



Target Costing and Corporate Performance of Manufacturing Companies in Anambra State, Nigeria

Eze, Maria N.

Department of Accountancy , Nnamdi Azikiwe University, Awka
Mail: mn.eze@unizik.edu.ng

ABSTRACT

This determined the relationship between target costing and corporate performance of manufacturing companies in Anambra State, Nigeria. The study adopted descriptive survey research design. Data were collected from the questionnaires distributed to respondents from a sample of 121 was obtained from population of 537. The hypothesis was tested using Spearman Ranked Order Correlation Coefficient with the aid of Statistical Package for Social Sciences (SPSS) V. 22. From the analysis, the study revealed that target costing contributes significantly to the corporate performance of manufacturing companies in Nigeria ($\rho = 0.469, p\text{-value} < 0.05$). Based on the finding, it was recommended that manufacturing firms should strategize their cost management tools to be based on customer demand, functional cost analysis, and product planning and design stage.

Keywords: Target costing, Corporate performance and Manufacturing companies

Introduction

Management accounting is the application of appropriate techniques and concepts in processing the historical and projected economic data of an entity to assist management in establishing a plan for reasonable economic objectives and in the making of rational decisions with a view towards achieving these objectives. Managerial accounting, or management accounting, is a set of practices and techniques aimed at providing managers with financial information to help them make decisions and maintain effective control over corporate resources (Consolata, 2019). These include the methods and concepts necessary for effective planning and decision making (choosing among alternative business actions and controlling through the evaluation and interpretation of performance) (Oguntodu & Taiwo, 2018).

Business innovations, advancement in technology and the changing demand of customers have brought more competition in business and marketing than ever before. The competitive nature of contemporary business atmosphere has forced corporate managers to cultivate business techniques and strategies that would guide an organization towards the maximization of profits. This business objective can be achieved through increased sales and reduced cost of production. The optimization of profits and minimization of costs may enable an organization to create a competitive advantage in its industry. Suffice to say that traditional management accounting practices may not be able to address such challenges. Strategic management accounting practices provide strategies that can influence a large number of customers to have a lasting preference for a company's products (Consolata, 2019).

The place of MAPs in the manufacturing sector is stressed nowadays than before as a result of evident decreasing profitability, increasing costs of production, toughened business competition, and assorted economic crises (Ayaundu & Ogoun, 2020). Regardless management accounting practices have a very vital place in the management of the manufacturing concerns, there are vast number of local manufacturing firms in Anambra state which have been observed to be slow in the utilization of management accounting practices when compared with multinational firms. Firms with low adaptation and utilization of advanced MAPs are yet to face the modern business needs that characterize the present day business environment. Such firm still feels relaxed mainly because their scale of production is not currently threatened by the status quo (Austin & Ejike, 2019).

As a consequence, some of the manufacturing firms have continued to have low financial and non-financial results because their MAPs level could not keep up with the advance in business competition, product diversification, production technology, increased costs and toughening

business environment. This has further threatened the sustainability and survival of various manufacturing firms across the country as management information which is the life-wire of the organization lacks the potency required to contribute effectively to corporate decision making process and strategy formulation. Ultimately, profitability of firms are adversely affected in this scenario thereby bringing about a cup-full of significant business challenges for managers. Thus, a fresh pressures is mounted on management accounting to change and met up with practices that best meets the emerging need for management accounting as an aid to corporate decision-making. This study therefore determines the relationship between target costing and corporate performance of manufacturing companies.

