THE INFLUENCE OF BALANCED SCORECARD SYSTEM ON PRODUCTIVITY AT KENYA WILDLIFE SERVICE

ODHIAMBO C. A.[1*] Dr. OLOKO M. A.[1]

1 Department of Commerce and Economic Studies, JomoKenyatta University of Agriculture and Technology

* odhiamboca@gmail.com Mob.No. 0722282691

Abstract

It is vital for any organization to assess its productivity both for future planning and determination of resource utilization. The traditional measures of assessing productivity have been found to have inherent weaknesses. Balanced scorecards have been suggested to be more effective, but there are conflicting information on the importance of Balanced Scorecard (BSC) in enhancing organizational productivity. This study sought to explore its influence on productivity at Kenya Wildlife Service[*] (KWS).

A descriptive research design was used to conduct the study. The KWS's current top management staff of 45 individuals constituted both the population and the sampling framework for the study. The factors considered in the study includes: the influence of customer knowledge, financial performance, internal business processes and learning perspective on performance in the organization.Data obtained was analyzed using the descriptive statistics and linear regression tool of the SPSS.

The results obtained indicated a positive relationship between the balanced scorecard and organizational performance. Regression analysis performed to test the model that the four factors interaction influence the productivity in the institution indicated that financial and customer perspective are the main contributors compared to both internal business processes and learning perspective on performance in KWS. The author recommends more emphasis on the application of the balanced scorecard by the entire management staff of the KWS.

[*]KWS is a state owned corporation that manages wildlife in Kenya. Wildlife is major tourist attraction in the country. Revenues from tourism contribute hugely to the economy of the country.Tourism is yet to be fully exploited in the country. Full exploitation promises higher returns and a major economic boost.

Introduction

Productivity is critical for the long-term competitiveness and profitability of organizations. It is possible to raise Productivity effectively through holistic and systematic management (Card, 2006). To track the productivity trends of a given organization, there should be a means to measure it. The traditional measurement systems like the financial measures have been documented to have inherent problems such as having a narrow, uni-dimensional focus based primarily on financial performance measures such as return on investment and earnings per share (Dixon *et al.,* 1990 and Johnson and

Kaplan ,1987). To overcome these challenges, the balanced scorecard have been developed (Kaplan & Norton, 1992).

The Balanced Scorecard allows managers to look at the business from four important perspectives: financial perspective, internal business perspective, the customer service perspective, and learning perspective. The system thus enables organizations to answer four fundamental questions: how do we appear to our shareholders (financial perspective), what must we excel at (internal business perspective), how does the customers view us (the customer perspective) and how can we continue to improve and create value (learning perspective)(Kaplan & Norton, 1992).

Although the balanced scorecard has grown in popularity, its implementation possess some challenges. Some of these include; poor leadership, poorly designed scorecards, lack of training, lack of resources for its implementation, and lack of top management support, among others (Edna, 2012). A similar line of thought has been advanced by Evans (2013) who points out that BSC is not easy to implement because it's complex and does involve a lot of subjectivity. This means that a lot of refinement is still required to be done on the tool so that it becomes understandable to every stakeholder associated with the organization and the subjectivity is removed to a large extent.

Although Kaplan and Norton (1996) describe many successful implementations of the BSC, they also identify sources of the failure of the Balanced Scorecard implementation. Key among these includes too few measures per perspective, measures selected for the scorecard not reflecting the organization's strategy, the difficulty of trying to make a quantitative link between non-financial leading indicators and expected financial results and lack of senior management commitment.

In an investigation on the challenges of implementing BSC in Kenyan Commercial banks, Mucheru (2011) found that commercial banks use the BSC to a great extent and that the performance measures used in the majority of the banks were financial indicators and customer satisfaction. According to Mucheru, there were some challenges faced by commercial banks in Kenya in using the balanced scorecard. These included resistances to change, management being too busy solving short-term issues to pay adequate attention to performance management-including balanced scorecard, lack of highly developed information system to support balanced scorecard, impending organizational problems and too many measures that dilute overall impact of BSC and lack of skills and know-how by a significant number of employees.

