

Cost Accounting and its Ramification for Business Management in Nigeria

Adekola Gbolagade
Department of Management and
Accounting, LAUTECH, Ogbomoso

Julia Adebisi, Ph.D
Department of Accounting,
LAUTECH, Ogbomoso

Taiwo Emmanuel Adekunle
Sion IT Solutions

Abstract:- The study investigated the relationship that exists between the management of the business organization in manufacturing companies and the information obtained from cost accountants for planning and, also, examined the relationship that exists between business management and the pool of information generated that facilitates informed decisions. Questionnaire was adopted for the collection of data from the staff of Nigeria Bottling Company Asejire, Oyo State. Both qualitative and quantitative methods were applied in the analysis of the data collected. The result of the hypotheses using regression analysis revealed that there is a relationship between the management of the business organization in manufacturing companies and the information obtained from cost accountants for planning. The study also revealed that there is a relationship that exists between business management and the pool of information generated that facilitates informed decision.

I. INTRODUCTION

Making prompt and timely judgments is important in a business because of the dynamism and sharp increase in commercial competition (Ogbolu, Osugba, & Agbeyi, 2021). It may be difficult to completely separate the appropriateness of product costing methodologies from the timeliness and relevance of cost accounting information that could reduce costs and increase profitability. The management frequently strives to ascertain the cost of the products and frequently bases their decisions on information from cost accounting.

Ezeala and Apete (2023) state that the process of cost accounting entails gathering, analyzing, summarizing, and assessing many potential courses of action. Its objective is to provide management with recommendations on the best course of action based on cost effectiveness and capabilities. The thorough cost data that management requires to oversee ongoing operations and make long-term plans is provided by cost accounting. It also plays a crucial part in providing an integrated view of the organization to align capabilities, resources, and their areas of responsibility in order to maximize use of these resources for the effective and efficient use of data and information.

For organization, the choice to set pricing has a direct bearing on the amount of money it may bring in. It is important to keep in mind that market dynamics such as demand, competition, and costs influence an optimal price. The two elements of the income equation are price and volume, and the decision to concentrate on one will have an immediate impact on the other (Adeniji, 2011). Customers' loyalty may suffer if the price is set too high, although a high price may also be associated with desirability to the customer. A business's revenue will be maximized if it can establish an effective price for its goods. Since the firm is functioning in a highly competitive environment, cost accountants must comprehend the activities of the business's value chain, from manufacturing to marketing to distribution to customer service (Azad & Akbari, 2016).

Against this background, this study tends to investigate the relationship that exists between the management of the business organization in manufacturing companies and the information obtained from cost accountants for planning and also examines the relationship that exists between business management and the pool of information generated that facilitates informed decisions.

II. LITERATURE REVIEW

➤ *Cost Accounting*

The process of documenting, categorizing, evaluating, summarizing, and allocating expenses related to a process, followed by the development of various action plans to control the costs, is known as cost accounting. Its objective is to provide management with recommendations on how to improve operational procedures and methods in light of capacity and cost effectiveness. Cost accounting offers the in-depth cost data management requires to oversee ongoing operations and make long-term plans (Edward, 2013). Various cost accounting aspects include:

➤ *Activity Based Costing*

The ABC technique was developed in the middle of the 1980s by Robert Kaplan, a professor of management accounting at Harvard University, and Robin Cooper, a professor of management specializing in the design and application of costing systems. It was created primarily to fix

inaccurate overhead allocations. It was initially a reaction to the unreliable American standard costing procedures. In the 1980s, the ABC approach was developed in the United States. In order to expand the number of indirect-cost pools, categorize more expenses as direct, and identify cost drivers, a more sophisticated cost system has been developed (Tabitha & Ogungbade, 2016).

Activity Based Costing is an approach to the costing of final output that keeps track of the activities and links resource consumption to the activities, according to CIMA (2008). Based on estimations of consumption, resources are assigned to activities and activities to cost objects. In the latter, activity expenses are linked to outputs using cost drivers. According to CIMA, activity-based costing/management eliminates tasks that don't benefit clients or the company, and it reduces or completely prevents distortions in product costs that could result from the haphazard distribution of overhead expenses.

