the KMO statistic was 0.782 which was significantly high; that is greater than the critical level of significance of the test which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 654.423 with 45 degrees of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.36. These results provide an excellent justification for further statistical analysis to be conducted.

Table 4.36: Information and Technology Deployment KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.782
Bartlett's Chi- Square	654.423
Bartlett's df	45
Bartlett's Sig.	0

4.8.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 10 statements on information and technology deployment can be factored into 1 factor. The total variance explained by the extracted factor is 47.133% as shown in Table 4.37.

Table 4.37: Information and Technology Deployment Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.713	47.133	47.133	4.713	47.133	47.133
2	1.807	18.067	65.2			
3	1.007	10.072	75.272			
4	0.575	5.749	81.021			
5	0.503	5.035	86.055			
6	0.449	4.487	90.543			
7	0.322	3.225	93.767			
8	0.276	2.758	96.526			
9	0.208	2.078	98.604			
10	0.14	1.396	100			

Extraction Method: Principal Component Analysis.

Table 4.38 shows the factor loadings for information and technology deployment statements. All the ten factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Table 4.38: Information and technology Deployment Factor Analysis Component Matrix

Statement	Component
The Internet is helping us to enlarge existing markets by cutting through many of the distribution and marketing barriers.	0.782
Technology has encouraged our company to develop innovative ways of advertising, delivering and supporting our staffs and customer care.	0.765
E-commerce is certainly a very effective tool when it comes to establishing customer relations and provision of access to global markets.	0.749
Through technology our company has been able to increase the market size and market structure.	0.748
To achieve organizational competitiveness an institution should adopt technology in its operations.	0.746
E-commerce lowers information and transaction costs for operating and providing a cheap and efficient way to strengthen customer-supplier relations.	0.678
Technology through electronic business is very effective at reducing the costs of attracting new customers	0.633
Technology is required to enhance and maintain communication and accountability for all relevant managers and operational employees	0.609
Adoption of technology promotes high levels of efficiency and performance within our organisation.	0.59
Adoption of technology has a significant correlation with organizational performance.	0.508

Extraction Method: Principal Component Analysis.
a 1 components extracted.

4.8.4 Descriptive Analysis

The respondents were asked to indicate the extent to which information and technology deployment strategy affect resource allocation in Water Services Board. Figure 4.13 illustrates that 50% of the respondents indicated to a very high extent while 29% indicated to a high extent, 13% indicated to a moderate extent, 7% indicated to a low extent and 1% indicated to a very low extent. The findings imply that information and technology deployment affects resource allocation positively. This therefore implies that those firms that are embracing information and

technology are allocating their resources wisely and appropriately thus improved performance of water service board.

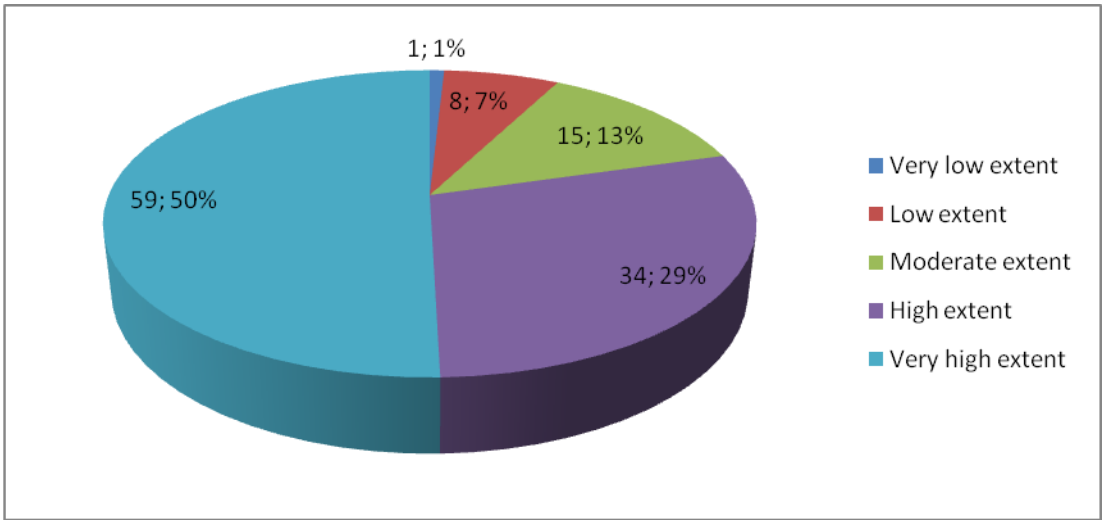

Figure 4.13: Extent to which Information and Technology Deployment affect Resource Allocation

The fourth objective of the study was to establish the extent to which information and technology deployment affects the performance of Water Services Boards in Kenya. Table 4.39 illustrates that 82% of the respondents agreed that technology was required to enhance and maintain communication and accountability for all relevant managers and operational employees, 75.2% agreed that adoption of technology had a significant correlation with organizational performance and 76.1% agreed that adoption of technology promotes high levels of efficiency and performance within their organisation. Seventy eight point six (78.6) percent of the respondents agreed that to achieve organizational competitiveness an institution should adopt technology in its operations, similarly 80.4% agreed that technology through electronic business was very effective at reducing the costs of attracting new customers and 87.2% agreed that E-commerce was certainly a very effective tool when it came to establishing customer relations and provision of access to global markets.

Technological developments can significantly alter the demand for an organization's or industry's products or service (Barnat, 2005; Business teacher, 2012). Similarly,

Ginsberg and Venkatraman (2002) used the ability to electronically file (e-file) tax returns as the instrumental variable to study the effect of technology adoption on funds raised in the for-profit universe. They looked into the influence of competitive posture on firm's investment in new information technology and hence efficiency in terms of funds raised by the firm. The findings of Ginsberg and Venkatraman suggested that such competitive postures indicate investment in new technology and hence efficiency.

In addition, 85.5% of the respondents agreed that through technology their company had been able to increase the market size and market structure, 77.8% agreed that the Internet was helping them to enlarge existing markets by cutting through many of the distribution and marketing barriers and 80.3% agreed that E-commerce lowered information and transaction costs for operating and providing a cheap and efficient way to strengthen customer-supplier relations. Finally, 77.8% of the respondents agreed that technology had encouraged their company to develop innovative ways of advertising, delivering and supporting their staffs and customer care. The mean score for responses for this section was 4.04 which indicated that majority of the respondents agreed that information and technology deployment was a key determinant of performance for water services board.

The study findings are in line with the views of Babatunde, and Adebisi (2012) who asserted that technological factors include technological aspects such as research and development activity, automation, technology incentives and the rate of technological change. They can determine barriers to entry, minimum efficient production level and influence outsourcing decisions. Furthermore, technological shifts can affect costs, quality, and lead to innovation. A technological innovation can have a sudden and dramatic effect on the environment of a firm.

