

**Relationship between Selected Strategic Planning Practices and Performance in Water Management Sector: A Case Study of Companies under Athi Water Works Development Agency in Kenya**

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**Abstract:** The general objective of the study was to establish the relationship between selected strategic planning practices and performance in water management sector: a case study of water and sewerage companies under Athi Water Works Development Agency in Kenya. The specific objective of the study was to determine the effect of goal setting, strategic resource allocation, strategic collaborations and strategic monitoring on performance in all companies managed by Athi Water Works Development Agency in Kenya. The study adopted a descriptive survey research design. The target population included three senior officials in each of the thirteen (13) water and sewerage service providers (WSPs) under management of Athi Water Services Board. In total 47 respondents participated in the study out of 66 that were targeted. On goal setting, the findings indicated that the average mean was 3.656 indicating that majority of respondents were of the opinion that goal setting affected performance in the water sector. Majority respondents also felt that strategic resource allocation affected performance (3.799). Most respondents as indicated by the overall mean of 3.872 were of the view that strategic collaborations influenced performance in the water sector. Most respondents as indicated by the overall mean of 3.0702 were neutral on whether strategic monitoring influenced performance. Most respondents were in agreement that performance had improved in the water company. Further while strategic resource allocation, strategic collaborations and strategic monitoring were significantly correlated with performance ( $p < 0.05$ ), the relationship between goal setting, and performance was not significant at  $p < 0.05$  but significant at  $p < 0.1$  <significantly. The strongest correlation was between strategy monitoring and performance. Further only strategic monitoring had a significant influence on performance at  $p < 0.05$  while the influence of goal setting was significant at  $p < 0.1$ . However strategic collaboration and strategic resource allocation had no significance on strategy implementation. It is therefore recommended that water companies Prioritize strategic planning practices in an effort to attain better performance.

**Keywords:** *Goal Setting, Strategic, Resource Allocation, Collaborations and Monitoring*

## Introduction

Johnson *et al.*, (2008) refers to a strategy as a game plan, a pattern in a stream of decisions and actions, a position intended to create competitive advantage in an organization. Strategic planning is the process of analyzing an organization's external and internal environments, deciding on a vision and mission, developing overall goals, creating and selecting general strategies to be pursued, and allocating resources to achieve the organization's goals. Its objective is to align an organization's activities with its environment, thereby providing for its continuing survival and effectiveness. Lake (2011), emphasize that there are four core reasons why the purpose of an organization should be stated clearly. Without a plan, a company may have difficulty successfully fulfilling its mission, since there is a lack of clarity about precisely what that mission is. Vague purpose challenges decision-making since decision-makers must use their best decision as to what an appropriate organizational judgement is. The method of making judgments that are not obviously related to the mission causes companies to spread themselves in unsuitable ways, leading to failure in most cases.

Second, a too broadly defined purpose causes the organization to have difficulty prioritizing (Lake, 2011). Alternative form of mission implication, lack of importance, normally leads to conflicting decision-making or poor decision-making, which could jeopardize an organization. This overarching or too broadly defined mission often results from an unengaged board, and can lead an organization into erratic or counterproductive behavior. Also, minus clear drive, key stakeholders can have conflicting concepts about why a company exists. Lack of clearness of drive confuses the issues for the campus administrator in terms of decision-making. Finally, without clarity of purpose, an organization will never know when it is time to refine and redefine its mission, or when to close its doors. One sector in Kenya that requires effective strategic planning is the water organization sector. This is because water is essential to sustain life and develop societies thus all water, even wastewater, should be effectively utilized. The safeguarding of clean water from wastage depends on reducing water wastage from either leaks or unnecessary usage or excessive consumption. About one fifth of the world's population lack access to potable drinking water and about forty per cent of the world's population are already in serious water crisis situation (Aswathanarayana, 2001).

The constitution of Kenya 2010 (COK 2010) entrenched the right to water and sanitation access in the bill of rights, hence effectively making water and sanitation a human right requirement and the need to have the water Act 2002 aligned to the COK 2010. These developments created the need to align the enactment of Water Act 2016 and are operational since April 2017. The Act objective was to have good practices especially in the water and sanitation sector on commercial viability as well ring fencing of revenue generation mechanisms of resolving consumer complaints as well as introducing good governance of service provision. (The impact 10<sup>th</sup> edition). In Kenya supply of clean water is characterized by low levels of access to water, in particular in urban slums and in rural areas, as well as poor service quality in the form of intermittent water supply (Water Service Quality – WASREB Impact Report 2009). Since water is a resource that can easily be depleted, efforts should be made in Kenya to ensure measures are put in place to ensure its availability and durability. There is need for prudent and efficient measures to be followed in the management of fresh water resources to ensure continual availability of water and efficient use. This process entirely depends on effective strategic planning.

