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ADOPTION OF BALANCED SCORECARD AND ORGANIZATIONAL
PERFORMANCE OF STATE CORPORATIONS IN KENYA**

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Strategy

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Abstract

Purpose: The purpose of this study was to determine the relationship between rational choice rationale for balanced scorecard (BSC) adoption and organizational performance of state corporations in Kenya.

Methodology: The research design employed in this study was explanatory cross-sectional survey research design. The target population for this study was the 32 State Corporations that have implemented balanced scorecard. A sample size of 96 top and senior middle level managers comprising of Managing Directors, Human Resource Directors, Finance Directors, Operations Directors, or their equivalent designations in senior management were surveyed using semi-structured questionnaires. The research adopted a quantitative approach.

Findings: The findings indicated that rational choice is a good predictor of organizational performance of State Corporations in Kenya. The findings also showed that rational choice and organizational performance had a positive and significant relationship.

Unique Contribution to Theory, Practice and Policy: In line with the findings, it is recommended that organizational decision makers to take account of available information, potential costs and benefits in determining whether to adopt or not adopt balanced scorecard, and to be lucid in choosing the best choice of action.

Key words: *Rational choice rationale, balanced scorecard adoption and organizational performance.*

1.0 INTRODUCTION

1.1 Background of the Study

Market competition for customers, inputs, and capital make organizational performance essential to the survival and success of the modern business. As a consequence, organizational performance has acquired a central role as the goal of modern organization. It is a recurrent theme of great interest to both academic scholars and practicing managers. It is the most sought outcome and common factor across organizations (Ongeti, 2014). Most studies in strategic management conceptualize performance as a dependent variable and seek to identify variables that explain variation in performance. It however, continues to be a contentious subject among organizational researchers in terms of definition and measurement (Aosa & Machuki, 2011) as various scholars and researchers define and conceptualize performance differently.

Hemming (2012) exemplifies that as companies around the world transform themselves for competition based on information, their ability to exploit intangible assets has become far more decisive than their ability to invest in and manage physical assets. This trend shows that the development and the adoption of more sophisticated managerial innovation system such as the balanced scorecard (BSC) used in planning, measuring and monitoring firm's performances are increasingly popular. In recent years, the use of the balanced scorecard and its variations not only applies to privately owned commercial entities, but also to the public sector and non-commercial entities (Lawson, Stration & Hatch, 2006; Kaplan, 2010). It is reported that more than 50% of the Fortune 500 companies adopt the BSC or its variations as a main performance measurement and strategic management tool (Gumbus, 2005).

Despite its widespread adoption and being touted by its proponents Kaplan and Norton as having performance enhancing potential, the results are mixed and inconclusive. De Geuser, Mooraj and Oyon (2009) indicate that it has proved difficult to document a strong relationship between balanced scorecard use and performance. Norreklit, Mitchell and Bjornenak (2012), pointed out that Kaplan and Norton's balanced scorecard literature appeals to managers' emotions instead of logic.

However, Rigby and Bilodeu (2007) argue that the extremely high and successful spread of balanced scorecard among thousands of organizations two decades after its inception is sufficient evidence that implementing organizations are either satisfied with the concept or at least find some aspects of the concept useful and beneficial to enhance performance. It was expected that at the third decade since its conception, the concept of the balanced scorecard would have matured and its application easily replicated across organizations, but this is not the case, there have been as many unsuccessful implementations of the balanced scorecard as successful ones (Parmenter, 2012)

These developments have prompted greater scrutiny of how and why managers cause their organizations to adopt balanced scorecard and the implications of these on its effectiveness and performance. Researchers typically distinguish between two types of explanations for reasons for its adoption, one is the rational accounts behavior which assumes that organizations act

rationality, and adopt the balanced scorecard to improve performance or strategic control (Abrahamson, 1996).

1.2 Statement of the Problem

The Kenyan government acknowledged that over the years there has been poor organizational performance in State Corporations, especially in the management of public resources which has hindered the realization of sustainable economic growth. As a result of this various strategies to revive the economy have been embraced. In 1991, a State corporation reform strategy paper was approved by the cabinet. Its content included the adoption of balanced scorecard as tool to improve organizational performance of State Corporations (GoK, 2010).