Table 4.39: Information and Technology Deployment Descriptive Statistics

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Technology is required to enhance and maintain communication and accountability for all relevant managers and operational employees	2.6%	7.7%	7.7%	65.8%	16.2%	3.85
Adoption of technology has a significant correlation with organizational performance.	0.0%	6.8%	17.9%	49.6%	25.6%	3.94
Adoption of technology promotes high levels of efficiency and performance within our organisation.	1.7%	11.1%	11.1%	45.3%	30.8%	3.92
To achieve organizational competitiveness an institution should adopt technology in its operations.	2.6%	12.8%	6.0%	60.7%	17.9%	3.79
Technology through electronic business is very effective at reducing the costs of attracting new customers	0.0%	5.1%	14.5%	30.8%	49.6%	4.25
E-commerce is certainly a very effective tool when it comes to establishing customer relations and provision of access to global markets.	0.0%	3.4%	9.4%	28.2%	59.0%	4.43
Through technology our company has been able to increase the market size and market structure.	0.0%	5.1%	9.4%	43.6%	41.9%	4.22
The Internet is helping us to enlarge existing markets by cutting through many of the distribution and marketing barriers.	5.1%	12.8%	4.3%	48.7%	29.1%	3.84
E-commerce lowers information and transaction costs for operating and providing a cheap and efficient way to strengthen customer-supplier relations.	2.6%	9.4%	7.7%	37.6%	42.7%	4.09
Technology has encouraged our company to develop innovative ways of advertising, delivering and supporting our staffs and customer care.	4.3%	12.0%	6.0%	29.9%	47.9%	4.05
Average	1.9%	8.6%	9.4%	44.0%	36.1%	4.04

4.8.5 Relationship between Information and Technology deployment and Performance

Table 4.40 shows the correlation results which indicate that there was a positive and significant relationship between information and technology deployment and performance of Water Services Board. This reveals that any positive change in information and technology deployment led to increased performance of Water Services Board. The relationship has been illustrated by the correlation co-efficient of 0.684, implying a positive relationship between information and technology deployment and performance of Water Services Board in Kenya. This was also evidenced by the p value of 0.000 which is less than that of critical value (0.05)

Table 4.40: Relationship between Information and Technology Deployment and Performance

Variable		Performance	Information and Technology
Performance	Pearson Correlation	1	
	Sig. (2-tailed)		
Information and Technology	Pearson Correlation	0.684	1
	Sig. (2-tailed)	0.000	

The findings on Figure 4.14 show the relationship between information and technology deployment and performance of Water Services Board. The figure indicates that a positive relationship exists between information and technology deployment and performance of Water Services Board in Kenya.

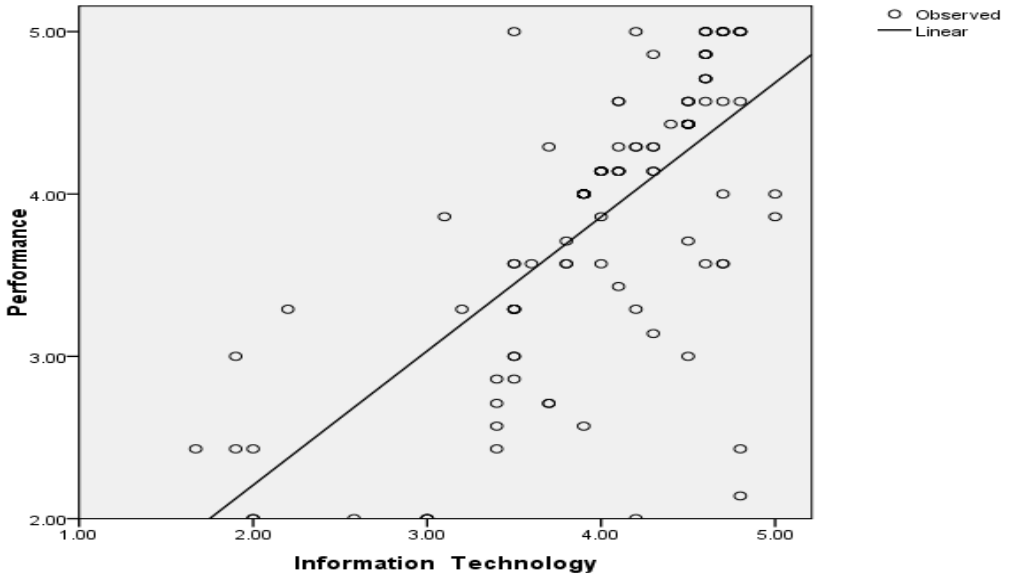

Figure 4.14: Linear Relationship between Information and Technology deployment and Performance

Regression analysis was conducted to empirically determine whether information and technology deployment was a significant determinant of performance in water Services Board in Kenya. Regression results in Table 4.41 indicate the goodness of fit for the regression between information and technology deployment and performance was satisfactory. An R squared of 0.468 indicates that 46.8% of the variations in performance are explained by the variations in information and technology deployment. This implies that 53.2% of the unexplained variations in performance is accounted for by the other variables including staff development strategy, availability of resources and infrastructure development allocations.

Table 4.41: Model Summary for Information and Technology Deployment

Indicator	Coefficient
R	0.684
R Square	0.468
Adjusted R Square	0.463
Std. Error of the Estimate	0.63283

The overall model significance is presented in Table 4.42. An F statistic of 101.063 indicated that the overall model was significant since the significance of the F-statistic 0.000 is less than 0.05 meaning that null hypothesis is rejected and conclude that there is a significant relationship between information and technology deployment and performance of water Board Services. The findings imply that information and technology deployment was statistically significant in explaining performance of Water Services Board in Kenya. The study findings support views those of Barnat (2005) who argued that technological change can decimate existing businesses and even entire industries, since it shifts demand from one product to another. Moreover, changes in technology can affect a firm's operations as well its products and services. He further said these changes might affect processing, methods, raw materials and service delivery. Therefore, marketers should keep track of the advancement and invention in technology, nature of changes in technological environment as well as the diversity in technology in their operating environment

Table 4.42: ANOVA for Information and Technology Deployment

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	40.473	1	40.473	101.063	0.000
Residual	46.055	115	0.4		
Total	86.528	116			

The information and technology deployment coefficients are presented in Table 4.43. The results show that information and technology deployment contributes significantly to the model since the p-value for the gradient are less than 0.05. The findings imply that one positive unit change in information and technology deployment led to a change in performance at the rate of 0.826. This confirms the positive effect of information and technology deployment on performance. The fitted equation is as shown below.

