The Impact of Cost Control on Manufacturing Industries' Profitability

Siyanbola, Trimisiu Tunji, Lecturer in Accounting, Babcock University, Ilishan Remo, Ogun State, Nigeria.
Raji, Gbolagade Mojeed, Lecturer in Accountancy at The Polytechnic, Ibadan.

ABSTRACT

Cost control is of utmost importance in every business concern, the negligience of which will affect the earnings at any point in time. In controlling costs, wastage is eliminated during the course of production and even during the administrative, selling and distribution activities. A good system of cost control begins with the behaviour of workers in the organisation as workers are instrumental to the achievement of organisational goals. In carrying out this research, budget was considered as the basic tool for achieving effective cost control and 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 analysing the data and the hypotheses tested confirmed positive impact of cost control on the industries' profitability.

Keywords
Cost, control, profitability, management, budget, production, sales.

1.1 INTRODUCTION

Cost and profit in business undertakings form part of what determines the financial position of a business concern. Since management is concerned with profitability, which is a measure of business performance, especially in a manufacturing concern, the need for higher sales will arise and this will facilitate the need to increase production capacity, which in turn brings about increase in cost. Brumbaug (2008) was of the opinion that corporate bodies should watch the cost and the profit will take care of itself. The implication is that cost should be controlled rather than embarking on unscientific cost reduction that may translate to lowering the quality of product. Management is normally forced to adopt various methodologies and techniques in order to regulate (control) rather than reduce cost. Cost increases as various production activities are embarked upon and the need to keep cost in check arises because standards for production will be set and actual production will be made thereby bringing about variances which can only be reduced or eliminated through effective cost control. Sikka (2003) was of the opinion that cost control system consists of methods and procedures that help to regulate the cost of operating an undertaking and ensures that cost do not go beyond a certain level. As profitability amongst others is the essence of any business, there will be the need to incur reasonable costs and management is to ensure careful and efficient use of resources so as to achieve the set standard or target. Cost control is operated by setting of standards and maintaining the performance according to standard because, as management aspires to increase productivity for more profit, there will be increasing cost and collection of cost will be made by each area of responsibilities. This study aims at discussing how cost control could be effectively administered in order to regulate expenses so as to bring about increased returns in term of profitability and not diminish it.

1.2 LITERATURE REVIEW

Nowadays managements of companies are becoming increasingly cost conscious and are constantly searching for new ways of controlling cost and eliminating wastages. One of the objectives of cost accounting is to achieve cost control. It is not enough if costs are worked out and presented regularly to the management, the effectiveness of cost accounting is judged primarily from the extent to which it has been able to bring about a control over the manufacturing and other costs, Sikka (2003).

CIMA in its terminologies of cost accountancy defined cost control "as the guidance and regulation by executive action of the costs of operating an undertaking, particularly where such action is guided by cost accounting"

Anthony, et al (2005) regards cost control as cost management or cost containment and defined it as a broad set of cost accounting methods and management techniques with the goal of improving business cost efficiency, by reducing costs or at least restricting their rate of growth. Businesses use cost control methods to monitor, evaluate and ultimately enhance the efficiency of specific areas, such as departments, divisions or product lines within their operations.
In his words, Lockyer (2002) regards cost control as a practice of comparing the cost of a business activity with the original cost in order to ascertain if the cost is as planned.
Sikka (2003) further discussed that in cost control, the first

step is to set up the target to be achieved, i.e. the goal or objectives to be attained, the cost control system guides the organisation to reach that goal. For this purpose, budgets or standards are used to provide the yardstick against which the actual costs and performance may be compared. If at any stage, it is noticed that the expenses are showing a trend away from the goal, resulting thereby in a variance from the target, the cost control system helps to regulate this trend and eliminate the variations. This guidance and regulation is by executive action or action taken by the executive, who is responsible for incurring the expenditure. It should be clearly understood that a cost accountant, by himself, does not control the expenses. He merely assists in the control of expenses since expenditure can be controlled only by the person who incurs it. The cost accountant brings to the notice of the executive concerned, the exact point on which an action is required of him for regulating the expenses. Thus, cost control is the guidance and regulation through an executive action and this executive action is exercised in respect of all the expenses incurred in operating an undertaking. Cost control comprises all procedures and measures by which cost of carrying out an activity is kept under check and aims at ensuring that costs do not go beyond a certain level.

