ACADEMICIA

ISSN: 2249-7137 Vol. 11, Issue 5, May 2021 Impact Factor: SJIF 2021 = 7.492

ACADEMICIA
An International Multidisciplinary Research Journal
(Double Blind Refereed & Peer Reviewed Journal)

DOI: 10.5958/2249-7137.2021.01363.X

EFFECT OF COST REDUCTION TECHNIQUES ON PROFITABILITY OF MANUFACTURING FIRMS IN NIGERIA

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ABSTRACT

The objective of this study is to examine the effect of cost reduction techniques on profitability of manufacturing firms in Nigeria. In this study, survey research design was employed. Furthermore, questionnaire was administered to solicit useful information from one hundred and twenty (120) respondents out of which only a hundred (100) of them could be retrieved. The retrieved copies of questionnaire were utilized for data analysis. Ordinary Least Square Regression Analyses which was employed for data analyses revealed that there is a significant relationship between cost reduction techniques and organizational profitability. The study concludes that the application of cost reduction techniques will improve organizational profitability. Based on this outcome, the study recommends that management should employ cost reduction technique so as to maximize its goal of higher productivity which will translate to more profit.

KEYWORD: *Cost Reduction Techniques, Profitability and Manufacturing Firms*

INTRODUCTION

In recent years, manufacturing companies in Nigeria have experienced unexpectedly high operating costs, resulting in a decrease in profitability. The energy sector's power generating capacity has decreased, putting manufacturing companies at a disadvantage. According to Akintoye, Onakoya, Amos, and Ifayemi (2015), poor infrastructure causes higher costs and compromises product quality, which accounts for most manufacturing companies' significant competitive disadvantage. According to Adeleke (2014), a large number of manufacturing companies in Nigeria have ceased to exist, and larger companies have absorbed or, at the very least, combined with smaller manufacturing companies. Some companies have moved their operations to neighboring countries (Abdul and Isiaka, 2015).

Few manufacturing companies still operating in the Nigerian market have found that cost management is an effective strategy for maintaining profits. Cost management strategies are supposed to be an integral part of any profit-making venture that wants to remain in business, particularly in this downturn, because no company can stay in business if it does not put specific measures in place to check its costs so that expenditures do not exceed projected budgets. If charges are not adequately reviewed, the result may be harmful to the business's smooth operation. Company management must match budgeted and actual costs and strive to ensure that they always remain within the estimated projections.

Profitability is germane to the survival of any business entity and is of significant interest to the stakeholders (owners, government, employees, and their host communities). Many companies in Nigeria, especially the manufacturing sector, have not been achieving this expectation to owners, government, employees, and their host communities in recent times (Akintoye, Onakoya, Amos, and Ifayemi, 2015). It is when a company makes a profit that it can fulfill its obligations to the stakeholders, payment of tax to the government, payment of dividend to shareholders, payment of enhanced remuneration to workers and investment in corporate social responsibility in its operating environment. The reverse will be the case for unprofitable companies. Profitability, in no small extent, depends on the capacity of the company to grow its earnings and tame its cost profile through cost control techniques.

In competitive industry, there is need to incur reasonable cost and management has to ensure careful and efficient use of resources so as to achieve the setoff standard. Cost control is the process of established standard and maintaining the performance according to standard. Therefore, cost control and reduction are important in an organization in order to regulate and reduce unwanted expenses and it also helps to bring about increase in market demand in term of competitive market. The significance of cost reduction and cost control derived from its function in profit maximization. Any organization that is successful using cost reduction and cost reduction can sell its product at a lower rate than its competitors without reducing its quality (Egbide, Adegbola, Rasak, Sunday, Olufemi, & Ruth, 2019).

Lockey (2012) stated that, having price competitive advantage, the company can increase its market share and become a market leader. Cost control and reduction are techniques used in making other means of competition feasible. The importance of cost reduction scheme within a company cannot be overstated especially when a company is struggling to maintain profitability. Organizations that forfeit money are required to intensify profits or become more involving need to reduce expenses in order to succeed. Frequent re-examination of costs can assist an organization to curb excessiveness and thereby eliminating costs. The significance of cost control and reduction scheme remains constant either it is in good or bad period (Lockey, 2012).