Internationally, the balanced scorecard has seen widespread adoption as a tool to improve organizational performance. Its adoption has been so rapid that it is labelled as one of the most influential management instruments of the 20th century (Hoque, 2014). Its worldwide adoption stands at 66%. Bloom and Van Reenen (2007) and Mol and Birkinshaw (2009) found that management practice adoption associates with superior firm performance. A review of United Kingdom competitiveness undertaken by Porter and Ketels (2003) suggests that low levels of adoption of what they term best practice is a contributor to the United Kingdom productivity gap.

On the contrast, the results from adoption are mixed. This has prompted attention of management researchers (Battisti & Iona, 2009; Bloom & Van Reenen, 2007; Chen & Huang, 2009; Mol & Birkinshaw, 2009; Chalhoub, 2009; Wu, 2010). Neely (2008) found the balanced scorecard having a positive impact on sales, gross profit and net profit, and its removal had negative impact on the same, while Kraaijenbrink (2012) disagrees with practitioner oriented literature suggestions that the balanced scorecard improves strategy awareness, communication, execution and achievement.

BSC adoption is affected by multiple and diverse rationales. Norreklit *et al.*, (2012) recommended research on the rationality behind balanced scorecard adoption, to answer why the BSC seemingly has had a worldwide impact, and even stronger impact than most other management concepts. Battisti and Iona (2009) found that traditional economic factors such as firm size, ownership and market competition can only explain a limited proportion of the variability of the adoption of management practices across firms, leading them to suggest it is necessary to consider alternative explanations and question the firm's rationality in its adoption choices. Mol and Birkinshaw (2009) observed that scant research supports this topic. In particular, the research sought to illuminate the relationship between rational choice rationale for balanced scorecard adoption and organizational performance of State Corporations in Kenya.

1.3 Research Objective

The study sought to establish the relationship between rational choice rationale for balanced scorecard adoption and organizational performance of State Corporations in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Literature Review

2.1.1 Rational Choice theory

Rational choice theory is an economic principle that states that individuals always make prudent and logical decisions. These decisions provide people with the greatest benefit or satisfaction — given the choices available — and are also in their highest self-interest (Levin & Milgrom, 2004). Rational choice intellectual position was secured in Thomas Hobbes' *Leviathan* (1651). Hobbes tried to explain the basic functioning of political institutions via individuals' choices. He conjectured choices stemmed from universally held 'appetites' and 'aversions.' The effort was continued by such illustrious figures as Francis Hutcheson, David Hume, Adam Smith, and later Utilitarian's as Jeremy Bentham and John Stuart Mill. Others followed including many in economics. These works spawned what has come to be thought of as classical rational choice theory.

Adam Smith emphasized the potential social functionality of Hobbes' simplifying assumption of self-interest, famously asserting, in the *Wealth of Nations* (1776), that it is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest. Utilitarian's went on to formalize the link between individual choice and social welfare via a reduction of moral content to an interpersonally comparable utility that was seen as also motivating the individuals

Rational choice is concerned, with finding the best means to given ends; more specifically, in the face of a decision-making situation, an actor considers a finite set of alternatives, ascribes consequences to them, orders these consequences according to their importance and value, and makes an optimal choice among available alternatives. The actor is assumed to know all available alternatives, and chooses the best action or means to achieve her ends on the basis of expectations about future consequences or outcomes of her choices.

It has had a wide range of applications: among others, operations research, decision engineering, game theory, foundations of microeconomic theory, enterprise decisions about production, output, investment, and technological change, personal choices about marriage, child-bearing, crime, education; personal and household choices about consumption and savings, public policy and public choice, group and organizational behavior in sociology; and criminology, deterrence theory, and international relations.

The same basic structure of rational choice underlies modern game theory, decision engineering, operations research, and the various analytical approaches to improving choices and information systems, in the blending of aviation fuel, the location of warehouses, the choice of energy alternatives, and the arrangement of bank queues, as well as many other decision problems.

A fundamental premise is that each actor pursues his or her personal values and self-interest, typically in the context of—and against—others rationally pursuing their own self-interest and their private values. Such theory emphasizes the volitional nature of human action and the capability of actors to make decisions and to act on the basis of rational calculations of benefit and cost. Individual actors are assumed to be more or less fully informed about their action situations and to choose the best action or means to achieve their ends. This theory posits that

organizational adoption is motivated by a desire for efficiency gains and related boosts to economic performance (Katz & Shapiro, 1987; Teece, 1980). Adopters are conceived as rational actors that scan their environment and make efficient choices.

