Global Scientific JOURNALS

GSJ: Volume 7, Issue 9, September 2019, Online: ISSN 2320-9186
www.globalscientificjournal.com

BUDGETING AS A MANAGEMENT TOOL AND ITS INFLUENCE ON OPERATIONAL EFFICIENCY AND PROFITABILITY OF SELECTED MANUFACTURING COMPANIES IN IBADAN OYO STATE

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Budgeting has turn out to be an extremely significant management tool in the Nigerian manufacturing companies in contemporary times. Even though it is still an old concept, an increasing number of manufacturing companies are appreciating its use for achieving profitability goals. This study investigated budgeting as a management tool and its influence on operational efficiency and profitability of selected manufacturing companies in Ibadan. A descriptive research design was adopted and a sample size of 26 staff were randomly selected from 2 manufacturing companies in Ibadan of Oyo State. Data generated through self-structured questionnaire was analysed using mean, standard deviation and ANOVA. The findings showed that long term budget, fixed budget, activity-based budgeting, incremental budgeting, and zero based budgeting and programming budgeting systems were commonly practiced in the two companies. Furthermore, the finding deduced that budgeting techniques have significant influence on operational efficiency ($F=244.917$; $p<0.05$) and profitability ($F=339.954$; $p<0.05$) of the selected manufacturing companies. The study therefore recommended that effective budget implementation at the company level should be facilitated through capacity building, robust systems and processes, prioritization close monitoring and evaluation.

Keywords: *Budgeting, Management tool, Manufacturing companies, Operational efficiency, Profitability*
Word counts:

Introduction

Over the last ten years, there has been an immense apprehension regarding competitiveness in Nigerian manufacturing industry (Siyanbola, 2013). The basis for this is that manufacturing sector has experienced the most unstable period in its history with reverence to the increasing demand for variety, the technology advancement, the progress of modern production equipment, and the fast development in information technology (Okwang'a, Mungania & Karanja, 2015). This means of modern technology along with the significant shorter product life cycle and quality-conscious customers have placed emergent pressures on the operations function of many manufacturing companies to enhance productivity and profitability while providing a wider range of high-quality products.

Operational efficiency underpins the most basic strategic goals of every business organizations. It assumes that the quantum and quality of commodities and services are constant while efforts are directed at reducing their costs. Operational efficiency refers to the extent to which costs can be reduced while output levels are either maintained or even increased (Olugbire, Aremu, Oyedele & Ogedengbe, 2015). Improving productivity, customer satisfaction, and increasing profitability depend on achieving operational efficiency. Today, manufacturing companies try to improve operational efficiency, but only few that are able to produce at least possible cost survive the growing competition in the market. Hence, it is paramount for every serious producing company undertaken to produce at that possible minimum cost so as to remain in business and also achieve the corporate objectives of profitability and stability.

Profitability is a measurement of efficiency, and a guide to further improvement. It serves as the primary goal of all business organization. Without profit the business will not survive in the long run. Profitability ratios such as return on asset (ROA) are financial metrics used by analysts and investors to measure and evaluate the ability of a company to generate income.

GSJ: Volume 7, Issue 9, September 2019
ISSN 2320-9186

ROA enables assessment of the firm's ability to capture demand and generate added value from its use of resources (Alarcon & Sanchez, 2013). Costs and returns analysis are frequently used to determine profitability of every business organization. Cost analysis is therefore central to the notion of operational efficiency (Mauyo et al 2017). The lower the costs, the higher the operational efficiencies.

Operational efficiency and profitability are difficult to realize when a business runs on distressed resources. However, even among major manufacturing players in Nigeria, there are significant determinants to realizing operational efficiency and profitability. It is predominantly imperative for the Nigeria manufacturing companies to operate efficiently, because it is anticipated that companies that do not operate optimally might run out of business. Operational efficiency ensures manufacturing companies to stays ahead of the competition, produce at lower costs, increases customer satisfaction and achieve its profitability goals. Two budgeting components such as operating budget and financial budget have been discovered by research on efficient operations (Cohen, Robbins &Young, 2014). Scholars (e.g. Adeleye, 2016; Alarcon & Sanchez, 2013; Siyanbola, 2013) have also come up with factors that enhance operational efficiency. But there are obvious gaps on the influence of budgeting on operational efficiency and profitability. It is therefore against this background that this study sought to investigate budgeting as management tool and its influence on operational efficiency and profitability of manufacturing companies in Ibadan

Literature Review- Conceptual

Concept of Budgeting

Budgets are financial blueprint that qualifies a firms plan for the future. It is a detailed plan that outlines the acquisition and use of financial and other resources over a given period of time. Budgets are also statements of estimated resources set apart for execution of planned works or activities over a specified period of time. According to CIMA Official Terminology, a budget is defined as "a quantitative statement for a defined period of time, which may include planned revenues, assets, liabilities and cash flows. A budget provides a focus for the organization, aids the co-ordination of activities and facilitates control." Onduso (2013) described budget as a standard against which the actual performance of an organization can be compared and measured. A budget stipulates which programmes and activities should be pursued. Lucey, (2012) defines a budget as a quantitative statement, for a period of time which may include planned revenues, assets, liabilities and cash flows.

