International Journal of Arts, Languages and Business Studies (IJALBS), Vol.10; June, 2023; pg. 82 - 89

EFFECT OF STANDARD COSTING ON ORGANIZATIONAL PERFORMANCE OF SOME SELECTED MANUFACTURING COMPANIES IN ONITSHA ANAMBRA STATE.

UBOGU FESTUS E. (PhD)
Department Of Accountancy,
Madonna University, Nigeria Okija Campus.
E-mail: Ubogufestus@Yahoo.Com,
Phone No: +2348149030383, +2348034118404

Abstract:
The study examined the effect of standard costing on organizational performance of some selected manufacturing companies in Onitsha. The specific objectives of the study are: to examine the extent to which standard costing affect the reduction of normal losses: to assess the effect of standard costing on gross profit, to determine the effect of standard costing on cost reduction and to provide a basis for establishing ways of improving performance. The population of the study consisted of selected manufacturing firms in Onitsha. The study employed primary method of data collection and applied through the administration of questionnaires designed in a 5- point like it scale. The formulated hypotheses were tested using Z- test statistics at 5% level of significant. The results revealed that there is significant positive effect on all the variables of study. Based on the above findings, the researchers recommends that manufacturing firms should adopt and consistently apply standard casting in their accounting system so as to ensure the efficient use of resources for effective control of costs and enhancement of organizational performance.

Keywords: Standard costing, cost reduction, profitability organizational performance.

Introduction:

A standard is a established criterion model or norm against which actual result can be compared (Idowu 2018). Therefore, standard cost are predetermined cost, target costs or pre-planned costs which management attempt to accomplish with a view of achieving maximum efficiency in the production process. They are cost plans relating to single cost unit out, inefficient performance can be pin pointed when such costs are compared with actual costs (Idowu 2018). Furthermore, standard costing could be viewed as a costing technique which established predetermine estimates of the cost of the product and services and then compares these predetermined costs with actual cost. It results in developing a standard cost system (Idowu 2018).

The survival of contemporary manufacturing concerns in Nigerian 21st century can be said to largely depend on the efficiency of its management. While management efficiency can be measured in a lot of ways including the profit ability or reported profits, this ca n only be achieved through implementation of adequate policies to cut down operating cost.

A well organized and an articulated standard costing system with full participation by all levels of management creates a positive cost effectiveness, the process of setting, revising and evaluating standard enhances reappraisal of costing methods and techniques thereby leading to cost minimization and by studying analyzing and interpreting the variances, management attention is being drawn towards those items which are not moving according to plan (Egbunike 2014).

Despite, the gigantic benefits gained by an organization from the use of standard costing techniques, this technique for cost control is bedeviled by so many drawbacks, which include: frequent revision of standard especially in an inflationary period may lead to serious difficulties, it is time consuming and costly to apply the establishment of a standard that is in most cases unattainable problem of identifying the specific needs of consumers and variation in labour rate per hour among different organization which depends on other economic variables (Yoshikwa etal, 1993, dean 1948).

A number of studies have analyzed the relationship between standard costing and organizational performance. The issue is for from being settled in view of mixed findings reached. Sadiq, lyanuoluwa, Mohammed and Fruk (2016) studied the effect of standard costing on profitability of telecommunications companies. The design of this paper is descriptive survey method and the paper was conducted at MTN company in Kano. The instrument of data collection was analyzed using the chi-square method. The result revealed that standard costing aids telecommunication companies in the elimination of unprofitable products, provision of costing information and cost control. Lawal (2017) critically, examined and evaluated the application of cost control and cost reduction in organizational performance and also to review the budget as an effective tool of cost control and cost reduction. The study adopted a descriptive survey research. The analysis of data collected was undertaken by applying appropriate statistical tools. The result revealed that standard costing has a positive impact on organizational performance and also the style of management has a positive impact on organizational performance.
Cokins (2012) stated that companies needs to be equipped with accurate cost modeling procedure so as to manage their cost and ascertain an acceptable profit margin. However, as competition grows larger, the origination of new products must out do product becoming old or out fashioned. Production of a product that has been produced can be accomplished through reduction of unfavourable, cost difference from the products standard cost and applying advancement process and managing the cost.
Siyanbola and Roji (2013) carried out a study on the impact of cost control on manufacturing companies profitability persan correlation model was used in analyzing the data and the hypothesis tested confirmed a negative impact of cost control on the industries profitability.
As a result of the controversy arising from their finding, the study is being carried out.

