

## Balanced score card and performance evaluation in Small and Medium Enterprises (SMEs) in Nigeria

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### Abstract

The balanced scorecard (BSC) is a strategic appraisal measure which incorporates non-financial measures to complement traditional financial measures. BSC captures more measures in assessing performance within an organization and these areas include perspectives on customers, internal business process, and learning and growth. As a result, BSC helps an organization in achieving an all-inclusive appraisal of its performance. This paper assessed the level of awareness and implementation of the balanced score card (BSC) in small and medium firms in Nigeria. The study employed a descriptive research design and primary data was used. The hypothesis was tested using the Pearson correlation coefficient and findings revealed that BSC have not been adopted by Nigeria small and medium companies due to lack of awareness, expertise and finance. The study recommended that more researches be conducted in this direction and Nigerian small and medium scale associations should partner with researchers on the new concept in training members on this approach.

**Keywords:** Balanced Scorecard, Small and Medium Enterprises, strategic performance management system

### 1. Introduction

The balanced scorecard is a strategic performance measurement tool which provides a platform for organizations to incorporate non-financial metrics into its performance measurement in order to have a holistic measurement of organisational performance. This is essential because there are aspects of measurement which may not be captured by only financial metrics. Financial measures based mainly on economic and financial accounting indicators such as the return on investment (ROI) and the earnings per share (EPS) generate results by counting on performances in the previous reporting period (Banker & Mashruwala, 2007). According to Molleman (2007), "the balanced scorecard is a performance management tool which gives aid in the translation of a company's vision and strategy into a set of definite measures of performance". Therefore, the complete implementation of this technique links each person in an organisation to ensure that every employee recognises in what way and manner they can give support to the strategy (Rompho, 2011; Kaplan & Norton, 1992). Kaplan & Norton (2007) argues that the balanced scorecard enhances traditional financial measures by providing three non-financial measures on which performance can be assessed. The non-financial measures include perspectives on customers, internal business process and learning and growth.

Kaplan and Norton (1992) states that in the present dynamic environment, only financial information and measures may be inadequate and vague for management especially in relation to the expansion and innovation of the company. Khan and Khaliq (2014) posits that in determining the firm's performance in modern times, organizations cannot solely rely on quantifiable measures such as cost and schedule performance, while ignoring qualitative measures such as customer satisfaction and innovation. Thus, on the overall, the balanced scorecard presents four perspectives of organisation's performance measurement which are the financial measures and the three non-financial measures as stated above. These four perspectives are aligned to the business policy and gives rise to the concept of a general strategic model that is applicable to all employees to see by what means they can contribute to the realisation of the

organisational goals. This tool is referred to as balanced scorecard due to the fact that it builds a balance in the use of financial and non-financial measures to appraise present and future performances at a time period. Balanced scorecard contributes to strategic management accounting by emphasising the part of management accounting in the formulation and support of an organisation's overall competitive strategy position (Drury, 2008).

According to Gumbus and Lussier (2006), large and small businesses can mutually use balanced scorecard when a business has the same targets and strategic goals which the employees are dedicated to its achievement. The balanced scorecard has been found to be prevalent in large businesses but its benefits and restrictions in small and medium-sized enterprises (SMEs) is uncommon. According to the Central Bank of Nigeria, small and medium scale enterprise (SME) is an establishment that has an asset base (excluding cost of land) of between N5million - N500 million and workforce of between 11 and 300. Most SMEs are not cognisant of this technique and it has a low rate of usage when related to big companies (Tennant & Tanoren, 2005). Now, businesses, including SMEs, are operating in a globalized and turbulent environment and to ensure survival through their competitive advantage, it is very crucial that they understand and monitor their company's performance to determine areas for improvement. The ability for implementing a steady strategy is a challenge particularly for SMEs, which is basically known to be very flexible and reactive to market changes while being characterized by a lack of resources and managerial expertise (Cocca & Alberti, 2010; Garengo, Biazzo & Bititci., 2005). The major objective of this paper is to assess the usefulness of balanced scorecard technique in evaluating performance of small and medium firms in Nigeria as well as to examine the extent of awareness on the application of the technique in such SMEs in Nigeria.