➤ *Standard Costing*

Standard costing is a control technique that reports deviations by comparing real costs to predetermined criteria, simplifying management by exception, according to CIMA terminology. It alludes to a method of control using variance analysis that use standards for expenditures and revenues. For an immediate future period, standards are created for each cost component on a scientific foundation, and actual results are compared to the standard. In order to prevent the repetition of inefficient operation, deviations from standards are analyzed, their causes are determined, and remedial action is then implemented (Tabitha & Ogungbade, 2016). Standard costing, in the opinion of Küçüksavaş (2006), strives to deliver cost information relevant to cost control, convenience and speedy computation of production costs, creation of business budgets, product pricing, and evaluation of division managers' performance.

➤ *Target Costing*

According to CIMA (2005), the development of target costing dates back to the Japanese manufacturing sector's response to the constraints posed by increasing consumer demand for variety and shorter product life cycles in the 1970s. Additionally, businesses started to understand that the majority of a product's cost was incurred during the design phase. As a multidisciplinary approach to cost management, target costing emerged early on and was reinforced by strategies like process re-engineering and overall quality management. It entails determining a target cost by deducting a targeted profit margin from a price that is competitive in the market. Its main objective is to support management in operating a company profitably in a highly competitive market.

Although the tool was developed in a manufacturing organization, it has also been demonstrated that it is appropriate for the service sector (Tabitha & Ogungbade, 2016). The service industry can benefit from target costing

just as much as the manufacturing industry. It is important to identify and comprehend the needs of the market, as well as those of its clients and users, and to assure financial performance at a particular cost or price (which, when resources are few, does not exceed the goal cost) (Kaplan, 1984). Its advantages include a better understanding of products and services that enables the identification of problems at an early stage of development where actions can be taken, a focus on the products' and services' final users, its multidisciplinary relevance, and the involvement of staff from all areas in the cost analysis and reduction of the cost before they are locked in.

III. EMPIRICAL REVIEW

In a 2017 study conducted in Indonesia, Maya and Muryati examined the impact of production costs and the order price technique on product pricing at PT. Aneka printing Indonesia in Sukoharjo. The major data source for the study was information gleaned from the company's owner or other relevant stakeholders. Methods of literature research, interviewing, and documentation are utilized as data collection techniques. Using the computer application SPSS 16.0 for Windows, basic regression analysis is the approach of data analysis used. The study discovered that the sale price is significantly influenced by the cost of production.

Novák, Dvorsk, Popesko, and Strouhal (2017) examined how overhead cost behavior affects the way decisions are made. The model parameters for the study's multiple linear regression models were estimated using a point estimate and an interval estimate. The study demonstrated that the asymmetric behavior of the selected components has an impact on asymmetric cost behavior.

In order to explore the uses of performance assessment and management accounting in the businesses operating in Konya Organized Industrial Zone, Iyibildiren and Karasioglu (2017) conducted a study. An analysis of 385 businesses operating in the Konya Organized Industrial Zone was done. Researchers used the correlations between management accounting instrument use, performance measurement, and performance scorecard importance level as a proxy for perception of business performance. Researchers used Pearson's correlation coefficients analysis and regression analysis with the aid of SPSS to assess the harmony of the variables with each other, their ability to explain each other, and the statistical significance of the variables and the model. The variables of management accounting use, performance measurement, and prominence of performance scorecard are significant in understanding how people perceive how well a business is performing, according to the results.

Bukunmi, Olusola, and Adebayo (2018) evaluated the usefulness of accounting data as a management decision-making tool in manufacturing firms in Nigeria's Osun state. Data were mainly obtained from 150 top management staff

members who were statistically chosen from the chosen industrial enterprises in Osun State, Nigeria, using a standardized questionnaire. They used the Statistical Package for Social Sciences (SPSS) version 20 to examine the study's data using the t-test statistical method. The findings of data studies showed a strong correlation between accounting data and management choices in manufacturing businesses. Based on this, the study makes the recommendation that enough knowledge of and effective use of various accounting tools be incorporated into decision-making processes as this will impact the investment of human resources and improve appropriate strategies for the launch of new goods into markets.

