EFFECTS OF CHANGE ON ORGANIZATIONAL PERFORMANCE: A CASE OF THE MINISTRY OF ENVIRONMENT, WATER AND NATURAL RESOURCES

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ABSTRACT

The purpose of this study was to establish the effects of change on organizational performance. The study was guided by four objectives which include: to determine the effect of change of informational systems on organizational performance; find out the effect of change of organizational structure on organizational performance; establish the influence of organizational size on organizational performance and ; determine the effect leadership on organizational performance. This study adopted a case study design to achieve the set objectives. The study population was 1035 staff members of the ministry of environment, water and natural resources who has experienced various forms of organizational change. Stratified random sampling was used to choose 104 respondents. Primary data was used where a questionnaire was employed to collect primary data. Descriptive and inferential statistics was conducted to analyze the data. The data was presented through frequency tables and bar graphs. From the findings it was concluded that change in information systems, change in organization structure, change in organization size and change in leadership affected performance. Therefore the findings of the study recommended that the ministry of environment, water and natural resources should update information systems continuously whereby top management should support the role of MIS in improving organizational performance; engaging employee in the analysis, design, construction and development of information system; and training of employees on how to use information system to improve their performance; The Ministry of Environment, Water and Natural Resources should continue to review her organization structure from time to time in order to benefit fully from the ever changing information technology. Secondly, with the recent gains in Information Technology, it is recommended that the Ministry of Environment, Water and Natural Resources design an Organization Structure that will fully integrate IT and ministry in a holistic way by embracing modern IT with reduced human intervention; The Ministry of Environment, Water and Natural Resources should manage size effectively to empower workers and improve the competitiveness of organization. A well-designed organization ensures that the infrastructure of the organization matches its purpose and goals, meets the challenges posed by business realities and significantly increases the likelihood that the collective efforts of people will be successful. However, the best organizational size is one that fits the structure, management style, and overall marketing strategy and finally, the management should: strive to become role models to their subordinates; inspire subordinates by providing meaning and challenge to work; stimulate subordinate efforts to become innovative & creative; and pay attention to each individual’s need for achievement and growth.

Key Words: change, organizational performance, Ministry of Environment, Water and Natural Resources
INTRODUCTION

In today’s fast paced and increasingly complex world change has become inevitable. High speed technological developments, globalization and economic factors are only some of the reasons that fuel the change in the business environment. With the change outside, there is a concealed change inside, thus organizations need to keep up with rapid developments in the business environment to survive. To adjust accordingly, organizations have become more technology driven than ever before. This requires organizations to be open and willing to change and once the organizations decide to undergo a radical change, considerable effort is required to manage it.

Many organizations are occasionally faced with challenges that force them to adjust or change (Burnes, 2004). Development organizations, in particular, regularly have to go through change processes when having to respond to new development scenarios or simply as part of their expansion or restructuring processes. The implications of change processes are regularly underestimated by senior management and not managed adequately. Ansoff (2001) asserts that it’s known that leadership can make a great difference, and that its importance for organizational success is intensifying. Yet we still know too little about the qualities and practice of effective organizational leadership and change.

Most organizational managers today would agree that change has become a constant phenomenon which must be attended to and managed properly if an organization is to survive. Changes in technology, the marketplace, information systems, the global economy, social values, workforce demographics, and the political environment all have a significant effect on the processes, products and services produced. The culmination of these forces has resulted in an external environment that is dynamic, unpredictable, demanding and often devastating to those organizations which are unprepared or unable to respond (Burnes, 2004).

According to Schaffer (2002), those organizations which do survive are often relegated to the role of playing “catch up” to their competitors, while others are either absorbed into larger entities via mergers or acquisitions or simply dissolved into a collection of corporate assets and liabilities. In fact, many of the popular trends in management and organizational consulting such as business process re-engineering, total quality management and the learning organization, represent systematic methods for responding to and channeling effectively the forces of change. Unfortunately, the vast majority of improvement initiatives undertaken by organizations, even with the best of intentions, are destined to have little impact.

While organizational change is a constant experience, knowledge and awareness about many of the critical issues involved in the management of such change is often lacking in those responsible for its progress. Clearly, if organizations are ever to experience a greater level of success in their development efforts, managers and executives need to have a better framework for thinking about change and an understanding of the key issues which accompany change. Change has been linked to the organization's competitiveness and response to changes in the
environment. Ansoff and McDonnell (2010), state that changes arise out of the need for organizations to exploit existing or emerging opportunities and deal with threats in the market. It is crucial that organizations seek to create a competitive advantage and wherever possible innovate to improve their competitive positions. This implies the readiness to change within the organization and the ability to implement the proposed change.