1.21 Costing System and Cost Control

Lockyer (2002) further noticed that cost control and costing systems are synonymous with common characteristics and was of the opinion that costing system comprises of an organisation's control, plans and structures which has three phases i.e. the setting; the operation and the feedback phases:

- **The setting phase**: in setting a control system, establishment of standards is a criterion for performance and can be stated in quantitative terms: in unit of products, unit of service, man hour, speed, volume or expressed in value such as volume of sales, cost of capital expenditure or profits etc;
- **The operation phase**: this is the part of the organisation in which the prevailing technology is applied to raw material inputs which are converted into finished output which the organisation provides as a service or a product. The success and failure in this respect depends on the set standards. If the standard is vaguely defined, the result will be failure, and if rightly defined, the operation will bring forth good result;
- **The feedback phase**: this phase provides information for decision that adjusts the system. As plans are implemented the system is monitored in order to ascertain whether or not performance is on the right target and whether objectives are being met. In a close system, feedback is received by human beings who process it and decide an appropriate action. In order to be efficient, actual performance is measured against standard and deviations analysed. The feedback can form the beginning of the whole process until a desired standard is achieved.

1.22 Cost control applications

Cooper et al (2000) posited that a complex business requires frequent information about operations in order to plan for the future, to control present activities and to evaluate the past performance of managers, employees and related business segments. To be successful, management guides the activities of its people in the operation of the business according to pre-established goals and objectives. Management's guidance takes two forms of controls: the management and supervision of behaviour; the evaluation of performance.

They further discussed that behavioural management deals with the attitudes and actions of employees. While employees behaviour ultimately impacts on success, behavioural management involves certain issues and assumptions not applicable to accounting control function. On the other hand, performance evaluation measures outcomes of employees' actions by comparing the actual results of management, identified the strenghts it needs to maximise and the weaknesses it seeks to rectify. The process of evaluation and remedy is called cost control.

1.23 Steps in Cost Control

Sikka (2003) believed that efficient organisation and operations of cost control system involves the following steps:

- Setting up the targets;
- Measurement of the actual;
- Comparison of actual with targets to ascertain variances;
- Analysis of variance to their causes;
- Taking such corrective actions as are necessary to eliminate the variations.

1.24 Merits of Cost Control

Biggs (2005) was of the opinion that effective implementation of cost control in any organisation is a team work of efficient management. And in doing so the following advantages are noticeable:

- Cost control provides an appropriate and system oriented information to control the activities of the company which operates in a competitive environment;
- It gives an explicit view of cost centre in a complex organisation so as to help management know where to focus their attention in order to effectively implement the cost control method;
- It eliminates inefficiency in order to ensure conducive working environment;
- Irrelevant costs are frequently avoided;

- It ensures adequate and accurate financial statement at the end of the year;
- It allows operational activities to be efficiently and constantly maintained;
- It encourages and ensures checks and balances on organisational use of funds.

1.25 Impact of cost structure on Profitability

Harris and Hazard (1992) opined from accounting point of view, that a critical element common in all firms, is the profile of cost structure. Cost structure, also called operating leverage, is measured in terms of proportions of fixed cost and variable costs present in the cost volume profit (CVP) equation of a firm. A firm which has a large proportion of fixed costs to total costs is said to have a high fixed cost structure; and conversely, a firm with a small proportion is referred to as having a low fixed cost structure. An understanding of the influence of cost structure on profits is a crucial element in management decision making.

They further discussed that in order to measure the effect of cost structure on profitability, a technique known as sensitivity analysis can be employed. In CVP context, if a small change in factor, such as cost of production, causes a large change in profit, then it can be said that profit is sensitive to cost of production.