Conceptual Review

No firm will ever perform well without quality management information which is the indispensable tool in decision-making across firms. It is through management accounting practices that management information is provided, processed and evaluated for the purpose of facilitating decision-making. However, the quality of such information depends greatly on the rightfulness of the MAP utilized. Advanced MAPs such as activity-based costing, target costing and value chain analysis, just like other modern techniques, are reputed to produce good management accounting information that have underlying three attributes viz. technical, behavioural and cultural traits that immediately bring about laudable improvement on the corporate performance of firms (Alabdullah, 2019). According to Austin and Ejike (2019), the technical attributes of management information that are provided by activity-based costing, target costing and value chain analysis is that they facilitate more easily the understanding of the phenomena that are measured through provision of relevant information for strategic decisions. The behavioural attributes encourages only actions that are consonance with the strategic objectives of the firm; the cultural traits create and facilitate a set of shared cultural values and mindsets in the firm which all together work towards the achievement of the corporate objectives of the firm, including financial performance of the firm.

The categories of information that are produced by the use of MAP are financial and non-financial information. The financial information are cost of producing a product, the cost of performing a business process or an activity and the cost of delivering a service. The non-financial information are measures that are related to customer loyalty, customer satisfaction, process quality and timeliness, employee motivation, and innovation which are all summarily incorporated for making decision, resource allocation, performance appraisal, evaluation and monitoring. Therefore, the extent to which management accounting practices can help firms in realizing their financial objectives is considerably high since MAP is indispensable in corporate decision making, planning or forecasting, evaluation and problem-solving. More so, the scarcity of corporate resources requires not just formidable management accounting practices but sophisticated management techniques that can fulfil the emerging need for management accounting as the principal aid to strategic corporate decision-making (Consolata, 2019).

Target Costing

Target costing refers to the strategic cost management tool which is based on customer demand, functional cost analysis, and product planning and design stage. This management practice is intended on to help the firm reduce costs. In other words, the major reason firms go on embracing target costing is to utilize the edge of target costing as a cost management approach in enhancing firm competitiveness. This could be the reason researchers claim that target costing basically focuses on effective implementation of corporate financial performance goals with the modes it adopts in developing a product cost-based approach and/or methodology (Okoli, 2019). Put succinctly, target costing is a cost management approach that is used in determining a product's life-cycle cost which is deemed to be sufficient to develop specified quality and functionality, at a desired profit. Such desired profit margin is subtracted from a competitive market price in order to set the target cost that will yield the desired profit level.

Organizational performance

Through corporate performance appraisal and evaluation, firms quantify the efficacy and efficiency of their operations as a way of identifying whether the firm's programs and processes have delivered as required. In such performance appraisal, efficient firms not only collect and analyze the performance data, but also utilize the data to seek for ways of making some improvement to the firm so that best strategies for the realization of the corporate goals of the firms will be reached. One of the most stressed part of corporate performance appraisal is the profitability analysis which, according to Soltani, Nayebzadeh and Moeinaddin (2014) is the most important objective of any commercial enterprise. Corporate profitability refers to the ability of a firm to generate revenue from its operation which can cover the expenses or cost incurred in the process. It is

often denoted by net income which still remains the sole criterion for profitability measurement. The specific angle of corporate performance which virtually all investors and credit-givers are primarily focused on is the profitability index. This is why most persons take interest in evaluating both the current and future profitability of a firm before ever committing their resources into that firm. By providing a resounding profitability level, investors and lenders automatically feel secure enough over the corporate performance of the firm though modern financial management literature has it that the current primary aim of any commercial enterprise is to maximize the value of the shareholders (Nzewi, 2015).