Rational choice theories are multiple with several variants having the following components: an actor or collective agent in a decision situation identifies or specifies alternative actions or sequences of actions, her repertoire of options in the decision situation, that are possible and are known unambiguously; she determines the consequences resulting from each of the alternatives, the possible outcomes or payoffs of the options, that is the actor is assumed to know all relevant consequences of her alternative actions; the actor has preferences among the options, with what is assumed to be a consistent preference ordering

This assumes moreover that the consequences of acts can be compared in terms of subjective preferences or utilities; effectively, there is comparability of the values or preferences of each of the sets of consequences; the actor applies a decision or choice procedure to the alternatives to determine which maximizes net gain; the procedure selects a single alternative on the basis of its consequences for the actor in terms of her preferences or utilities. The actor makes a choice by selecting the alternative which maximizes a utility or value function. Varian (1997) posits that all economic models are pretty much the same. There are some economic agents. They make choices in order to advance their objectives. The choices have to satisfy various constraints so there's something that adjusts to make all these choices consistent.

In the context of BSC adoption, rational choice theory approach predicts that a new system will be adopted when the expected benefits, in terms of enhanced organizational performance, exceed the associated costs. It assumes that organizations act rationally and innovations such as balanced scorecard are adopted by rational decision makers who make the choices that lead to the diffusion of beneficial innovations and adopt such concepts to improve performance (Katz & Shapiro, 1987).

2.2 Empirical Literature Review

Rational accounts emerges from the field of economics, it has an immediate intuitive appeal, since they focus on the presumed economic benefits that result from the adoption of a practice. The connection between cost effectiveness and the likelihood of diffusion is one of the most widely reported findings in the innovation diffusion literature. Organizational adoption is usually motivated by methodical evaluation and a desire for efficiency gains and related boosts to economic performance. It takes utility maximization as a literal description of a decision process (Ansari, Fiss & Zajac, 2010).

Rational choice comes in two versions. The first one focuses on evolutionary processes, which suggest that selection forces weed out the weaker performers, who fail to adopt an efficient practice. The second indicating effective innovations are adopted by rational decision makers who make the choices that lead to the diffusion of beneficent innovations (Ansari, Fiss & Zajac, 2010).

In both forms a key mechanism explaining increasing levels of adoption pertains to information cascades, where adoption processes build momentum as firms use observed behaviors of early adopters, presumably with more accurate information about the practice, to update their own value expectations regarding a diffusing practice (Terlaak & Gong, 2008). In such models

imitation follows from a heuristic of social proof that is, firms infer from the actions of other firms what constitutes appropriate actions to minimize search costs and to avoid the costs of experimentation.

With greater diffusion more information about the utility of a practice reduces its associated uncertainty and, thus, the risk of adoption, speeding up the diffusion process. However, some rational models also acknowledge that information cascades may lead to herding behavior, which occurs when it is optimal for an individual, having observed the actions of those ahead of him, to follow the behavior of the preceding individual without regard to his own information. Such information cascades may form particularly fast when early adopters are high status individuals or are perceived to have special expertise, leading other firms to imitate them, even if their private information indicates that adoption is not beneficial (Ansari, Fiss & Zajac, 2010).

Performance of a firm is a comprehensive result, its measurement and evaluation system should be equally comprehensive and multidimensional to achieve alignment and coherence with the notion of its performance. Public authorities have to pay much attention to the objectives of efficiency; effectiveness and economy. As a result of this, a growing number of public sector organizations worldwide are adopting balanced scorecard for performance management (Farneti & Guthrie, 2009).

Hemming (2012) exemplifies that as companies around the world transform themselves for competition, based on information, their ability to exploit intangible assets has become far more decisive than their ability to invest in and manage physical assets hence balanced scorecard is a good option for them. Balanced scorecard or its variation aim to capture data on what has happened and to measure factors that drive profitable growth. Balanced scorecard is a management system that can motivate breakthrough improvements in such critical areas as product, process, customer, and market development. Rational choice therefore informs the choice for balanced scorecard.