As alternative to the problem prone traditional measurements systems, the KWS introduced the BSC as tool to measure the organization's productivity. Though literature on the BSC advocate for its use as a tool for measurement of productivity (Kaplan and Norton, 1992 and Seth and Oyugi, 2013). Other researchers argue that its adoption is often constrained by the fact that it is simply a framework (Neely, 2000). Neely states that BSC provide little guidance on how the appropriate measures can be identified introduced and ultimately used to manage the business. Taking into consideration that contradictory views exists concerning effectiveness of BSC, and further noting that in recent years many Kenyan organizations have adopted BSC, there is therefore the need for a

study to establish whether the system has a positive effect on organizational productivity, with a specific emphasis on Kenyan organizations. It is on this basis that this study sought to determine if the adoption of BSC by the KWS affected the productivity in the organization.

RESEARCH METHODOLOGY

Research Design

The study took on a descriptive research design approach. This approach entails the gathering of data that describe phenomena and then organizing, tabulating, depicting, and describing the data collected. It uses visual aids such as graphs and charts to aid the reader in understanding the data distribution (Hopkins, 1984). Both quantitative and qualitative data was generated for this study. Quantitative data refers to the type of data which can be subjected to thorough quantitative analysis in a formal and strict method whereas qualitative data is that which is concerned with subjective assessment of attitudes, opinions and behavior (Saunders *et. al.,* 2007).

Target Population

The study entailed a census ofKenya wildlife service. The population for this research constituted top management staff directly and closely involved in BSC's system formulation and implementation. These included Deputy Directors, Senior Administrators and Senior Wardens. The KWS has 6 Deputy Directors in charge of the KWS's six key divisions – strategy and change, corporate services, research and monitoring, finance and administration, wildlife and community service, and security; 6 Senior Administrators – in charge of the six key divisions; and 33 Senior Wardens in charge of national parks and game reserves.

Sampling Frame

A list of all the Deputy Directors, Senior Administrators and Senior Wardens constituted the sampling frame for this research. Their postal addresses and telephone numbers was obtained and used to contactthem during the data collection stage.

Sample Size and Sampling Technique

The technique used was census inquiry of the top management staff at KWS. Census inquiry refers to a complete enumeration of all items in the population. According to Kothari (2004), when the universe is a small one, it is no use resorting to a sample survey. The population for this study consisted of only 45 members, thus eliminating the need for a sample survey.

Data Collection Instruments and Collection Methods

Primary data comprised of first-hand information obtained from KWS's senior management staffusing questionnaires. Compared to other instruments, the costs incurred when collecting data through questionnaires are usually lower even when the universe is large and widely spread geographically. This instrument further gives respondents' adequate time to give well thought out answers, besides;it is an effective tool for reaching respondents who are not easily approachable. Questionnaires also allows for the use of large samples, therefore, enabling the researcher to generate results which are more dependable and reliable (Kothari, 2004).

Enumerators were enlisted to assist in delivering and overseeing the filling of questionnaires by respondents' within their respective work stations across the counties. Questionnaires were mailed to respondents who may be unreachable at theirworkstations. Secondary data was collected through a review of reports, journals and other publications.

Pilot Test

A pretest of the study instrument was carried out on 5 respondents who did not form part of the sample for this study. The pretest was vital in ascertaining the validity and reliability of the instrument (Blaxter, Huyhes and Tight, 2001). Thisalso helped check the appropriateness of the language used in the questionnaire as well as to determine the difficulty of the items in the instrument. The questionnaire was modified in order to improve the instrument's validity and appropriateness.