Empirical Review

Alabdullah (2019) determined the effect of Strategic Management Accounting (SMA) on the Jordanian service sector's performance as one of the emerging economies. The data were obtained via the structured questionnaires that were distributed to the respondents. The total selected sample size for the quantitative approach was 127 companies belonging to the Jordanian service sector for the fiscal year 2017. The study broadly revealed that Strategic Management Accounting influences the service sector's performance. The regression analysis showed that there is a significant and positive link between SMA information usage and financial performance. Austin and Ejike (2019) analyzed the effect of management accounting practices on financial performance of manufacturing companies in Nigeria. This study adopted a descriptive survey design. . Analysis was done using regression analysis. The findings of the study revealed that costing practices, budgeting practices, performance evaluation and strategic analysis have a significant positive effect on the financial performance of selected manufacturing firms in Rivers state. The study recommended that as an efficient accounting ethical practice, it is the responsibility of the management accounting professionals to remain relevant in adding value to the companies for which they work. Pradhan, Swain and Dash (2018) examined the relationship between the adoption of various management accounting practices and the impact of such practices on supply chain performance and firm financial performance. The study deployed descriptive survey research design. This research also utilized descriptive-correlation method wherein all measurement indicators were assessed for validity and reliability taking into account the model. This study used the structural equation modelling (SEM) via PLSs for analyzing the data using process measurement and structural model stages. The study revealed that management accounting practices through adoption of various advanced techniques positively and significantly affects the supply chain activity and corporate performance. The results also revealed that adoption of management accounting practices provides strategic information that significantly increases the competitive advantage of firms. Oguntodu and Taiwo (2018) ascertained the impact of management accounting practices on the performances of the fast-food industry in Rivers State. Descriptive research design was applied in the study among 50 staffs of fast food firms. Questionnaire was used in collecting data which was presented in tables. Pearson and linear regression was used in testing the study hypotheses. The result of the study showed that there is a positive relationship between budgeting and effectiveness of fast-food industries in Rivers state and there is a positive relationship between pricing tools and efficiency of fast-food industries in rivers state. Maziriri and Miston (2017) examined the impact of management accounting practices on the business performance of Small and Medium Enterprises in South Africa. The Statistical Package for the Social Sciences (SPSS), version 24.0, was used to analyze data. Regression analysis was undertaken in order to check the association between management accounting practices and business performance. The specific results of the study are as follows: costing system as a management accounting practice emerged as a statistically significant predictor of business performance ($\beta = 0.064$; $t = 1.722$; $p = 0.048$) in the regression analysis; budgeting emerged as a statistically significant predictor ($\beta = 0.184$; $t = 2.235$; $p = 0.002$) of business performance; performance evaluation is a significant predictor ($\beta = 0.337$; $t = 5.412$; $p = 0.000$) of business performance; and Information for decision making is not a statistically significant predictor ($\beta = -0.163$; $t = -1.139$; $p = 0.001$) of business performance. Mustafa and Fehmi (2017) examined the effect of management accounting practices on performance measurement among firms on the enterprises operating in Konya. The data were collected with the use of questionnaire as the research instrument. Of the total 220 questionnaires that were distributed, 140 were duly returned and a participation level of approximately 64% was obtained to form the data set. The regression analysis revealed that the usage of management accounting instruments and performance measurement have a significant and positive effect on business performance with an R-squared value of 45%. Njoki (2017) investigated the effect of management accounting practices on financial performance of banks in Kenya. This study adopted a descriptive survey design. The descriptive analysis of the study was carried out using mean and standard deviation while the hypothesis of the study was tested with the use of regression technique. The analyses were done using Statistical Package for Social Sciences (SPSS V 24). The research findings established that commercial banks in Kenya often use management accounting practices in their daily operations. Egbunike, Egolum and Agwaramgbo (2015) examined the management accounting practices in a changing advanced manufacturing technology (AMT) environment. The study adopted a correlational research design.. Data were collected from 26 Nigerian manufacturing firms

that were selected from Nigerian Stock Exchange fact books. Collected data were analyzed using ordinary least square method reference analysis. The results of the analysis showed that labour and capital have a significant weak effect on output. The weak ratio of labour to capital is an indication that AMT is yet to be adapted in Nigeria. It indicated weakness in AMT adoption among Nigerian manufacturing firms. Soltani, Nayebzadeh and Moeinaddin (2014) examined the effect of management accounting measures on the performance of tile companies in Yazd. The research model is formed using the variable of management accounting techniques as the independent variable and performance as the dependent variable. The statistical population was tile factories of Yazd. Simple random sampling was used in choosing the sample, and 52 acceptable samples were collected. Furthermore, structural equations modeling with the help of partial least square and Smart PLS software were used to test hypotheses and the validity of the model. The results of the research show that pricing techniques, decision-making for investment and budgeting have significant and direct relationship with performance. Gichaaga (2014) investigated the effect of management accounting practices on financial performance of manufacturing companies in Kenya. This study adopted a descriptive survey design. The data collected was both quantitative and qualitative. Analysis was done using regression technique computed with the aid of Statistical Package for Social Sciences (SPSS). The results of the analysis revealed that management accounting practices have a significant positive effect on financial performance of manufacturing companies in Kenya.