A host of external factors influence an organization’s choice of direction and action and ultimately, its organizational structure and internal processes. These factors, which constitute the external environment, can be divided into three interrelated Strategy categories; that is factors in the remote environment, factors in the industry environment and factors in the operating environment (Pearce and Robinson, 2011). Organizations manage change directly. Balogun and Hailey (2009) identify important contextual features that should be taken into account when designing change programs. These include the scope, institutional memory, diversity of experience within an organization, the capability of managing change and the readiness for change throughout the different levels in the organization.

There are different approaches to managing change; some are sudden, planned and incremental. Kazmi (2002) says that change is not linear and therefore cannot be worked on a mathematical formula basis with a set of variables that will yield a fixed answer for their combination. Aosa (1996) points out the necessity of carrying out change within the context of unique environmental challenges within Africa. Therefore change is context and environmental dependent, and there is no one best way.

**Organizational Change**

To survive and insure perpetuity, companies must exchange large parts of their secure traditions for untried paths into the future (Muturi, 2006). Organizations experience three types of enduring change: developmental Change: natural growth, transitional Change: evolve slowly to a “known state” transformational Change: moving into the unknown. An organizational change in which the organization evolves slowly is called transitional change (Ongaro, 2004).

However, when faced with several challenges at the same time, most corporate leaders realize that controlled series of transitional changes just will not move their organizations fast enough. When transitional changes are not enough, organizations need to move to a radically different, and sometimes unknown, future state in what is perceived as one big change. This process is defined as transformational change (Schneider, 2007).

In small and old mature organization, the fixed norms of culture become a liability and may act as resistance to change because of fear amongst its employees (Rukunga, 2003). Another obstacle to change is mindset of employees at all levels. Therefore, during transformational changes, small company faces challenges to adapt to big “one size fits all” matrix-based organizational structure. Successful organizational change is a collaborative effort. Those who
would implement significant transformations in the enterprise must also take responsibility for managing their relationships with the people who have the authority to determine the nature and shape of the company. The role of the implementer is that of a change agent because that person acts on behalf of principals. Firms that implement change should be aware that this may result in increased turnover, partly because changes in the pattern of work are likely to result in greater incidence of shocks (Lee et al., 2009). The transformational change that some companies are faced with after its acquisition and during its integration may certainly result in some turnover among employees afraid of the unknown future amongst several factors and variables.

**Organizational Performance**

Performance refers to the metrics relating to how a particular request is handled, or the act of performing; or doing something successfully; using knowledge as distinguished from merely possessing it. It is the outcome of all of the organization’s operations and strategies, (Venkatraman and Ramanujam, 2001). A firm’s set of operational routines is made up of the organizational processes and routines formed and shaped by organizational learning mechanisms (Cepeda and Vera, 2007).

Performance measurement systems provide the foundation to develop strategic plans, assess an organization’s completion of objectives, and remunerate managers (Alderfer, 2003). Although assessment of performance in the marketing literature is still very important, it is also complicated (Andersen and Segars, 2001). While consensual measurement of performance promotes scholarly investigations and can clarify managerial decisions, marketers have not been able to find clear, current and reliable measures of performance on which marketing merit could be judged (Manogran, 2001). The common assumption, which underpins much of the organizational performance research and discussion, is that increasing organizational performance will lead to improved functions and activities of the organizations. The subject of organizational performance and research into its measurement is well advanced within finance and management fields.

Organizational performance involves recurring activities to establish organizational goals, monitor progress towards the goals, and make adjustments towards achieving those goals more effectively and efficiently (Carter, 1997). The objective of top management in any organization is to maximize their operational efficiency by all possible means in order to maintain their competitive advantage and survive in the market. The measures of operational performance of organizations are productivity, quality, cost effectiveness, timeliness and flexibility. Quality aspect in to processes of making products and services reduces costs throughout the organization. This results in cost efficiency and positive quality perception for products and services offered by the organization. Internal measures of quality are linked to value created for the customer. Flexibility is attained through improved systems which is key to opportunities in the market. The process creates value to customers through efficient service models for different market segments.
Ministry of Environment, Water and Natural Resources

The Ministry of Environment, Water and Natural Resources was established by Executive Order no. 2/2013 and is mandated to undertake protection, conservation, rehabilitation and development of environment and natural resources for sustainable development. Previously, this mandate had been undertaken by Ministries of, Environment and Mineral Resources, Forestry and wildlife, Water and Irrigation and Regional Development as defined in the Presidential circular No. 1/2008.