The other sections of the paper are arranged in this order: section two is on conceptual framework and literature review; section three describes research method and section four focuses on findings, recommendations and policy implications

## **2. Conceptual Framework**

Financial measures based mainly on economic and financial accounting indicators to include the return on investment (ROI) and the earnings per share (EPS) generate results by counting on performances in the previous reporting period (Banker & Mashruwala, 2007). As Kaplan and Norton (1992) stated that in the present dynamic environment, this kind of information and measures may be inadequate and vague for management especially in relation to the expansion and innovation of the company. Hence, a fundamental reason why the balanced score card is crucial. The complete implementation of this technique links each person in an organisation to ensure that every employee recognises in what way and manner they can give support to the strategy (Rompho, 2011; Kaplan & Norton, 1992). In addition, Rompho (2011) reports that the Balanced Scorecard proposes that an organisation's performance can be seen from four main perspectives: financial, customer, internal business process, and learning and growth (Lipe & Salterio, 2000). Hence, these four perspectives are aligned to the business policy and gives rise to the concept of a general strategic model that is applicable to all employees to see by what means they can contribute to the realisation of the organisational goals. The tool is called balanced scorecard because it builds a balance in the use of financial and non-financial measures to appraise present and future performances at a time period.

BSC contributes to strategic management accounting by emphasising the part of management accounting in the formulation and support of an organisation's overall competitive strategy position (Drury 2008). However, there is a vital assumption in the approach to BSC that a cause-and-effect relationship occurs between the financial and non-financial methods that leads to the formation of a link from the design of the approach to monetary results (Kaplan & Norton, 1992; Collis, Holt & Hussey, 2012).

### **2.1 Cause and effects relationship**

The scorecard translates the vision and strategy of a business unit into objectives and measures in four different areas: the financial, customer, internal business process and learning and growth perspective. The cause and effect sequence of actions must involve all the four perspectives of a BSC (Molleman, 2007). The aim of balance scorecard implementation is to make improvements in the learning and growth perspective to enable a positive impact on the internal business process which will result in an increase in customer perspective about the firm that will therefore be finally felt in the financial perspective.

Moreover, proper alignment of the financial and intangible measures indicates that the intangible elements will serve as leading indicators of lagging future performance. In other words, good non-financial elements are a prerequisite for favourable financial performance in the long run (Drury, 2008). A good balanced scorecard should have an appropriate mix of outcomes (lagging indicators) and performance drivers (leading indicators) of the business unit's strategy (Kaplan & Norton, 1996). The study of Marques (2012) illustrated with a diagram that to apply a BSC, it is essential to know the relationship of cause and effect, for each outlook and on the various perspectives and Molleman (2007) followed in the same step to explain the relationship of the BSC perspectives in an engineering firm.

## **2.2 Benefits of application of Balanced Scorecard**

The influx of research reporting organizations that have succeeded in implementing BSC provides assurance of great benefits for usage of BSC. According to (Drury 2008; Marques 2012), the following are some of the benefits of balanced score card approach in business firms namely:

- It leads to improved communication of the mission between employees, middle and upper level management in a firm.
- It ensures visibility of the linkage of performance measures to a business unit strategy thereby promoting active formulation and implementation of strategies.
- It provides a medium for management to determine and measure its important operational procedures in order to ensure that an area of the firm is not improved at the expense of others.
- This technique ensures uniform development in all strategic units of an organisation.

## **2.3 The BSC focuses on four major perspectives as follows:**

### **2.3.1 Financial perspective**

The financial perspective emphasizes cost efficiency, reduction and asset utilization, meaning the capacity to provide satisfactory financial benefits to the customer at the least possible cost and ensure continuous shareholder value (Gekonge, 2005). The procedures as well as the goals of the further three views of the BSC focus on the financial objectives and intents, which in general have to do with development, cost-effectiveness and investor's value (Kaplan and Norton, 1996; Drury 2008). The economic performance methods offer evidence centred on an organisation results of previous events so businesses should combine this data policy models and dimensions that lay emphasis on the entire business's strategy (Giannopoulos et al 2013).

Financial measures specify whether the organization's strategy, execution and performance are contributing to major improvement as a well-structured financial system can in fact improve an organization's system. Moreover some of the financial measures that can be used are: net profit percentage, cost declines in basic areas, return on investment, revenue growth and economic value added (Drury 2008; Collis et al, 2012; Khan and Khaliq, 2014).