$Y= 0.554 + 0.826X_4$

Table 4.43: Coefficients of Information and Technology Deployment

Variable	Beta	Std. Error	t	Sig.
Constant	0.554	0.334	1.661	0.099
Information and Technology	0.826	0.082	10.053	0.000

4.9 Multivariate Regression

A multiple regression analysis was conducted to investigate the joint causal relationship between the independent and dependent variables. Regression results in table 4.44 indicate that the goodness of fit for the regression of independent variables and performance is satisfactory. An R squared of (0.736) indicates that (73.6%) of the variances in the performances are explained by the variances in the resource allocation strategies employed in the organization.

The regression equation is as follows;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X4$$

Where:

Where; Y is the performance of water services, X_1, X_2, X_3, and X_4 represents staff development strategy, availability of finances, infrastructure development, information and technology deployment respectively.

Table 4.44: Overall Model Fitness

Indicator	Coefficient
R	0.858
R Square	0.736
Adjusted R Square	0.726
Std. Error of the Estimate	0.45203

Table 4.45 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. This was supported by an F statistic of 77.866 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. These results imply that the independent variables are good predictors of performance.

Table 4.45: Analysis of Variance (ANOVA)

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	63.642	4	15.911	77.866	0.000
Residual	22.885	112	0.204		
Total	86.528	116			

Regression of coefficients results in Table 4.46 shows that there is a positive and significant relationship between staff development, finances availability, infrastructure development, information and technology deployment and Performance. These were supported by beta coefficients of 0.332, 0.464, 0.159 and 0.223 respectively. These results show that a change in either of the variables will definitely lead to a positive change in performance.

Table 4.46: Overall Regression Coefficients

Variable	Beta	Std. Error	t	Sig.
Constant	-0.677	0.265	-2.553	0.012
Staff Development	0.332	0.084	3.95	0.000
Financial Resources	0.464	0.082	5.692	0.000
Infrastructure Development	0.159	0.07	2.264	0.026
Information Technology	0.223	0.084	2.662	0.009

$$Y= -0.677 + 0.332X_1 + 0.464X_2 + 0.159X_3 + 0.223X_4 + \varepsilon$$

4.10 Government Regulation

This section presents the results and discussions of the moderating variable. The results outlined are reliability tests, sampling adequacy, factor analysis, descriptive statistics and the inferential statistics.

4.10.1 Reliability Tests

Using Cronbach's Coefficient Alpha test on information and technology deployment, a coefficient of 0.871 was found as shown in Table 4.47. These results corroborates findings by Saunders Lewis and Thornhill (2009) and Christensen, Johnson and Turner (2011) who stated that scales of 0.7 and above, indicate satisfactory reliability. Based on these recommendations, the statements under the information and technology deployment variable of this study were concluded to have adequate internal consistency, therefore, reliable for the analysis and generalization on the population.

Table 4.47: Reliability Test for Government Regulation

Variable	Government Regulation
Number of items	11
Cronbach's Alpha	0.843

4.10.2 Sampling Adequacy

To examine whether the data collected was adequate and appropriate for inferential statistical tests such as the factor analysis, regression analysis and other statistical tests, two main tests were performed namely; Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Barlett's Test of Sphericity. For a data set to be regarded as adequate and appropriate for statistical analysis, the value of KMO should be greater than 0.5 (Field, 2000).

Findings in Table 4.48 showed that the KMO statistic was 0.789 which was significantly high; that is greater than the critical level of significance of the test

which was set at 0.5 (Field, 2000). In addition to the KMO test, the Bartlett's Test of Sphericity was also highly significant (Chi-square = 519.314 with 55 degrees of freedom, at $p < 0.05$). The results of the KMO and Bartlett's Test are summarized in Table 4.48. These results provide an excellent justification for further statistical analysis to be conducted.

Table 4.48: Government Regulation KMO Sampling Adequacy and Bartlett's Sphericity Tests

Kaiser-Meyer-Olkin Measure	0.789
Bartlett's Chi- Square	519.314
Bartlett's df	55
Bartlett's Sig.	0

4.10.3 Factor Analysis

Factor analysis was conducted after successful testing of validity and reliability using KMO coefficient and cronbach alpha results. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an eigen value of 1 or more indicates a unique factor. Total Variance analysis indicates that the 11 statements on government regulation can be factored into 1 factor. The total variance explained by the extracted factor is 40.61% as shown in Table 4.49.

Table 4.49: Government Regulation Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.467	40.611	40.611	4.467	40.611	40.611
2	1.58	14.363	54.974			
3	1.004	9.123	64.097			
4	0.922	8.38	72.476			
5	0.818	7.441	79.917			
6	0.52	4.727	84.644			
7	0.452	4.112	88.756			
8	0.411	3.736	92.492			
9	0.337	3.064	95.556			
10	0.317	2.879	98.435			
11	0.172	1.565	100			

Extraction Method: Principal Component Analysis.

Table 4.50 shows the factor loadings for government regulation statements. All the eleven factors attracted coefficients of more than 0.4 hence all the statements were retained for analysis. According to Rahn (2010) and Zandi (2006) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Black (2002) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions.

Table 4.50: Government Regulation Factor Analysis Component Matrix

Statement	Component
Regulations helps the Board ensure that the regulatory management systems of the Board are kept up to date.	0.788
Putting up infrastructure for water requires heavy investment.	0.749
The burdens resulting from government regulation will likely hinder service delivery in the Board	0.749
Regulation by the Government provide clarity about what regulatory requirements apply to the Water Boards	0.745
Regulation helps ensure level playing field for business/ customers of the Water Board	0.733
Regulation from the Government help the Water Board to address regulatory risks & prevent non-compliance	0.594
The overall level of regulation in the Kenya is an obstacle to your business's success	0.59
Complying with Government regulation is the greatest challenge	0.519
There has been a backlog of investments into this sector creating a challenge for the country.	0.486
Good regulatory advice from the Government helps the Board make confident investment decisions	0.474
Unwillingness by some local authorities to implement certain aspects of the on-going water reforms.	0.449

Extraction Method: Principal Component Analysis.
a 1 components extracted.

4.10.4 Descriptive Analysis

The respondents were asked to indicate the extent to which Government regulation affect resource allocation in Water Services Board. Figure 4.15 reveals that 39% of the respondents indicated to a very high extent while 27% indicated to a high extent, 21% indicated to a low extent, 7% indicated to a moderate extent and 6% indicated to a very low extent. The findings imply that government regulations affect resource allocation to a high extent since the government ensures that the parastatals offering services to the citizens offer quality services and ensures effective service delivery, hence the need to put in place policies that remove the cartels and middle men in offering essential services to Kenyan citizens.