In 2013, the government, in line with the Constitution, rationalized the portfolio, responsibilities and functions of all the ministries and other government agencies. Consequently, the above mentioned ministries were merged to form the Ministry of Environment, Water and Natural Resources. This is in line with the Government’s key policies as envisioned in the Constitution of Kenya 2010, Vision 2030 and the Medium Term Plans that emphasize the need for efficiency and better management in the utilization of natural resources to enable the Government achieve its strategic objectives of growth, productivity, efficiency and improvement in service delivery.

The mandate of the Ministry is executed through two State Departments, namely Environment & Natural Resources and Water. Each Department is headed by a Principal Secretary. The Principal Secretaries are charged with responsibilities of formulating policies, developing strategies and plans for conservation, protection, rehabilitation and management of Environment, Development of Water Resources and Natural Resources. In addition, the ministry is responsible for all the statutory institutions as defined in the Executive Order No 2/2013.

STATEMENT OF THE PROBLEM

Though we all rationally recognize that progress means change, and that we all need to progress, but not even the prospect of attaining benefits from change would make everyone ready and willing, or indeed able, to embrace change. On the contrary, it is widely believed that most would resist change. Those charged with bringing about changes in organizations have a myriad of challenges to deal with. There is evidence to suggest that the universal, prescriptive model of change is inadequate to describe the diversity of approaches actually used by organizations (Dunphy and Stace, 2009). Some seek to restrict the meaning of change to the felt need to improve organizational performance and members’ own position within the organization. Dawson (1996) has discussed the limitations of adopting such a simple definition of change. She sees conflicting interests and resistance as some of the barriers to achieving the desired results in the felt need for change. Other researchers (Tichy, 1999) acknowledge the frustration that manager’s feel when their organizations do not respond to elaborately analyzed plans, where there is a lack of interaction between decision and action. The external changes that have been facing the organizations provide an avenue for thinking. Managers have adopted change practices with varying levels of success. While studies on change have been done on manufacturing, (Shem, 2005) private sector (Nyamache, 2003) International Development
organizations (Muturi, 2006) and in other corporations, few studies have been done on change management and organizational performance. This study therefore provided insights on change practices in the ministry of environment, water and natural resources.

GENERAL OBJECTIVE

The general objective of the study is to establish the effects of change on organizational performance.

SPECIFIC OBJECTIVES

1. To determine the effect of change in information systems on organizational performance
2. To establish the effect of change in organizational structure on organizational performance
3. To determine the effect of change of organizational size on organizational performance
4. To determine the effect of change in leadership on organizational performance

THEORETICAL REVIEW

According Kothari (2004) a theory is a coherent group of tested propositions commonly regarded as correct that can be used as principles of explanation and prediction for class of phenomena. In line with this definition, the study will use two theories that help explain the arguments advanced in this study. Theoretical framework presents the theories which explain why the problem under study exists and serves as a basis for conducting the present research.

Discourse-Based Theory of Organizational Change

A number of studies have suggested that discourse theory and the analysis of organizational discourse offer considerable potential for understanding the nature and complexity of organizational change. However, while these studies demonstrate some of the potential contributions that a discourse based theory of organizational change might make, they also exhibit two inter-related problems. First independently or in combination, none of the studies attempts to provide a comprehensive or integrated discourse theory of change. The discursive change model, if one exists, is implicit, but not fully articulated. Second, by virtue of the model being underspecified, the value of the observations and results of studies of organizational discourse and change are potentially open to question or even undermined (Ford, 2008).

In reference to level of change related to discourses, it operates at several different levels. It is possible to identify five that merit attention in relation to organizational change – the intrapsychic, the Micro, the Meso, the macro and the Meta. At the intrapsychic level a discourse might manifest itself in the form of internalized stories and introjected beliefs that an individual tells them self. It can also refer to cognitive frames and schemas (Ford, 2008). Analyses of
discourses at the micro level focus on the detail of language in use by individuals. Beyond the individual focus of the micro-level, it is possible to consider discourse at the meso-level to explore the interpersonal. At this level discursive interactions will impact on the actions and behavior of individuals within a localized context, e.g. a department or among a specific group of actors who socially interact on a regular basis (Mumby, 2004).