Budgeting, like any other activity, is subject to the interpretation of each practicing organization. Budgeting is the process of preparation, implementation and operation of budgets decisions into specific projected financial plans for relatively short periods of time. Budgeting is also viewed as a process of identifying, gathering, summarising and communicating financial information of an organization's future activities. Blumentritt (2016) further explained that budgeting processes include a review and study of the prior period's financial results, projections for sales, operating expenses (fixed, variable, and semi-variable) and financing expenses, examination of proposals for capital expenditures, and means of rolling up and rationalizing figures from different functional departments to ensure they meet company-wide profit expectations.

There are two main techniques for budgeting, that is, incremental budgeting and zero-based budgeting (Onduso, 2013). An incremental budget is a budget in which the figures are based on those of the actual expenditure for the previous year with a percentage added to cover for an inflationary increase for the New Year. It is an easy technique that saves time but is often inaccurate. This budgeting technique is only appropriate for organizations where each year is very similar to the earlier one in terms of activities. In normal situations however, very few dynamic organizations or projects are so stable as to make this budgeting technique really work for them (Lucey, 2014). In zero based budgeting scenarios, past figures are not used as the starting point. the budgeting process starts from "scratch" fore posed activities for the year. This results in a more detailed and accurate budget, although it takes more time and energy to prepare. This technique is most useful for new organizations and projects but is also probably the best route to go in a dynamic organization that is proactive in taking on fresh challenges (Kariuki, 2010). Siyanbola (2013) also classified budget into: short term budget; long term budget; fixed budget; flexible budget; Zero Based Budget (ZBB); rolling budget; activity-based budgeting; incremental budgeting; and planning, programming budgeting systems (PPBS).

Operational Efficiency

The importance of efficiency in the manufacturing industry has continued to build with increase of products in today's society. Customer rely more on a diverse variety of products that make their lives simple and easier. Operational efficiency according to Apruebo (2010) occurs when appropriate and right people, processes, and technology are combined to deliver products or services to its customers by organizing the core processes in response to the changes in market forces. A similar study by Hackfurth (2014) summon that company must minimize waste while maintaining the resources that give most to the success in achieving profit. In the book of Greasley (2013), layout has something to do with efficiency which includes the overall physical resources such as where the equipment were stored and the design that makes the flow of materials and customers efficient. Proper storage starts the moment raw materials are received in the organisation. Efficient storeroom management includes using proper forms for receiving and issuing supplies; keeping an accurate and up-to-date inventory of materials and items; checking periodically the condition of stored materials; using the first-in-first-out (FIFO) system to rotate supplies to minimize spoilage (Drysdale, 2010).

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Profitability

The words profitability is composed of two words profit and ability. The word profit has already been defined but the meaning of profit differs according to the use and purpose of the enterprise to earn the profits. Thus, the word profitability may be defined as the ability of given investment to earn a return from its use. Profitability ratios measure the firm’s ability to generate profits and central investment to security analysis, shareholders, and investors. Profitability is the primary measure of the overall success of enterprise. The analysis of profitability ratios is important for the Shareholders, creditors, prospective investors, bankers and government alike.

Theoretical Framework

Most modern organizations have budgets. This study explains the pervasiveness of budgeting from theoretical perspectives of resource dependency. Budgets are pervasive in organizations because they help clarify internal resource dependencies. Often the hierarchy of budgets reveals organizational priorities and dependencies better than formal organizational charts. The approved budget can also represent a "rationalized" statement of purpose for the coming year understood by both employees and outsiders. More importantly, budgets are important tools of power (Pfeffer, 1992). Since departments are usually dependent on budgets for general operations, those who control budgeting control resources. Budget planners and approvers can exploit these asymmetric dependencies to accumulate power. External groups can also exert internal influence by reviewing and/or approving yearly budgets. The budget planning process at a given level is often a zero-sum game where politics and influence are most evident. Budgets are also useful control mechanisms because there are more flexible than contracts. Unlike contracts, you can quickly change a budget to affect a sub-group's activity.