Revenue Collection Efficiency for similar period 91% 92% 93%. Our worry is that 2019 is not is just beginning 2018/2019, and we were no able to verify whether there was an error in reporting. However, our concern is that the performance of over 90 percent is good enough. Robert and Peter (2012) argues that strategic planning refers to the process of setting plans and formulating strategies that governs the activities being undertaken to achieve an organizations set goals and objectives. Kotler and Keller, (2007) argues that the primary goal of strategic planning is to guide a firm in setting out its strategic objectives and priorities as well as focus itself towards realizing them. Odame (2007) defines strategic planning as a method of formulating and implementing long-term plans in an extensive and flexible manner in order to achieve the objectives of the organization. The main components of strategic planning practices entail asking questions on where the business wants to be (vision), the present position of the business, means to get where it wants to be (planning), and what changes was take place in the business's environment (Kotler & Keller, 2007).

Elsevier (2018) argues that strategic planning process encompasses three main fundamentals which helps turn an organization's vision or mission into concrete achievable and measurable choices and strategic implementation. There for strategic analysis includes setting the company's direction in term of vision, mission and goals and hence, it comprises articulate company's strategic commitment and direction of efforts towards understanding the business atmosphere. Strategic choice stage involves generating, evaluating and selecting the most appropriate strategies. Strategy implementation stage consists of relevant policies and formulation of structures that will assist in translating chosen strategies into actionable procedures. Water Organisation (2018) report indicate that with a population of 46 million, 41 % of Kenyans still rely on unimproved water sources, such as ponds, shallow wells and rivers, while 59 percent of Kenyans use unimproved sanitation solutions. These challenges are apparent in the rural areas and the urban slums. Only 9 out of 55 public water service providers in Kenya provide continuous water supply, leaving people to find their own ways of searching for appropriate solutions to these basic needs. There is a continuous water and sanitation crisis in Kenya where in total 19 million people lack access to safe drinking water and 27 Million people lack access to improved sanitation. Impact and ©2017 Water.org journal: The impact report 2017: WASREB reported that (51%) of all rural Kenyans started the New Year on a dry note and actually continue lacking access to clean piped water (Impact Journal)which is our Millennium Development Goal number six. It also reported that that Kenya missed the Millennium Development Goal seven to halve, by 2015, the population without sustainable access to safe drinking water and sanitation. Although a lot of efforts has been carried out to minimize water loss in Kenya, Water loss which is a major component of non-revenue water has been one of the major challenges in water utility management in Kenya (NCWSC, 2016).

## Literature Review

### Theoretical Background

David *et al* (1993) quotes Frederick Taylor (1917) who developed scientific management theory known as classical theory of management and maintained that there was precise and correct way of performing job tasks to produce the most efficient results. According to Taylor having a perfect vision reinforced by open communication from managers can help employees perform their tasks effectively, increase their morale and job satisfaction. Leaders who make job skills training a reliable priority repeatedly improve the performance of their employees. These open communications enable employees to feel that their contributions to the organization are appreciated. This theory was applicable to the current study in that in strategic planning organizations should ensure that there was a clear chain of command. Managers should play a role in helping to keep employees motivated and satisfied with their daily performance (Mullins, 2010). Scott and Davis (2007) argued that there was no better way to organize an organization however, though noted that the optimal course of action was contingency arrangement hence the contingency theory. This meant that it was contingent theory was dependent upon the internal and external situation. Environments create necessities for organizations and thus appropriate strategies are essential to be put in place. These plans in turn chance to create contingencies-size, technology, level of divergence, or others-for which some organizational structures are better suitable than others. When directors of a company find themselves with a structure that is not equal its contingencies, because these contingencies have changed, their organization's performance suffers, and they attempt to change its structure to one with a better fit, to improve performance (Scott & Davis, 2007).

Henderson and Mitchell (1997) argues that the resource-based view (RBV) emphasizes the firm's resources as the fundamental determinants of competitive advantage and performance and it adopts two assumptions in analyzing sources of competitive advantage (Peteraf & Barney, 2003). Levinthal and Myatt, (1994), Amit and Shoemaker (1993) argues that "it is the applicability of the organization's available resources and its competences to a particular industry that determines its production". Further Porter (1991) argues that resources are never valuable on their own, but when they allow firms to perform activities that create solutions in particular markets. The competitive value of resources can be enhanced or eliminating changes in technology, competitor behavior, or buyer needs which an inward focus on resources will overlook".