STANDARD COSTING

Standard costing is defined by Nweze (2010)as a system of accounting which makes use of predetermined cost relating to each element of cost layout, materials and overhead for each line of product manufactured or service supplied. Standard costing technique therefore represents an Integral part of management accounting control technique will also include budgeting system and responsibility accounting statement. Adeniji (2009) states that standard costing represents an integral part of management accounting control techniques which also include budgeting system and responsibility accounting statement. Standard costing technique may be viewed from the perspective of marginal costing technique or absorption costing technique (Egbunike, 2014). Standard costing often give rise to variance analyses which enables a comparison of the standard costs with the actual costs incurred in the manufacturing process. Adeniji (2004) defined variance as the difference between the budgeted revenue and the actual revenue.
Rotch and Allen (1982) stated that variance is the deviation of actual from expected. Several factors are responsible for the differences between standard costs and actual cost. These factors are associated with price of materials, material usage, labour rate, labour efficiency, and overheads. In the implementation of standard costing, management is given the opportunity to practice management by exception which enables management attention to be focused on areas of variances (favorable or unfavorable) depending on the aim and nature of the standard.

Cost Reduction And Profitability:

Cost reduction can be seen as a decrease in cost or increase in cost-saving arising from the better use of resources in the production process. The aim of cost reduction strategy or technique is to utilize opportunities bringing about a saving in material-cost, labour-cost, overhead-expenses, and any other cost arising in a production process.
Furthermore, Salter (1995) argued that relative performance measures appropriate surrogates for objection measures in the single-industry sample. Wing (2000) stated that there were two major fundamental financial management tools which include budgets and variance analyses. Nevertheless, the reports of variance are not necessarily useful for a manager. When performing variance analyses, the main difficulty is that there is need for cost to be known as either as variable or fixed cost. Practically, large numbers of costs do not perform in this manner. It leads to constraints on reports and inadequate management way cost actually

perform, and reporting the difference through improved cost models. When a system is based on an inadequate model,
This can be used or discarded. But when it is used, it leads to inadequate decisions by the management. Cokins (2002) stated that companies needs to be equipped with accurate cost modeling procedure so as to manage their costs and ascertain an acceptable profit margin. However, as competition grows larger, the origination of new products must outdo product becoming old or out fashioned. Production of a product that has been produced can be accomplished through reduction of favorable cost differences from the product's standard cost and applying advancement process and managing the cost.
Morgan (2012) suggested that business performance consists of two aspects: Market performance and financial performance. Market performance relates to customer behaviors. Higher sales volume, customer satisfaction increases, customer loyalty, and growth of market shares are indicators of market performance while financial performance is measured in performance that are indicated by the net income goal achievement, sales amount and market share increases, the better return on investment, and the growth and continuance of overall performance.

Siyanbola and Raji (2013) carried out a study on the impact of cost control on manufacturing industries' profitability. The study was concentrated on West African Portland cement plc.(WAPCO), where cost control was viewed from a strategic perspective. Pearson correlation model was used in analyzing the data and the hypothesestested confirmed positive impact of cost control on the industries' profitability and that element of cost, such as materials, labour and overhead cost and workers' behavior could be strategically controlled with measures like responsibility accounting, data collection and data reporting. Cletus and Thank God (2015) invested the relationship between standard costing and cost control in Nigeria oil and gas industry. This was achieved through a review of extant literature and development of hypotheses. The population for the study consisted of petroleum marketing companies listed in the Nigerian stock
Exchange Facebook of 2012. In order to generate the necessary data for this study, both primary and secondary method of data collection were adopted. The primary data were collected through the administration of a questionnaires designed in a 5-point likert scale, while the secondary data were sources from the Nigerian stock Exchange Facebook of 2011. The findings generated in this study revealed that a significant relationship exists between standard costing and cost control. According to the Terminology of the institute of cost and management Accountants London, cost reduction is to be understood as the success of real and unchanging reduction in the unit cost of goods manufactured without impairing their suitable for the use intended. The necessity for cost reduction arises when the profit margin has to be increased without an increase in the sales turnover i.e for the same volume of sales, the cost should be reduced.