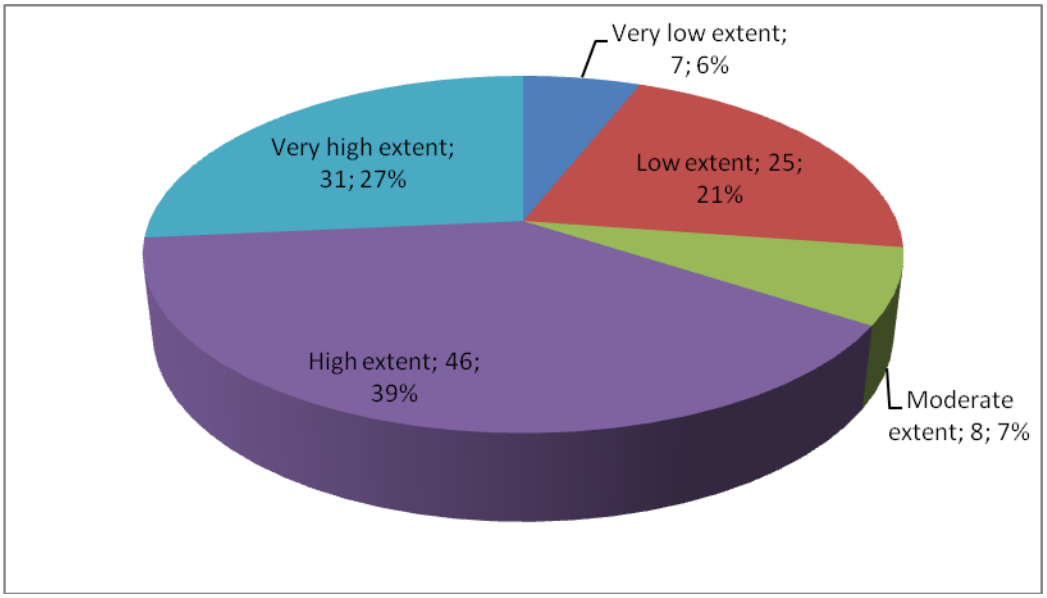

Figure 4.15: Extent to which Government Regulation affect Resource Allocation

The fifth and last objective of the study was to establish the moderating effect of government regulations on the performance of Water Services Boards in Kenya. Results in Table 4.51 shows that 64.1% of the respondents agreed that complying with Government regulation was the greatest challenge, 72.6% agreed that putting up infrastructure for water requires heavy investment, 70.1% agreed that there has been a backlog of investments into this sector creating a challenge for the country and 78.6% agreed that the overall level of regulation in Kenya was an obstacle to business's success.

In furtherance, 69.2% of the respondents agreed that the burdens resulting from government regulation are likely hinder service delivery in the Board, 76% agreed that regulation helped ensure level playing field for business/ customers of the Water Board, 79.5% agreed that regulations helped the Board to ensure that the regulatory management systems of the Board are kept up to date and 74.3% agreed that regulation by the Government provided clarity about what regulatory requirements apply to the Water Boards.

In addition, 84.7% of the respondents agreed that regulation from the Government helped the Water Board to address regulatory risks & prevent non-compliance, 70.1% agreed that good regulatory advice from the Government helps the Board make confident investment decisions and 78.6% agreed that regulation curbs the unwillingness by some local authorities to implement certain aspects of the on-going water reforms. The findings are in tandem with those of Anyadike-Danes *et al.* (2008) who analyzed the relationship between regulation and small business performance. and found that regulation generates multiple influences which can be enabling and motivating as well as constraining. These influences, operating simultaneously, shape the activities of small business owners and other stakeholders whose actions underpin small business performance, regardless of the owner and manager's awareness of such regulations. The impact of regulation on business performance depends on how business owners and other stakeholders respond to specific regulations. Agents' adaptations to regulation, and thus the business performance outcomes that result, depend on firms' internal resources and capabilities, and on the external product, labour and capital market conditions.

Table 4.51: Government Regulation Descriptive Statistics

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Complying with Government regulation is the greatest challenge	4.3%	15.4%	16.2%	43.6%	20.5%	3.61
Putting up infrastructure for water requires heavy investment.	3.4%	14.5%	9.4%	37.6%	35.0%	3.86
There has been a backlog of investments into this sector creating a challenge for the country.	0.9%	12.0%	17.1%	57.3%	12.8%	3.69
The overall level of regulation in the Kenya is an obstacle to your business's success	0.0%	6.0%	15.4%	69.2%	9.4%	3.82
The burdens resulting from government regulation will likely hinder service delivery in the Board	4.3%	11.1%	15.4%	52.1%	17.1%	3.67
Regulation helps ensure level playing field for business/ customers of the Water Board	0.9%	14.5%	8.5%	41.0%	35.0%	3.95
Regulations helps the Board ensure that the regulatory management systems of the Board are kept up to date.	4.3%	10.3%	6.0%	42.7%	36.8%	3.97
Regulation by the Government provide clarity about what regulatory requirements apply to the Water Boards	0.0%	3.4%	22.2%	33.3%	41.0%	4.12
Regulation from the Government help the Water Board to address regulatory risks & prevent non-compliance	1.7%	6.0%	7.7%	46.2%	38.5%	4.14
Good regulatory advice from the Government helps the Board make confident investment decisions	0.9%	13.7%	15.4%	43.6%	26.5%	3.81
Unwillingness by some local authorities to implement certain aspects of the on-going water reforms.	6.0%	11.1%	4.3%	43.6%	35.0%	3.91
Average	2.4%	10.7%	12.5%	46.4%	28.0%	3.87

4.10.5 Moderating Effect of Government Regulation

This section provides results of analysis on the effect of the independent variable on the dependent variable before and after introducing a moderating variable. The independent variable herein is; resource allocation strategy with government regulation as the moderating variable. R square also referred to as coefficient of determination and significance tests were done to determine the effects of the predictor variable on the dependent variable. The R square and the overall significance of the model were analyzed before and after introducing the moderating variable to independent variable. The introduction of the moderating variable introduces an interaction effect on the prediction strength of the independent variable on the dependent variable. The interaction effect leads to either a stronger or weaker prediction power of the independent variable on the dependent variable. In this study, interaction effect was created by use of the product between predictor variable and the moderating variable.

Table 4.52 shows the results of the R-square before involving the moderating variable (government regulation) and after incorporating the moderating variable to the independent variable (resource allocation strategy). The results indicate that government regulation had a positive moderating effect on resource allocation strategies (R squared change of 0.011) which translates to 1.51% change in the R-square. Results show that after introducing the moderating variable (government regulation) the R- square changed from 0.72 to 0.73 and was significant (0.000). This means government regulation moderates resource allocation strategies and is statistically significant.

