



**INFLUENCE OF MANAGEMENT INNOVATION CHANGES ON EFFICIENT WATER SERVICES PROVISION IN THE LAKE VICTORIA NORTH REGION, KENYA**

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**ABSTRACT**

*This study investigated the influence of management innovation changes on efficient water services provision in the Lake Victoria north region, Kenya. The study adopted the descriptive survey design and targeted four water services providers with 98 management staff. Since the target population was less than 100 respondents, a census method was used to select all the 98 respondents to participate in the study. Descriptive statistics was used to summarize data. Analyzed data was presented using tables and graphs. Both descriptive and inferential statistics were computed using SPSS version 24. Multiple regression results showed that management innovation changes significantly influenced the dependent variable (efficient water services provision in the Lake Victoria north region, Kenya). The study concluded that that management innovation changes in terms of new management practices, process, structures and techniques in the water management systems boost efficient water services provision in the Lake Victoria north region. The study recommend that water service boards in the Lake Victoria north region should embrace collaborative management innovation changes in terms of new management practices, process, structures and techniques in the water management systems so as to boost efficient water services provision in the Lake Victoria north region.*

**Key Words:** Management Innovation, Water Services Provision, Lake Victoria, Kenya

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## INTRODUCTION

To derive value from collaboration investments, you must view collaboration as more than a technology deployment (Burton, 2005) many companies lose a lot of potential values because they think of collaborations primarily as a source of technology. They wrongly assume that to support collaboration, they just have to buy the “right “tool. In the 1960s, there was a strong trend towards centrally planned and measured approaches to government.

According to OECD (2009) notes that in some countries this took the form of very detailed multi-year national planning systems. Such systems ultimately failed as they were too rigid to take account of uncertainty and unpredictability, and did not recognize the limitations of formal systems in influencing peoples’ behavior (Mansor, 2012). Limited work has been done on this topic regionally and globally since most public organization claim to have established better strategic plans but little can be viewed in their general outlook performance as it’s below the expected standards Al-Kandi, *et al.* (2013). The Government is one of the fundamental collaborators in the modernization of the service delivery in water board services.

One of the most important natural resource is water. It is the essence of life on earth. The availability of safe water is critical not just for health reasons, but also for social and economic development (WHO and UNICEF, 2015). The development agenda highlighted water supply and sanitation as a result of the UN conference in 1977 in Argentina. The International drinking Water supply and sanitation Decade was declared in the 1980s with the aim of ensuring every person has access to safe water, of adequate quantity and basic sanitary facilities, by 1990 (World Water Assessment Programme, 2013). Despite this, one billion people in the world today are without access to improved sources of water, and access to consistent safe drinking water notwithstanding water

being at the center of economic and social development; (World Bank, 2015).

In Africa, water shortage is related to both under-development of potentially available water resources and their uneven distribution. This is coupled up with an unrelenting population growth rate of 3 % per year, which is a major factor in on-going water and sanitation problems. Water supply services for instance in Zambia’s peri-urban areas vary widely from one settlement to another even within the same town. Water supply systems have been poorly maintained in the last 20 years because local authorities and ministry departments as providers have absconded their capacity and professionalism to operate and sustain these services efficiently and effectively (Nwasco, 2015). This is similar to other countries like Zimbabwe, Nigeria, Angola, DRC just to mention but a few Nwasco, 2015).

Article 43 of the Constitution of Kenya (2010) has enshrined the principle that ‘Every person in Kenya has the right to clean and safe water in adequate quantities and to reasonable standards of sanitation’. The Country’s blue print for development, Vision 2030, also states that the role of water sector service provision is to endeavor to “reverse the declining trend of water availability per capita, increase access to safe water and sanitation, increase area under irrigation and reclaim arid and semi-arid lands for productive use.” Kimotho (2012) addressed the challenges faced by water service providers licensed by Athi Water Services Board for operation in specific regions and recommended that further studies should be done to cover all water service providers in the country. In his studies Betsy (2015) asserted that contextual collaboration stages pose the next challenge to be addressed by most companies. Contextual collaboration helps companies bridge several chasms that chronologically reduce productivity, search as the geographic dispersal of workers, the handling of expectations to processes,

coordinating management organizational boundaries. Putting strategic management plans into practice is the most important aspect of the planning itself. There are seven factors for successful strategy execution, these were: adequate feedback systems, sufficient resources, good leadership and direction skills, motivation for all involved staff, communication and coordination, an appropriate company structure, an appropriate company culture (Sabourin ,2015).