### **2.3.2 The customer perspective**

The importance of customers' satisfaction is of recent concern to many businesses, especially with the realisation that there is increased competition in the corporate environment (Kaplan and Norton, 1992). This viewpoint considers the capability of the company to deliver quality products and services, the efficiency of their distribution, and complete consumer satisfaction (Gekonge, 2005). This perspective leads a firm in achieving and gaining the revenue embedded in the financial perspective meaning that customer satisfaction should lead to an increase in the financial measures. The consumers usually have four key concerns regarding the product or service that is offered by a business: time, quality, performance & service and cost (Kaplan & Norton, 1992). Hence, the customer perspective focuses on specific measures that include customer satisfaction, number of customer complaint, market share etc. these in turn reflect the factors that really matter to customers, and how the company wants to be viewed by its customers (Drury, 2008).

### **2.3.3 Internal Business process perspective**

An internal process is a perspective which focuses attention on the critical internal processes and activities, to provide customer satisfaction and enable financial success by an organisation (Marques 2012; Giannopoulos et al 2013). The basis behind this perspective is that customer-based dealings are essential,

but they must be interpreted into actions to be taken by the organization internally to meet its customers' expectations (Kaplan & Norton, 1992). In order to achieve the organizational goals and customers' anticipations, it is imperative for businesses to identify the major business processes. These crucial processes are observed to ensure that results will always be adequate as this perspective reports on the competence of internal processes and procedures (Gekonge 2005).

Drury (2008) observes that this perspective basically involves three processes which include: innovation, operations and post sales processes. These further consist of the following measures of number of new patents, defect rates, product delivery time, setup time and time spent to repair defective products.

#### **2.3.4 Learning and growth perspective**

The learning and growth perspective observes the aptitude of employees, the value of information systems and the effects of organizational orientation in backing the achievement of organizational goals (Gekonge, 2005). The learning perspective is the perspective where importance is given to generating an environment favourable to progress, to the contentment of employees, to transformation, progress and execution of improvements. Some of the performance measures that could be used to appraise growth and learning include employee training and expertise level, team incentives, accessibility to information system, employee satisfaction and turnover rates (Giannopoulos et al 2013; Marques 2012).

### **2.4 Empirical Review of Literature**

According to Rompho (2011) the BSC approach in SMEs will be slightly dissimilar from what is found in large organisations but there are diverse researches on the use of this technique in SMEs (Aoki & Hasebe, 2012; Fernandes et al 2006; Bhagwat & Sharma, 2007; Manville, 2007). In a study, Sousa et al. (2006) indicates that the SMEs surveyed recognise the importance of performance and a performance measurement system but their level of use was significantly lower.

Giannopoulos, Holt, Khansalar and Cleanthous (2013) conducted a survey on respondents which comprised of the owners, general managers, directors and accountants of 40 small businesses in the UK and Cyprus on their level of awareness of BSC and its usage in their businesses. The results of the research study showed that awareness of small companies about balanced scorecard is significantly higher in Cyprus with 45% against the 20% in the UK and the usage rate was 22% and 25% respectively. This indicates a higher usage in the UK despite lower awareness level. Nonetheless, it was found that the balanced scorecard enables the running of an effective performance measurement system for their company and has aided the employees to understand the corporate strategy leading to increased profits and reduced costs. However, there were different opinions about the significance of this technique in the small companies. As a result, a substantial amount of the UK and Cypriot small companies consider that there is difficulty in the use of BSC in small size companies. Also they assume that its use might be incompetent and costly as against large companies. The results indicate that the mainstream of small UK and Cypriot companies appear primarily focused on assessing the financial parts of their performance and as such, financial performance indicators are more prevalent in such companies for making decisions.

The study of Fernandes et al. (2006) has revealed a perception to implementing BSC by the SME review of Biddle Air System enterprise. The outcomes proved that the implementation of BSC in the SME boosted its ability to react quickly to the inconsistent refrigeration and air-conditioning market within which it functions. Moreover, they stated that it has revealed by practice, the applicability of Kaplan and Norton's four view perspective to a SME manufacturer. Although, Kaplan and Norton (1996) propose the applicability of their framework (BSC) to SMEs, they do not precisely give a procedure for such an implementation. They also posited that success or failure is reliant on good cooperation between departments, and the use of standard hardware and software systems.