1.26 Effective cost cutting strategies to increase profit margins

Khera (2007) said that the goal of every business is to make profit, and most small business owners believe that the best way to do that is by increasing sales. But that brings up another conundrum – in order to increase sales, there has to be a corresponding increase in costs because of the increased amount of work involved. But increased costs are just what need to be curtailed, therefore, another way of going about lowering costs is by controlling them and thus increasing the profit margins.

1.27 Cost Control Reports

Cooper et al (2000) posits that cost control reports are informational reports that tell management about an entity's activities. Management request control reports only for internal use, and therefore directs the accounting departments to develop tailor made reporting formats. Accountant provides management with a format designed to detect variations that need investigating. In addition, management also refers to conventional reports, such as income statement and funds statement as well as external reports on the general economy and specific industry.

Hamilton and Martha (2007) asserted that control reports need to provide an adequate amount of information so that management may determine the reasons for any cost variances from the original budget. A good control report highlights significant information of focusing management's attention on those items in which actual performance significantly differs from the standard. Because key success factors shift in type and number, accountant revises control reports when necessary. Accountant also varies the control period covered by the control report to encompass a period in which management can take useful remedial action. In addition, accountant disseminates control reports in a timely fashion to give management adequate time to act before the issuance of the next report.

Managers perform effectively when they attain the goals and objectives set by the budget. With respect to profits, managers succeed by the degree to which revenues continually exceed expenses. In applying the following simple formula, managers, especially those in operations, realise that they exercise more control over expenses than they do over revenue.

While they cannot predict the timing and volume of actual sales, they can determine the utilization rate of most of their resources, that is, they can influence the cost side. Hence, the evaluation of management's performance and its operations is cost control.

1.28 Standards in Cost Control

Hamilton and Martha (2007) opined that for cost control purposes, a budget provides standard costs. A management constructs budget and lays out a road map to guide its efforts. It states a number of assumptions about the relationships and interaction among the economy, market dynamics, abilities of its sales force, its capacity to provide the proper quality and quantity of products demanded. An examination of the details of the budget calculations and assumptions indicates that management expects the sales force to spend only so much in pursuit of the sales forecast. The details also reveal that management expects operations to produce the required amount of units within a certain cost range. Management base its expectations and projections on the best historical and current information, as well as its best business judgement.

1.29 Conditions for Effective Cost Control

Anthony et al (2005) submitted that for cost control system to be adequately administered, the following must be taken into consideration: data collection; data analysis; and budget control and administration:

- **Data collection:** Accurate and timely information is the foundation of any cost control system, and thus detailed cost data are essential to any cost control endeavour. Management must understand, in great detail, how funds have been spent in the past and how they are being spent currently. As a result, companies invest large sums into sophisticated and error resistant cost control systems in order to gain adequate understanding of their finances.

- **Data Analysis**: Accountant's specialty is in the cost control function, yet its analysis is indispensable to the planning process. The adjustment and interpretation of data allows for changes to be made as regards the standards and control of variances;
- **Budget and Control Administration:** The budget plays a key role in designing and securing support for the procedural aspects of the planning process. In addition, the design and distribution of forms through budget and control administration further ensures the collection and booking of detailed data on cost.

1.210 Strategic Cost Control

Hamilton and Martha (2007) concluded that management relies on such accounting data and analysis to choose from several cost control alternatives, or management may direct accountant to prepare reports specifically to evaluate such options. As the Chainsaw A1 episode indicated, all costs may not be viable targets for cost cutting measures. For instance, in mass layoffs, the company may lose a significant share of its human capital by releasing veteran employees who are experts in their fields, not to mention creation of a decline in the morale of those who remain after the mass purge. Thus management must identify which costs have strategic significance and which do not.

Shrank et al (2001) opined that to determine the strategic impact of cost cutting, management has to weigh the net effects of the proposed change on all areas of the business. For example, reducing variable costs related directly to manufacturing a product, such as materials and transportation costs, could be the key to greater incremental profits. However, management must also consider whether saving money on production is jeopardizing other strategic interests like quality or time to market. If a cheaper material or transportation system negatively impacts other strategic variables, the nominal cost savings may not benefit the company in the bigger picture, i.e. it may lose sales. In such scenario manager requires the discipline not to place short term savings over long term interests. They further opined that one trend in cost control has been toward narrowing the focus of corporate responsibility centres, thereby shifting some of the cost control function to day-to-day managers who have the most knowledge or influence over how their areas spend money. This practice is intended to promote bottom-up cost control measures and encourage a widespread consensus over cost management strategies.