Lake Victoria North Water Services Board (LVNWSB) is one of the eight Water Services Boards established under the Water Act 2002 section 51(2), as part of the reforms in the water sector with the mandate of ensuring efficient and economical provision of water and sewerage services within their respective areas of jurisdiction. The Board was established in March 2004 vide gazette notice no. 1717. The Board contracts, monitors and enforces agreements with Water Service Providers (WSPs), in accordance with regulations set by the Water Services Regulatory Board (WASREB). Direct provision of water and sanitation services is however undertaken by Water Service Providers (WSPs) who are the Board's agents. However, in the event that for either economic or social reasons it is not possible to establish a Water Service Provider, the Board is mandated to undertake service provision (Ojwang (2015).

### **Statement of the problem**

Existing evidence clearly demonstrates that most water service provider firms in developing countries have failed to fully implement their strategic plans despite having well written strategies (AfDB, 2014). Considering the trends, poor water service delivery impacts negatively on water provision firm's general performance thus denying most citizens their natural basic right- access to safe drinking water. It is thus shocking that more than 17 million Kenyans lack access to safe drinking water (Ojwang 2015). With a population of 46 million, 41% of Kenyans still rely on unimproved water sources, such as ponds, wells and

rivers (Betsy, 2015. The services are especially evident in the rural areas and the urban slums and only 9 out of 55 public water services providers in Kenya provide continuous water supply, leaving most people to find their own ways of searching for appropriate solution to this basic need (Ojwang 2015). To therefore achieve actual provision of water services, the water service providers' performance standards must be not only set but met in good time. Previous studies show lack of empirical data on efficient water provision mechanisms and that strategic collaborations have been a major problem in most organizations service delivery (GOK, 2013). This study therefore endeavored to investigate the management innovation changes on efficient water services provision in the Lake Victoria north region, Kenya.

### **Research Objectives**

The objective of this study was to investigate the management innovation changes on efficient water services provision in the Lake Victoria north region, Kenya.

### **Research Hypotheses**

**H<sub>01</sub>:** There is no significant relationship between management innovation changes and efficient water services provision in the Lake Victoria north region, Kenya.

## **LITERATURE REVIEW**

### **Theoretical Review**

#### **Systems Theory**

This theory was designed in 1968 by Ludwig von Bertalanffy. The theory categorically offers a more comprehensive view of organizations and their operations. According Ludwig the theory is not so much into management practices but a unique way of conceptualizing and studying organizations. It examines actions and their outcomes at a collective level, which demonstrates that the actions and interactions of the individuals determine organization

performance. (Charlton, 2005). An analytical framework is provided for general view of organizations by the system theory which creates room for detailed explanation and descriptions.

Most Organization directors recognize how different systems can affect workers delivery and how workers can equally affects the systems around them. Different efforts combined make a system work effectively to accomplish goals. Through Systems theory managers are able to effectively examine patterns and events of occurrences at the workplace which is significant in coordinating programs to work as a collective whole for the overall goal or mission of the organization rather than for isolated departments (Hawthorne, 2013).

Based on the Systems theory, charismatic leaders may improve the performance of an organization from a struggling state for survival, but their actions are likely to introduce new innovations that serve as referencing rules even when the organization found a new good fit with its environment (Inganj, 2016). This effect makes them prone of making changes without considering the consequences as the results of their actions even when the changes are more likely to do harm than good. Basing on the above argument, charismatic leadership is more likely to be useful only for a short-term period. According to Goleman (2004), long-term charismatic leadership might work in positive development of organizations in an environment which is radically changing.