Methodology

In determining the relationship between management accounting practices and corporate performance of selected manufacturing companies in Nigeria, the author deployed descriptive survey research design. The population of this study was taken from the estimate of the total number of staff working full time in the selected manufacturing companies in Anambra North, Anambra South and Anambra Central senatorial districts. The Distribution of the Study Population; Eastern Distilleries & Food Industries = 109, Ibeto Group of Companies = 130, Intafact Beverages = 300. The total population is 537.

Yamane (1964) formula for sample size was used to determine the sample size of the study. The computation is as follows:

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

Where:

n - Sample size

N - Population size

e - The level of precision, sometimes called sampling error, is the range in which the true value of the population is estimated to be.

1 - Constant

Therefore;

Substituting the values in the formula where $e = 8\%$ we have:

$$N = 539$$

$$e = 0.08$$

$$n = ?$$

$$n = \frac{539}{1+539(0.08)^2}$$

$$n = \frac{539}{1+539(0.0064)}$$

$$n = \frac{539}{1+3.4496}$$

$$n = \frac{539}{4.4496}$$

$$n = 121.1344$$

Approximately, $n = 121$

The strata samples of the study are determined with the formula:

$$n = \frac{\text{number of staff in each company}}{\text{total population target}} \times \text{study sample size}$$

$$\begin{aligned} \text{Therefore, for EFI, stratum sample size} &= \frac{109}{539} \times 121 = 25 \\ \text{for IBG, stratum sample size} &= \frac{130}{539} \times 121 = 29 \\ \text{for INB, stratum sample size} &= \frac{300}{539} \times 121 = 67 \end{aligned}$$

Thus, 25, 29 and 67 questionnaires are distributed to the staff in EFI, IBG and INB respectively for further analysis.

Source of Data

This study deployed primary data that were obtained first hand by the researcher on the field. The primary source of data used in this study was generated mainly with the aid of a structured questionnaire. The researcher collected raw data from questionnaires administered to 121 staff of the study sample. The questionnaire was specifically designed into two parts, section A and B. Section A comprises of respondents' personal data and Section B comprises of the research in detail. Where necessary, the specific objectives of the research work would be analyzed through the responses from the respondents using a five (5) point scale (Likert Scale) which are: Strongly Agree (SA) 5, Agree (A) 4, Undecided (U) 3, Disagree (D) 2, and Strongly Disagree (SD) 1.

$$\frac{5 + 4 + 3 + 2 + 1}{5}$$

$$\frac{15}{5} = 3.0$$

Method of Data Analysis

The analysis of data was obtained using descriptive statistics such as percentage analysis, mean, and standard deviation and frequency distribution tables to measure the demographic characteristics of the respondents. In addition to the analyses of the descriptive statistics carried out in the study, the research hypotheses that were formulated were tested using Spearman Ranked Order Correlation Coefficient with the aid of Statistical Package for Social Sciences (SPSS) V. 22.

Decision Rule

Accept the specific objectives with the calculated value which is greater than or equal to 3.0 and reject any objective with a calculated value less than 3.0.

The percentage of each response was obtained using the formula:

$$\text{Percentage Response} = \frac{X}{Y} \times \frac{100}{1}$$

Where X = Number of respondents

Y = Total number of respondents

Data Analysis

Out of the 121 issued questionnaires, 113 questionnaires representing 93.39% of the total questionnaires distributed were returned fully completed; 5 (4.13%) questionnaires were wrongly filled; while 3 questionnaires were not returned representing 2.48% of the total questions distributed to the respondents. The study was, however, continued since a response rate of at least 70% was obtained and is fit for inferential analysis.