Hence, the principle way of establishing cost consciousness is to minimize cost at all the levels and highlighting the role and responsibility of every employee in every part of the organization (lawal, 2017). Standard costing happen to be one of the techniques which enhance the attainment of cost reduction as it predetermines the respective costs of material, labour and overhead before the commencement of the production process. With this also comes the benefit of achieving the most with the least cost and reduction of wastages in the course of production. A company can reduce material cost by either using fewer material in the production process or reduce material prices by utilizing quantity discounts and other trade discounts. The cost of labour can be reduced through elimination of overtime, reduction and where possibly, elimination of idle time and increased supervision and motivation of workers. When cost reduction is achieved, it is always reflected in the profit of the manufacturing company.

Concept Of Profitability

Pandey (2010) defines profit as the difference between revenues and expense over a period of time, (usually one year). Profit is the ultimate output of a company and it will have no future if it fails to makes sufficient profit. Therefore, the financial manager should earn profit to survive and grow over a long period of time. Ezeamama (2010) agrees that profit is the difference between revenues and expenses over a period of time. Therefore, profitability is the ability to make profits from all business activities of the company, organization, firm or an enterprise. It shows how efficiently the management can make profits by using all the resource available in the market. However, the term "profitability" is an index of efficiency and is regarded as a measure of efficiency and management guide to greater efficiency.

The change in operational efficiency is merely one of the factors on which profitability of an enterprise largely depends; moreover, there are many other factors besides efficiency which affects profitability ranging from the degree of competition that a firm faces, market competition, the strength of demand, the state of the demand, the advertising campaign, substitutes, costing methods to the efficiency of the company. The companies calculate gross profit by subtracting their manufacturing costs from the revenue generated after sales.

Therefore, the money difference between the costs of goods sold and net revenue generated represents the gross profits.

Organizational Performance

Jones and George (2009) define Organizational performance as the measure of how a manager utilizes the resources of the organization efficiently and effectively to accomplish the goals of the organization as well as satisfy its stake holders. When managers are dedicated and skillful in carrying out specific roles, it helps to make things happen. Managers influence performance by defining objectives, recognizing and minimizing obstacles to the achievement of these objectives and effectively planning, organizing, leading and controlling all available resources to attend high level of performance (Duening and Ivancevich, 2023)

Theory (ES) Propounded by Athanasoglou in 2006.

Efficiency Structure Theory (ES)

The ES Hypothesis States that firm earn high profits because they are more efficient than others. They are two district approaches within the ES; the X- efficiency and scale- efficiency Hypothesis. According to the X- efficiency approach, more efficient firms are more profitable since they have lower costs such as firms tend to gain larger market shares, which may manifest in higher levels on concentration, but without any causal relationship from concentration to profitability (Athanasoglou et all,2006).

The scale approach emphasizes economics of scale rather than differences in management or production technology. Lager firms can obtain lower unit cost and higher profits through economies of scales. This enables larger firms to acquire market share, which may manifest in higher concentration and then organizational performance.

Topics related to this study has been researched by various authors. At this point it is important to evaluate those areas they researched on and also consider their methodologies, findings and conclusion of this study.

Empirical Review

Reeve and Philpot (1988) supported that statistical process control is an efficient way in cost control and cost reduction techniques. He said that, defining the process from the point of view of the financial manager is the first step in SPC. More so, over time, the characteristics of the process are measured and observed. Control charting is the process of studying the difference from the mean. This identifies correctly if the process has come up against any special difference that needs better attention. With the use of SPC, firms are able to significantly improve Organizational effectiveness, product quality, and process efficiency. Brancato (1995) and Fisher (1995a) indicate that many firms believe that financial measures are too historical and '('backward-looking," lack predictive ability to explain future performance, reward short-term or incorrect behavior, provide little information on root causes or solution problems, and-give inadequate consideration too difficult to quantify "intangible" assets such as intellectual capital. As a result, many firms are supplementing financial metrics with a diverse set of

non-financial performance measures that are believed to provide better information on strategic progress and success.

Horngren (1991) argue that cost management must not be isolated from other managerialfunctions and should play a key role in the implementation of the company strategies. It isreported that less than 10% out of nearly five million finance function professionals in theUnited States are involved in audit, tax, and external financial reporting. It takes more people todo the work than to check the work. Most people are believed that what an "accountant" doesare taxes or working at a CPA firm. The cause of this imbalance is the proliferation ofaccounting laws and regulation themselves. Looking at the role played by cost management inconstruction industry, it is reported that in the case of cost estimating in construction industry,he information produced has the additional drawback that it is remotely related to the waycosts are incurred.