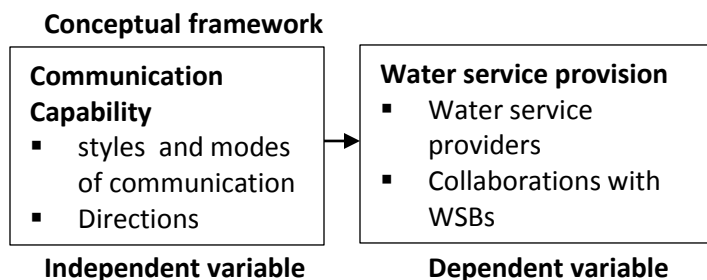
In his studies, Muruli (2016) noted that Systems theory analysis of management shows that adaptive standardization of processes may lead to a shrinking of the system in the short-term, but in the long term adaptive standardization leads to further and faster expansion. The analysis upholds that standardization reduces the complexity of some procedural language used within the organization. This systems theory was therefore relevant to this study in that management

innovation in terms of new management systems, structures and processes will be examined to assess if these new management system changes can lead to efficient water service provision.

#### **Empirical Review of related literature**

UNICEF (2014) a research identified several factors affecting sustainability of community managed water provision as; Institutional factors comprising national, regional, community organizations and private sector entities, and Development processes which include design, participation, operation and maintenance and monitoring and evaluation;. Technological factors such as suitability, acceptability, responsiveness, servicing needs, standards and costs; Contextual factors and forces which include factors beyond the control of institutions involved to change. They include environmental, demographic, socio-cultural, political, economic and technological. Other factors include project organization and processes including administrative and budgeting entities. This study tried to address a number of water service provision related issues but did not incorporate communication capability and management innovation changes which have been included in this study to assess their influence on efficient water service provision.

Moreover, WHO and UNICEF (2014) found that; since water is a social good, community participation is very vital in the management of these water resources in order to ensure maximum social benefits to the communities. But the challenge facing most African countries is establishing the networks for adequate assessment of water resources, monitoring of the quality of water that is harvested at the water resources and addressing the vital socio-cultural issues associated with the management of sustainable water resources. However, the study was limited to community participation at the water resources without noting that stakeholder participation in water service provision can also influence efficient water provision.



**Figure 1: Conceptual Framework**

**Source: Author (2019)**

**Management Innovation Changes**

The competitive environment in which firms operate in necessitates the change of how firms do operate or transact business and have to constantly be innovative so that they maintain their business/market share and sustain competitive advantage. To do this, firms can focus on innovation through adopting new structures, processes and practices (Hamel, 2007).

Management innovation is defined as the generation and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals (Birkinshaw *et al.*, 2008). According to Frambach and Schillewaert (2008), management innovation may not only change an organization and bring potential benefits to it, but also redefine an industry by influencing the spread of new ideas. Studies in water service provision have not

incorporated the idea of management innovation yet; management innovation changes in terms of new management practices, process, structures and techniques in the water management systems can really improve water service provision to customers

**METHODOLOGY**

This study adopted the descriptive research design. A descriptive research design involves collecting data that answers questions about the participants of the study, thus appropriate when the researcher wishes to provide an accurate representation of persons, events or situations and make inferences about the target population (Saunders *et al.* 2012). The target population or those cases that contain the desired information consisted of five water services providers with 98 management team. Primary data was collected from respondents directly using self-administered structured questionnaires (closed ended questions).

**FINDINGS**

**Management Innovation and Efficient Water Service Provision**

This assessed the influence of Management Innovation on efficient water services provision in the Lake Victoria north region, Kenya. The results were presented in table 1 below.

**Table 1: Descriptive Statistics; Management Innovation**

Statement	Frequency and Percentage (%)					Mean	Std.Dev
	5	4	3	2	1		
1. Rules and procedures within our organization are regularly renewed to improve service provision	4(4.8)	40(48.3)	10(12.0)	25(30.1)	4(4.8)	3.18	.772
2. We regularly make changes to our employees' tasks and functions to improve service provision	3(3.6)	39(47.0)	8(9.6)	27(32.6)	6(7.2)	3.07	.813

3. There is regular implementation of new management systems to improve service provision	2(2.4)	38(45.9)	7(8.4)	28(33.7)	8(9.6)	2.98	.837
4. The policy with regard to compensation has been changed in the last three years.	4(4.8)	40(48.2)	11(13.3)	23(27.7)	5(6.0)	3.18	.784
5. The intra- and inter-departmental communication structure within our organization is regularly restructured.	5(6.0)	43(51.9)	6(7.2)	26(31.3)	3(3.6)	3.25	.880
6. There is continuous change of certain elements of the organizational structure to improve service provision	2(2.4)	42(50.7)	10(12.0)	24(28.9)	5(6.0)	3.14	.961
<b>Valid N (listwise)</b>	<b>83</b>						
<b>Grand mean = 3.133</b>							