The application of cost accounting as the financial foundation of management accounting systems at public hospitals in Slovenia and Croatia was examined by Jovanovi, Draic-Lutitsky, and Vaiek (2019). In order to identify the key barriers to the adoption of a comprehensive costing approach in hospitals in Slovenia and Croatia, the article examined the capacities of cost monitoring according to several criteria. These researchers looked into 52 Croatian and 26 Slovenian hospital financial and accounting executives. It was thus made clear that the management accounting systems in Slovenia and Croatia are still in their very early stages of development. Additionally, the study found several similarities and variations between the two systems, leading to the conclusion that Slovenia has made more advancements, particularly when considering systematic cost monitoring and the application of national cost analysis.

IV. METHODOLOGY

The research design used is both explorative and descriptive involving collections, analysis, and interpretations of data. The population of this study is mainly the staff of Nigeria Bottling Company Asejire, Oyo State. As of the time of writing this paper, there was two hundred and fifty (250) staff employed in the Accounting and Finance Department, Purchasing Department, and Production Department in the organization. The sample size obtained through the Yaro-Yamani formula was one hundred and fifty-four (154).

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

Where:
 n=sample size
 N= Population of the study
 e=Tolerable error (5%)

Using this formula,

$$n = \frac{250}{1 + \frac{250(0.05)^2}{250}}$$

$$= \frac{250}{1 + 250 \times 0.0025}$$

$$= \frac{250}{1.625}$$

$$n = 154$$

The data used for this research were collected from primary sources. The questionnaire was the basic instrument for data collection. The research instrument was a 5-point Likert scale where one is the lowest level and five is the highest level for an optimistic answer. Respondents were asked to pick any of the options which include: Strongly Agree, Agree, Uncertain, Disagree, or Strongly Disagree.

Both qualitative and quantitative methods were applied in the analysis of the data collected. To analyze the responses obtained from the questionnaire, the research study made use of the two main methods of statistical data analysis which are descriptive statistical analysis and computer data analysis i.e., the SPSS package. The descriptive statistical analysis involved the use of tabular presentations such as frequency tables and distributions. The research questions were tested using ANOVA. This was performed by defining the numbers categories and observing the number of the case falling into each category and knowing the expected number of cases fully in each category.

The formula for ANOVAs is:

$$SS_{Total} = \sum X^2 - \frac{(\sum X)^2}{N}$$

V. DATA PRESENTATION, ANALYSIS, AND INTERPRETATION

To remain focused in this sub-section, the researchers articulate their ideas and present and analyze the data gathered in tabular forms treated with clarity, in a simple, lucid, concise, and logical manner devoid of ambiguity.

Table 1 Distributions and Return of Questionnaire.

S/N	Department	No Distributed	No Distributed (%)	Returned	Returned (%)	Not Returned	Not Returned (%)
1	AFD	50	32.5	49	32	1	0.5
2	PuD	50	32.5	45	30	5	2.5
3	PrD	54	35	50	32	4	3
	Total	154	100%	144	94%	10	6%

Source: Authors' Field Survey, 2015.

- 1.AFD = Accounting and Finance Department
- 2.PuD = Purchasing Department
- 3.PrD = Production Department

Table 1 shows that a total of one hundred and fifty-four (154) copies of the questionnaire representing 100% were distributed to the Accounting and Finance Department, Purchasing Department, and Production Department of the selected department, out of which one hundred and forty-four were selected representing 94% were returned while ten (10) copies of the questionnaire indicating 6% were not returned for the designated purpose of the study. Therefore, the study based all their data presentation, analysis, and presentation on the one hundred and forty-four (144) questionnaire representing 94% that were duly completed and returned.

Two hypotheses were propounded for further investigation and the proof or otherwise of each of these hypotheses was based on appropriate statistical evaluation. To arrive at a logical and meaningful finding, conclusions, and recommendations, several statistical tools were used to determine the degree of association. The researcher employed regression statistical analysis in testing the research hypotheses formulated earlier, this was achieved through SPSS {Statistical Packages for Social Science}.

• *Hypothesis One*

H₀: There is no relationship between the management of a business organization in manufacturing companies and the information obtained from cost accountants for planning.

H₁: There is a relationship between the management of a business organization in manufacturing companies and the information obtained from cost accountants for planning.