Data Analysis

The completed questionnaires were collected for data coding and analysis. Categories of responses were then identified and classified on a prepared sheet as per objectives of the study. The data was analyzed using descriptive statistics. The Excel computer package and SPSS ver.16.0 was used to analyze the data. In descriptive analysis, means, standard deviations, frequencies and percentages were used. The statistical test was done at significance level of 0.05.

Results and Discussion

The entire management staff of KWS comprising of 45 individuals were supplied with questionnaires.The results in table 4.1 show the response rate was 89% of the sample unit.This response rate was a fair representative and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 70% and over as excellent. The incomplete questionnaires were excluded from the data analysis process.

Influence of customer perspective on productivity

The Customer perspective was measured using five items. The respondents were expected to give one of the three answers. The response for each item was scored. The individual scores for each respondent were aggregated into a composite score with an expected maximum of 15 and a minimum of 5. Based on the benchmark set the mean score obtained was either interpreted to indicate higher focus on Customer perspective otherwise a low focus on Customer perspective. The following benchmarks (table 4.4) were used for interpretation of the level of focus on Customer perspective.

The results presented in table 4.5 show that KWS have average customer perspective. These results show that the organization performs averagely on customer perspective as regards its various customers. There is growing acceptance that institutional administration must understand and address the wants, needs and requirements of those it serves. Taking the customer view means focusing on responsiveness, timeliness and service quality from the customer's point of view. It is undoubtedly true that customer perspective is the most important aspect of any organization.

To determine the influence of customer perspective on organization performance, simple regression model was used**.** The results of the model (table 4.6) indicates that the customer perspective is a statically significant predictor of organization performance at ($t=4.486$, $p<0.05$) with a strong model fit ($R^2=0.346$) which imply that focusing on the customer perspective contributes up to 34.6% of organizational performance. The null hypothesis is rejected and in conclusion, focusing on the needs of the customer is an important contributor to performance in institutions of higher learning. KWS evaluates its productivity from the customer perspectives both from their direct client, the tourist and students who study in the institutions the organization manages. The timely deliverance of quality service at matching cost is stated to be important in enabling successful improvement of productivity in the organization.The result is indicative of the fact that customer perspective has a strong influence on the productivity of the organization. Similar findings was established by O'Dell and Grayson (2004) that having customer-centric business strategies enables the exploration of the best mutual opportunities for customers leading to high organizational performance. Studying the influence of BSC on performance of institutions of high learning, Seth (2012) established that customer perspective is an important predictor of institutional performance.

Influence of Learning Perspective on Organizational Performance

Six items scored by the respondents were used to measure the learning perspective. The individual scores for each respondent were aggregated into a composite score with an expected maximum of 18 and a minimum of 6. The score level of the respondents was used to make a judgment on the perception of the staff of KWS on learning perceptive and its influence on productivity. The following benchmarks (table 4.7) were used for interpretation of the level of focus on innovation and learning perspective.

The data obtained was analyzed by calculating the mean on learning perspective scores. The results are presented in table 4.8 indicate a low level of learning and innovation perspective in the KWS.

To determine the influence of learning perspective on organization performance, simple regression model was used. The results are presented in table 4.9 show that focus on learning perspective is a statically significant predictor of organization performance at ($t=2.322$, $p<0.05$) with a moderately strong model fit ($R^2=0.124$) which implies that focusing on innovation and learning perspective can contribute up to 12.4% of organizational performance. In conclusion, focusing on the innovation and learning perspective is an important component of organization performance. From the study, the acquisition of ICT knowledge and sharing of information was found to be very important in relationship to learning perspective. Information exchange through seminars and guest lectures were stated to be the prominent means of achieving the goals of learning perspective.

The influence of financial perspective on productivity

The financial perspective was measured using four items. The respondents were expected to give one of the three answers. The response for each item was scored. The individual scores for each respondent were aggregated into a composite score with an expected maximum of 12 and a minimum of 4. Based on the benchmark set the mean score obtained was either interpreted to

indicate higher focus on financial perspective otherwise a low focus on financial perspective. The following benchmarks were used for interpretation of the level of focus on financial perspective (table 4.10).