Table 4.52: Moderation Tests Using R Square and Significance Change

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df 2	Sig. F Change
1	.848 a	0.72	0.717	0.45921	0.72	295.334	1	115	0.000
2	.855 b	0.73	0.726	0.45229	0.011	4.545	1	114	0.035

a Predictors: (Constant), Resource Allocation strategies

b Predictors: (Constant), Resource allocation strategies, Resource allocation strategies* Govt

The ANOVA results for resource allocations strategies with moderating variable in Table 4.53 also indicates that the model was significant with F=154.492 and p=0.000<0.05 meaning that resource allocation strategies and government regulation had significant effect on performance of water services board in Kenya. A further test on the beta coefficient of the resulting model in Table 4.51 shows a significant change in the beta coefficients before and after the introduction of the moderating variable. The model remained statistically significant with p value= 0.035 < 0.05.

Table 4.53: ANOVA Test for Resource Allocation Strategies with Moderating Variable

Model	**Indicator**	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	62.277	1	62.277	295.334	0.000
	Residual	24.25	115	0.211		
	Total	86.528	116			
2	Regression	63.207	2	31.604	154.492	0.000
	Residual	23.32	114	0.205		
	Total	86.528	116			

a Dependent Variable: Performance

b Predictors: (Constant), Resource allocation strategies

c Predictors: (Constant), Resource alllocation strategies, Resource allocation strategies_ Govt Regulation

In order to determine the significance of coefficients Table 4.54 shows the coefficients of the regression equations for both models. Model 1 indicates that the coefficient of for resource allocation strategies (1.153) was positive and significant. In model 2 the interaction term for allocation strategies * Government regulation was found to be significant implying that government regulation was found to have significant moderation effect in the relationship between resource allocation strategies and performance.

Table 4.54: Coefficients with Moderation _Government Regulation

Model	Variable	Beta	Std. Error	t	Sig.
1	Constant	-0.614	0.263	-2.331	0.021
	Resource allocation strategies	1.153	0.067	17.185	0.000
2	Constant	-1.225	0.386	-3.169	0.002
	Resource allocation strategies	1.528	0.188	8.139	0.000
	Resource allocation strategies*Government Regulation	-0.056	0.026	-2.132	0.035

a Dependent Variable: Performance

Model

1) $Y= -0.614 + 1.153X$

2) $Y= -1.225+ 1.528X - 0.056 X *Z$

4.11 Hypothesis Testing

Hypotheses testing required the use of multiple regression analysis. This was performed using the field data and the results interpreted according to the R^2, beta coefficients and P values at $P < 0.005$ significance level. The variables under study were regressed on performance indicators and a composite performance measure computed to reflect overall organizational performance. Five research hypotheses that the study sought to test are presented in Table 4.55 below.

Table 4.55: Hypothesis Testing Results

Variables	R^2	Beta coefficient	P-value	Findings	Verdict
Strategic staff development	0.513	0.877	0.000	Significant	Reject null hypothesis
Strategic financial resources	0.592	0.898	0.000	Significant	Reject null hypothesis
Strategic infrastructural development	0.471	0.686	0.000	Significant	Reject null hypothesis
Strategic technology deployment	0.468	0.826	0.000	Significant	Reject null hypothesis
Government regulations	0.730	-0.056	0.035	Significant	Reject null hypothesis

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of major findings of the study, relevant discussions, conclusions and the necessary recommendations. The study sought to establish the effect of resource allocation strategies on the performance of Water Services Board in Kenya. The summary of key findings, conclusions and recommendations is done in line with the objectives of the study based on the output of the descriptive and inferential statistical analyses guided to test the research hypothesis of the study.

5.2 Summary of the Findings

The general objective of the study was to establish the effect of resource allocation strategy on the performance of Water Services Board in Kenya. The key finding was that the water services board management was concerned with attaining high profits and thus improved organizational performance which would translate into superior competitive advantage. The pressure to provide water to the rapidly growing population in Kenya has made it mandatory for the water services boards to come up with clear cut strategies to meet these demands. This has been the major motivation for the adoption of strategic planning, with clear cut throat to resource allocation strategies to enhance performance of the institutions.

5.2.1 Strategic Staff Development and Performance

The first objective of the study was to evaluate the influence of strategic staff development on the performance of Water Services Board in Kenya. The study established that a significant number of organizations put emphasis on human capital which is crucial to the recognition and exploitation of business opportunities. Most of the organization focused on developing human resources who help in identifying and operating in markets. The organizations evaluated their resources and capabilities

and understood their value for the firm. The majority of the respondents agreed that more emphasis on employees' training and empowerment was considered in their organizations, employees' better knowledge of general decisions of the organization was of utmost benefit to the organization and reduction of the number of required personnel to perform organizational tasks ensured efficiency in the utilisation of human resources. Regression and correlation results indicated that there was a positive and significant relationship between staff development and performance of water services board in Kenya.

5.2.2 Strategic Financial Resources and Performance

The second objective of the study was to establish the influence of strategic financial resources on the performance of Water Services Boards in Kenya. The study findings indicated that financial resources are very essential for effective service delivery within the water service boards and thus improved performance. The respondents agreed that financial resources are necessary for effective implementation of the Board's strategic Plan, inadequacy of financial resources within the Board was supplemented through borrowing so as to be able to attain the goals of the board and financial sustainability was a must key goal among organizations if they were going to implement the strategic plans. The findings imply that availability of financial resources affects the performance of water service board greatly and thus the correct amount of finances should be allocated to the core operations of the organization to enhance profitability and increased performance. Regression and correlation results indicated that there was a positive and significant relationship between availability of financial resources and performance of water services board in Kenya.

5.2.3 Strategic Infrastructure Development and Performance

The third objective of the study was to assess the influence of strategic infrastructure development allocations on the performance of Water Services Boards in Kenya. The study findings indicated that infrastructure development allocations had a positive influence on performance of water services board in Kenya. The majority of the respondents agreed that clear communication channels are required to enhance and

maintain communication and accountability for all relevant managers and operational employees, the government and its development partners should continue to allocate huge financial resources to finance infrastructure development and that a trail of time and cost overruns on building and infrastructure projects in public and private sector, attributable to numerous factors that come into play during the projects' implementation. The findings imply that infrastructure development allocations affect the performance of water service board greatly and thus measures to ensure effective infrastructural development should be put in place to enhance profitability and increased performance. Therefore, it is imperative for managers in the public sector to install proper communication structures in their organizations to boost the planning process. Regression and correlation results indicated that there was a positive and significant relationship between infrastructure development allocations and performance of water services board in Kenya.

5.2.4 Strategic Information and Technology Deployment and Performance

The fourth objective of the study was to establish the influence of strategic information and technology deployment on the performance of Water Services Boards in Kenya. Deployment of information and technology gives a strong mile hold in achieving competitive advantage, this has seen most of the institutions adopting new technological changes so as to win many customers and retain them through offering high quality services. The respondents agreed that technology advancement had significantly promoted market-like forms of production and distribution in their company, adoption of technology promoted high levels of efficiency and performance within their organization.