### Empirical Literature Review

Reinhart (2015) conducted a study related to goal-setting in an industrial production setting, showed that even without financial incentives goal-setting improves worker performance by 12 to 15% compared to the state of affairs where no goals were defined. This holds true for the groups which had to maximize either output quantity or output quality, as well as for the group which had an obligation to be as energy efficient as possible. Miller *et al* (2015) argued that a pretest of students prior to completing a goal setting trial plan, only few students had courage of how to set an effective goal. After the demonstration substantial improvement was noted though students rated the task as both effective in improving their knowledge of goal setting. Goal setting is the process of classifying the goals one wants to achieve and what one will do in order to achieve them.

Resource allocation means planning for scarce resources and using those available resources to achieve the company's objectives. These resources could be time, budgetary allocation, human resources working tools etc. this means allocating scarce resources amongst various projects or business units. This allocation starts when a company formulates its vision and goals where one must focus on accomplishment and achievement of objectives. A study by Klingebiel and Rammerb (2011) indicate that the choice of resource allocation strategy affects innovation performance. A strategy of allocating resources to a comprehensive range of innovation assignments increases sales of new products. The consequence of greater breadth seems to outweigh that of increased resource allocation per project. Wales (2009) refers to Monitoring, Evaluation and Control Commonly as M&E and control, is a process that helps oversee performance and effect improvement where possible to achieve the desired results. The main purpose of M&E and control is to improve the current and future management of outputs, outcomes and impact. Simons (2002) observes that monitoring is a critical element of the planning process which enables stakeholders to get feedback about performance.

### Conceptual Framework

Conceptual framework was a network of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena (Cooper & Schindler, 2003). In this study the dependent variable was performance in water and sewerage companies and independent variables are; goal setting, strategic resource allocation, strategic collaboration and strategic monitoring. The relationships between the research variables are illustrated in the following figure 1.

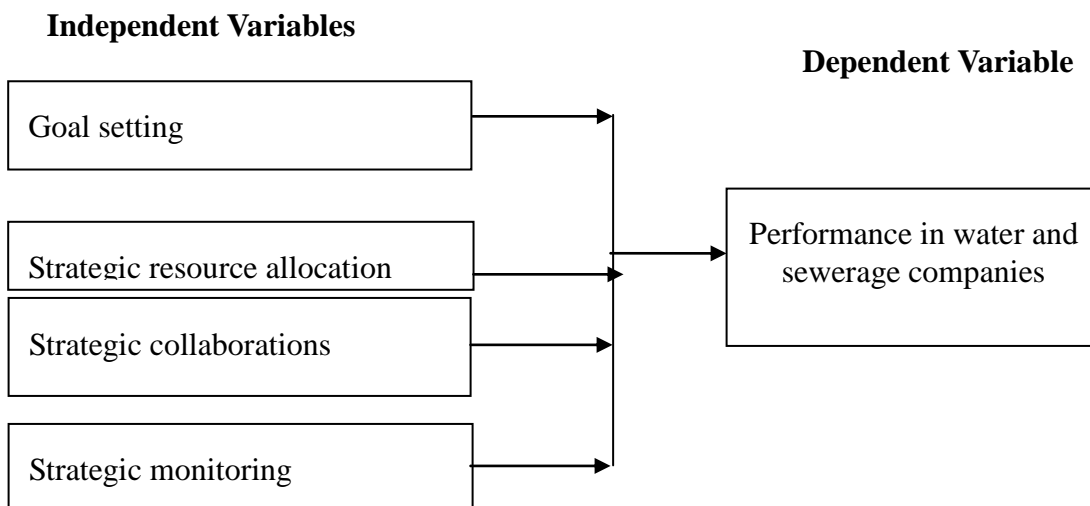


Figure 1: Conceptual Framework

## Research Methodology

The study adopted a descriptive survey method. Descriptive survey method was preferred because it ensured complete description of the situation, making sure that there was minimum bias in the collection of data. In this particular case study the target population consisted of sixty-six (66) respondents comprising of senior managers of the thirteen waters service providers (WSP's) under the supervision of Athi Water Services Board. Primary data was gathered through the use of a semi structured questionnaire (open and close ended questions). Questionnaires were preferred since they are and allow respondents to give much of their opinions of the researched problem. The questionnaires were self-administered using emails, through survey monkey dot com link, used questionnaires as well as face to face This was because the respondents are senior officers who are knowledgeable and needed little or no effort in guidance.

The use of semi structured questionnaires facilitated gathering of both quantitative and qualitative data. Quantitative data analysis method was therefore applied to analyze quantitative data through calculating responses frequencies, percentages and means. Tables and bar charts were used in order to give graphical representation of research findings. The questionnaires were checked for completeness and consistency of information at the end of every field data collection day and before storage. Data capturing was done using Excel software. The data from the completed questionnaires was cleaned, numbered, coded and entered into SPSS V21 Software for analysis. The data was analyzed using descriptive statistics including frequency distribution diagrams, and percentages. In addition, multiple regressions were used to measure the quantitative data.