Macro level discourses can be viewed as an aggregation and accumulation of an amalgam of meso-level discursive interactions in organizations. Here, interactions such as conversations and texts coalesce to form the dominant thinking, institutional practices and collective social perspectives within an organization. Meta level discourses have been described as discourses that are recognized and espoused at the broader societal level and across institutional domains. As such they might address “more or less standard ways of referring to/constituting a certain type of phenomenon” (Alvesson & Kärreman, 2000). The texts within any level of discourse are linked to, and informed by discourses and the texts that operate from other levels. This inter-textuality means that it is important to identify and analyze specific, micro-level discourses pertaining to change, within say a conversation, and to then place them in the context of other meso, macro or even meta discourses (Boje, 2001).

**Three-Step Change Theory**

Kurt Lewin (1951) introduced the three-step change model. This social scientist views behavior as a dynamic balance of forces working in opposing directions. Driving forces facilitate change because they push employees in the desired direction. Restraining forces hinder change because they push employees in the opposite direction. Therefore, these forces must be analyzed and Lewin’s three-step model can help shift the balance in the direction of the planned change. According to Lewin, the first step in the process of changing behavior is to unfreeze the existing situation or status quo. The status quo is considered the equilibrium state. Unfreezing is necessary to overcome the strains of individual resistance and group conformity. Unfreezing can be achieved by the use of three methods. First, increase the driving forces that direct behavior away from the existing situation or status quo. Second, decrease the restraining forces that negatively affect the movement from the existing equilibrium. Third, find a combination of the two methods listed above. Some activities that can assist in the unfreezing step include: motivate participants by preparing them for change, build trust and recognition for the need to change, and actively participate in recognizing problems and brainstorming solutions within a group (Robbins, 2005).

Levin’s second step in the process of changing behavior is movement. In this step, it is necessary to move the target system to a new level of equilibrium. Three actions that can assist in the movement step include: persuading employees to agree that the status quo is not beneficial to them and encouraging them to view the problem from a fresh perspective, work together on a quest for new, relevant information, and connect the views of the group to well-respected, powerful leaders that also support the change. The third step of Lewin’s three-step change
model is refreezing. This step needs to take place after the change has been implemented in order for it to be sustained or “stick” over time. It is highly likely that the change will be short lived and the employees will revert to their old equilibrium (behaviors) if this step is not taken. It is the actual integration of the new values into the community values and traditions. The purpose of refreezing is to stabilize the new equilibrium resulting from the change by balancing both the driving and restraining forces. One action that can be used to implement Lewin’s third step is to reinforce new patterns and institutionalize them through formal and informal mechanisms including policies and procedures (Robbins 564-65). Therefore, Lewin’s model illustrates the effects of forces that either promote or inhibit change. Specifically, driving forces promote change while restraining forces oppose change. Hence, change will occur when the combined strength of one force is greater than the combined strength of the opposing set of forces (Robbins, 2005).

Dynamic Conservatism

This model by Donald Schon (1982) explores the inherent nature of organisations to be conservative and protect themselves from constant change. He recognises the increasing need, due to the increasing pace of change for this process to become far more flexible. This process being one of 'learning'. Very early on Schon recognised the need for what is now termed the 'learning organization'. These ideas are further expanded on within his frame work of 'reflection-in-action', the mapping of a process by which this constant change could be coped with. An early model of change developed by Kurt Lewin described change as a three-stage process. The first stage he called "unfreezing". It involved overcoming inertia and dismantling the existing "mindset". Defence mechanisms have to be bypassed. In the second stage the change occurs. This is typically a period of confusion and transition. We are aware that the old ways are being challenged but we do not have a clear picture to replace them with yet. The third and final stage he called "refreezing". The new mindset is crystallizing and one's comfort level is returning to previous levels. Rosch (2002) argues that this often quoted three-stage version of Lewin’s approach is an oversimplification and that his theory was actually more complex and owed more to physics than behavioural science. Later theorists have however remained resolute in their interpretation of the force field model.

RESEARCH METHODOLOGY

Research Design

This study adopted case study design where by the unit of study was The Ministry of Environment, Water and Natural Resources. According to Yin (1994) Case study research method is defined as an empirical enquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between the phenomenon and the context aren’t clearly evident. This design was most appropriate since a detailed and in-depth data was desired. Case study research design provides very focused and valuable insights about the phenomena which
enables the researcher not only to establish factors explaining phenomena but also unearth underlying issues and complex real life situations related directly with the object of study.

**Target Population**

The study population was staff of the ministry of environment, water and natural resources who has experienced various forms of organizational change. The population targeted for the study must have been involved in organizational change both directly and indirectly impacted upon by the new administrative systems. The total population of staff at the ministry of environment, water and natural resources is 1035.