The respondents further agreed that technology was required to enhance and maintain communication and accountability for all relevant managers and operational employees, technology through electronic business was very effective at reducing the costs of attracting new customers and E-commerce was certainly a very effective tool when it comes to establishing customer relations and provision of access to global markets. The study findings indicated that adoption of technology promotes high levels of efficiency and performance within their organisation. This therefore implies

that those firms that are embracing information and technology are allocating their resources wisely and appropriately thus improved performance of water service board. Regression and correlation results indicated that there was a positive and significant relationship between strategic adoption of technology and water services board in Kenya.

5.2.5 Government Regulations and Performance

The fifth and last objective of the study was to establish the moderating effect of government regulations on the performance of Water Services Boards in Kenya. The study findings indicated that supply of clean portable water as well as good sanitation services is a moral responsibility of any government and therefore the Kenya government will have to go out of its way and identify all plausible ways of generating finance. The study found out that a regulatory frame work consists of set of rules and processes that bind the water and sanitation services providers in the country, including the formal rules and informal rules. It also defines how the main regulatory functions are allocated to various institutions. The study also showed easing of the regulatory framework could generate increased access to water and sanitation services and improve the nature of this access with regards to the availability, affordability and sustainability of these services. The findings imply that government regulations affect resource allocation to a high extent since the government ensures that the institutions offering services to the citizens offer quality services and ensures effective service delivery, hence the need to put in place policies that remove the cartels and middle men in offering essential services to Kenyan citizens and in furtherance improve the organization performance.

5.3 Conclusions

The study sought to establish the effect of effect of resource allocation strategies on the performance of Water Services Board in Kenya. From the study findings, it can be concluded that resource allocation strategy have a significant effects on the performance of water services boards in Kenya. The results established that strategic staff development, strategic financial resources, strategic infrastructure development,

strategic information and communication technology and government regulations have a significant influence on performance of WSBs.

5.3.1 Strategic Staff Development and Performance

The study established that staff development strategy played the critical role in improving performance of water Services Boards. The study demonstrated that to improve performance and achieve competitive advantage, water services board should pursue proactive management approach that embraces skill and knowledge development through training coaching selection and retention of the best employees. Top management should put in place strategies and mechanisms that respond quickly to market changes. The study therefore concluded that the staff development strategy positively influenced performance of water Services Boards. Thus it is of utmost importance for institutions to carefully recruit the right people, nurture and retain them to ensure long term survival of their organizations.

5.3.2 Strategic Financial Resources and Performance

Strategic financial resources were found to be statistically significant in explaining performance of water Services Boards in Kenya. The higher the availability of financial resources the higher the strategy implementation rate hence the need to have a strong management structure and clear policies in place to improve performance. The study concluded that development of water services requires not only investment finance and good institutions but also trained, competent and committed staff and management. This would help in improving administrative and institutional capacity of the trust fund and the regulation authority. The study concludes that without financial resources the WSBs will not be able to implement strategies to improve performance. Adequate, suitable or appropriate factors of production (money, equipment, manpower, and land) need to be optimized and timely deployed in the process of generating value projects. However, the management has tried to attract and implement investments and in occasions where there were inadequate financial resources the Board was not able to implement some

of its projects and inadequacy of financial resources within the Board was therefore supplemented through borrowing so as to be able to attain the goals of the board.

5.3.3 Strategic Infrastructure Development and Performance

Strategic infrastructure development has a positive and significant relationship with performance of water services board. The study therefore concludes that clear communication channels are required to enhance and maintain communication and accountability for all relevant managers and operational employees, the government and its development partners should continue to allocate huge financial resources to finance infrastructure development. The study concludes that infrastructure development allocations affect the performance of water service board greatly and thus measures to ensure effective infrastructural development should be put in place to enhance profitability and increased performance.

5.3.4 Strategic Information and Technology Deployment and Performance

The study indicated that the influence of strategic information and technology deployment on achieving superior performance is by increasing internal efficiencies and promoting better handling of the external environment. At water services boards, information technology is being used to enhance internal operation systems capabilities by enhancing adoption of information systems for faster delivery; enhancing payment processing; enhancing cut in cost and increase efficiency; and enhancing diversification of processes. In addition, adoption of information technology also enhances effectiveness of external activities for instance the use of electronic marketing to improve sales. Information technology is used to support operational level efficiencies to reduce cost and increase overall business efficiency. The operational efficiencies help firms in gaining superior performance by ensuring low cost and high quality services.

5.3.5 Government Regulations and Performance

The study concludes that government regulation had a significant moderating effect on the performance of water services board. Regulation of water services boards has

helped ensure level playing field for business/ customers of the Water Board, regulations has also helped the Board to ensure that the regulatory management systems of the Board are kept up to date and regulation by the Government provided clarity about what regulatory requirements apply to the Water Boards. The study therefore concludes that a regulatory frame work consists of set of rules and processes that bind the water and sanitation services providers in the country, including the formal rules and informal rules. It also defines how the main regulatory functions are allocated to various institutions. It further concluded that easing of these regulatory frameworks could generate increased access to water and sanitation services and improve the nature of this access with regards to the availability, affordability and sustainability of these services.

5.4 Recommendations

Based on the results, findings and conclusions the following recommendations have been deciphered. It is clear that resources are critical and important to the success and good performance of any organizations. The contribution of human, physical, technological resources and organizational capabilities was highly significant to the success of water service boards. It is thus recommended that managers in water companies optimize the resources available and develop strategies of seeking new resources to enhance the performance of such organizations.

5.4.1 Strategic Staff Development and Performance

Since staff development was found to be statistically significant in explaining performance of water services board. The study recommends that water service board management should initiate a policy of providing opportunities for leadership development for its staff. This will help them to engage closely and creatively with activities that will improve the strategic performance of the organization. The study also recommends that water services board executive should demonstrate commitment toward empowering company employees, and to develop staff to fill future vacancies.

The study recommends that the water services board should ensure that they have the right resources in the organization and allocated well for the right purpose and at the right time. The water services board management needs to provide strict accountability measures for its staff so that all resource allocation decisions are thoroughly vetted, and that there is monitoring system for all allocations. This would also ensure that all resource allocation decisions serve the best interest of the organization.

5.4.2 Strategic Financial Resources and Performance

Availability of finances was found to be statistically significant in explaining performance of water service board. It is therefore, recommended that the government increases funds meant for water infrastructure development and implement fully the transfer plan of physical assets and staff. A long term investment plan would help water services board to attain sector bench marks as well as provide financial gaps for financing by the Government. The study therefore recommends that the board should develop one as well as linking its five year strategic plans to the business plans of the water service providers under its jurisdiction.

5.4.3 Strategic Infrastructure Development and Performance

Strategic infrastructure development has a positive and significant relationship with performance of water services board. Water services boards should simplify its hierarchy structures to ensure easier information flows, more collaboration among the personnel, and teamwork. This is likely to help improve staff understanding of the strategic objectives and align their efforts towards attainment of those goals. The management of water services board should undertake policy modifications that are geared towards devolving decision making and authority to staff at all levels so that they feel empowered to act in areas of their expertise for the benefit of the organization as a whole. This is because empowered employees are likely to be more satisfied and committed to the organization.