The regression equation used:-

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \text{ whereas:}$$

Y = Performance

$\beta_0$  = Constant term

$\beta$  = coefficients of determinants

$X_1$  = Goal setting

$X_2$  = Strategic Resource allocation

$X_3$  = Strategic collaborations

$X_4$  = Strategic monitoring

e = error term

## Findings of the Study

### Demographic characteristics of Respondents

The study sought general information on the respondents' including gender, work experience and highest level of education.

### Response Rate

Out of 66 questionnaires administered a total of 47 completed questionnaires were returned. This was a response rate of 71.2%. This provided the required information for purposes of data analysis and meaningful generalization. According to Mugenda and Mugenda (2003) a response rate of over 70% is considered very well.

### Gender of the respondents

On gender the findings were as follows:

**Table 1: Gender of the respondents**

		N	%
GENDER	Male	30	64.7
	Female	17	35.3
	Total	47	100

Table 1 indicates that majority of the respondents were male accounting for 64.7%. Female accounted for 35.3% of the total respondents. Majority of respondents were male.



### Highest Education Level

The respondents were also requested to indicate their highest education level. The results are as shown in table 2.

**Table 2: Highest Education Level**

	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>CERTIFICATE</b>	-	-
<b>DIPLOMA</b>	6	12.8
<b>BACHELORS</b>	31	66
<b>MASTERS</b>	10	21.2
<b>PHD.</b>	-	-
<b>TOTAL</b>	47	100

As per results above, 12.8% (6) of the respondents indicated that their highest level of education was diploma, 66% (31) indicated Bachelor's degree, while 21.2% (10) indicated masters. Most of the respondents had bachelor's and above.

### Working Experience

The respondents were asked to indicate the number of years they had worked in the water company. The results are as shown in the table 3.

**Table 3: Working Experience**

	<b>FREQUENCY</b>	<b>PERCENT</b>
<b>BELOW 5 YEARS</b>	17	35.3
<b>6-10 YEARS</b>	6	13.7
<b>11-15 YEARS</b>	4	7.8
<b>16 YEARS AND ABOVE</b>	20	43.1
<b>TOTAL</b>	47	100

Results indicate that 35.3% (7) of the respondents had worked below 5 years. 13.7% (6) indicated they had worked for 6-10 years. 7.8% (4) indicated they had worked for 11-15 years while 43.1% (20) had worked for 16 years and above. Therefore, majority of the respondents had worked in the sector in Kenya for over 10 years. This experience would allow them give relevant and reliable information. Status of strategic management practices and performance of the water sector. The description of the status of strategic management practices and performances of the water sector was examined using descriptive statistics and the results comprising means and



standard deviations are presented in this section.

## Descriptive Results

**Table 4: Summary of Status of Strategic Management Practices and Performance**

Descriptive Statistics				
Variables	Min	Max	Mean	Std. Deviation
Performance	2.20	4.67	3.03	0.48
Strategic Monitoring	1.88	4.63	2.81	0.65
Strategic Collaboration	1.80	5.00	3.25	0.63
Strategic Resource Allocation	1.50	4.50	2.84	0.59
Goal Setting	2.14	4.29	3.71	0.37

Further, results for each strategic management practice and performance are presented in the next parts of this section.

## Goal Setting

The study sought to establish the effect of goal setting on performance in the water sector. Respondents using a likert scale of 1 (strongly disagree) – 5 (strongly agree) were requested to indicate their level of agreement or disagreement. Their responses were presented in table 5.

**Table 5: Goal Setting Status**

Code	Statements	Mean	Std. Deviation
GS1	The company is clear on what it wants to achieve in five years' time	4.53	0.65
GS2	Employees are clear on the main goals to be achieved by the company	4.74	0.53
GS3	Employees are aware of what should be achieved on a weekly basis	4.64	0.61
GS4	Goal setting has helped employees to direct efforts towards specified goals	3.62	0.74
GS5	Goal setting has helped the company met its set targets	3.47	0.91
GS6	Due to specified goal achievements set targets are easily achieved	3.04	0.75
GS7	Due to goal setting service delivery has improved	1.87	1.15

From the above results the respondents almost strongly agreed that the company had clear set goals as shown by mean scores (M) 4.74 with standard deviation (SD) of 0.53. The respondent too also agreed that they were of what should be achieved on a weekly basis as indicated by a mean (M) of 4.64, SD of 0.61, and followed by clarity of what the company wants to achieve in five years' time as shown be M= 4.53 and SD of 0.65. However, respondents somewhat agreed on the following three questions of whether, goal setting had helped employees to direct efforts towards specified goals the respondents had a mean (M)= 3.62, SD of .074, whether Goal setting had helped the company meet its set targets the respondents had a mean (M)= 3.47, SD of 0.91, and whether specified goal achievements set targets were easily achieved the respondents had a mean (M)= 3.04, SD = 0.75. There was a strongly contradiction that as a result of as a result of goal setting there was improvement of service delivery as the respondent strongly disagreed as shown by M= 1.87 and SD = 1.15.