The main difficulty encountered by organizations recently is the increase in the cost of operation that could lead to inevitable cost control and reduction scheme which makes it difficult for most organizations to operate at the cost-efficient frontier. Every organization that wants to survive and maintain its consumers must seek to improve on its product (Egbide, Adegbola, Rasak, Sunday, Olufemi, & Ruth, 2019). Therefore, in order not to exceed their budget and not to run at loss, as well as not to reduce the quality of their products, organization needs to control costs and reduce their cost to the lowest minimum. For this reason, the study investigates the extent of application of cost control and cost reduction technique and the degree of their impact on the operational efficiency in an organization (Dury, 2015).

The manufacturing industries in developing countries have never grown beyond a certain point as if they have physical barriers impossible to cross. This view could be applied to manufacturing industries in Nigeria. Many companies are suffering from profit squeeze; this is because manufacturing companies are still constrained by problems such as frequent shortage of raw material, liquidity problems and mismanagement of resources (Dury, 2015). Owing to the effectuations in the economy and increasing competition among companies, business managers are becoming conscious of how they manage their firms. They are struggling to maintain satisfactory earnings in a situation where costs are rising (Egbide, Adegbola, Rasak, Sunday, Olufemi, & Ruth, 2019). They incur high cost in almost all the areas of their operations and commitments with result that their major problems are not to minimize and control these costs for higher productivity and profitability. The problem now is, can firms survive in this era of economic recession? The answer is not retrenchment of workers, compulsory leave, pay cuts nor is closure of firms rather they should find a solution that would lead to profitability and efficiency and this efficiency in operation and utilization of cut edge tools. From the foregoing, this study will examine and evaluate the application of cost reduction techniques in the organization profitability

LITERATURE REVIEW

The Concept of Cost

Resources must be sacrificed for any organization to achieve its objectives. To an accountant, cost is defined as a resource forgone to achieve a specific goal. This can be expressed as the monetary amount which must be paid to acquire goods and services. ACCA Study Text (2015) defines cost as the amount of expenditure incurred on, or attribute to a specific thing or activity cost of anything ordinarily is money spent to acquire that things. As Chukwugbo (2005) opined, cost is the worth of a unit of product or service. It is the amount of money spent in procuring a thing or product commodity. The importance and necessity of cost to shareholders, investors, tax agencies, and creditors are not overawed in period reporting.

The Concept of Profitability

According to Lucey (2016), accountants use the term profit, as the excess of revenue over costs or expenses; it may qualify as gross profit, net profit, pre-tax profit etc. Profitability therefore, is the measure of returns on the resources or capital employed by the organizations while growth is the rate of development in the organization. Since making of profit involves costs and revenue, any factor that reduces cost, increase a profit vice versa. Profits are indispensable for the efficient management of a business as highlighted. It is therefore advice able for business to undertake those ventures that would maximize their profit and minimize costs authority fraud or deception. Some of these would include the employment of capable and efficient managers, proper and prudent employment of the resources available to the organization, making sure that enough finance is available to implement most of the project of the organization, making available modern equipment which would increase output and reduce unit cost of the product. The aim of the measure is to reduce cost and increase revenue. The business organization has to organize its production department marketing, finance and administrative department to ensure that coordination and efficiency are achieved (Dury, 2015)

Cost Reduction Techniques

For one to successfully present cost reduction scheme as a tool of improving efficiency, one must bring into perspective the techniques that can be employed. In its execution they usually try to find how new mathematical models improve planning and control. Most accounting techniques are employed to reduce costs as such as study and acceptable of cost reduction techniques in achieving more profitability in the organization. The following are some of the approaches to cost reduction:

Kaizen Costing

When a product is in the production stage, kaizen costing is the process of constantly lowering costs. It is a process of continuous improvement that allows for consistent cost reductions by adjusting the standard (Adeniji, 2011). It is a cost-cutting technique that focuses on the manufacturing process and achieves cost savings by essentially increasing the efficiency of the manufacturing process (Asaolu & Nassar, 2007). Kaizen is made up of two words: KAI, which means "alter," and ZEN, which means "for the better" (Rof, 2012). This Japanese term refers to making small gradual improvements to a process rather than large-scale changes. Since goods are already in the production phase, major adjustments to reduce costs are difficult. Kaizen's incremental approach is considered acceptable.

Value Analysis

One of the most popular cost-cutting methods is value analysis. It is a systematic method of recognizing and removing unnecessary costs associated with a product or service by examining the role of each item. It is a nearly universal approach for evaluating current goods and services provided by manufacturing firms, with the basic concept of providing value for the lowest or optimum production costs (Leber, Bastic, Marvic, & Ivanisevic, 2013). It is a method of improvement that focuses on increasing the value of a product or process by gaining a better understanding of its constituent parts and their costs. It is a systematic examination of each cost item that goes into production. The effort at the heart of value analyses is to identify and eliminate those characteristics of products or services that have no real value for the customer or the product, but nevertheless cut costs in the manufacturing or service delivery processes.