**Sampling Technique**

According to Kothari (2004), sampling is the selection of some part of an aggregate or totality on the basis of which judgment or an inference about an aggregate to a totality is made. A sufficient number of elements from the population so that by studying the sample, and understanding the properties or the characteristics of the sample subjects, we were able to generalize the properties or characteristics to the population elements. The study adopted stratified random sampling. According to Sekaran (2001), stratified random sampling involves the division of a population into smaller groups known as strata. In stratified random sampling, the strata are formed based on members’ shared attributes or characteristics. A random sample from each stratum is taken in a number proportional to the stratum's size when compared to the population. The strata comprised top management, middle level management and general staff of the ministry of environment, water and natural resources. The study used 10% of the target population as sample size which was 104 respondents. This is according to Mugenda and Mugenda (2003), who argues that at least 10% of the total population is representative. Thus, 10% of the accessible population is enough for the sample size.

**Validity**

Validity refers to the degree to which evidence and theory support the interpretation of test scores entailed by use of tests. The validity of instrument is the extent to which it does measure what it is supposed to measure. According to Mugenda and Mugenda (1999), Validity is the accuracy and meaningfulness of inferences, which are based on the research results. It is the degree to which results obtained from the analysis of the data actually represent the variables of the study. The research instrument was validated in terms of content and face validity. The content related technique measures the degree to which the questions items reflected the specific areas covered.

**Reliability**

Reliability is the ability of a research instrument to consistently measure characteristics of interest over time. It is the degree to which a research instrument yields consistent results or data
after repeated trials. If a researcher administers a test to a subject twice and gets the same score on the second administration as the first test, then there is reliability of the instrument (Mugenda and Mugenda, 1999). Reliability is concerned with consistency, dependability or stability of a test (Nachmias and Nachmias, 1999). The researcher measured the reliability of the questionnaire to determine its consistency in testing what they are intended to measure. The test re-test technique was used to estimate the reliability of the instruments. This involved administering the same test twice to the same group of respondents who have been identified for this purpose.

**Table 1: Reliability test Analysis for the questionnaire**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s alpha</th>
<th>No. of Items per objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in information systems</td>
<td>.811</td>
<td>7</td>
</tr>
<tr>
<td>Organizational Structure</td>
<td>.845</td>
<td>10</td>
</tr>
<tr>
<td>Change in organizational size</td>
<td>.724</td>
<td>6</td>
</tr>
<tr>
<td>Change in leadership</td>
<td>.718</td>
<td>5</td>
</tr>
</tbody>
</table>

A pilot study was carried out to determine reliability of the questionnaires. The pilot study involved the sample respondents. Reliability analysis was subsequently done using Cronbach’s Alpha which measured the internal consistency by establishing if certain item within a scale measures the same construct. Gliem and Gliem (2003) established the Alpha value threshold at 0.7, thus forming the study’s benchmark. Cronbach alpha was established for every objective which formed a scale. The table shows that Change in information systems had the highest reliability ($\alpha=0.811$), followed by Organizational Structure ($\alpha=0.845$), change in organizational size ($\alpha=0.724$) and finally the Change in leadership ($\alpha=0.718$). This illustrates that all the variables were reliable as their reliability values exceeded the prescribed threshold of 0.7.

**Data Collection**

Data collection is the process of gathering information about a phenomenon using data collection instruments (Sekaran, 2000). Data collection was based on secondary and primary sources where primary data was obtained through the use of questionnaires as the main data collection instrument. The questionnaire is an ideal instrument to gather descriptive information from a large sample in a fairly short time (Kothari, 2004). It can also be answered at the convenience of the respondent and picked at a later time. Secondary data was obtained from journals and books in the library and the University’s annual reports. The questionnaires was used for the following reasons: its potentials in reaching out to a large number of respondents within a short time, able to give the respondents adequate time to respond to the items, offers a sense of security (confidentiality) to the respondent and it is objective method since no bias resulting from the personal characteristics (as in an interview) (Owens, 2002). A total of 104 questionnaires was developed which was administered through drop and pick method.
Data Analysis