Table 1: Presentation of Mean Scores for the Variable: Target Costing

S/N	Statements About the Research Variable	SA	A	N	D	SD	Mean
T1	Our firm determines the life-cycle cost of our products based on a specified quality and functionality, at a desired profit.	102	2	0	9	0	4.74
T2	Target cost that will yield the desired profit level are set by our firm by subtracting a desired profit margin from a competitive market price	33	42	0	38	0	3.62
T3	Customer demand and functional cost analysis are jointly considered in the strategic cost management tool of our firm	21	71	0	21	0	3.81
T4	The target costing method used in our firm utilises product planning and design stage to arrive at a target cost of a product or service	31	27	2	53	0	3.32

Source: Survey Findings, 2021

Table 1 above presents the mean scores of the construct that measured Target Costing. According to the table, all the statements that were made to measure Target Costing were accepted, on average.

Table 2: Presentation of Mean Scores for the Variable: Corporate Performance

S/N	Statements About the Research Variable	SA	A	N	D	SD	Mean
C1	Our firm always uses assets from its primary mode of business in generating more revenues over time	113	0	0	0	0	5.00
C2	Management accounting practices motivate behaviors that support the cultural values that are necessary to the achievement of firm's strategic financial objectives	33	47	0	33	0	3.71
C3	The financial objective of our firm has always been achieved through increased sales and reduced cost of production	22	77	0	14	0	3.95
C4	Managers in our firm direct and control the firm's operations in such a way that enhances the value and performance of the firm	26	35	3	49	0	3.34

Source: Survey Findings, 2021

Test of Hypothesis

For the test of the first hypothesis, the under-stated null hypothesis is deployed:

H₀₁: Target costing does not contribute significantly to the corporate performance of manufacturing companies in Nigeria.

The test of the hypothesis has the following outputs.

Table 3: Correlation Result for Hypothesis

		Target Costing	Corporate Performance
Spearman's rho	Correlation Coefficient	1.000	.469**
	Sig. (2-tailed)	.	.000
	N	113	113
	Correlation Coefficient	.469**	1.000
	Sig. (2-tailed)	.000	.
	N	113	113

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

The result shown in Table 3 above is the result of the test that determines if target costing significantly affects the corporate performance of firms. The positive coefficient of correlation, $\rho = 0.469$, reveals that there is a moderately strong significant association between target costing and corporate performance. The coefficient of determination, $\rho^2 = 0.220$ indicates that about 22% variations in corporate performance can be significantly explained by changes in target costing. Furthermore, Table 3 shows the p -value of the analysis which was used to test the statistical significance of the correlation. The p -value of 0.000 indicates that there is an evidence that a statistical association exists between target costing and corporate performance of manufacturing firms.

Decision

Since the p -value of the test is less than 0.05, the null hypothesis was rejected while the alternative hypothesis was accepted in line with the decision rule. Consequent upon that, the researcher concludes that target costing contributes significantly to the corporate performance of

manufacturing companies in Nigeria ($\rho = 0.469$, p -value < 0.05).

Conclusion

Furthermore, target costing was revealed to have a positive and significant effect on the corporate performance of manufacturing companies in Nigeria. The rho-statistic indicated that when firms increase their target costing intensity, there will be about 46.9% increase in the chances that the corporate performance of the firm will be improved ($\rho = 0.469$, p -value < 0.05). To further support this position statistically, the ρ^2 value of 0.220 indicates that about 22% variations in corporate performance can be explained by movement in target costing. That is to say that there is statistical evidence that supports the assumption that a better target costing method implies that there will be an improvement in the corporate performance of the firm. Put in other words, firms that engage in sound target costing practice are likely to increase the rate of their financial success. Based on the finding, it was recommended that manufacturing firms should strategize their cost management tools to be based on customer demand, functional cost analysis, and product planning and design stage.

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