

Influence of Balanced Scorecard in Quality Service Provision: Experience from Selected Public Organizations in Tanzania

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Abstract:- The article examined the ability of balanced scorecard (BSC) performance management system to influence the quality of service provision experienced in selected public organizations in Tanzania, namely; Tanzania Revenue Authority, Tanzania National Electric Supply Company, National Social Security Fund and Medical Store Department. Both theoretical and empirical writings were reviewed. The study used participatory action research and survey research design. It applied both qualitative and quantitative research approaches. Data was collected through interviews and documentary reviews. Data validity and reliability were done through pretesting of data collection instruments. The findings revealed that the BSC has great influence to employees in providing quality services. Further, the findings indicated that Balanced Scorecard had great influence as it brought better results and motivated employees. Therefore, the study concludes that there is direct relationship between balanced scorecard performance management system and the quality of service provision.

Keywords:- *Balanced Scorecard, Performance Management System, Public Organizations, Open Performance Review and Appraisal System (OPRAS).*

I. INTRODUCTION

Provision of quality service as a direct relationship with performance management tool in place which also links employees and organizations to performance management. Worldwide, performance management has been a very challenging issue among managers in both services-providing and material-production organizations. There has been a contention that the rise in quantity and quality of production has been associated with effective management of both fiscal and human resources (Rajest et al, 2023).

The example is provided in Turkey whereby about 45.6% of products from electrical and fabrication industries failed to compete effectively in the global markets due to low quality

and lack of watermark specification (Show,2022). In line with this, Karahan et al(2022) asserts that the situation was fueled by poor technologies in Turkey's production sector and the need for identification of Performance Indicators (PIs) in human resources sector. The threshold was the fall of economy of Turkey by 5.3% and hence, the critical political instability engineered by people who demand for the ending of reforms in the economic sector.

In a similar vein, Yang(2022) said that the government of Singapore was forced to renovate its country's human resources following the underperformance of employees in different economic firms. An empirical study conducted by Arta (2022) observed and recommended that the government should urgently provide on-job training for employees in their occupational areas of competencies and thereafter design a comprehensive criterion for determining their performances at work. The critique was on the prevailed method of determining employee performance based on their academic/professional credentials.

According to Jia et al (2023) the probabilistic curves between the state's performance indices and national performance measures were then established to incorporate national performance measures into the decision making process for performance target setting. Jia et al(ibid) add that measures and targets could have been used as benchmarks in assessing employees' performance at the end of the year, but lost focus and ethics among assessors, hence the assessments were questionable.

Jia et al(ibid) further argues that, although a lot of effort have been made to improve the use of new performance metric in performance management system, there are challenges that States are facing including different data sources, change in optimization goals and updating models within the performance measures.

In that view, the balanced scorecard performance management system intends to do away with the traditional practice of short-term performance management measurement, and therefore focus on long-term performance management and effective quality management in public organizations. The balanced scorecard approach provides a clear and focused prescription as to what public organizations should measure to improve the quality of their services and products.

Since its inception, there are several public organizations in Tanzania which have opted for balanced scorecard as the system that could improve performance, particularly the quality of services and products. Such public organizations include Tanzania Revenue Authority (TRA), Medical Store Department (MSD), Tanzania Reinsurance (TANRE), Azania Bank, Peoples Bank of Zanzibar (PBZ), Tanzania National Electricity Supply Company (TANESCO), National Social Security Fund (NSSF), Public Service Social Security Fund (PSSSF), Commission for Science and Technology (COSTECH), Vodacom Tanzania, Kilimanjaro Airport Development Company (KADCO), Uongozi Institute, Tanzania National Parks Authority (TANAPA), Mkulazi Holding Company Limited and Self Micro-Finance. Additionally, the idea of lack of clear and focused performance management system tool in Tanzania is seconded by Li (2023) who argues that performance problems related to lack of a clear and focused performance management system tool is a hinderance to effective service delivery and production of quality products in China.