After data collection, the filled-in and returned questionnaires were edited for completeness, coded and entered into Statistical package for social sciences (SPSS version 22.0). Coding is a technical process where raw data are transformed into easily tabulated form by way of assigning symbols. This helps in condensing the responses into few categories for the purposes of data analysis. The data was then be subjected to a verification process to verify if the captured data correlated with the data-capture into SPSS. Both descriptive and inferential statistics was used to analyze the data. Descriptive analysis was conducted on primary data. Mean and standard deviations was also used as measures of central tendencies and dispersion respectively. Correlation was used to analyze the degree of relationship between the variables in the study. Further, regression was used to obtain an equation which describes the dependent variable in terms of the independent variable based on the regression model. Data is presented in the form of frequency distribution tables, graphs and pie charts that facilitated description and explanation of the study findings. Inferential statistics was conducted to establish the association between and among the independent and dependent variables. In addition the researcher used multiple regression analysis so as to determine the relationship between change management and organizational performance and the variables of the study (Change in information systems; Organizational Structure; change in organizational size; and Change in leadership). The regression equation guiding the study is:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \]

Where: \( Y \) = organizational performance; \( X_1 \) = Change in information systems; \( X_2 \) = Organizational structure; \( X_3 \) = Change in organizational size; \( X_4 \) = Change in leadership; \( \beta_0 \) – is the constant; \( e \) - Is the error

And \( \beta_1-4 \) is the regression equation coefficients or change induced in \( Y \) by each of the variables discussed (Mugenda & Mugenda, 2003). In order to make the data more user-friendly and attractive to the readers, different graphic interactive such as tables, graphs and charts was generated using statistical packages for social sciences (SPSS).

RESEARCH RESULTS

The main objective of this study was to determine the effects of change on organizational performance with reference to the ministry of environment, water and natural resources. The study established that change of informational systems affected organizational performance on statements that organization re-evaluates the effectiveness and efficiency of their business information system, technological limitations (performance/missing functionality, the organizational change systems that get on the way of the changed vision, the organization develops new skills and capabilities which will allow them to cope with the complexity, organization and procedures are not adapted to the new situation (technological and
organizational integration on different levels), information systems is embedded in the organization, and change of information systems enhance competitiveness and facilitate business growth and success.

The value of adjusted R square for the regression of organizational performance in the ministry of environment, water and natural resources is 0.687 which mean that coordination of managerial processes explains 68.7% of variation in organizational performance in the ministry of environment, water and natural resources. From the ANOVAs results the f-ratio f-ratio (191.832) for this relationship is significant at p < 0.000, which indicates that the model significantly predicts the outcome of the relationship between informational systems and organizational performance. The coefficient for the constant term is 0.912, implying that when change in informational systems is zero; organizational performance in the ministry of environment, water and natural resources would have a default value of 0.912. Therefore the null hypothesis one, which stated that there is no relationship between top coordination of managerial processes and organizational structure in the ministry of environment, water and natural resources, is rejected. The implication is that there exists a significant positive relationship between informational systems and organizational performance in the ministry of environment, water and natural resources.

As to whether organizational structure affected organizational performance, it was revealed that most respondents agreed on statements that decision-making authority is concentrated at higher levels in an organization, structure is a valuable tool in achieving coordination, individual and team work within the organization are well coordinated, high degree of formalization may actually lead to reduced innovativeness because employees are used to behaving in a certain manner, the organizations uses divisional structures, managers are relatively unable to provide close supervision, leading to greater levels of freedom of action for each employee, the number of employees reporting to each manager tends is small, the organizations uses functional structures, and decisions are made and problems are solved at lower levels by employees who are closer to the problem in question.

From the findings the adjusted R square for the regression of Organizational performance in the ministry of environment, water and natural resources on knowledge management is 0.685 which mean that Organizational structure explains 63.3% of variation in Organizational performance in the ministry of environment, water and natural resource. From the ANOVA results the F-ratio F-ratio = 151.256 for this relationship is significant at p <0.001, which indicates that the model significantly predicts the outcome of the relationship between Organizational structure and Organizational performance in the ministry of environment, water and natural resources. Therefore the null hypothesis one, which stated that there is no relationship between Organizational structure and organizational structure is not accepted. The implication is that there exists a significant positive relationship between Organizational structure and organizational performance in the ministry of environment, water and natural resources.
Moreover, the analysis of the findings revealed that organizational size influenced performance. The respondents agreed that small size of firm encourages motivation and commitment, right-sizing and the utilization of benefits help an organization to achieve its goals, a congruent size ensures that individuals carry out his/her responsibilities with minimum resistance, in small organization’s top managers can use their personal observation to control and on that greater size gives marketing-intensive companies power in the market place and increased revenues.