The data obtained was analyzed by calculating the mean financial perspective scores for the scores obtained from each respondent. The results in table 4.11 show that KWS has a low financial perspective.

The results (table 4.12) show that focus on financial perspective was a statically significant predictor of organization performance at ($t=5.144$, $p<0.05$) with a strong model fit ($R^2=0.41$) which implies that focusing on the financial perspective contributes up to 41% of organizational performance. The null hypothesis is rejected and in conclusion, focusing on the financial perspective is important contributor to performance in KWS. In this study, it was stated that increase revenue streams through opening up new services in the parks and improving the state of existing one is important. Improvement of infrastructure and particularly road network to parks and tourist resorts were constantly stated to contribute largely to attainment of the goals of KWS financial perspective. This result agrees with the Kanji and Sa, (2002) conclusions who state that the financial perspective will indicate whether an organizations strategy, implementation and execution are contributing to bottom line improvement. This is a very important finding as organizations are slowly moving away from the financial performance measures which have severely been criticized for their historical focus on short-term emphasis (Kaplan, 1983).

Influence of internal business processes perspective on productivity

The internal business process perspective was measured using four items. The respondents were expected to give one of the three answers. The response for each item was scored. The individual scores for each respondent were aggregated into a composite score with an expected maximum of 12 and a minimum of 4. Based on the benchmark set the mean score obtained was either interpreted to indicate higher focus on internal business process perspective otherwise a low focus on internal process perspective. The following benchmarks (table 4.13) were used for interpretation of the level of focus on internal business process perspective.

The data obtained was analyzed by calculating the mean internal process perspective scores and the results presented in table 4.14. Overall KWS is in the category of high focus on internal business process perspective.

The result from simple regression model presented in table 4.15 show that focus on internal process perspective was not a statically significant predictor of organization performance at ($p<0.05$). The null hypothesis is accepted. According to this study, focus on the internal process perspective is not an important contributor component of organization productivity. The above results indicate that the institution is not practicing good internal operational measures which focus inward into the internal workings of their faculties and on those process and activities that deliver critical services to both internal and external customers.

CONCLUSION

The exploration of the main objective of the study which was to establish the influence of balanced scorecard system on productivity at Kenya Wildlife Service was positively achieved. As conceptualized in the framework of the study, customer perspectives, financial perspectives, internal business process perspective, and innovation and learning perspectives influenced organizational productivity. The customer perspective is a statically significant predictor of organization performance this was also true with learning perspective and financial perspective. The internal business process perspective does not significantly influence productivity at Kenya Wildlife Service. The financial and customer perspective have a higher influence on productivity compared to the other two perspectives.Despite the great influence the financial perspective has on the productivity when the other three are held constant, it is evident that the four perspective collective contribution significantly influences the productivity. Based on this fact efforts should be directed towards the focusing on the four perspective in order to achieve higher levels of productivity.

As indicated in others similar studies, the findings of this study suggested that BSC can be used as an important management tool as it enables organizations to clarify their vision and strategy and translate them into goal or actions. The reporting based on the BSC can greatly improve accountability.

RECOMMENDATIONS

The study recommends more emphasis on the application of the balanced scorecard by the entire management staff of the KWS. This is because the study has revealed that the four perspectives all have an influence on productivity of the institution.

Intensive training should be carried out to equip the KWS personnel on how to interpret and of the BSC and its contribution to the productivity of the institution.

There should be a mechanism to review the BSC periodically in order to align the objective with the KWS emerging challenges, this also helps remove obsolete measures, update and make decisions on the validity of the measures.

References

Card, D.N. (2006).*The Challenge of Productivity Measurement*.Pacific Northwest Software Quality Conference. Q-Labs, Inc.