Salter (1995) suggested that performance measurement of corporate and business unit has three dimensions:

(1) Effectiveness, (2) efficiency, and (3) adaptability. Some indicators of three dimensions are returns on investment, sales growth, and new product success, respectively more efficient is the firm in material, labor, and overhead costs. Based on the above findings, we recommended that oil and gas firms in Nigeria should adopt and apply standard costing in their accounting system so as to ensure the efficient use of resources for an effective control of costs.

Sadiq, lyanuoluwa, Mohammed and Faruk (2016) studied the effect of standard costing on profitability of telecommunications companies. The design of this paper is descriptive survey method and the paper was conducted at MTN Company, Kano which is the case study of this paper work. The instrument of data collection was analyzed using the chi-square method. The following were discovered findings show that accounting records are kept and are significantly necessary in the management of the company. That the company employs standard costing in their product and decisions are made with the standard costing information obtained in the company. That accounting reports are prepared and presented to the company's management and that actions are taken promptly on the information given in the report. That effective application of standard costing has effect on the profitability of the company. That the company benefit in a significant way through the use of standard costing especially in the improvement of profit. We came to a conclusion that standard costing is widely used in Nigerian telecommunication companies and that standard costing enhances adequate planning, control and decision making processes in the company. That standard costing aids telecommunication companies in the elimination of unprofitable products, provision of costing information and cost control.

Lawal (2017) aims to critically examine and evaluate the application of cost control and cost reduction in organizational performance and also to review the budget as an effective tool of cost control and cost reduction. A descriptive survey research was adopted. A total number of 50 questionnaires were administered and used for the study. The analysis of data collected was undertaken by applying appropriate statistical tools. Regression analysis was used to test the hypothesis with the use of SPSS. Based on the findings, it was evident that cost control has a positive impact on organizational performance and also the style of management has a positive impact on organizational performance.

This study was conducted in Anambra state of Nigeria. This choice was prompted by the high level of manufacturing activities which abound in the state. The study adopted survey research design. Five (5) point Likert scales were used to analyze the questionnaire. The population of the study is made up of the total staff of production departments and accounting departments of the selected companies below;

Simple random sampling was adopted in this study. Since the population is finite, Taro Yamane formula for sample size determination was used to determine the sample size as shown below; n=N/1+N (e) ^2=131/1+131(0.05)^2= 131/1+131(0.0025) - 131/1+ 0.3275 =131/ 1.3275 n=99 n= sample size, N - Population size, e=error term.

The statistical tool used in hypotheses testing is Z-test method. Z-test is a parametric statistic used to test significance of difference or relationship between two populations mean. The Z-test formula is

Z=x⁻– μ
Where" x = Sample mean,
u- - Population mean
n = Sample size
n-1 - Degree of freedom
Decision Rule: for the Z-test accepts the null hypothesis when the alpha value is less than theprobability values, otherwise we reject.
Data Analyses And Discussion
Analysis of the data using statistical package for scientific studies (SPSSversion 21)Level of significant =0.05

Testing of Hypothesis 1
Ho: Standard costing has no significant effect on cost reduction
Table4.1. Descriptive Statistics

	N	Mean	Standard Deviation	Minimum	Maximum
Standard Costing	5	16.0000	12.10372	4.00	32.00

Source: SPSS Output
Table 4.2. One-Sample Kolmogrovo-Smirnov (Z-Test)

		Standard Costing
N		5
Normal Parameters	Mean	1.60000
	Std. Deviation	12.10372
Most Extreme Differences	Absolute	.218
	Positive	.218
	Negative	-.161
Kolmogrov-Smirnov Z		.488
Asymp. Sig. (2-tailed)		.0011

a. Test distribution is Normal.
b. Calculated from data.
From the analysis above, it shows that the probability value (0.011) is less than the alpha value (0.05), the researcher therefore rejects the hypothesis no significant effect on cost reduction.
Test of Hypothesis II
Ho: There is no positive effect of standard costing on gross profit.
Table .3. Descriptive Statistics
Standard costing

	N	Mean	Standard deviation	Minimum	Maximum
Standard Costing	5	16.0000	16.91153	2.00	44.00

Source: SPSS Output
Table .4. One-Sample Kolmogorov-Smirnov (Z- Test)

		Standard Costing
N		5
Normal Parameters	Mean	1.60000
	Std. Deviation	16.91153
Most Extreme Differences	Absolute	.253
	Positive	.235
	Negative	-.204