A study conducted by Rompho (2011) on SAQ Company Limited, a Thai SME in the electrical appliance business was a case study was selected from four that implemented the Balanced Scorecard and in which the researcher was a consultant. This company was chosen because of failure to fully implement the Balanced Scorecard as this was of great interest to the researcher. Data was collected for study from interviews with the owner and employees responsible for the BSC and researcher observation of the design. The observation revealed that the major cause for the failure was the company's frequent strategy changes due to the changes in customer perspectives which led the measures dealing with the internal business process to reveal such changes. The measures in the Balanced Scorecard were revised many times because of the strategy changes that were unavoidable in a rapidly changing business environment

thereby leading to miscommunication. The study concluded that the cause and effect linkage between measures in the Balanced Scorecard could not be measured and led to a waste of time and effort.

Aoki and Hasebe (2012) reveal that Balance Scorecard has been introduced to Japanese SMEs for about six years and surveyed several cases to clarify the difficulties encountered in its introduction process and propose a way to overcome these difficulties. It was observed that many SMEs could not develop strategies appropriately that adapts to their environment and these SMEs do not have sufficient resources of human, information, and organization, which relate to the perspective of Learning and Growth in BSC. The study proffered Closed Loop Strategy Management System (CLSMS) as an effective tool for introducing BSC into a SME strategy. The study further indicate that the procedure should be a step by step process as these businesses operate in severe markets with large enterprises and require short term oriented results.

### **3. Methodology**

The study made use of a descriptive research design as it aids the conduct of exploratory and preliminary studies. The study area was Ikeja in Lagos; a choice based on its considered location as the commercial centre of Lagos. Purposive sampling technique was used to select samples used for the study, therefore the sample consists of 50 respondents which are broken into following strata: manufacturing (25) and service sector (25). Primary data was utilised and the instrument for data collection was a 9 - term survey structured questionnaire with a 5 Likert scale response option as follows: Strongly agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1). The questionnaire was set to solicit information from the entrepreneurs and it was elaborate enough to investigate the study and was designed in such a way that every question in the questionnaire related to the research questions and the hypotheses of the study. The measurement of reliability used to ensure that the research instrument is reliable and consistent to achieve its objectives was the Cronbach's alpha method with result of 0.754.

The extent of relationship was tested using person product moment correlation statistical test instrument. The value of calculated ( $r$ ) varies from -1 to +1 indicating the strength of either negative or positive association between two variables. The analysis of the hypothesis was performed by using the probability value to determine whether the null hypothesis in research should be accepted or rejected. When the  $p$ -value is less than 0.05, the hypothesis should be accepted and vice versa.

### **4. Result and discussion**

A total of 50 questionnaires were given to small companies and a response rate of 42% was achieved indicating that 21 were received. In terms of the first two questions, regarding the total cost and the number of employees of the company, all of the companies surveyed had a total cost within the 50 million range and no more than a hundred employees which is on track with the conditions for a small company in Nigeria.

The result revealed that majority of the respondents that is (81%) of the total respondents disagreed, while 19.0% of the respondent are undecided to the statement that a large number of small companies adopt and implement BSC as a performance measurement approach. Hence this shows that this technique adoption in Nigerian small and medium companies is relatively ignored and unemployed at present. Respondents were required to rate the extent of awareness of BSC technique in Nigeria manufacturing and service small companies and 50% specified that the level of awareness is still extremely little though a fair number (33.3% and 42.9%) are undecided about this statement and very little number of respondents (4.8% and 9.5%) agreed. Furthermore, findings showed that a great number of respondents (85.7%) of the respondents agreed that the combination of financial and non- financial measures is important in evaluating performance of SMEs while 9.5% disagreed and 4.8% are undecided.

The result in table 3 (appendix) revealed all negative except one positive correlation among the variables tested. The balanced performance measurement was represented with variables from the four perspectives to include: profitability customer satisfaction employee satisfaction and delivery time. The Pearson correlation coefficient ( $r$ ) value of -0.80 indicates a strong negative association between balanced scorecard technique and profitably of small enterprises in addition to indicating a strong and weak negative relationship for the technique with the satisfaction of employee and customers of SMEs with the ' $r$ ' value of -0.76 and -0.31 respectively. The delivery time of such companies showed a weak positive association of 0.204 with the BSC technique.