➤ *Hypotheses Testing*

Model Summary

Model	R	R Square	Adjusted R Square	Std. An error in the Estimate
1	.980 ^a	.961	.961	.285

a. Predictors: (Constant), information obtained from cost accountants for planning.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	284.325	1	284.325	3491.316	.000 ^b
Residual	11.564	142	.081		
Total	295.889	143			

a. Dependent Variable: between management

b. Predictors: (Constant), information obtained from cost accountants for planning

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.024	.049		-.478	.633
information obtained from cost accountants for planning	1.026	.017	.980	59.087	.000

a. Dependent Variable: Business Management

The regression table which is the model summary shows a regression result of 0.980 which is 98.0%, this shows a strong positive linear relationship between the dependent (Business Management) and the independent variables (information obtained from cost accountants for planning). The R squared (coefficient of determination) which indicates the proportion level in the dependent variable that is explained by the independent variable from the model summary table R squared is 0.961 which means that about 96.1% variation in Business Management is explained by information obtained from cost accountants for planning, that is the extent to which information obtained from cost accountants to plan influence Business Management is to the degree of 96.1%.

From the regression coefficient table, the column labeled Unstandardized Coefficients reveals the unstandardized regression coefficient for the independent variable, as 1.026. The test explains to us whether the regression coefficient is

different enough from zero to be statistically significant at the level (0.001) it also indicates the marginal contribution of the independent variable to the dependent variable. According to the analysis, since the p-value (0.001) is less than the alpha value (0.05) we, therefore, accept the alternative hypothesis and conclude that there is a relationship between the management of the business organization in manufacturing companies and the information obtained from cost accountants for planning.

• *Hypothesis Two*

H₀: No relationship exists between business management and the pool of information generated that facilitates informed decisions.

H₁: There is a relationship that exists between business management and the pool of information generated that facilitates informed decisions.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.916 ^a	.840	.838	.632

a. Predictors: (Constant), a pool of information generated that facilitates informed decisions.

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	296.801	1	296.801	743.413	.000 ^b
	Residual	56.692	142	.399		
	Total	353.493	143			

a. Dependent Variable: business management

b. Predictors: (Constant), the pool of information generated that facilitates informed decision.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.171	.105		1.634	.105
	A pool of information is generated that facilitates informed decisions.	1.033	.038	.916	27.266	.000

a. Dependent Variable: business management

The regression table which is the model summary shows the regression result of 0.916 which is 91.6%, this shows a strong positive linear relationship between the dependent (Business Management) and the independent variables (Pool of information generated that facilitates informed decision). The R squared (coefficient of determination) which indicates the proportion level in the dependent variable that is explained by the independent variable from the model summary table R squared is 0.840 which means that about 84.0% of the variation in Business Management is explained by Pool of information generated that facilitates informed decision, that is the extent to which Pool of information generated that

facilitates informed decision influence Business Management is to the degree of 84.0%.

From the regression coefficient table, the column labeled Unstandardized Coefficients reveals the unstandardized regression coefficient for the independent variable, as 1.033. The test explains to us whether the regression coefficient is different enough from zero to be statistically significant at the level (0.001) it also indicates the marginal contribution of the independent variable to the dependent variable. According to the above analysis, since the p-value (0.001) is less than the alpha value (0.05) we, therefore, accept the alternative hypothesis and conclude that there is a relationship that exists

between business management and the pool of information generated that facilitates informed decision.

VI. DISCUSSION OF FINDINGS

The research work borders on assessing the impact of Cost Accounting and its ramifications for Business Management in the Manufacturing Industry. The result of the hypotheses using regression analysis reveals that: there is a relationship between the management of the business organization in manufacturing companies and the information obtained from cost accountants for planning. The implication of this is that the presumption that there is a relationship between the management of business organizations in manufacturing companies and the information obtained from cost accountants for planning is true.

The second hypothesis sought to establish whether there is a relationship that exists between business management and the pool of information generated that facilitates informed decisions. The study revealed that there is a relationship that exists between business management and the pool of information generated that facilitates informed decision which was confirmed by the research work of (Horngren, et al., 2009) who posed that Cost 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.