1.211 Budget as a tool for effective Cost Control

William, et al (2000) posited that cost control is a continous process that begins with the proposed annual budget. In this wise, the budget helps to:

- organise and coordinate production, selling, distribution, service and administrative functions and;
- take maximum advantage of available opportunities.

As the fiscal year progresses, management compares actual results with those projected in the budget and incorporates into the new plan the lessons learnt from its evaluation of current operations.

Cost control also refers to management's effort to influence the actions of individuals who are responsible for performing tasks, incurring costs and generating revenues. Management is a two-phased process: planning and control. Planning refers to the way that management plans and wants people to perform; control on the other hand, refers to the procedures employed to determine whether the actual performance complies with those plans. Through the budget process and accounting control, management established overall company objectives for each responsibility centre and designs procedures and standards for reporting and evaluation.

William et al (2000) further emphasised that a budget segments the business into its components or centres where the responsible party initiates and controls action. Responsibility centres represent applicable organisational units, fuctions, departments and divisions. Generally, a single individual heads the responsibility centre, exercising substantial, if not complete control, over the activities or people or processes within the centre and controlling the results of their activities. Cost centres are accountable only for expense, that is, they do not generate revenue, examples include accounting department, human resources department and similar areas of the business that provide internal services. Profit centre accepts responsibility for both revenue and expenses, example is a product line or an autonomous business unit in an organisation. If the profit centre has its own assets, it may also be considered as an investment centre, for which returns on investments can be determined. The use of responsibility centre allows management to design control reports to pinpoint accountability, thus adding in profit planning.

A budget also sets standards to indicate the level of activity expected from each responsible persons or decision unit and the amount of resources that a responsible party should use in achieving that level of activity. A budget establishes the responsibility centre, delegates the concomitant responsibilities and determines the decision points within an organisation.

1.212 Profit Plan

In the submission of Cashin (1998), profit plan could be termed as the focal point of a master budget. It shows the profit that management can expect to earn, given the resources and facilities. The profit plan is the operating plan detailing revenue, expenses and the resulting net income for a specific period of time. The format is usually a projected income statement. The profit plan reflects the results of the short range decisions. It is the firm's optimal plan in light of management's expectations of the future. It is a static budget because only one level of sales activity is expected; all other plans are based on that level. The profit plan should be detailed by areas of responsibility within the firm and by other significant dimensions, such as product lines and sales territories.

1.213 Responsibility Accounting and Cost Control

Cashin (1998) posited that responsibility accounting is a system designed to accumulate and report costs by individual levels of responsibility, each supervisory area is charged only with the cost for which it is responsible and over which it has control. The responsibility accounting system should also provide costs for establishing policies and for making daily decision. Most cost accounting systems were originally designed to accumulate and distribute costs for product or inventory cost and for general cost control. The accounts were set up to gather products costs and period costs in accordance with the needs of the income statement and balance sheet. This system worked well in showing where the money was spent, but not so well in determining who was responsible for incurring the cost and how to take prompt corrective action, if necessary. Responsibility accounting is directed towards individuals, that is, those who spent the money rather than what the expense was all about. A good responsibility accounting system will require a good cost information system that will collect well ascertained cost, showing how the cost was incurred and who incurred it.