5.4.4 Strategic Information and Technology Deployment and Performance

Information and technology deployment was found to have a positive and significant relationship with performance of water services board in Kenya. Water services boards should be on top of the game to ensure they keep pace with the rapid changes in technology. Customer requirements are fast changing. The study has established that information and technology deployment enhances performance. Thus, by promoting strategic adoption of technology there should be a high level of efficiency and reduction in cost. This also improves customer convenience and speed of service delivery. This also improves customer convenience and speed of service delivery. Water services Board should therefore strive to ever improve their technological capacity to preserve and grow their market share and customer base.

5.4.5 Government Regulations and Performance

The study recommended that for the regulations and regulatory framework to be successful, they must be accessed not only on how they drive utilities to greater efficiency and protect existing customers, but also on what role they play in ensuring that the services reach the poor in the communities while still being cost effective. It further recommends for easing of these regulatory frameworks in order to generate increased access to water and sanitation services and improve the nature of this access with regards to the availability, affordability and sustainability of these services.

5.5 Areas for Further Study

The study investigated the effect of resource allocation strategy on performance of water service boards in Kenya. Further research should be undertaken in other parastatals to find out the effect of resource allocation strategy on performance.

Further study should be carried out in other service industries to establish if resource allocation strategy has effects on performance. The operating environment, both external and internal have become very turbulent and thus a study should be done to show how firms should cope with the volatile environment by formulating relevant

strategies and effectively implementing them to deal with the ever changing environment. Further study should also be done to establish effects of resource allocation on performance in private companies in Kenya. A study comparing strategic implementation of a private and public firm would seem likely to lead to new insights and therefore enrich the efforts that have been made in this study.

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APPENDICES

Appendix I: Letter of Authorization

Date……

To

Managing Director

Water Service Board

P.O. Box …….

Dear Sir,

RE: Research Data on "Effect of Resource Allocation Strategy on the Performance of Water Services Boards in Kenya."

I am a student pursuing a Doctorate Degree in Business Administration at Jomo Kenyatta University of Agriculture and Technology. I am required to undertake a research as partial fulfillment for the award of this higher degree. My research topic is stated above and kindly request for your assistance in making my research a success.

The purpose of this letter is, therefore, to request you to grant permission to collect relevant data from your organization from selected respondents among your management staff. The information collected will be treated with utmost confidentiality and will be used for academic purposes only. The output of this research will add value to Water Service Boards in Kenya in terms of appreciating the role they play in service delivery through proper resource allocation.

I wish your Bank fruitful business.

Yours Sincerely,

Abdikarim Mohamed Sadiq.

HD433-C003-3431/12

School of Human Resource Development (SHRD)

Appendix II: Letter of Introduction

Date……

To……..

Dear Sir/Madam,

RE: COLLECTION OF RESEARCH DATA

My name is Abdikarim Mohamed Sadiq and a PhD student in Business Administration at Jomo Kenyatta University of Agriculture and Technology. Currently, I am carrying out a research on "*Effect of Resource Allocation Strategy on the Performance of Water Services Boards in Kenya".* I 'am in the process of gathering relevant data for this study. You have been identified as one of the collaborators and respondents in this study and kindly request for your assistance towards making this study a success.

I therefore kindly request you to take some time to respond to the attached questionnaire. I wish to assure you that your responses will be treated with confidentiality and will be used solely for the purpose of this study.

I thank you in advance for your time and responses. It will be appreciated if you can fill the questionnaire within the next 5days to enable early finalization of the study.

Yours Sincerely,

Abdikarim Mohamed Sadiq.

HD433-C003-3431/12

School of Human Resource Development (SHRD)

Appendix III: Questionnaire

This questionnaire is meant to collect data regarding the Effect of Resource Allocation Strategy on the Performance of Water Services Boards in Kenya. The data collected will be treated with utmost confidentiality and will be used for academic purposes.

Kindly respond to each item as truthfully and accurately as you can.

SECTION A: GENERAL INFORMATION

1) What is your gender? (tick one)

   Male ( ) Female ( )

2) Age(tick one)

   20 to 30 ( ) 30 to 40 ( ) 40 and above ( )

3) What is your academic background

   Certificate [ ] diploma [ ] undergraduate [ ] postgraduate [ ]

4) How long have you been working in your present capacity?

   Less than 3 years ( ) 3 to 5 years ( ) 5 to 7 years ( ) Over 7 years ( )

5) How long have you worked for the industry?

   1 to 2 years ( ) 5 to 10 years ( ) Over15year ( )

   2 to 5 years ( ) 10 to 15 years ( )

SECTION B: STAFF DEVELOPMENT STRATEGY

This section has statements regarding staff development strategy. Kindly respond with the response that matches you opinion. Please tick as appropriate in the boxes using a tick (√) or cross mark (x).

To what extent do staff development strategy affect the performance of water board?

Very low extent [ ]

Low extent [ ]

Moderate extent [ ]

High extent [ ]

Very high extent [ ]

What is your level of agreement to the following statements regarding staff development strategy in your organisation? Rate your response on a scale where:
1=strongly disagree, 2= disagree, 3=moderately disagree, 4= agree and 5= strongly agree.

Statement	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	1	**2**	**3**	**4**	**5**
HR, is a requirement for any effective quality development process and top management should give it a high level of attention and priority in their programs					
HR processes: selection, appraisal, rewards, and development require resource management for its effectiveness					
Resources are required for selection of the right candidates					
Labour is regarded as a resource in conventional economics					
Strategic questions include the allocation of scarce resources within an enterprise, and this					

includes the management of employees					
HRM functions 'address planned business changes' and are therefore 'considered strategic'					
More emphasis on employees' training and empowerment is considered in our organisation					
Employees' better knowledge of general decisions of the organization is of utmost benefit to the organisation					
Reduction of the number of required personnel to perform organizational tasks ensures efficiency in the Utilisation of human resources					
Managers follow a regular schedule in providing feedback to employees.					
We have a formal process of performance appraisals to provide feedback to employees.					
We use performance appraisals primarily to help employees identify new skills to develop.					
Managers closely monitor the day-to-day activities of employees to improve efficiency					

In your opinion how else do staff development strategy affect organizational performance?.....

.....

.....

SECTION C: AVAILABILITY OF FINANCES

This section has statements regarding availability of finances. Kindly respond with the response that matches you opinion. Please tick as appropriate in the boxes using a tick (√) or cross mark (x).

To what extent do availability of financial resources affect the performance of water board?