From the table above, 48.3% of respondents agreed while 30.1% disagreed that rules and procedures within our organization are regularly renewed to improve service provision. The high number of those who disagreed (30.1%) means some water service providers are not collaborating management innovation in their organizations yet Birkinshaw *et al.* (2008). points out that management innovation in terms of generation and implementation of a management practice, process, structure, or technique that is new to the state of the art furthers organizational goals; while Frambach and Schillewaert (2008) reinforces that management innovation may not only change an organization and bring potential benefits to it, but also redefine an industry by influencing the spread of new ideas. Studies in water service provision have not incorporated the idea of management innovation yet; management innovation changes in terms of new management practices, process, structures and techniques in the water management systems can really improve water service provision to customers.

More so, 47.0% of respondents agreed while 32.6% disagrees that they regularly make strategic changes to employees' tasks and functions to improve service

provision, implying that stakeholders rarely collaborate in management innovations meant to improve water service provision. This is further supported by only 45.9% of respondents who agreed and 33.7% who disagreed that there is regular implementation of new management systems to improve service provision. However a fairly high percentage of respondents agreed (51.9%) that the intra- and inter-departmental communication structure within the organization is regularly restructured. Strategic communication restructuring ensures that the water service provision company collaborates with strategic partners to fast track efficient water provision to their customers. Lastly, 50.7% of respondents agreed that there is continuous change of certain elements of the organizational structure to improve service provision while 28.9% disagreed to the statement. The element of organizational restructuring is supported by Hamel, (2007) who asserts that the competitive environment in which firms operate in necessitates the change of how firms do operate or transact business and have to constantly be innovative so that they maintain their business/market share and sustain competitive advantage. To do this, water service provision companies can focus on innovation through adopting

new collaborative structures, processes and practices so as to improve on water service provision.

### **Hypothesis Testing**

Study hypothesis stated that there is no significant relationship between management innovations and efficient water services provision in the Lake Victoria north region, Kenya. The study results indicate that there exists a positive and significant effect of management innovations on efficient water services provision in the Lake Victoria north region ( $\beta = 0.287$  (0.079), at  $p < .05$ ). Hypothesis  $H_{01}$  was therefore rejected. The study results consequently implied that a single increase in management innovations in water service providers will lead to 0.287 element increase in efficient water services provision in the Lake Victoria north region. These results were supported UNICEF (2014a) research which identified several factors affecting sustainability of community managed water provision among others; technological factors such as suitability, acceptability, responsiveness, servicing needs, standards and changes innovative changes in the management structures of water service providers.

Further, these study results confirmed Frambach and Schillewaert (2008) assertion that, collaborative management innovations may not only change an organization and bring potential benefits to it, but also redefine an industry by influencing the spread of new collaborative ideas in terms of new management practice, process, structure, or techniques to address dynamic changes affecting a given organization or industry, hence serve customers with much ease. Studies in water service provision have not incorporated the idea of management innovation yet; management innovation changes in terms of new management practices, process, structures and techniques in the water management systems can really improve water service provision to customers.

### **CONCLUSIONS**

The study found significant relationship between management innovations and efficient water services provision in the Lake Victoria north region. The study therefore concluded that management innovation changes in terms of new management practices, process, structures and techniques in the water management systems boost efficient water services provision in the Lake Victoria north region

### **RECOMMENDATIONS**

The water service boards in the Lake Victoria north region should embrace collaborative management innovation changes in terms of new management practices, process, structures and techniques in the water management systems so as to boost efficient water services provision in the Lake Victoria north region.

### **Areas for Further Research**

The research suggested that further research should be done in this area probably using a different measurement scale to see if similar results can be obtained. Other indicators in strategic collaboration could also be included as this was just a few and they tended to fit the model exactly. As research can also be done to identify how public and private sector players are managing strategic collaborations using the four management variables used in the study.

Scholars and other professionals in strategic management should carry out research to determine how the concept of strategic collaborations can become a major consideration during planning and operational decision making. Strategic collaboration can then be a major consideration by managers for creating competitive advantage.



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