3.0 RESEARCH METHODOLOGY

The research design employed in this study was explanatory cross-sectional survey research design. The population of the study was the 32 State Corporations that have implemented the balanced scorecard. A sample size of 96 top and senior middle level managers comprising of Managing Directors, Human Resource Directors, Finance Directors, Operations Directors, or their equivalent designations in senior management were surveyed using semi-structured questionnaires. A sample size of three persons per organization was used in order to avoid single respondent bias. These were sampled using simple random sampling method. The research adopted a quantitative approach as this was found by the researcher to be the most appropriate for this study. The Cronbach's alpha values obtained in the pilot study and the wide literature used in this area supported this approach. Data was analysed using Statistical Packages for Social Sciences Version 22 software. Hypothesis was tested using Analysis of Variance (ANOVA) F-test.

4.0 RESULTS

4.1 General Information

Table 1 provides the results on the response rate and the demographic information.

Table 1: General Information

	Response rate	Frequency	Percent
Returned		92	96
Unreturned/Rejected		4	4
Total		96	100
	Gender	Frequency	Percent
Male		48	52
Female		44	48
Total		92	100
	Number of Employees	Frequency	Percent
More than 100		80	87
50-100 employees		12	13
Total		92	100
	Job position	Frequency	Percent
Top management		61	67
Middle management		31	33
Total		92	100
	Level of Education	Frequency	Percent
PhD		13	14
Masters		42	46
Bachelor's		32	35
Diploma		5	5
Total		92	100

Out of the 96 administered questionnaires, 92 fully completed questionnaires were returned. This represented a response rate of 96%. On gender, majority of the respondents (52%) who were managers in their companies were male. Female represented 48% of the respondents. Majority of the respondents who were 87% indicated that their organization has more than 100 employees while 13% indicated that their organization has 50-100 employees. Further, most of the respondents who were 67% held top management positions in their respective organizations. Those in senior middle management were represented by 33%. Finally on education, most of the respondents (46%) had attained a master's degree, 35% had bachelor's degree, 14% had postgraduate degree and 5% had diploma as the highest education they had attained.

4.2 Descriptive Analysis

The descriptive analysis results are as depicted in Table 2.

Table 2: Descriptive Analysis Results

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
Our organization adopted the balanced score card in order to achieve efficiency in our operations	3.30%	0.00%	9.80%	40.20%	46.70%	4.27	0.89
Our organization adopted balanced scorecard because it is an effective tool	3.30%	6.50%	22.80%	40.20%	27.20%	3.82	1.02
Our organization adopted balanced scorecard to be able to more improve performance measurement	3.30%	9.80%	3.30%	46.70%	37.00%	4.04	1.05
Our organization adopted balanced scorecard to be able to improve on performance	3.30%	9.80%	6.50%	50.00%	30.40%	3.95	1.03

The results as indicated in Table 2 show that majority of the respondents 86.90% agreed that their organization adopted the balanced score card in order to achieve efficiency in their operations. This confirms Farneti and Guthrie (2009) assertion that a growing number of public sector organizations worldwide are adopting balanced scorecard for performance management to achieve objectives of efficiency; effectiveness and economy. The results also showed that majority of the respondents 67.40% agreed that their organization adopted balanced scorecard because it is an effective tool, confirming Rigby and Bilodeau (2013) assertion that balanced scorecard is an effective tool in enhancing organizational performance.

The results indicated that majority of the respondents 83.70% agreed that their organization adopted balanced scorecard to be able to improve performance measurement. This confirms (Gumbus, 2005) assertion that majority of companies adopt the balanced scorecard or its variations as a main performance measurement tool .The results also showed that majority of the respondents 80.40% agreed that their organization adopted balanced scorecard to be able to improve on performance. This confirms Madsen and Stenheim (2014) support that the balanced scorecard has an overall positive effect on the performance of an organization.

The Table 2 further shows that low standard deviation (STD) deviation and means on all the factors and this indicates a low variation. This means that the questions were well answered and answers given were accurate and reliable. The study hence deduced that balanced scorecard is adopted to improve efficiency, because of its effectiveness, to be able to improve performance measurement, and to improve performance.

4.3 Correlation Analysis

Correlation analysis was conducted to determine the strength of a relationship between the rational choice rationale for balanced scorecard adoption and organizational performance. Results are shown in Table 3.