Kolmogrov-Smirnov Z Asymp. Sig. (2-tailed)	.566 .004

a. Test distribution is Normal.
b. Calculated from data.
Also the analysis shows that the alpha value (0.05) is greater than the probability value (0.04) of the second hypothesis; the Researchers therefore reject the null hypothesis of no significant effect of standard costing on gross profit.
Test of Hypothesis III
Ho3: standard costing does not have significant effect in reduction of normal losses.
Table .5. Descriptive Statistics

	N	Mean	Standard deviation	Minimum	Maximum
Standard costing	5	16.00	12.49000 5.00	5.00	35.00

Source: SPSS Output
Table .6. One-Sample Kolmogorov-Smirnov (Z-Test)

	Standard costing
N	5
Normal Parameter Mean	16.0000
Standard Deviation	12.49000
Most Extreme Differences Absolute	.256
Positive	.256
Negative	-.189
Kolmogorov-Smirnov Z	.571
Asymp.Sig. (2-tailed)	.009

a. Test distribution is Normal.
b. Calculated from data.
The analysis also shows that the probability value (0.009) of the third hypothesis is less than the alpha value (0.05), the researchers therefore reject the null hypothesis that standard costing does not have significant effect in reduction of normal losses.

Conclusion and Recommendations
This study investigated the effect of standard costing on profitability of selected manufacturing companies. Findings reveal that standard costing has significant positive effect on cost reduction and on gross profit.
Furthermore, the study reveals that standard costing has significant effect in reduction of normal losses in the manufacturing processes. It is concluded that standard costing has significant positive effect on profitability of manufacturing companies that have it in practice. The implication is that standard costing works effectively as cost control technique and that elements of manufacturing costs (materials labor and overhead) can be strategically controlled with standard costing system to achieve organizational profitability through cost reduction and minimization of wastages and production process losses.
1. All Manufacturing firms should adopt standard costing technique to enhance their profitability especially in the present economic 'tight corner'.
2. The Management of firms should endeavour to communicate management plans with respect to standards and plans to prevent resistance.

3. Standard costing should be accompanied with proper record keeping monitoring variances over time to enhance management by exception

References

Adeniji, A. A. (2009). Cost Accounting. A Managerial Approach. Lagos State, Nigeria: El- TodaVentures Limited publishers.
Athanasoglou, PP, Delis, MD& Staikouras, CK (2006). The determinants of bank profitability inthe South Eastern *European Region, MRPA Paper No.10274.*
Cletus 0. A. &Thank god C. A. (2015). Standard Costing and Cost Control in Nigerian Oil and GasIndustry. *Journal of Modern Accounting and Auditing, 11(4), 185-193 doi: 10.17265/1548-6583/2015.04.001.*
Cokins, G. (2002). Integrating target costing and ABC. *Journal of Cost Management, 22-29*
Dean, J. (1948). Cost structures of enterprises and break-even charts. *The American EconomicReview, 38(2), 153-164*
Egbunike, P.A. (2007). Management accounting techniques and applications. SCOA HeritageNigeria Ltd. ISBN: 978-97852716-3-8.
Eyisi, S. A. (2009). Cost Accounting: Theories and Practice. Enugu. Ayi- best Publishers.
Guardian Newspaper, www.ngrguardiannews.com Accessed. 28/7/2018
Lawal, B. A. (2017). Effect of Cost Control and Cost Reduction Techniques in OrganizationalPerformance. *International Business and Management, 14(3)19-26 DOI: 10.3968/9686.*
Lucey, T. (2002). 6th edition, costing. New York: Biddies Limited, Guildford and King's Lynn.
Morgan, Neil, A. (2012). Marketing and business performance. Journal of the academicMarketing science.
Pandey, I. M. (2010). 10th Edition, Financial management.. New Delhi: UBS Publishers Distributors Pvt Ltd.
Reeve, J. M., & Philpot, J. W. (1988). Applications of statistical process control for financialmanagement. *Journal of Cost Management (fall),* Master of Accounting Program, 33-40
Sadiq, R. A.; lyanuoluwa 0.; Muhammad, D. A., & Faruk I. S. (2016). Effects of Standard Costingon the Profitability of Telecommunication Companies. Information and Knowledge Management ISSN2224-5758 (Paper) ISSN 2224-896X (Online) 6(8).