VII. CONCLUSION AND RECOMMENDATION

Conclusions drawn from the research are stated below: There are relationships existing between the management of the business organization in manufacturing companies and the information obtained from cost accountants for planning as the coefficient of correlation is high. There also exists a strong relationship between business management and the provision of information about the actual figure of cost for comparisons with estimated cost and this is backed up by a high percentage of the respondent who believes that the information provides bits of help in business management. Respondents also help conclude that there exists a relationship between business management and the pool of information generated that facilitates informed decisions and that there exists a significant relationship between business management and cost generated through Cost Accounting.

Because of all the above analysis and findings, the following are recommended;

- The company should put in place an adequate and reliable Cost Accounting system.
- Company accountants should engage in training and development on recent Cost Accounting concept and their application.

- Cost Accounting should reveal weak areas of management adoption of various costing methods and techniques for planning
- Management should always consider the report of the cost accountant in deciding as regards cost issues in the company.
- Business management information should enhance an efficient system of material control.
- However, the variables used in the study were not also exhaustive. Future research could incorporate key performance indicators in industries. Extensive research is still to be done in this area as presently this research has not examined all the manufacturing sector and other relevant industries. Further works with a wider scope of reference should still be done to be able to relatively ascertain if the level of relevance still holds.

REFERENCES

- [1]. Adeniji, A. A. (2011). Cost accounting: A managerial approach. El-Toda ventures Ltd, 5th ed.
- [2]. Azad, R. & Akbari, F. (2016). The effect of cost accounting system inventory on increasing the profitability of products. *Journal of Industrial and Intelligent Information* 4(1): 83 –87.
- [3]. Bukunmi, A. A, Olusola, A. A, & Adebayo O. (2018). Assessment of the effectiveness of accounting information as a tool for management decision in manufacturing companies in Osun state, Nigeria. *Journal of finance and marketing*; 2(3):1-9.
- [4]. CIMA (2005) Target costing in NHS; Reforming the NHS from within. CIMA
- [5]. CIMA (2008). *Activity Based Costing. Gateway series No 1*. Retrieved from: http://www.cimaglobal.com/Documents/ImportedDocuments/cid_tg_activity_based_costing_nov08.pdf.pdf
- [6]. Edward, J. (2013). *Principles of Cost Accounting. Vanderbeck - Google Books*. <https://books.google.com.ng/books?id=IDp-BAAAQBAJ>
- [7]. Ezeala, G. & Apete, C. (2023). Effect of Cost Accounting Information on Firm Value: A Study of Small and Medium Size Enterprises in Anambra State, Nigeria. *International Journal of Research Publications and Review*, 4(2):1170-1181.
- [8]. Iyibildiren, M. & Karasioglu, F. (2017). Effects of Management Accounting Practices and Performance Measurement on The Perception Of Business Performance: Field Study On Organized Industrial Zone Of Konya. *Journal of Knowledge Management, Economics and Information Technology*.7(4):1–14.
- [9]. Jovanović, T. & Vašiček, V. (2021). The role and application of accounting and budgeting information in government financial management process—a qualitative study in Slovenia. *Public Money & Management*, 41(2): 99-106

- [10]. Kaplan, R. S. (1984). The Evolution of Management Accounting. *The Accounting Review*, 59(3):390-418.
- [11]. Maya, W. D. & Muryati. (2017). An Analysis of Production Cost Effect with Order Price Method on Sales Pricing of Products at PT. Aneka Printing Indonesia in Sukoharjo. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 1(2):1-7.
- [12]. Novák, P., Dvorský, J., Popesko, B., & Strouhal, J. (2017). Analysis of overhead cost behavior: case study on decision-making approach. *Journal of International Studies*, 10(1), 74-91.
- [13]. Ogbolu, L. M., Osugba, S. & Agbeyi, M. (2021). Cost Accounting Information and Product Costing of Selected Paint Manufacturing Companies in Delta State, Nigeria. *Research Journal of Management Practice*, 1(11): 44-54.
- [14]. Tabitha, N. & Ogungbade, O. I. (2016). Cost Accounting Techniques Adopted by Manufacturing and Service Industry within the Last Decade. *International Journal of Advances in Management and Economics*, 5(1):48-61.