From the findings the value of adjusted R square for the regression of size of the organization in the ministry of environment, water and natural resources on organizational performance is 0.241 which mean that organizational size explains 24.1% of variation in organizational performance. From the ANOVA results the F-ration = 28.681 for this relationship is significant at p <0.000, which indicates that the model significantly predicts the outcome of the relationship between size of the organization and performance in the ministry of environment, water and natural resources. Therefore the null hypothesis one, which stated that there is no relationship between size of the organization and performance in the ministry of environment, water and natural resources, is not accepted. The implication is that there exists a significant positive relationship between size of organization and performance in the ministry of environment, water and natural resources.

The findings of the study also revealed that leadership influenced organizational performance. Those agreed recorded that leadership promotes people’s motivation towards achieving common goals, leadership allows cooperation in an organization, leadership contributes to creativity, leadership plays an integrating role in an organization and on that leadership diminishes conflicts. Based on the findings, the value of adjusted R square for the regression of leadership in the ministry of environment, water and natural resources on organizational performance is 0.129 which mean that leadership accounts for 12.9% of variation in organizational performance in the ministry of environment, water and natural resources. The ANOVA results the F-ration = 13.903 for this relationship is significant at p <0.000, which indicates that the model significantly predicts the outcome of the relationship between leadership and organizational performance in the ministry of environment, water and natural resources. Therefore the null hypothesis one, which stated that there is no relationship between top leadership and organizational performance in the ministry of environment, water and natural resources, is rejected. The implication is that there exists a significant positive relationship between leadership and Organizational performance in the ministry of environment, water and natural resources.

Further, the findings of the study indicated that change management influenced organizational performance. Majority of the respondents agreed that change gave an organization a better chance of sensing events and trends in marketplace which will in turn lead to better sales and increased market share, embracing organizational change strategies improves organizational performance, organizational change forms a basis of gaining a sustainable competitive advantage thus a key to organizational, change enables an organization to have a more flexible and responsive structure so that it responds to new challenges faster than the competitors, change
influences organizational performance directly through facilitating the generative learning that leads to innovations, change influences organizational performance indirectly by improving the quality of its market-oriented behaviours, and on embracing organizational change strategies improves organizational performance.

The correlation results also indicated that there was strong correlation between organizational performance and information systems as shown by correlation factor of 0.831, this strong relationship was found to be statistically significant as the significant value was 0.000 which is less than 0.005, the study also found a strong positive correlation between organizational performance and organizational structure as shown by correlation coefficient of 0.798, this too was also found to be significant at 0.000 level of confidence, the study also found strong positive correlation between organizational performance and organizational size as shown by correlation coefficient of 0.500 at 0.001 levels of confidence organizational performance and organizational leadership as shown by correlation coefficient of 0.373 at 0.000 levels of confidence.

**REGRESSION ANALYSIS**

On the correlation of the study variable, the researcher conducted a Pearson moment correlation. From the finding in the table above, the study found that there was strong correlation between organizational performance and information systems as shown by correlation factor of 0.831, this strong relationship was found to be statistically significant as the significant value was 0.000 which is less than 0.005, the study also found a strong positive correlation between organizational performance and organizational structure as shown by correlation coefficient of 0.798, this too was also found to be significant at 0.000 level of confidence, the study also found positive correlation between organizational performance and organizational size as shown by correlation coefficient of 0.500 at 0.001 levels of confidence organizational performance and organizational leadership as shown by correlation coefficient of 0.373 at 0.000 levels of confidence. The findings are in line with the research by Ambrosini (2003) who found a strong positive correlation between Information systems and organizational performance adding that Information systems can provide opportunities for achieving substantial savings, significant improvements in performance, and other competitive advantage. The findings also concur with the research findings by Robbins (2005) who found a strong positive correlation between organizational structure and organizational performance adding that organizational structure helped to deliver significant impact to organizations undergoing or anticipating profound change or facing strategic discontinuities or risk. The findings support the research by findings by Rice et al., (2012) who found a weak positive correlation between organizational sizes and organizational performance adding that organizational sizes disrupt established routine and may even require a very different set of capabilities and new behaviour patterns, adding that the notion of novelty is relative so organizational size for one organization might be an incremental one for another.
Table 2: Correlations

<table>
<thead>
<tr>
<th></th>
<th>organizational performance</th>
<th>information systems</th>
<th>Organizational structure</th>
<th>organizational size</th>
<th>Organizational leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.831**</td>
<td>1</td>
<td>.568**</td>
<td>.411**</td>
<td>.333**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.798**</td>
<td>.568**</td>
<td>1</td>
<td>.377**</td>
<td>.320**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.500**</td>
<td>.411**</td>
<td>.377**</td>
<td>1</td>
<td>-.356**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88</td>
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<td>88</td>
<td>88</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.373**</td>
<td>.333**</td>
<td>.320**</td>
<td>-.356**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.002</td>
<td>.002</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
<td>88</td>
</tr>
</tbody>
</table>