The average mean of 1.87 therefore indicates that majority of respondents were of the view that goal setting did not affect performance in the water sector. This is in contradiction with views expressed by Dulo (2013) who argued that more specific and ambitious goals lead to more performance improvement. This probably could be as result of setting goals without involving the implementers.' Similarly Latham, Erez, and Locke 1988: argued that involvement in goal setting does increase goal commitment, though assigned goals are also effective so long as a compelling purpose or rationale for the goal is given or may be implementer's were not being motivated as argued by Locke 1968: that employees were motivated by working towards clear goals and receiving suitable feedback which, in turn, improve performance and Pritchard et al 1988: who argued that goal setting improves performance by 10%–25%.

### Strategic Resource Allocation

The study sought to establish the effect of strategic resource allocation on performance in the water sector. The respondents using a likert scale of 1 (Strongly disagree – 5 (strongly agree) were requested to indicate their level of agreement or disagreement with the statements. Their responses were presented in table 6.

**Table 6: Strategic Resource Allocation and Performance**

Code	Statements	Mean	Std. Deviation
SRA1	Effective mechanisms have been put in place for resource distribution	4.00	1.16
SRA2	Improved processes of resource allocation has led to effective service delivery	3.96	1.28
SRA3	Effective resource allocation has helped eliminate overspending	3.02	0.80
SRA4	Improved resource allocation has created customer satisfaction	3.39	1.02
SRA5	Resource allocation has contributed to superior service quality	2.3	0.99
SRA6	Strategic resource allocation has improved performance in the organization	2.37	1.02
		3.173	1.045

Only the question on whether effective mechanisms had been put in place for resource distribution did the respondents agree with as shown by a mean score of (M) = 4.00, SD = 1.16. The respondents somewhat agreed with the remaining three questions of whether Improved processes of resource allocation had led to effective service delivery M=3.96 SD 1.28, Improved resource allocation has created customer satisfaction (M) =3.39 SD=1.02 and Effective resource allocation had helped eliminate overspending M=3.02 SD = 1.02.

They disagreed with the question of whether Strategic resource allocation had improved performance in the organization by a mean score (M) =2.37 SD= 0.99 and whether Resource allocation has contributed to superior service quality by a mean score (M) = 2.3 SD=1.02. The overall mean of mean of 3.173 therefore indicates that majority of respondents were of the view that strategic resource allocation somewhat affected performance in the water sector. This is in line with views expressed by Klingebiel and Rammerb (2011) who indicated that the choice of resource allocation strategy affects performance.

**Strategic Collaborations**

The study sought to determine the effect of strategic collaborations on performance in the water sector in Kenya. The respondents using a likert scale of 1(Strongly disagree) – 5(strongly agree) were asked to indicate their views. Their responses were presented in table 7. On a scale of 1 to 5 where: Undecided (UD) =1 Strongly Disagree (SD) = 2 Disagree (D) =3 Agree (A) = 4 & Strongly Agree =5; the results are presented in Table 7

**Table 7 Strategic Collaboration**

Code	Statements	Mean	Std. Deviation
SC1	The company works closely with other players in the water sector and this has improved water services	3.26	0.68
SC2	Working together with other water companies has assisted us achieve our goals.	3.63	0.97
SC3	Networking has helped us assist each other to improve service quality	3.24	0.85
SC4	Frequent discuss among water companies has assisted in identification and solutions of water problems	2.43	1.19
SC5	Networking is an effective way of improving services in the water sector	3.67	0.87

From the above findings respondents agreed that networking is an effective way of improving services in the water sector as illustrated by the highest mean scores of M=3.67, SD=0.87 and Working together with other water companies had assisted the respondents to achieve their goals had a mean score of M=3.63 SD 0.97, and the respondents agreed that the company works closely with other players in the water sector that has improved water services as illustrated by (M) =3.24 SD = 0.85. However, respondents disagreed that Frequent discussion among water companies had assisted in identification of solutions of water problems and quality as indicated by M= 2.43 SD = 1.19.

This is in agreement with views expressed by Elmuti & Kathawala, (2001) who indicated that where strategic collaboration created partnerships between two or more companies, those partnerships resulted in positive effect on performance though in this particular case the impact was not very heavy as illustrated by the mean of less than 4 and as expressed by a wide standard deviation of 1.19 in regard to finding solutions of water problems.