Methodology

The methods adopted in this research in collecting the data used are direct interviews, observations and the use of questionnaire. Inquiries were also made via questions to both the staff and management of the company.

Population, Sample and Sampling Technique

The study focuses on budgeting, operational efficiency and profitability of manufacturing company, with special reference to FAN Milk Plc and Nigeria Breweries. In order to carry out an in-depth and comprehensive study, 26 respondents were randomly selected. These respondents cut across all the cadres of the company and its customers.

Instrument

Questionnaires were used in collecting the primary data and in gathering information from staff of all cadres. The questionnaire consists of four sections. Section A elicits demographic information like gender, educational status, working experience and position, while Section B, C and D contained structured items relating to the research questions that necessitated this research.

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 business management aside from peer review conducted by the researcher. The reliability of the instrument was obtained through a test-retest technique to analyse the data collected.

Method of Data Analysis

The descriptive and inferential statistics were used respectively in analyzing the data. Hence, the descriptive statistics of frequency and percentage were used in analyzing the demographic variables while inferential statistics of Pearson Moment Correlation Analysis and Analysis of Variance (ANOVA) were used in testing hypotheses 1 to 3 at 0.05 level of significance.

Results and Findings

This section presents the results of data analysis, interpretation and discussion of the research findings obtained from the staff of FAN Milk Plc and Nigeria Breweries in Ibadan. The result presented in this section was based on the 100% of the questionnaire that were duly completed and returned by the respondents.

Table 1: Comparative Analysis of Budgeting techniques practiced in selected manufacturing companies in Ibadan (N=26)

Budgeting Techniques	FAN Milk Plc		Nigeria Breweries	
	Mean	Std. Dev	Mean	Std. Dev
Incremental budgeting	3.08*	0.06	1.04	0.15
Zero based budgeting	1.01	0.92	3.23*	0.22
Short term budget	1.37	0.56	1.49	0.71
Long term budget	3.24*	0.60	2.87*	0.53
Fixed budget	2.81*	0.32	3.25*	0.14
Flexible budget	1.21	0.61	2.01	0.32
Rolling budget	1.91	0.41	3.11	0.27
Activity based budgeting	2.79*	0.64	3.48*	0.20
Programming budgeting systems	1.03	0.18	2.73*	0.61

*Mean > average mean = 2.05

Table 1 assessed the comparative analysis of budgeting techniques practiced in the two selected manufacturing companies in Ibadan. The result shows that out of nine budgeting techniques identified in the study, the result reveals that only 4 budgeting techniques such as long term budget (mean=3.24), incremental budgeting (mean=3.08), fixed budget (mean=2.81) and activity based budgeting (mean=2.79) were always practiced in Fan Milk Plc while in Nigeria Breweries Plc 5 budgeting techniques such as activity based budgeting (mean=3.48), fixed budgeting (mean=3.25) zero based budgeting (mean=3.23), long term budgeting (mean=2.87) and programming budgeting systems (mean=2.73) were practiced. This implies that long term budget, fixed budget and activity-based budgeting were commonly practiced in the two companies. The result further shows that while Fan Milk practiced incremental budgeting, the Nigerian Breweries focused on zero based budgeting and programming budgeting systems.

Table 2: Correlation Analysis of Budgeting techniques, Operational Efficiency and Profitability (N=26)

		Operational Efficiency		**Profitability**	
		FAN Milk Plc	Nigeria Breweries	FAN Milk Plc	Nigeria Breweries
Budgeting Techniques	Pearson Correlation	-.105**	.078**	.144*	.137**
	Sig. (2-tailed)	.000	.000	.040	.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 2 presents the correlation coefficients and significance values of budgeting techniques on operational efficiency and profitability in the selected manufacturing companies. The result shows that while there is negative significant relationship between budgeting techniques and operational efficiency in Fan Milk (r= -.105, p(.000)< 0.01), budgeting techniques have positive and significant relationship with operational efficiency in Nigeria Breweries (r= .078, p(.000)< 0.01). On the other hand, the result shows that there is positive and significant relationship between budgeting techniques (r= .144, p(.000)< 0.01) and profitability (r= .137, p(.000)< 0.01) of both Fan Milk and Nigeria Breweries. The result therefore rejects the null hypothesis and accepts the alternate. This implies that budgeting technique has significant relationship with operational efficiency and profitability.

