

COST ACCOUNTING AS A VEHICLE FOR ENTREPRENEURSHIP DEVELOPMENT IN NIGERIA: AN EMPIRICAL STUDY OF SELECTED ENTREPRENEURS IN DELTA STATE

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Abstract

This study was carried out to investigate cost accounting as a vehicle for entrepreneurship development in Nigeria – An empirical study of selected entrepreneurs in Delta State, Nigeria. A set of structured questionnaire was used as the instrument for data collection and administered on 100 entrepreneurs in Delta State, Nigeria randomly selected using Yaro Yameni formula. Applying the formula, the simple size from a population of 100 is 80 respondents at 95% confidence level. Data analysis was made and the hypotheses formulated were tested using the pearson correlation co-efficient at 0.05% level of confidence. The results revealed that positive and significant relationship exists between cost accounting in assisting entrepreneurs in cost reductions and elimination of wastages. The study concluded that for entrepreneurship development to be successful, application of cost accounting is imperative. The study recommended gradual introduction of cost accounting system, studying the organizational structure of the enterprise, study and effectiveness of the system and a host of others for effective application of cost accounting for entrepreneurship development.

Keywords: Cost Accounting; Vehicle; Entrepreneurship; Development.

Introduction

In the present competitive environment, fixation of product price is mostly determined through cost incurred in bringing out an item from the production processes. The true situation is that the inverse relationship of product cost to the level of demand implies that the higher the product cost the lower is the level of demand. Thus, the overall profit depends on the quantity demanded. The reality therefore is that while the cost of resource utilization is increasing, the major resources available for production continued to be scarce. It is therefore undeniable to express that the existence of a firm in the future competitive environment is very much concerned with an effective

utilization of resources available for production. Thus, the application of cost control is accordingly paramount to a business success in the contemporary market economy.

The fundamental concept of efficiency of operation through the application of cost control and cost containment techniques is better studied under cost accounting, which is one of the branches of accounting.

The main purpose of accounting is to present quantitative information about economic entities in a summary form. The information provided is purely financial in nature and useful to various users in taking decisions involving financial spending. Financial accounting satisfies the needs of both insiders and outsiders through the preparation of financial statements, compiled from the cost incurred records. Cost accounting assists in estimating product cost in advance of production through the use of historical and estimated cost records. In the real sense, cost accounting system assists an organization to set standards for cost and revenue items. The firm is able to determine its operational performance only by comparing the actual operational figures with the standard figures already set. Thus, this study is therefore aimed at carrying out an empirical study on cost accounting as a vehicle for entrepreneurship development in Nigeria – An empirical study of selected entrepreneurs in Delta State with a view to identifying the need to identifying cost accounting as a vehicle for entrepreneurial development.

Statement of the Problem

Over past decades, manufacturing and service sectors have been facing the problems of very keen competition, scarcity of resources, high inflationary trends, increasing rate of technological innovation, insufficient demand and changes in consumers' attitudes toward products selection. Moreover, changes in the government policies have equally generated uncertainty in profit and demand forecast for many organizations. One of the major means that a firm can be assured of overcoming the above predicaments is to be efficient in its daily operation so that its total unit cost to incur on every item produced will be minimized.

Objectives of the Study

The broad objective of this study is to investigate cost accounting as a vehicle for entrepreneurship development in Nigeria. The specific objectives include:

1. To identify the extent to which cost accounting assist entrepreneurs.
2. To identify the role of accounting in assisting entrepreneurs with eliminating of wastages.

Research Questions

The following questions were raised to guide the study.

1. To what extent does cost accounting assist entrepreneurs with cost reductions?
2. Does cost accounting significantly assist entrepreneurs with elimination of wastages?

Statement of Hypotheses

For the purpose of this study, the following hypotheses are considered relevant.

- i. Cost accounting significantly assists entrepreneurs with cost reductions.
- ii. Cost accounting significantly helps entrepreneurs with elimination of wastages.