However, there exists a positive relationship among the variables signifying the different perspectives of a scorecard which varied strength levels ranging between medium and strong in which the highest 'r' value of 0.96 was obtained for profitability and customer satisfaction. These findings support the assumption of cause and effect relationship for which an increase in each perspective is a driver of the subsequent perspectives. This means that a change in a measure will lead to an equivalent change in other measures with the final outcome shown in the financial perspective. Thus, the result revealed that the relationship between the BSC technique and profit, customer and employee satisfaction; with delivery time are insignificant as the sig. values are greater than 0.05. With the  $p > .05$ , it indicates that the balanced scorecard technique has no significant relationship with the measurement of performance of SMEs in Nigeria. This implies that in general terms this system can measure performance but it has not taken significant influence on small and medium scale enterprises in Nigeria. This result conforms with the findings of Giannopoulos et al (2013) to support the statement that majority of SMEs performance system are in exclusion of the balanced scorecard.

In addition, a Pearson product-moment correlation was run to determine the relationship between the degree of awareness and BSC implementation in SMEs. There was a very weak positive level of association between the awareness degree in the small scale manufacturing sector and level of adoption which was statistically insignificant ( $r = .098$ ,  $p > .05$ ). Also, the results showed a very weak positive relationship between the extent of small service companies awareness and implementation of BSC ( $r = .268$ ,  $p > .05$ ). The linear relationship of the awareness degree of both small scale manufacturing and service sectors is significant because the Sig. value is less than .05, and the linear relationship is positive and of high strength with the 'r' value of .809 and p-value less than 0.05. this showed that the level of awareness has not influenced the implementation of the scorecard approach among Nigerian SMEs. The results suggest that not adopting this method can be largely linked to the relatively low degree of awareness.

The complete lack of knowledge on the approach has restricted the execution to zero, ensuing in minor backing for balanced philosophy of performance measurement in Nigeria small companies. In the course of this study, it was observed that Nigerian small scale managers have not adopted and implemented this balanced approach and solely rely on quantifiable measures such as cost reduction measures, revenue and profit estimated figures. Majority of the respondents claimed that they were unaware of this approach and those who showed knowledge disclosed that it was not applicable because of the difficulty associated with the implementation in SMEs.

## **5. Conclusion and Recommendation**

Due to the lack of empirical evidence regarding the use and relevance of the BSC in Nigerian small and medium companies, this study observed whether these companies were aware of the BSC and the level or relevance placed on this method in measuring performance. As observed by Khan and Khaliq (2014) that in determining the firm's performance in modern times, organizations cannot solely rely on quantifiable measures such as cost and schedule performance, while ignoring qualitative measures such as customer satisfaction and innovation. The findings from the study revealed that the balanced scorecard technique has been adopted by some small scale companies in advanced countries from the literature evidence though the rate of adoption is not as rapid as expected and limiting factors such as lack of sufficient information impedes the development of this technique in Nigeria among SMEs.

The study concluded that balanced scorecard method is a commendable technique which could be implemented but have not been adopted by Nigeria small and medium companies due to lack of awareness, expertise and finance. Therefore, it is recommended that the BSC execution in these enterprises should be adapted and lined to the specific features and needs to ensure maximisation of the potential benefits of BSC in strategy alignment. Moreover, more researches should be conducted in this direction and small and medium scale associations in Nigeria should partner with researchers on the new concept as well as training on the approach should be done to realize the benefits. This will further strengthen the competitive position of small and medium businesses as they are a major source of economic development in various countries.

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APPENDIX

**TABLE 3: Correlations results to test hypothesis one**

		Q9	Q4	Q5	Q7	Q8
Q9	Pearson Correlation	1	-.080	-.031	-.078	.204
	Sig. (2-tailed)		.731	.893	.735	.375
Q4	Pearson Correlation	-.080	1	.969**	.464*	.468*
	Sig. (2-tailed)	.731		.000	.034	.032
Q5	Pearson Correlation	-.031	.969**	1	.474*	.493*
	Sig. (2-tailed)	.893	.000		.030	.023
Q7	Pearson Correlation	-.078	.464*	.474*	1	.578**
	Sig. (2-tailed)	.735	.034	.030		.006
Q8	Pearson Correlation	.204	.468*	.493*	.578**	1
	Sig. (2-tailed)	.375	.032	.023	.006	
N		21	21	21	21	21

**TABLE 4: Correlations results to test hypothesis two**

		Q1	Q2	Q3
Q1	Pearson Correlation	1	.098	.268
	Sig. (2-tailed)		.674	.241
Q2	Pearson Correlation	.098	1	.809**
	Sig. (2-tailed)	.674		.000
Q3	Pearson Correlation	.268	.809**	1
	Sig. (2-tailed)	.241	.000	
N		21	21	21