### Strategic Monitoring

The study sought to establish the effect of strategic monitoring on performance of the water sector in Kenya. The respondents using a likert scale of 1 (strongly disagree) – 5 (strongly agree) were requested to indicate their level agreement or disagreement with the statements. Their responses were presented in table 8. The respondents were asked to indicate their level of agreement with the following statements that relate to strategic monitoring in the water sector using a Likert scale where: Undecided (UD) =1 Strongly Disagree (SD) = 2 Disagree (D) =3 Agree (A) = 4 & Strongly Agree =5. The results are presented in Table 8.

**Table 8: Strategic Monitoring and Performance**

Code	Statements	Mean	Std. Deviation
SM1	There is frequent evaluation of the progress within the water sector	2.02	1.38
SM2	The company pays keen attention on its daily service delivery	2.33	0.99
SM3	There is keen supervision of staff	3.61	0.98
SM4	Continuous monitoring has assisted the company identify weak areas that need improvement	3.06	0.97
SM5	Frequent checking of the company's records has assisted management gain insight in areas that need improvement	2.00	1.18
SM6	Frequent evaluation of the company's performance has helped the company gain competitive advantage	3.09	0.73
SM7	The company carries out systematic monitoring to identify external opportunities and threats	3.45	1.10
SM8	There is frequent evaluation of the progress within the water sector	2.91	0.62

As per the results in table 4.8 respondents somewhat agreed that there was There is keen supervision of staff as illustrated by M=3.61, SD=0.98, The company carries out systematic monitoring to identify external opportunities and threats as illustrated by M=3.45, SD=1.10 and that frequent evaluation of the company's performance has helped the company gain competitive advantage as illustrated by M=3.09, SD=0.73, and respectively that Continuous monitoring had assisted the company identify weak areas that need improvement as illustrated by M=3.06, SD=0.97. however, respondents disagreed with frequent evaluation of the progress within the water sector had helped as illustrated by M=2.91, SD=0.62 and that frequent checking of the company's records had significance assistance to management in gaining insight in areas that need improvement as illustrated by

M=2.0 SD=1.18. Most respondents as indicated by the overall mean of 2.8.87 were somewhat neutral on whether strategic monitoring influenced performance. However Simons (2002) observed that monitoring is a critical element of the planning process which enables stakeholders to get feedback about performance. Monitoring of water management processes as well as the implementation of strategic goals set by a company is important in practice to ensure the organizations provide quality services to their customers.

### Performance of Athi Water Companies

The study sought to evaluate the overall performance. The respondents using a likert scale of 1(strongly disagree)–5 (strongly agree) were asked to indicate their level of agreement or disagreement with the statements. Their responses were presented in table 9. Table 9 shows responses on extent of agreement on statements regarding performance of water sector on a five-point Likert scale.

**Table 9: Performance in the Water Sector**

		Mean	Std. Deviation
P1	Effective planning has assisted the company to achieve set objectives	3.15	0.75
P2	Effective planning has enabled proper work coordination in the company	2.47	0.94
P3	Profitability has increased in the company	2.34	1.01
P4	The number of customer complaints has reduced	4.42	0.89
P5	Employee turnover is low	2.48	0.88
P6	Most of the company set targets has been achieved	3.44	1.01
<b>Composite Mean</b>		<b>3.05</b>	<b>0.933</b>

From the results above, the respondents agreed that the number of customer complaints had reduced as illustrated by mean scores of 4.42, SD 0.89, Most of the company set targets were achieved as respondents somewhat agreed as illustrated by mean score 3.44, SD 1.01 while on whether effective planning had assisted the company to achieve set objectives the respondents somewhat agreed as depicted by mean score (M) = 3.15 SD= 0.75. Indicated that they agreed the set objectives in the company had been achieved by mean scores of 4.279. The respondents somewhat agreed that employee Employee turnover is low as represented by mean scores of 2.48, and SD =0.88, that Effective planning had enabled proper work coordination in the company as illustrated by M= 2.47, SD = 0.94 and disagreed that Profitability had increased as illustrated by M=2.34, SD =1.01. The composite mean of 3.05 and SD0.9333 indicates that most respondents were in agreement that performance had improved in the water company though on a low impact.

## Relationship between Strategic Management Practice and Performance

Inferential statistics were used in the study included the use of correlation analysis to determine the strength of the relationship between pairs of variables; and multiple regression analysis to establish the significance of the influence of strategic management practices on performance. The use of different tests was driven by the need to corroborate results and to further query the results to find out more about the underlying patterns explaining such results.