Scope of the Study

The scope of this study was limited to entrepreneurship ventures in Warri, Asaba and Sapele in Delta State of Nigeria where reliable and accurate data were easily available at a relative low cost. The emphasis of the study was on cost accounting as a vehicle for entrepreneurship development: An empirical study of Delta State.

Literature Review

Conceptual Framework –Cost accounting

Inegbenebor (2010) defines cost accounting as the art/science of determining the economic resources used in the production process. Basic knowledge of costing is very essential to the entrepreneur or small scale business managers in appreciating financial reports upon which decisions are made.

Arora (2011) defines cost accounting as a formal system of accounting for costs by means of which costs of products or services are ascertained and controlled.

It is defined as the "application of accounting and cost principles, methods and techniques in the ascertainment of costs and the analysis of savings and or excesses as compared with previous experience or with standards". Eferakeya (2013) sees cost accounting as the process of determining and accumulating the cost of a product/service of an activity. It is a way of accumulating and assigning historical costs to units of product, services, operations, jobs, processes, departments primarily for the purposes of inventory valuation, income determination and cost ascertainment. According to Lucey (2011), cost accounting is defined as the establishment of budgets, standard cost and costs of operations, processes, activities or products and the analysis of variances, profitability or the social use of funds.

The Objectives of Cost Accounting

According to Harngen (2013), the main objectives of cost accounting are;

- i. **Ascertainment of cost** – This is the primary objective of cost accounting. For cost ascertainment, different techniques and systems of costing are used under different circumstances.
- ii. **Cost control** – Cost control aims at improving efficiency by controlling and reducing costs. This objective is becoming increasingly important because of growing competition.
- iii. **Guide to business policy** – Cost accounting aims at serving the needs of management in conducting the business with utmost efficiency cost data provide guidelines for various managerial decisions like make or buy, selling below cost, utilization of idle plant capacity, introduction of a new product, etc.
- iv. **Determination of selling price** – Cost accounting provides cost information on the basis of which selling prices of products or services may be fixed.

Cost accounting is generally considered as being applicable only to manufacturing concerns. This is not so its applications are in fact much wider. All types of activities, manufacturing and non-manufacturing in which monetary value is involved, should consider the use of cost accounting. Wholesales and retail businesses, banking and insurance companies, railways, airways, shipping and road transport companies, hotels, hospitals, schools. Colleges, universities, farming and cinema houses, all may employ cost accounting techniques to operate efficiently. It is only a matter of recognition by the management of the applicability of these techniques in their fields of behaviour.

Advantages of Cost Accounting

Pandey (2013) views the advantages of cost accounting as follows;

- i. Formation and implementation of plans and budget that not only motivate employees but lead to the achievement of business goals and objectives.
- ii. Establishing cost tracking methods that ensure control of operations, cost savings, and improvements in product quality.

- iii. The controlling of inventory cost minimization of inventory investments and the ascertainment or determination of the cost of each product or service considering the various elements of cost (material, labour, and overhead expenses).
- iv. The pricing policy for products and services in such a manner that is contingent with the organization's goals and objectives.
- v. The making of prudent decisions that will impact on the short-term and long-term revenues and expenses of the firm.

Difficulties in Installing a Costing System

The practical difficulties in installing a cost accounting system according to Jhingan (2012) are;

- i. There may be shortage of trained costing staff.
- ii. Lack of support of top management staff. The existing accounting staff may not welcome the new system. This may be because they look with suspicion of a system which is not known to them.
- iii. Non-cooperation of working and supervisory staff, correct activity data which is supplied by the supervisory staff and workers is necessary for a costing system. There may not co-operate and resist the additional paper work arising as a result of the introduction of the system. Such resistance generally arises out of ignorance.