Li (2023) further puts forward how to formulate reasonable enterprises performance management objectives, improve the communication of enterprise performance management, strengthen the organization and implementations of enterprise performance appraisal management and perfect the results of enterprise performance appraisal management and puts forward suggestions on how to optimize their enterprise performance appraisal management. Further, Mahmoud and Othman (2023) pinpoint that performance management system is critical to the success of any organization.

Lamia (2023) argues that the implementation of balanced scorecard approach as a strategic solution for integrating sustainability into performance management. Lamia (ibid) further comments by effectively incorporating sustainability metrics and objectives alongside traditional performance measures, organizations can align their goals with sustainable development principles.

Hence, balanced scorecard performance management system is assumed to be a solution to such a problem poor service provision and thus, that is an impetus to this study. Therefore, this study assessed the ability of balance scorecard to influence the quality of service delivery in the four selected public organizations before and after the introduction of Balanced Scorecard.

II. METHODOLOGY

Research methodology serves as a backbone of every scientific enquiry. This chapter, therefore presents the methodology employed in this study. It describes the research philosophy, research design, research approach, research area, target population, sample and sampling procedures. It also provides explanations of the data collection methods, instruments and data analysis procedure used.

A. Research Philosophy

Saunders et al. (2019) define research philosophy as a system of beliefs and assumptions on knowledge development. Knowledge is generated when a researcher conducts a study in order to give answer to a certain question. In conducting this study, pragmatism research philosophy was applied as it generates knowledge associated with value driven research and action research and emphasizes more on practical solutions and outcomes.

According to Greener & Martelli (2015), knowledge generation is the phenomenon which can produce knowledge since it is associated with empirical testing. Matoka (2020) argues that, knowledge creation is concerned with gaining knowledge by enquiry. The present study employed survey method in order to collect views and opinion of employees on the effectiveness of balanced scorecard by conducting face to face interviews, making telephone interviews and documentary reviews such as individual performance appraisal reports, organization performance reports and performance management guidelines of all four selected public organizations.

B. Research Approaches

Based on pragmatism philosophy, this study employed mainly qualitative approach and slightly quantitative approach in order to overcome the disadvantages that are inherent when adopting mono research method. In light of that, the checklist was used to obtain quantitative data related to facilities and equipment which are used to effect balanced scorecard tasks. The approach assisted the researcher to easily track the needed number of respondents and number of tools and number of organizations from which data was to be collected and analyzed.

Qualitative research approach was used because it provides an opportunity for the problem to be studied in-depth and enables the researcher to collect facts and study their relationships.

Thus, qualitative research approach enhances learning whereby the researcher and respondents interacted specially to accomplish already formulated goals. In light of this, the qualitative research approach enabled the researcher to do an in-depth study of how effective BSC was.

Quantitative data was equally collected from documents using documentary analysis methods and a documentary review schedule. Conclusively, the researcher employed both qualitative and quantitative approaches because both approaches were notably compatible and complemented each other; the former was primary and the latter was secondary.

C. Study Area

The study was conducted in four public organizations which are implementing the balanced scorecard performance management system, and these are: Tanzania Revenue Authority, Medical Stores Department, Tanzania National Electric Supply Company and National Social Security Fund. These organizations were selected purposively as they had been using BSC performance management system for five years and above as follows: Tanzania Revenue Authority started using balanced scorecard from 2007, Medical Stores Department from 2014, National Social Security Fund from 2011 and

Tanzania Electric Supply Company from 2010. If all factors remained constant, the experience of those public organizations in implementing balanced scorecard was enough to give valid and reliable data on the effectiveness and applicability of balanced scorecard in Tanzania.