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

Table 1: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.010</td>
<td>.169</td>
<td>.061</td>
<td>.952</td>
</tr>
<tr>
<td>information systems</td>
<td>.422</td>
<td>.050</td>
<td>.453</td>
<td>8.420</td>
</tr>
<tr>
<td>Organizational structure</td>
<td>.381</td>
<td>.049</td>
<td>.401</td>
<td>7.786</td>
</tr>
<tr>
<td>organizational size</td>
<td>.102</td>
<td>.026</td>
<td>.224</td>
<td>4.010</td>
</tr>
<tr>
<td>Organizational leadership</td>
<td>.092</td>
<td>.028</td>
<td>.174</td>
<td>3.225</td>
</tr>
</tbody>
</table>

a. Dependent Variable: organizational performance
CONCLUSIONS

From the analysis of the findings, it is concluded that change of informational systems affected organizational performance on statements that organization re-evaluates the effectiveness and efficiency of their business information system, technological limitations (performance/missing functionality, the organizational change systems that get on the way of the changed vision, the organization develops new skills and capabilities which will allow them to cope with the complexity, organization and procedures are not adapted to the new situation (technical and organizational integration on different levels), information systems is embedded in the organization, and change of information systems enhance competitiveness and facilitate business growth and success. In addition, it was concluded that organizational structure affected organizational performance on statement that it assist in decision-making authority is concentrated at higher levels in an organization, structure is a valuable tool in achieving coordination, individual and team work within the organization are well coordinated, high degree of formalization may actually lead to reduced innovativeness because employees are used to behaving in a certain manner, the organizations uses divisional structures, managers are relatively unable to provide close supervision, leading to greater levels of freedom of action for each employee, the number of employees reporting to each manager tends is small, the organizations uses functional structures, and decisions are made and problems are solved at lower levels by employees who are closer to the problem in question.

The findings of the study also conclude that organizational size influence performance. The respondents agreed that small size of firm encourages motivation and commitment, right-sizing and the utilization of benefits help an organization to achieve its goals, a congruent size ensures that individuals carry out his/her responsibilities with minimum resistance, n small organization’s top managers can use their personal observation to control and on that greater size gives marketing-intensive companies power in the market place and increased revenues.

Further, the findings of the study conclude that leadership influence organizational performance. Leadership promotes people’s motivation towards achieving common goals, leadership allows cooperation in an organization, leadership contributes to creativity, leadership plays an integrating role in an organization, and on that leadership diminishes conflicts.

RECOMMENDATIONS

From the analysis of the findings, we can give some recommendations that might help management in the Ministry Of Environment, Water and Natural Resources to improve the performance.
Information Systems

Updating information systems continuously and top management support to the role of MIS in improving organizational performance; engaging employee in the analysis, design, construction and development of information system; and training of employees on how to use information system to improve their performance.

Organization Structure

The Ministry of Environment, Water and Natural Resources should continue to review her organization structure from time to time in order to benefit fully from the ever changing information technology. Secondly, with the recent gains in Information Technology, it is recommended that the Ministry of Environment, Water and Natural Resources design an Organization Structure that will fully integrate IT and ministry in a holistic way by embracing modern IT with reduced human intervention.

Organizational Size

The Ministry of Environment, Water and Natural Resources should manage size effectively to empower workers and improve the competitiveness of organization. A well-designed organization ensures that the infrastructure of the organization matches its purpose and goals, meets the challenges posed by business realities and significantly increases the likelihood that the collective efforts of people will be successful. However, the best organizational size is one that fits the structure, management style, and overall marketing strategy.

Organizational leadership

The success or failure of an organization is directly connected to the leadership style and the relevance of the founder's beliefs, values, to the current opportunities and constraints confronting the organization at a specific moment. The style of leadership affects performance since performance cannot be achieved in the absence of a leadership that can adapt to the changes and challenges of the environment, that knows how to motivate the employees and that encourages them to take more ownership for their work. It is therefore recommended that managers should: strive to become role models to their subordinates; inspire subordinates by providing meaning and challenge to work; stimulate subordinate efforts to become innovative & creative; and pay attention to each individual’s need for achievement and growth.

REFERENCES


Tichy, N.M. (1983), Managing Strategic Change, John Wiley & Sons, New York, NY