Methodology

All the proprietors of small and medium scale enterprises in Nigeria constituted the population of the study. The number is somewhat infinite. Therefore, the researcher decided to limit the target population to only literate small and medium scale entrepreneurs who are involved in productive ventures in Warri, Asaba and Sapele in Delta State, Nigeria. A sample size of 80 was selected from a population of 100 using the Taro Yameni's formula which is given as;

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

where;

n = Sample size sought

e = Level of significance = 0.05 or 95%

N = Population size = 100

$$\begin{aligned} n &= \frac{100}{1+100(0.05)^2} \\ &= \frac{100}{1+0.25} = \frac{100}{1.25} \\ &= 80 \text{ respondents at 95\% confidence level} \end{aligned}$$

Apply the formula, the sample size from a population of 100 is 80 respondents at 5% confidence level.

The simple random sampling method was used to select the respondents. The researcher made use of survey design. The data used in this study were obtained from both primary and secondary sources of data. The instrument of primary data collected was through the questionnaire and face-to-face interview. The instruments were validated by experts to authenticate the relevance of the instrument. Secondary data were collected from textbooks, and publications.

Data collected were collated and analyzed, using percentages. In addition, the hypotheses formulated were tested using the pearson product moment correlation co-efficient and the t-test at 0.05% level of significance.

Findings and Discussions

The tables presented below contain the analytical details relating to my findings from the respondents.

Table 1: Types of entrepreneurship ventures studied

S/N	Types Of Entrepreneurship Ventures Studied	No. Of Entrepreneurs
1.	Furniture and cabinet works	5
2.	Refuse collection and disposal	5
3.	Soap and detergent making	10
4.	Photography	5
5.	Phone services/repair of handset	10
6.	Computer assembly and repairs	8
7.	Bakery and confessionary	5
8.	Catering and restaurant management	7
9.	Welding and fabrication	10
10.	Paint production	5
11.	Roofing sheet	5
12.	Automobiles	20
13.	Cosmetics and detergents	5
	Total	100

Source: Field survey, 2016

Hypotheses Testing and Results

H₀₁: There is no significant relationship between cost accounting and assisting entrepreneurs with cost reductions.

A 5-point likert scale was used with the following response categories

- Strongly Agree (SA) - 5 points
- Agree (A) - 4 points
- Undecided (UD) - 3 points
- Strongly Disagree (SD) - 2 points
- Disagree - 1 point

The formula for the pearson product moment correlation co-efficient is;

$$r = \frac{N\sum XY - \sum X \sum Y}{\sqrt{[N\sum X^2(\sum X)^2 - (N\sum Y^2) - (\sum Y^2)]}}$$

Table 2: Calculation of pearson product moment correlation co-efficient

Options	X Points	Y Responses	XY	X ²	Y ²
Strongly Agree	5	40	200	25	1600
Agree	4	25	100	16	625
Undecided	3	9	27	9	81
Strongly Disagree	2	4	8	4	16
Disagree	1	2	2	1	4
Total	15	80	337	55	2326

Source: Field Survey, 2016

$$r = \frac{5(337) - (15)(80)}{\sqrt{(5 \times 55) - (15)^2} \sqrt{(5 \times 2326) - (80)^2}}$$

$$r = 0.9484$$

The above result shows that there is positive and significant relationship between cost accounting and assisting entrepreneurs with cost reduction.

But there is a greater need to test further in order to justify the stated hypothesis. In doing so, test of significance will be employed.

$$T_{cal} = \frac{r}{\sqrt{\frac{1-r^2}{n-2}}}$$

$$= \frac{0.9484}{\sqrt{\frac{1-0.9484^2}{5-2}}}$$

$$T_{cal} = 5.1808$$

$$t_{tab} = n - 2, \alpha 0.05 = 5 - 2, \alpha 0.05 = 3 \alpha 0.05$$

$$\therefore t_{tab} = 2.35$$

The decision rule here is to reject H₀ if t_{cal} is > t_{tab}. Since t_{cal} is > t_{tab} H₀ is rejected which means that there is positive and significant relationship between cost accounting and assisting entrepreneurs with cost reduction. This is supported by the view of Lucey 2011 who stressed that cost accounting helps in taking and implementation of cost reduction programme by using improved methods of purchasing and production. Examples are product life-cycle costing, target costing, keizen costing, just-in-time method, etc.