D. Sample Size and Distribution

A sample is the number of people sought from the larger population for providing information for the study. The sample size of this study was 199, consisting of board members, CEOs, directors, managers, and professional and non-professional employees. The sample distribution was arranged in the following manner: Tanzania Revenue Authority 61 respondents, Medical Stores Department 36 respondents, Tanzania National Electric Supply Company 52 respondents and National Social Security Fund 50 respondents. In total, the sample size was 199 as indicated in Table 1

Table 1 : Sample Distribution by Selected Organizations (N=199)

| Selected public institution | Board Members | Chief Executive Officers and Directors | Managers | Professional Employees | Non professional Employees | Total |
|-----------------------------|---------------|--|-----------|------------------------|----------------------------|------------|
| TRA | 6 | 7 | 4 | 31 | 13 | 61 |
| MSD | 3 | 4 | 3 | 20 | 6 | 36 |
| NSSF | 4 | 5 | 4 | 27 | 9 | 50 |
| TANESCO | 6 | 5 | 5 | 27 | 9 | 52 |
| Total | 18 | 21 | 17 | 106 | 37 | 199 |

Source: Researcher Data, (2023)

The sample size of this study was 199 which consisted of Board Members, the CEO, Directors and Employees whose distribution was also based on gender as indicated in Table 2.

E. Sample and Sampling Procedure

Sample size was the number of respondents selected from the study population to obtain the sample population. In this study, the researcher adopted Yamane's, (1967) simplified formula to calculate the sample size. A 95% confidence level and P=.5 was assumed for the equation. Hence, the researcher used the following formula to determine the sample size:

$$n = \frac{N}{1 + N(e)^2}$$

Whereby:

n=Sample size,

N=Population,

e=Level of precision

The level of precision *e*, sometimes called *sampling error*, is the range in which the true value of the population is estimated to be. This range is often expressed in percentage points, (e.g., ±5 per cent). The confidence or risk level of 95% is based on ideas encompassed under the Central Limit Theorem. Therefore: $n = 3,468 / (1 + 3468(0.05)^2) = 199$

In this view, the study consisted of 199 respondents as clearly indicated in table 3.1 above and this was the sample of the study.

F. Sampling Procedures

The following are details of how sub-samples were obtained.

➤ *Professional Employees*

Two types of sampling methods were employed to get the number of required professional employees. A purposive sampling method was used to get the required number of professional employees. Since the number of respondents which was obtained after using the purposive sampling method was big, the stratified random sampling method was then used to get the required number of respondents i.e. 45 males and 61 females. In stratified sampling, the researcher attempted to stratify the sample in such a way that the sample remained within the stratum.

➤ *Board Members, CEOs, Managers and Non-Professional Employees*

Purposive sampling method was used to get the required number of CEOs, directors, managers, non-professional employees and board members as clearly explained in chapter four. Stratified random sampling method was used in selecting

each category to get the required number of respondents, that is to say, 21 CEOs and directors, 17 managers and 37 non-professional employees with the composition from each selected public organization. Sospeter (2021) pinpoints that stratified random sample aims to reduce the potential for human bias in the selection of cases to be included in the sample. Therefore, the researcher had to identify respondents with similar characteristics from which the researcher created non-overlapping strata of category and sex.

The strata included a category of board members or CEOs and directors or Managers or professional employees and or nonprofessional employees. The researcher used lottery method to get respondents from each stratum. This method ensured that there was high representation of all categories and both sexes. Sospeter (2021) argues that randomizations is the best way of ruling all alternative explanations for observed effects of treatment groups.

G. Data Collection Methods and Instruments

The study employed mainly two data collection methods: interviews and documentary review. The data collection methods and instruments (see Appendix I) that were used to collect both primary and secondary data are described below. Interviews were used in this study because the method and instrument required simple facilities such as paper and pens. The interviews were facilitated through interview questions. The researcher used interview guide to ask questions to the respondents from all categories between October 2022 and December, 2022 by visiting TRA offices, MSD offices, NSSF Offices and TANESCO offices where the researcher managed to interview CEOs and Directors, managers, professional and non-professional employees. The researcher had face to face interviews with only 8 out of 18 board members, while the remaining 10 were interviewed through telephone calls. This instrument was easily administered in all types of environment; that is, some were interviewed in their personal offices, some in the corridors, and some out of their office.

Also the researcher used semi-structured interviews when asked specific questions with the purpose of getting specific information when the researcher tried to compare and contrast the same information gained from TRA against MSD, TANESCO and NSSF. Sospeter (2021) argues that semi-structured interview is used when a researcher wants to know specific information which can be compared and contrasted with information gained in other interviews. During interview sessions the researcher asked probable questions for the purpose of getting and giving more clarification about issues raised during interviews.