Budgetary Control

Budgetary control is the process of comparing future spending plans to actual performance in order to identify variances. It refers to how managers effectively use budgets to monitor and control costs within a set timeframe. Budgetary control ensures that the budgetary plans' objectives are met. Budgetary control systems serve as a benchmark for comparison and cover all aspects of business activity, including sales, production, administration, and finance. It is a cost-cutting strategy that disengages issues by focusing on variances that serve as warning signals to managers. It keeps costs under control by limiting the amount of money that different department heads are allowed to spend; as a result, costs are not expected to exceed certain levels. The hallmark of budgetary control is to achieve profit maximization through appropriate coordination of various capacities, legitimate control of capital and income consumptions and making greatest utilization of accessible assets (Preetabh, 2010).

Theoretical Foundation

The principle of going concern is used in this research. The going concern theory states that an entity will be able to continue operating for the near future and will not be forced to cease operations or liquidate its assets (The going concern principle, 2017). The willingness of a corporation to make enough money to remain alive without going bankrupt is referred to as the theory of going concern. The principle is based on the idea that an organization can continue to carry out its operations for a long enough period of time to fulfill its responsibilities and commitments as they become due. In other terms, it is assumed that the company will not be forced to liquidate or cease operations in the near future. Since it is presumed that a corporation would not be forced to cease operations, management must make provisions to prevent anything from undermining that presumption. Uncontrolled costs can cause a company to cease operations, so rising costs are a major factor that affects the going concern status of a corporation. Uncontrolled expenses have an impact on a company's ability to make a profit; as a result, a company that does not make a profit will be unable to meet its commitments and will not be able to expand.

Empirical Studies

Adam, (2015), Despite the seeming gain of democracy in 1999, the mobilization of domestic and foreign resources has become problematic due to several year of dictatorial misrule, the business environment continues to be severely impacted by widespread religious, cultural and political disturbance in Nigeria, infrastructural by all intents and purposes, remain to be grossly inadequate and in a poor state, with the cause by supply of power leading to serious disruptions in production are constituting serious strains in the company’s finances, with greater reliance been placed on the use of private generating facilities. However, the productivity of the manufacturing sector is also associated with high production cost related with high tariffs, increase in cost of energy, rising cost of imported inputs as a result of continues depreciation of naira exchange rate, and rising rate of inflation. Furthermore, the net import requirement of the manufacturing sub- sector grew rapidly as more than 60% of the raw materials consumed is imported due to lack of economics of scale, difficulty in obtaining technical expertise, inadequate research into local substitute and cost of production of locally sources material. There are a number of studies that were carried out in Nigeria and outside with the view to appraise the various cost control and strategy cost management in manufacturing firms as a survival technique. Some utilize primary data (questionnaire and /or interview) while others used secondary data.

According to a research conducted in India by Barbole (2013), is one of those that used secondary data such as books, online articles and descriptive statistics to analysis the study and title ‘’Impact of cost control and cost reduction techniques on manufacturing sector’’ the study review that for a business enterprise to survive, grow, and prosper. Cost Control and Cost reduction are the activities necessary for ensuring objectives are fulfilled. The researchers further highlighted that, with the liberalization of the Indian Economy and Globalization, there is now a cut throat competition from various concerns of the world. This has now increased the importance of Cost Control as a survival technique. He further explained different tools and techniques used for Cost Control and cost reduction and analysis the changes in component cost after implementing the various techniques.

Another study was carried out by Emengini (2014) and title ‘product cost management in relation to Activity-Based costing (ABC) by manufacturing companies in a developing country like Nigeria. Data were collected from 58 sampled companies using questionnaire and analyzed using student’s t-test and Multivariate analysis variance (MANOVA). The study disclosed that product cost management through application of ABC and traditional costing is geared towards cost reduction and are good strategic cost techniques in controlling cost. They further review that there is no statistically significant difference in cost reduction attained by ABC over Traditional costing, but though ABC tend to have higher effect and profit realized of ABC is equally higher. Base on the findings, the study recommends that manufacturing companies in developing countries should develop a good tone of management and core values that will promote the utilization of ABC in their costing system, and the use software to facilitate application of ABC. The research is limited to South East of Nigeria. The study also recommends that the initial cost of implementation of ABC should deter the companies from adoption of ABC since its long run benefits surpasses its costs.