Hypotheses 2

ho₂: There is no significant relationship between cost accounting and assisting entrepreneurs with elimination of wastages

Table 3: Calculation of pearson product moment correlation co-efficient

Options	X Points	Y Responses	XY	X²	Y²
Strongly Agree	5	38	190	25	1444
Agree	4	26	104	16	676
Undecided	3	7	21	9	49
Strongly Disagree	2	5	10	4	25
Disagree	1	4	4	1	16
Total	15	80	329	55	2210

Source: Field Survey, 2016

$$\sum X = 15, \sum Y = 80, \sum XY = 329, \sum X^2 = 55, \sum Y^2 = 2210$$

$$r = \frac{5(329) - (15)(80)}{\sqrt{(5 \times 55) - (15)^2} \sqrt{(5 \times 2210) - (80)^2}}$$

$$r = 0.9228$$

From the above analysis, the result implies that there is significant and positive relationship between cost accounting and assisting entrepreneurs with elimination of wastages. But there is also the need to test further so as to justify the stated hypotheses. In doing so, test of significance will be employed.

$$T_{cal} = \frac{r}{\sqrt{\frac{1-r^2}{n-2}}}$$

$$\frac{0.9228}{\sqrt{\frac{1-0.85155^2}{5-2}}}$$

$$T_{cal} = 4.1492$$

$$t_{tab} = n - 2, \alpha 0.05 = 5 - 2, \alpha 0.05 = 3 \alpha 0.05$$

$$\therefore t_{tab} = 2.35$$

Reject H_0 if t_{cal} is $> t_{tab}$. Since t_{cal} is $> t_{tab}$ H_0 is rejected which means that there is positive and significant relationship between cost accounting and assisting entrepreneurs with elimination of wastages. This is supported by the view of Arora (2011) who stressed that cost accounting enables management to know the cost of a product and even at every stage of production. It makes it easier to check waste relating to time and expenses regarding the use of machines, equipment, materials and labour.

Conclusion

The study examined cost accounting as a vehicle for entrepreneurship development in Nigeria – An empirical study of selected entrepreneurs in Delta State, Nigeria.

The study revealed that there is positive and significant relationship between cost accounting and assisting entrepreneurs with cost reduction. There is also a significant relationship between cost accounting and assisting entrepreneurs with elimination of wastages.

Recommendations

In the view of the findings and conclusion of the study, the following recommendations were proposed for effective implementation of cost accounting for entrepreneurship development.

1. The system should be effective in cost control and cost reduction.
2. The organization structure of the business should be studied to ascertain the scope of authority of each executive.
3. The system should be introduced gradually.
4. Preliminary investigations should be made relating to the technical aspects of the business. For instance, the nature of the product and methods of production will determine the type of costing system to be applied.
5. The size and layout of the factory should be studied.

References

- Arora, A.M. (2011). A Textbook on Cost Accounting, New Delhi: Vikas Publishers.
- Eferekaya, I.O. (2013). Cost accounting: A Managerial Perspective, Benin: Most Virtue Publishers.
- Harngen, L.O. (2013). Cost Accounting: A managerial Emphasis, London: Prentice Hill.
- Inagbenebor, A.U. (2010). The Fundamentals of Entrepreneurship, Lagos: Malthouse Publishers.
- Jhingan, M.L. (2012). Managerial Economics, New Delhi: Virinda Publications.
- Lucey, T. (2011). Costing, UK: Bookpower Publishers.
- Pandey, I.M. (2013). Element of Management Accounting, New Delhi: Vikas Publishers.