During interview sessions, notebooks, papers and a voice recorder were used to get and properly keep the information provided. The respondents were requested to give consent for recording. On average, one interview session would take about 25 to 45 minutes on average. After each interview session, the

recorded voices were transcribed into texts by writing them in a notebook.

Documentary review was used to review identified documents during the study. Official documents from targeted organizations were scrutinized. These included; the Tanzania Revenue Authority Act, Cap.399 R.E 2019, MSD Establishment Act No. 13 of 1993, the National Social Security Act, Cap.50.RE 2018 and the Electricity Act of 2008.

H. Data Analysis

The process of data analysis aimed at determining whether the collected data supported the research objectives or not. Based on research philosophy this study mainly used qualitative techniques and slightly quantitative technique was used only to analyze few quantitative data. Generally qualitative data was systematically analysed using qualitative techniques. The analysis begun with an individual respondent; then responses from different sources were grouped and sorted in correspondence with research objectives and research questions. The sorted data was then compared to identify similarities. In so doing, a large amount of organized data was reduced into small manageable analytical portions to save both time and space.

III. RESULTS AND DISCUSSION

The overall objective of this study was to assess the influence of balanced scorecard on the quality service provision in public organizations in Tanzania. There were several questions which were administered to 199 respondents so as to capture the ability of balanced scorecard to influence quality of service provision.

➤ Ability of Balanced Scorecard to influence Quality of Service

The researcher also investigated if the use of Balanced Scorecard Performance Management System changed the quality of services organizations provided to their stakeholders.

The findings indicated that out 199 respondents who provided responses, there were 95 (47.74%) respondents who responded that balanced Scorecard changed the quality of services and 73 respondents (36%) said that balanced scorecard performance management system was a very good tool which improved the quality of services in the selected public organizations. Further 30 (15.1%) of the respondents said that balanced scorecard performance management tool was a good tool which brought about changes in the quality of services.

They explained that the improvement with regard to the quality of services was underpinned by competencies they gained from getting feedback after measuring their performances. One (0.5%) of the respondents who was customer care officer explained that he was able to attract and provide good and promising answers to customers. The respondent highlighted further that:

'..... the number of customers is increasing drastically after the use of balanced score card..... we expect to get higher profit compared to the past'.

The responses were validated by researcher through reviewing documents which indicated that the increase in rate of customers in that organization as indicated in Table 2.

Table 2: Number of Customers After the Use of Balanced Scorecard (N=210)

| Year | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2000 | 2021 | 2022 |
|---------------------|------|-------------|-----------|--------------|----------------|---------------|---------------|--------------|---------------|
| Number of customers | 1679 | 1682 | 2196 | 2213 | 2470 | 2540 | 2642 | 2708 | 2946 |
| Rate of Increase | | 3 (0.1%) | 9 (2%) | 17 (0.8%) | 257 (10.4%) | 100 (3.9%) | 102 (3.9%) | 66 (2.4%) | 238 (8.1%) |

Source: Research Data, 2023

Data indicated that the number of customers was increasing dramatically when the balanced score card was on use. For example, in the year 2015 the percentage increase of customers compared to the previous year was 0.15%. For the year 2019, the percentage increase was 10.4% compared to the previous year whereby the percentage increase was 0.8%.

Similarly, for the year 2022, the percentage increase of customers was 8.1% compared to the year 2021 which was 2.4%. In congruent to these findings, one respondent (1.4%) explained that the use of balanced score card to determine the performance of employees was of paramount step towards commitment to achieve organization goals. The respondent commented that:

'...on my personal view. I use this tool to measure my work performance'.

In view of these, the researcher concludes that the increase of the rate of customers was a result of employees' performance which in a nutshell also resulted into the increase in the quality of services.

IV. CONCLUSION

The study concludes that balanced scorecard is concluded that balanced scorecard is the tool which has great influence in the provision of quality services, increases employee satisfaction and enhances a sense of responsiveness, responsibility and accountability to both employer and employee and is a solution of performance management.

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