Oyewo (2013), study the impact of ‘’strategic cost management as a recession survival tool in the Nigerian manufacturing and financial service industries’’. The study used questionnaire for collecting the data from targeted 280 respondents, out of which 212 were completed and returned from both manufacturing and financial sectors and the collected data where analysis using the Mann-Whitney test. The objectives of the research is to determine whether strategic cost management (SCM) techniques are practically used by Nigerian companies and the extent of their utilization particularly in the Nigerian manufacturing and financial services industries. The study reveals that survival of businesses in recessionary times is dependent on managing cost strategically and the SCM techniques is more feasible, applicable and can be implemented in Nigerian manufacturing industry than in financial service industry because of the predominant application of SCN to manufacturing concerns and, product tangibility of the two industries. The author recommends more researches in SCM should be done in other industries apart from manufacturing industries in order to demonstrate that management accounting can be applied with resounding success in any industry and country. The Nigerian government should formulate more policies that create enabling environment to promote higher adoption of SCM.

Ayodele and Alabi, (2014) topic of research was ‘’Effect of cost control on building projects delivery in Nigerian’’. The study aims at determined the effects of cost control techniques on building projects delivery for both government and private developers based on quality, time and cost. Interviews were conducted for selected quantity surveyors, architects, civil engineers, builders and contractor. Observations were also made on construction sites of government and private developers. The data collected were analyzed by percentage. The study reveals that bill of quantities and other cost control techniques was utilizes on government building contracts while none of the cost control techniques was utilized by private developers. The research did not specify the cost control techniques used by government and is limited to south west of Nigerian

Methodology

The research design used is survey research design. This is aimed at describing and predicting the influence of cost reduction techniques on organizational profitability. Purposive sampling method was adopted to select 120 staff from 5 selected firms listed on the Nigerian Stock Exchange (NSE) market. These firms include; Guinness Nigeria Plc, Nigerian Breweries Plc, Life Breweries Plc, Asaba Textiles and Dumex Nigeria Plc. The questionnaire survey was designed using Linkert five scale points and the information from the questionnaire was transformed through coding by a data analyst expert so as to meet the requirement of regression analyses. The hypothesis was statistically tested using ordinary least square regression analyses technique. The study adopted the model of Anyigbo (2012) which is shown as;

Functional Form as;

Prof = f(CRT) ---i

Econometric Form as;

Prof = B_0+B_1CRT+ u_t ---ii

Where;

Prof = Firm Profitability

CRT = Cost Reduction Technique

B_o = Regression Line Constant Term

B_1 = Expected Coefficient of CRT

U_t = Error Term

Result of the Study

Simple Regression Model was explored to test the linear relationship between the dependent and independent variable using SPSS version 20 as shown in the tables below:

TABLE 1: REGRESSION RESULT OF EFFECT OF COST REDUCTION TECHNIQUES ON ORGANIZATIONAL PROFITABILITY

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.455	0.307		1.020	.033		
	Cost Reduction Techniques	.899	.668	.613	1.345	.021	1.000	1.000

Source; Authors Computation 2021

H_{01}: The application of cost reduction techniques has no significant effect on organizational profitability.

This hypothesis was tested and the result of this regression indicates that the relationship between cost reduction techniques and organizational profitability is positive and significant; this can be justified with the P-value (significance) of 0.021 which is less than the 5% level of significance. Likewise, the result of positive coefficient of 0.613 is proving that application of cost reduction techniques ‘ceteris paribus’ (all other things remaining constant) increases organizational profitability. Therefore, we reject the null hypothesis and accept the alternate hypothesis which means that application of cost reduction techniques has significant effect on organizational profitability. The findings of the study agree with those of Oyewo (2013) who found that cost control and techniques have significant effect on organizational profitability.

CONCLUSION AND RECOMMENDATION

Manufacturing concerns’ main cost elements are direct material, direct labour costs, manufacturing overhead while other costs of high-level significance are transportation and administrative costs. Manufacturing companies prefers to employ cost reduction techniques of budgetary control. However, based on the findings revealed above, the paper recommends that managers who are interested in carrying out cost control procedures must necessarily be concerned about cost reduction techniques as a means of achieving its aims. It is recommended that mechanisms for budgetary control should be put in place. A good budgeting process would effectively control cost. The inventory management process must provide for the pre determination of economic-order quantities and re-order level for all class of raw material and components in the store room to achieve its objectives of maintaining minimum stock holding costs. With the above recommendation, the company can achieve its goal of lowering its production cost

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