Table 3: Correlation Analysis Results

		Rational choice rationale
2	Organizational performance	Pearson Correlation .602**
		Sig. (2-tailed) < 0.001

As shown in Table 3 there was a positive and significant relationship between rational choice rationale and organizational performance ($\gamma = 0.602$, $p < 0.05$). This is in line with the findings of Farneti and Guthrie (2009) that growing number of public sector organizations worldwide are adopting balanced scorecard for performance management. Lovett (2006) also attests that rational people act efficiently in pursuit of whatever objectives they hold at the moment of choice.

4.4 Inferential Statistics

Inferential statistics was calculated to determine the relationship between the rational choice rationale and organizational performance of State Corporations of Kenya.

Table 4 presents the model fitness used for regression model in explaining the study phenomena.

Table 4: Model Fitness

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.695a	0.483	0.459	0.65483

The results in Table 4 show that rational choice rationale of balanced scorecard adoption was found to be satisfactory in explaining organizational performance. This is supported by coefficient of determination also known as the R square of 0.483. This means that rational choice rationale explain 48.3% of the variations in the dependent variable which is organizational performance.

Table 5 presents the ANOVA results for rational choice rationale

Table 5: ANOVA on Rational choice rationale

	Sum of Squares	df	Mean Square	F	Sig.
Regression	34.81	4	8.703	20.295	< 0.001
Residual	37.306	87	0.429		
Total	72.116	91			

Table 5 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variable which is rational choice rationale is a good predictor of organizational performance. This was supported by an F statistic of 20.295 and the reported p value ($p < 0.001$) which was

less than the conventional probability of 0.05 level of significance. Table 6 presents the regression of coefficients results for rational choice rationale.

Table 6: Regression of Coefficients Results for Rational Choice Rationale

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.902	0.407		2.219	0.029
Our organization adopted the balanced score card in order to achieve efficiency in our operations	0.107	0.082	0.108	1.311	0.193
Our organization adopted balanced scorecard because it is an effective tool	0.540	0.103	0.616	5.235	0.000
Our organization adopted balanced scorecard to be able to more improve performance measurement	0.275	0.102	0.324	2.686	0.009
Our organization adopted balanced scorecard to be able to more improve on performance	-0.229	0.117	-0.265	-1.963	0.053

A value of $p < 0.01$ is interpreted as a very strong evidence against H_0 , $p < 0.05$ is moderate evidence against H_0 , $p < 0.10$ is Suggestive evidence against H_0 , $p > 0.10$ is little or no real evidence against H_0 . Regression of coefficients results in Table 6 showed that efficiency in operations of balanced scorecard and organizational performance had a positive and insignificant relationship ($r=0.107$, $p=0.193$). The results also revealed that effectiveness of BSC and organizational performance had a positive and significant relationship ($r=0.616$, $p<0.001$). The results further revealed that ability to improve performance measurement and organizational performance had a positive and significant relationship ($r=0.275$, $p=0.009$). Finally, results revealed that ability of balanced scorecard to improve performance had a negative and insignificant relationship with organizational performance ($r=-0.229$, $p=0.053$). Table 7 presents the optimal model for rational choice Rationale.

Table 7: Optimal Model for Rational Choice Rationale

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.87	0.393		2.217	0.029
Rational Choice Rationale	0.686	0.096	0.602	7.155	< 0.001

Regression coefficients in Table 7, revealed that there was a positive and significant relationship between rational choice rationale for balanced scorecard adoption and organizational performance ($r=0.686$, $p<0.001$). This was supported by a calculated t-statistic of 7.155 which is larger than the critical t-statistic of 1.96 (Kothari, 2011). These results agree with Farneti and Guthrie (2009) who indicated that growing number of public sector organizations worldwide are adopting balanced scorecard for performance management this is due to the efficiency, effectiveness and economy of balanced scorecard model.

The model for rational choice rationale is

$$Y=0.87+0.686X \text{ where,}$$

Y= Organizational Performance

X= Rational Choice Rationale

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

It was concluded that rational choice and organizational performance had a positive and significant relationship. Organizations seem to adopt balanced scorecard because it is an effective tool and also to be able to improve performance measurement. .

5.2 Recommendations

In line with the findings, it is recommended that organizational decision makers to take account of available information, potential costs and benefits in determining whether to adopt or not adopt balanced scorecard, and to be lucid in choosing the best choice of action

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