Kaplan, R.S. & Norton, D.P. (1992).*The balanced scorecard: measures that drive performance*, Harvard Business Review.

Kaplan, R.S. and Norton, D.P. (1992).Balanced Scorecard: *Translating Strategy into Action*. Harvard Business School Press. Boston, MA.

Kaplan, R.S. and Norton, D.P. (1992).Balanced Scorecard: *Translating Strategy into Action*. Harvard Business School Press. Boston, MA.

Kaplan, R.S. and Norton, D.P. (1996).Using the Balanced Scorecard as a Strategic Management System.*Harvard Business Review*, 74(1):75.

Kaplan, R.S. and Norton, D.P. (1996).Using the Balanced Scorecard as a Strategic Management System.*Harvard Business Review*, 74(1):75.

Mugenda, O. M &Mugenda, A. G. *Research Methods*: (1999).Qualitative and Quantitative Approaches. Nairobi: Act Press

Nelly, A., Adams, C. &Kennerley, M. (2002).*The performance Prism:* The Scorecard for Measuring and Managing Business Success, Financial Times – Prentice Hall, London.

Seth A.,Oyugi L. A. (2013). *Influence of balanced scorecards on organizational in selected institutions of higher learning in Kenya*.A case study of University of Nairobi.

Appendix

Table 4.1:Illustration of the questionnaire response rate

Questionnaires	Number	Percentage
Completed	40	89
Incomplete	2	4
Unreturned	3	7
Total	**45**	**100**

Table4.4: Customer perspective score range interpretation

Customer Perspective Scores Range	Interpretation
>11.6	High customer perspective
8.3-11.6	Average customer perspective
<8.3	Low customer perspective

Table 4.5: Customer perspective score

ORGANIZATION	N	Mean	Std. Error	Std. Dev.
KWS	40	10.300	0.635	4.014

Table 4.6:Influence of customer perspective on organizational productivity

MODEL	B	Std. Error	*t*	P-value
(Constant)	22.384	2.524	8.870	0.000
Customer Perspective score	1.026	0.229	4.486	0.000

Table 4.7: Innovation and learning score range interpretation

Innovation and learning score range	Interpretation
>13.92	High focus innovation and learning perspective
9.96-13.92	Average focus on innovation and learning perspective
<9.96	Low focus on innovation and learning

Table 4.8: Learning perspective score

ORGANIZATION	N	Mean	Std. Error	Std.Dev.
KWS	40	9.725	0.543	3.434

Table4.9: Influence of learning perspective on organizational productivity

MODEL	B	Std. Error	*T*	P-value
(Constant)	25.963	3.186	8.150	0.000
Learning perspective score	0.718	0.309	2.322	0.026

Table4.10: Financial perspective score range interpretation

Financial perspective scorerange	Interpretation
>9.28	High financial perspective
6.64-9.28	Average financial perspective
<6.64	Low financial perspective

Table4.11: Financial perspective score

ORGANIZATION	N	Mean	Std. Error	Std.Dev.
KWS	40	5.825	0.270	1.708

Table4.12: Influence of financial perspective on organizational productivity

MODEL	B	Std. Error	*T*	P-value
(Constant)	17.660	3.095	5.706	0.000
Financial perspective score	2.6249	0.510	5.144	0.000

Table4.13: Internal business process perspectivescore range interpretation

Internal process score range	**Interpretation**
>9.28	High internal process
6.64-9.28	Average internal process
<6.64	Low internal process

Table4.14: Internal business process perspective score

ORGANIZATION	**N**	**Mean**	**Std. Error**	**Std.Dev.**
KWS	40	9.725	0.543	3.434

Table4.15: Influence of internal business perspective on organization productivity

MODEL	**B**	**Std. Error**	***T***	**P-value**
(Constant)	33.377	3.842	8.688	0.000
Internal process score	-0.055	0.471	-0.116	0.908