1.214 Making Cost Control a Success

According to Lucey (2000), in order to carry out cost control system efficiently, so as to obtain the required result, the underlisted basic measures should be followed:

- The targets for performance of work as well as the costs to be incurred for the purpose should be laid down for each area of responsibility as far as practicable. It would enable us to locate the exact person responsible for a given state of affairs. The powers, responsibilities and obligations of each executive in the organisation should be clearly defined;
- The target should always be fixed up in consultation with the individual responsible for attaining the target. The impression should never be created that the target is purely a result of some calculations in the accounting department. Further, the targets should be attainable and not merely ideal. If the targets are not attainable, even in the best of circumstances, a certain amount of frustration will be created in the minds of the persons concerned and the whole object of the cost control will thereby get defeated;
- The targets fixed in an undertaking should not be treated as permanent. They should be reviewed whenever necessary and should be revised when conditions change;
- Collection of costs should be made by each area of responsibility and reports thereon should be drawn up similarly. These reports should clearly indicate, in monetary terms, the effect of efficiency or inefficiency shown by each section or department;
- The reports should be presented sufficiently in time for necessary action to be taken. Belated presentation of reports will only give statistical information and cannot be helpful in taking an action;
- Utmost care should be exercised while making a judgment about the efficiency or inefficiency of various persons on the basis of the reports. A single report is likely to be misleading under certain circumstances and hence a number of reports should be considered together;
- A proper and thorough enquiry into factors leading to exceptionally good or bad performances should be made and appropriate remedial action should be taken. The main objective should be to locate and remove the factors leading to wastages and losses rather than to punish people. If there is too much emphasis on punishment, it is possible that figures will be cooked and the truth hidden;
- A good performance should attract immediate reward and consistent bad performance should attract commensurate penalty.

1.3 STATEMENT OF PROBLEM

The rising cost of doing business in the country has been of utmost concern to business men and the entire citizens. This has even accounted for capital flight, closure of businesses and the movement of manufacturing companies to neighbouring countries, where cost of doing business is relatively low compared to what is happening in Nigeria. The use of effective cost control system is needed to arrest the situation and this is what the study aims at achieving.

1.4 RESEARCH QUESTIONS

The study was guided by the following research questions:

- What is the relationship between cost control and profitability of a business?
- Does budget help to ensure effective cost control and profit growth?
- What are the requirements for ensuring effective cost control system?
- To what extent does cost control affect market

share?

1.5 RESEARCH HYPOTHESIS

For the purpose of analysing the data, the following hypotheses were tested:

- Ho_1: Cost control has no impact on the profitability of manufacturing companies;
- Ho_2: Cost control has no effect on market share.
- Ho_3: Budget has no direct link with cost control and profitability of manufacturing companies.

1.6 METHODOLOGY

The methods adopted by this researcher in collecting the data are direct interviews, observations and the use of questionnaire. Inquiries were also made both directly and indirectly through some unusual questions to diverse groups within the industry.

1.7 POPULATION, SAMPLE AND SAMPLING TECHNIQUE

The study focused on all aspects of cost reduction in a manufacturing company in Nigeria, WAPCO. In order to carry out an in-depth and comprehensive study, 74 respondents were randomly selected. These respondents cut across all the cadres of the company's employees in production, sales, purchasing, accounts and stores departments.

1.8 INSTRUMENT

The primary data was employed in gathering information from staff of all cadres. Interviews were also conducted with other stakeholders, including customers of the company. The questionnaire consists of two sections. Section A elicits demographic information like gender, working experience, while Section B contained structured items relating to the research questions that necessitated this research.

1.9 VALIDITY AND RELIABILITY OF THE INSTRUMENT

To ensure the validity of this research, the instrument was subjected to criticism by specialist in the areas of educational management aside from peer review conducted by the researchers. The reliability of the instrument was obtained through a test-retest technique to analyse the data collected.

2.0 RESULTS

Table 1: Cost control has no impact on the profitability of the company.

Subject	No	%	X^2-calculated	Table value	Decision
Agreed	65	87.8			
Disagreed	9	12.2	42.38	6.63	Reject

Level of significance – 0.01

Since X^2-calculated is greater than the table value (i.e. $42.38 > 6.63$), then the null hypothesis is rejected, while the alternative hypothesis is accepted and we conclude that cost control has significant impact on profitability of manufacturing company in Nigeria.

Table 2: Cost control has no effect on market share.