Very low extent [ ]

Low extent [ ]

Moderate extent [ ]

High extent [ ]

Very high extent [ ]

What is your level of agreement to the following statements regarding financial resources in your organisation? Rate your response on a scale where:

1=strongly disagree, 2= disagree, 3=moderately disagree, 4= agree and 5= strongly agree.

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Statement	**1**	**2**	**3**	**4**	**5**
Financial resources are very essential for effective service delivery within the water service board.					
Financial resources are necessary for effective implementation of the Board's strategic Plan.					
In occasions where there are inadequate financial resources the Board is not able to implement some of its projects.					
Inadequacy of financial resources within the Board is supplemented through borrowing so as to be able to attain the goals of the board.					
Aiming for financial sustainability must be a key					

goal among organizations if they are going to implement the strategic plans effectively					
Financial management of the resources within the board are hard to manage.					
Complete financial autonomy is hard to achieve and thus the board ensures they are sustainable.					

In what other ways does availability of financial resources influence performance of your

organization?.....

.....

.....

.....

SECTION D: INFRASTRUCTURE DEVELOPMENT

This section has statements Infrastructure Development. Kindly respond with the response that matches you opinion. Please tick as appropriate in the boxes using a tick (√) or cross mark (x).

To what extent does infrastructure development affect resource allocation in your organisation?

Very low extent [ ]

Low extent [ ]

Moderate extent [ ]

High extent [ ]

Very high extent [ ]

What is your level of agreement to the following statements regarding Infrastructure Development in your organisation? Rate your response on a scale where:

1=strongly disagree, 2= disagree, 3=moderately disagree, 4= agree and 5= strongly agree.

Statement	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	1	**2**	**3**	**4**	**5**
Clear communication channels are required to enhance and maintain communication and accountability for all relevant managers and operational employees					
The government and its development partners continue to allocate huge financial resources to finance infrastructure development					
A trail of time and cost overruns on building and infrastructure projects in public and private sector, attributable to numerous factors that come into play during the projects' implementation					

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Infrastructure development is always allocated the highest resources for any development					
There is enhanced speed of data transmission between various departments of organization due to infrastructural development					
Infrastructure development has led to simple and fast access to information to perform tasks					
Infrastructural development within the Board has led to easy classification of information and rapid preparation of comprehensive reports					
Investment in infrastructural development has led to reduction of duplications in tasks performed by the Board					
Infrastructural development has led to reduction of paper works and bureaucratic excessive formalities.					
As a result of infrastructural development performing tasks and organizational activities has become more effective					
Speed of transmission customers' demands to the organization has been achieved as a result of infrastructural development					

In your opinion how does infrastructure development allocation influence the performance of your organization?

.....

.....

SECTION E: INFORMATION AND TECHNOLOGY DEPLOYMENT

This section has statements regarding information and technology deployment. Kindly respond with the response that matches you opinion. Please tick as appropriate in the boxes using a tick (√) or cross mark (x).

To what extent do information and technology deployment strategy affect resource allocation in your organisation?

Very low extent [ ]

Low extent [ ]

Moderate extent [ ]

High extent [ ]

Very high extent [ ]

What is your level of agreement to the following statements regarding technological resources in your organisation? Rate your response on a scale where:

1=strongly disagree, 2= disagree, 3=moderately disagree, 4= agree and 5= strongly agree.

Statement	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	1	**2**	**3**	**4**	**5**
Technology is required to enhance and maintain communication and accountability for all relevant managers and operational employees					
Adoption of technology has a significant correlation with organizational performance.					
Adoption of technology promotes high levels of efficiency and performance within our organisation.					
To achieve organizational competitiveness an institution should adopt technology in its operations.					

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Technology through electronic business is very effective at reducing the costs of attracting new customers					
E-commerce is certainly a very effective tool when it comes to establishing customer relations and provision of access to global markets.					
Through technology our company has been able to increase the market size and market structure.					
The Internet is helping us to enlarge existing markets by cutting through many of the distribution and marketing barriers.					
E-commerce lowers information and transaction costs for operating and providing a cheap and efficient way to strengthen customer-supplier relations.					
Technology has encouraged our company to develop innovative ways of advertising, delivering and supporting our staffs and customer care.					

How else does information and technology deployment influence performance of your organization?

……

……

……

SECTION F: GOVERNMENT REGULATION

This section has statements Government regulation. Kindly respond with the response that matches you opinion. Please tick as appropriate in the boxes using a tick (√) or cross mark (x).

To what extent does Government regulation affect resource allocation in your organisation?

Very low extent [ ]

Low extent [ ]

Moderate extent [ ]

High extent [ ]

Very high extent [ ]

What is your level of agreement to the following statements regarding government regulations in your organisation? Rate your response on a scale where:

1=strongly disagree, 2= disagree, 3=moderately disagree, 4= agree and 5= strongly agree.

Statement	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	1	**2**	**3**	**4**	**5**
Complying with Government regulation is the greatest challenge					
Putting up infrastructure for water requires heavy investment.					
There has been a backlog of investments into this sector creating a challenge for the country.					
The overall level of regulation in the Kenya is an obstacle to your business's success					
The burdens resulting from government regulation will likely hinder service delivery in the Board					

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5
Regulation helps ensure level playing field for business/ customers of the Water Board					
Regulations helps the Board ensure that the regulatory management systems of the Board are kept up to date.					
Regulation by the Government provide clarity about what regulatory requirements apply to the Water Boards					
Regulation from the Government help the Water Board to address regulatory risks & prevent non-compliance					
Good regulatory advice from the Government helps the Board make confident investment decisions					
Unwillingness by some local authorities to implement certain aspects of the on-going water reforms.					

SECTION G: PERFORMANCE OF WATER BOARDS

This section has statements on Performance of Water Boards. Kindly respond with the response that matches you opinion. Please tick as appropriate in the boxes using a tick (√) or cross mark (x). Where:

1=strongly disagree, 2= disagree, 3=moderately disagree, 4= agree and 5= strongly agree.

Statement	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	1	**2**	**3**	**4**	**5**
There are numerous maintenance of water assets and extensions of water distribution lines that have been implemented in the board area over the last two years					
The current implementations status of water infrastructure projects within the Board is high					
There has been an increase in the number of water meter connections to consumers					
There has been a growth in water sales revenue.					
Funds from the parent ministry/donor partners meant for the board are sometimes diverted to other water boards or misappropriated					
It is difficult to sustain the water sector reforms implementation due to lack of enough financial funding?					
The Board receives timely and adequate budgetary allocations from the government and donor funding partners?					

What are the other factors that influence the performance of your organization?

……
…….....

Appendix IV: Sampling Frame

List of Water Services Board in Kenya
Athi Water Service Board
Coast Water Service Board
Lake Victoria North Water Services Board
Lake Victoria South Water Service Board
Northern Water Service Board
Rift Valley Water Services Board Kenya
Tana Water Services Board
Tanathi Water Services Board