### Correlation Analysis

The study applied Pearson product moment correlation coefficient which is a measure of the strength of linear association between two variables. It was used to measure the degree of association between variables under consideration. The coefficient ranges from -1 to +1. Where there is a negative value, there is negative correlation and positive value implies a positive correlation. Where Pearson coefficient is less than 0.3, the correlation is weak and 0.5 implies a strong correlation. The correlation summary shown in Table 10 indicates the strength relationship between each of the independent variables, namely goal setting, strategic resource allocation, strategic collaborations and strategic monitoring; and the dependent variable (performance) were all significant at the 95% confidence level.

**Table 10: Correlation Coefficients**

	GSAV	SRAV	SCAV	SMAV	PAV
Goal setting (GSAV_					
Strategic resource allocation (SRAV)	.342*				
	0.019				
Strategic collaboration (SCAV)	.364*	.702**			
	0.013	<0.001			
Strategy monitoring (SMAV)	.316*	.496**	.734**		
	0.03	<0.001	<0.001		
Performance (PAV)	0.271	.449**	.465**	.456**	1
	0.072	0.002	0.001	0.002	

\* Correlation is significant at the 0.05 level (2-tailed).

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

As presented in Table 10, three of the variables had moderate to strong and significant ( $p > 0.05$ ) relationship with performance, while one variable (goal setting, average value GSAV) was significantly correlated with performance at  $p = 0.072$  ( $p > 0.1$ ) with the performance (Table 4.10). The correlation coefficients between independent variables (strategic management practices) and performance with respective p-values are: goal setting ( $r = 0.271$ ,  $p = 0.072$ ), followed by strategic resource allocation average value SRAV ( $r = 0.449$ ,  $p = 0.002$ ), then strategic monitoring, strategic monitoring average value SMAV ( $r = 0.456$ ,  $p = 0.002$ ), while the strongest correlation was with strategic collaboration average value, SCAV ( $r = 0.465$ ,  $p = 0.001$ ). These results imply that the strategic management practice had the strongest relationship with performance where strategic collaboration was involved. Tadelis, 2007: argues that Outsourcing is a favored form of strategic collaboration and has become extensive and global in scope, incorporating a wide range of operational and strategic activities. This is so because collaborations enable an organization to have extra resources required that would not have been there if collaboration was not involved.

### Multivariate Regression Analysis

Multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together. This analysis attempted to indicate how the independent variables influenced the dependent variable collectively; to what extent does each independent variable affect the dependent variable in such a collective set-up, and which are the more significant factors. The results are given in the model summary in Table 11.

**Table 11: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935a	0.874	0.79	0.319638

a Predictors: (Constant), GSAV, SMAV, SRAV, SCAV

Predictors (Constant) goal setting, strategic resource allocation, strategic collaborations and strategic monitoring. According to the results, the combination of goal setting, strategic resource allocation strategic collaborations and strategic monitoring explain 87.4% of the variation in performance of the water company.

### Analysis of Variance (ANOVA)

The study used Analysis of Variance (ANOVA) to check how well the model fits the data and the results are presented in Table 12.



**Table 12: Analysis of Variance (ANOVA)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.916	4	0.729	4.008	.008b
	Residual	7.094	39	0.182		
	Total	10.01	43			

A) Dependent Variable: Performance Average Value

b) Predictors: (Constant), goal setting, average value, Strategic Collaboration average value, strategic resource allocation average value and strategic monitoring average value, SRAV, SMAV

The model was significant ( $F=4.008$ ,  $p<0.008$ ) in explaining the relationship between the independent variables (goal setting, strategic resource allocation, strategic collaborations and strategic monitoring) and performance.

**Table 13: Regression Coefficients**

	B	Std. Error	Beta	t	Sig.
(Constant)	-0.793	0.887		-0.894	0.406
SMAV	0.831	0.245	0.953	3.384	0.015
SCAV	-0.379	0.201	-0.485	-1.888	0.108
SRAV	0.19	0.266	0.177	0.713	0.502
GSAV	0.596	0.281	0.36	2.122	0.078

a) Dependent Variable: Performance (PAV)

Only Strategy resources allocation average value was significant at  $P<0.05$  while Goal setting, strategic monitoring and strategic collaborations average value was slightly significant at  $P<0.1$ . Strategic monitoring value had a significance of ( $P<0.05$ ) research influence on Strategic Implementation. These findings are consistent with previous studies of Oliver *et al*, (1997) who argued that resources allocations influences performance. However, the findings did not show significance influence on Goal setting, strategic monitoring and strategic collaborations. This can be explained by the fact that the three variables were moderate which could have made the situation of the strategy implementation minimal as explained individually below.