Table 3: Analysis of Variance of Influence of Budgeting Technique on Operational Efficiency (N=26)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	32.667	9	10.889	244.917	.000[b]
	Residual	5.333	17	.242		
	Total	38.000	26			

a. Dependent Variable: Operational Efficiency

b. Predictors: (Constant), Budgeting Techniques

The result in Table 3 showed the influence of budgeting techniques on operational efficiency of selected manufacturing companies in Ibadan. The results showed that the mean square between the group (10.889) is higher than the mean square within the group 0.242. The calculated f-statistic ratio of 244.917 is higher than tabulated f-statistic ration of 240.459, and the significant value is 0.000 which is less than 0.05 (Cal.F-stat.$_{(df=9,17)}$=244.917 >tab.F-stat=240.54; p(0.000)<0.05). Statistically, this implies that budgeting techniques have significant influence on operational efficiency of the selected manufacturing companies.

Table 4: Analysis of Variance of Influence of Budgeting Techniques on Profitability (N=26)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	46.927	9	69.385	339.954	.000[b]
	Residual	3.530	17	.594		
	Total	50.457	26			

a. Dependent Variable: Operational Efficiency
b. Predictors: (Constant),Budgeting Techniques

The result in Table 4 showed the influence of budgeting techniques on profitability of selected manufacturing companies in Ibadan. The results showed that the mean square between the group (69.385) is higher than the mean square within the group 0.594. The calculated f-statistic ratio of 339.954 is higher than tabulated f-statistic ration of 240.54, and the significant value is 0.000 which is less than 0.05 (Cal.F-stat.$_{(df=9,17)}$=339.954 >tab.F-stat=240.54; p(0.000)<0.05). Statistically, this implies that budgeting techniques have significant influence on profitability of the selected manufacturing companies.

Conclusion and Recommendations

This paper analysed the budgeting as a management tool and its influence on operational efficiency and profitability of selected manufacturing companies in Ibadan. Each of the research questions and hypotheses tested in the study ascertained the relationship that exist between budgeting techniques, operational efficiency and profitability, and determined the influence of budgeting techniques on operational efficiency and profitability of two selected manufacturing companies. The efficient operations of selected companies rely extensively on the budgeting techniques practiced in the companies. The budgeting techniques such as long-term budget, fixed budget, activity based budgeting, incremental budgeting, zero based budgeting and programming budgeting systems were commonly practiced in the two companies. Therefore, budgeting techniques need to be effectively practiced so as to positively affect the operational efficiency and profitability. The negative relationship that budgeting technique has on operational efficiency in Fan Milk may be as a result of changes in market forces experienced by the company. The paper established that budgeting techniques have significant influence on operational efficiency and profitability of the selected company. This study therefore concluded that budgeting is a management tool that have significant influence on operational efficiency and profitability of selected manufacturing companies in Ibadan.

Recommendations

Based on the above findings, the paper recommends ss that effective budget implementation at the company level should be facilitated through capacity building, robust systems and processes, prioritization close monitoring and evaluation. All stakeholders in manufacturing companies should get involved in budget execution in enhancing the overall budget implementation. The management systems need to be supported in order to ensure effective operations and prudent management of funds. There is a need for adequate sensitization of both the employees and the public on best budgeting practices so that the oversight role is enhanced. Finally, manufacturing firms needs to establish a strong link between the budget process and operation process.

REFERENCES

Apruebo, X. (2010). Operational efficiency and customer satisfaction in selected fast food industry. Unpublished Masters Thesis, LPU, Batangas.

Drysdale J.A. (2010). *Restaurant Food Service Equipment*. New Jersey: Pearson Education, Inc.

Greasley, A. (2013). *Operations Management*, Third Edition. Canada: Wiley & Sons Publication.

Mauyo, L.W., Okalebo J.R., Kirkby R.A., Buruchara R., Ugen M., Mengist C.T., Anjichi V.E. & Musebe R.O. (2017). Technical efficiency and regional market integration of cross-border bean marketing in Western Kenya and Eastern Uganda. *African Journal of Business Management,* 077-084.

Okwang'a, B.C., Mungania A.K. & Karanja, J.G. (2015). Analysis of factors affecting the operational efficiency of Jua Kali Sector: A case of Apparel Industry in Nairobi, Kenya. *European Journal of Business and Management*, 7(30): 119-129.

Olugbire, O.O, Aremu, F.J., Oyedele P.B. & Ogedengbe, T.A. (2015). Analysis of profitability and operational efficiency of Shea Butter marketing: Empirical evidence from Ibadan, Oyo State, Nigeria. *Journal of Sciences and Multidisciplinary Research,* 7(2): 40-46.

Onduso E.A. (2013). The effect of budgets on financial performance of manufacturing companies in Nairobi County. Unpublished Master Thesis, University Of Nairobi.

Siyanbola T.J. (2013). The impact of budgeting and budgetary control on the performance of manufacturing company in Nigeria. *Journal of Business Management & Social Sciences Research,* 2(12): 8-16.