Subject	No	%	X^2-calculated	Table value	Decision
Agreed	59	79.7			
Disagreed	15	20.3	26.16	6.63	Reject

Level of significance – 0.01

Since X^2-calculated is greater than the table value (i.e. $26.16 > 6.63$), then the null hypothesis is rejected, while the alternative hypothesis is accepted and conclude that cost control has effect on market share.

Table3: Budget has no direct link with cost control and profitability of manufacturing companies.

Subject	No	%	X^2-calculated	Table value	Decision
Agreed	42	56.8			
Disagreed	46	43.2	1.352	6.63	Accept

Level of significance – 0.01

Since X^2-calculated is lower than the table value (i.e. $1.352 > 6.63$), then the alternative hypothesis is rejected, while the null hypothesis is accepted and we conclude that budget has no direct link with cost control and profitability of manufacturing industries. This is true as budget itself, cannot serve any purpose unless it is monitored, that is when we can now check if the expenses do not exceed the budgeted figure, hence only budgetary control have direct link with cost control and profitability but not budget itself.

2.1 DISCUSSION

Finding of hypotheses tested and direct interview conducted reveals the followings:

- Cost control has a remarkable impact on business profitability through reduction of wastages and losses; effective utilization of materials; labour resources and other inputs in the production cycle;

- The relationship between cost control and business profitability can be seen from the view point of material utilization, labour and cash, wastage elimination, supervision of cost expended in the course of production, administrative, selling and distribution activities. All these help improve the earnings of an enterprise, thus its profitability and continuity;
- Budget as a tool, can only help ensure effective cost control, when actual costs expended are compared with planned cost and the variances are analysed to see their causes in order for the management to take corrective actions. Note that budget, in itself, will not serve any purpose in cost control unless we embark on budgetary control which is the monitoring aspect of budget. It is then that budget would be of importance when we talk of cost control and profitability in any business concern;
- The requirements for ensuring effective cost control entail complete data collection on cost from all departments, analysis of the cost data, then budgetary control and administration.

2.2 CONCLUSIONS

From the findings of this research, it is evident that cost control has a positive impact on business profitability and that element of cost, such as materials, labour and overhead cost and workers' behaviour could be strategically controlled with measures like responsibility accounting, data collection and data reporting. The absence of behavioural control, either through motivation, incentives and the rest will short change the effect of cost control on profit growth, but if with all the conditions and measures management is able to focus on enlightening and motivating workers on the true purpose of cost control, then greater profitability is assured.

2.3 RECOMMENDATIONS

From the above findings, the following critical steps should be taken by the stakeholder to make cost of doing business bearable in Nigeria, which will in effect stimulates economic growth and stability in the productive sector of the economy:

- Effective cost control, including good responsibility accounting system, should be established by all business concerns in the country;
- Cost control should be in place in all the departments, most especially the production department, in order to make sure that units of finished goods are properly accounted for;
- Budget established should not remain fixed, but should be revised, when condition changes. This means that there should be attainable target, not the one that is beyond workers' capability given the resources at their disposal;
- Collection of costs should be made by each area of responsibility and reports thereon, which should indicate, in monetary terms, the effect of efficiency or inefficiency, given section by section and department by department;
- For effective cost control to be achieved, there should be proper data collection, analysis and administration at all level of the business;
- There should be strategic cost control so as not to allow negative impact of other strategic variables, such as financial product, affect sales revenue and later profitability;
- Above all workers should be carried along at all stages of cost control strategies so as to buy into the process and ensure full compliance.

REFERENCES

[1] Anthony, et al., (2005), "Management Control Systems", Chicago, Irwin Publishers
[2] Cashin, A. (1998), "Cost Accounting", New York, McGraw-Hill Inc.
[3] Cooper, et al., (2000), "The Design of Cost Management System", New York, Prentice Hall, Upper Saddle River.
[4] Lucey, T. (2000), "Management Accounting", DP Publishers, 4th Edition.
[5] Lockyer, K. (2000), "Factory and Production", London, DP Publishers.
[6] Sikka, T.K. (2003), "Fundamental of Cost Accounting" India, Viva Books Private Ltd. 5th Edition
[7] Williams, et al. (2000), "Cases in Management Accounting and Control System"