### Goal Setting

This was contrary to Asmus, Karl, Mohnen and Reinhart (2015) who argued that goal-setting in an industrial production setting, showed that even without financial incentives goal-setting improved worker performance by 12 to 15% compared to the state of affairs where no goals were defined. This too can be explained by Edwin Locke theory of lack of motivation to the employees when he argued that Goal Setting at workplace motivation shows that there is a direct relationship between goals, productivity and employee engagement both clear, and actionable and this increases performance.

## Strategic Monitoring

This too was in contradiction to the findings Asmus, Karl, Mohnen and Reinhart (2015) who illustrated that it was possible to have effect of Performance Monitoring Systems as long stakeholders had interest in establishing strategic objectives for sustainability. So there was a possibility of lack of support of key stakeholders and this case regulator and government.

## Strategic Collaborations

Emanuela, Todeva and David Knoke (2005) who argued that cooperative arrangements represent new organizational formation that seeks to achieve organizational objectives better through collaboration than through competition. So lack of significance influence is wanting. At that same time goal setting had had no significance in strategic collaborations of revenue on strategy implementation. However standards such as this indicate a significant influence. Possible explanation of this is that strategy collaboration was rated moderate at  $M= 3.6$  which would suggest that it was not effective hence it was insignificant on strategy implementation.

## Regression Analysis

Strategy monitoring (SMAV) significantly influenced strategy implementation at  $p<0.05$  ( $\beta=0.831$ ,  $p=0.015$ ) while the influence of goal setting (GSAV) was significant at  $p<0.1$  ( $\beta=0.596$ ,  $p=0.078$ ). On the other hand the strategic collaborations, SCAV ( $\beta = -0.379$ ,  $p=0.108$ ) and that strategic resource allocation, SRAV ( $\beta=0.19$ ,  $p=0.502$ ) also had no significant influence ( $p>0.1$ ) on performance (PAV). The influence of the variables on performance in increasing order, that is from least to the highest influence is SRAV ( $\beta=0.19$ ,  $p=0.502$ ), SCAV ( $\beta=-0.379$ ,  $p=0.108$ ), then GSAV ( $\beta=0.596$ ,  $p=0.078$ ) and the strongest influence was SMAV ( $\beta=0.831$ ,  $p=0.015$ ).

The influence of goal setting on strategy implementation was insignificant at  $P< 0.05$  but significant at  $P < 0.1$ . This findings is significant with that Wernham (1984) argued that strategy formulation and implementation are part of a uninterrupted and communicating process where the process is cyclic in nature rather than a linear sequence. May be the companies were facing challenges of implementation, poor resources allocation, in terms money, manpower, working tools, as well as misallocation of priorities), the allocated power by the Governor, their Strategy Formulation and Organization structure Management Process, as well as organizational Culture and Human Resources strategic objectives achieved. With this in place Wernham (1984) found that there was significance influence on strategic implementation on goal setting. Other issues that could have affected this implementation could be lack of ownership, lack of communication to the employees at the right time, getting mired in the day-to-day work, overwhelming plans, and meaningless plans to employees. Others could be not considering implementation plans during the planning stage, no progress reports. No accountability as well as lack of empowerment to implementer's. The study established noticed there was a small significance between strategic collaborations and strategic resource allocation. This is in line with Todeva and Knoke (2005) argued that Some empirical studies suggest that most Collaborations are relatively short-lived, with many failing to achieve their formal objectives of Research & Development innovations. Secondly Gulati, Nohria and Zaheer (2000) argues that some at times there are negative consequences of collaborations, e.g. some networks researchers have recognized the effect of social embeddedness on market efficiencies by locking associates into

unproductive relations or blocking collaboration with other viable firms including “rigidity in changing direction and trading partners as well as potential lack of market incentive.”

### Conclusion

There was significant positive relationship between strategic management practices (strategic monitoring, strategic goal settings, strategic collaborations, and strategic resource allocations) and performance where the strategic relationship was between strategic collaboration and performance followed by strategic management and then by strategic resource allocation and lastly by strategic goal settings. Further strategic product that had the strongest influence on performance were strategic management followed by goal settings, then strategic collaborations and strategic resource allocations which were all positive and a negative strategic resource allocation but insignificant at  $P > 0.05$

### Recommendations

Water companies under the Athi Water Development Authority should put more emphasizes on strategic monitoring of their plans and improves on goal stings because these two practices were found to have strategic influence on performance. A further study is required since the literature indicate that strategic collaboration and strategic resource allocations positive significant influence on performance but the study showed insignificant influence. It is further recommended that a study be conducted to deduce why strategic collaboration and strategic resource allocation did not have significant influence. It is also recommended that studies be conducted in other water sector in the country and other firms to arrive at more generalized conclusions.

### Conflict of Interest

No potential conflict of interest was reported by the authors

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