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DOCOST CONTROL TECHNIQUES AFFECT PROFITABILTY OF A MANUFACTURING COMPANIES?: CASE STUDY OF MAWIA ALBERER COMPANY

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Abstract

The study aims toexplore the relationship between cost control techniques and profitability in manufacturing companies through studingMawiaAlberer company as a case study. The objectives of the study are: to evaluate the various cost control techniques used by manufacturing companies, to establish the relationship between cost control techniques (variance cost, budget control) and profitability in manufacturing companies. To conduct the study. The researcher adopted a cross sectional designs which was quantitative descriptive in nature. It involved descriptive and analytical research design.Primarydata was collected through using a self-administered questionnaire from300employees. Overall, 264 usable questionnaires representing 88% respondent rate were attained. The data was analyzed using SPSS and the results were presented on the basis of the study objective.From the study, it was found out that there is a positive significant relationship between variance analysis and profitability. And there is also a positively significant relationship between budget control and profitability. Furthermore, manufacturing companies in Sudan apply various cost control techniques to maintain the cost at minimum in order to increase profitability.

Keywords: Cost control Techniques, Profitability.

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هل يؤثر أدوات رقابة التكاليف على ربحية الشركات الصناعية؟بالتطبيق على مجموعة شركات معاوية البرير

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ملخص الدراسة

تناولت الدراسة العلاقة بين الرقابة على التكاليف والربحية في الشركات الصناعية، بالتطبيق على مجموعة شركات معاوية البرير بوصفها دراسة حالة. سعت الدراسة إلى تقييم أدوات الرقابة على التكاليف المختلفة والمستخدمة من قبل الشركات الصناعية، وتحديد العلاقة بين أساليب الرقابة على التكاليف (تحليل الانحرافات والرقابة على الموازنة)، والربحية في الشركات الصناعية.

لتحقيق أهداف الدراسة تم تصميم استبانة أداة رئيسة لجمع البيانات، حيث تم توزيعها على 300 موظف من موظفي مجموعة شركات معاوية البرير بجميع الأقسام والدرجات الوظيفية، وتم استرداد وتحليل 264 استبانة بما يعادل 88% من مجتمع الدراسة. تم تحليل البيانات باستخدام برنامج التحليل الإحصائيSPSS وعرض النتائج بناءً على أهداف الدراسة. توصلت الدراسة إلى أن الشركات الصناعية في السودان تطبق أساليب مختلفة لمراقبة التكاليف للحفاظ على التكلفة في حدها الأدنى من أجل زيادة الربحية. وأيضًا توصلت الدراسة إلى وجود علاقة إيجابية ذات دلالة إحصائية بين تحليل انحرافات التكلفة والربحية، وأيضاً وجود علاقة إيجابية ذات دلالة إحصائية بين الرقابة على الموازنة والربحية في الشركات الصناعية.

الكلمات المفتاحية: أدوات الرقابة على التكاليف،الربحية.

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1.Introduction

Profits are returns of investment and are obtained after analyzing costs and revenues. Profitability is achieved when the firms revenues are greater than costs incurred in the production of such revenue, (Wendy H. Mason, 2009). However , according to accounting definition, profit includes even non-financial items like depreciation of fixed assets. For economists, profits mean the net increase in the wealth of a business' cash flow and change in the value of a firm's assets(AmalokwuO.John, 2010).Frank wood(2010) defines a profit as the excess of revenue over total costs measured in the process of providing goods and services.

Furthermore Lipsey(2002) defines profit as the difference between revenues derived from the sale of commodities and the cost of producing these commodities.

However, profit as a function of revenue and costs has been criticized as a poor performance measure since it does not reflect the funds invested and hence the use of profitability ratios to measure performance has been recommended(I.M Pandy,2001) .

Lawyer(2014) defines cost control as abroad set of accounting methods and management techniques to improve business efficiency by reducing cost or at least restricting their rate of growth.Siyanbola and Raji(2013) state that cost control is management effort to influence the actions of individuals who are responsible for performing tasks, incurring charges and generating revenues. Charlie S.(2010) in his article 'cost control techniques' points out that the first step in the cost control management is to find out that the cost centers and comes to the conclusion of how much percentage they differ from the standards of the industry.

Previous literatures reviews reveal that the empirical studies conducted so far have mostly focused on the impact of quality cost management on profitability.Oyadonhan and Ronald(2014).Abduk and Isaik(2015),Oyerobaet al(2014),Deloof(2013),LazaridisandTrifonidis(2014),Eljelly(2014), However studies that link between cost control with profitability use different measures of cost control such as(standard costing, variance analysis, marginal costing, activity based costing, budgetary control, cost volume profit analysis, just in time manufacturing) has not been fully explored. Only few studies have discussed the aforementioned relationship.Olalekan and Tajudeen(2015),AyodeleandAlabi(2014) ,Syanbola and Raji(2013),Barbole(2013).Syanbola and Raji(2013),Good win, Amos and Sunday(2019)have examined the impact of cost control on manufacturing industries profitability,their studies findings show that cost control has significant positive impact on profitability of manufacturing companies in Nigeria. In India, Barbole(2013) found positive relationship between cost control and profitability.

Most of the above studies were conducted in Nigeria and others in India. This study focused on cost control techniques such as(budgetary, variance analysis) and their impact on profitability of manufacturing companies in Sudan which has a different micro and macro environment with Nigeria.

2.Review of Related Literature

Existing studies show that companies applyingcost control techniques such as standard cost, budgetary control,just in time and activity based costing will ensure survival and increase their profitability for example Olalekan and Tajudeen(2015),Abdul and Isiaka(2015),Ayodele and Alabi(2014),Siyanbol and Raji(2013). They concluded that a company interested in carring out cost control procedures must necessarily be concerned about cost reduction.

Sterdy and Key(2011) opined that the reason for poor performance in many companies was as a result of a poor cost control systems. This means that there is a significant relationship between cost control and profitability. Hirst(2015) contends that with setting specific objectives like budget, lower uncertainty arises and the budget goals set will promote profitability and minimize behaviors like falsifying accounting information. Stoner and Freeman(2012) postulate that with cost control systems in place, the companies will be able among others to provide accurate information on performance.

Several studies examine the impact of quality cost management on profitability.Oyadonhan and Ronald (2014) investigate the effect of quality cost management on profitability for the Nigerian setting. The data was collected from hospitality industry. Their results show that there is positive effect between profitability and quality cost management.Abdul and Isiak(2015) examine the relationship between cost management and profitability . Their sample consists of 60 Nigerian companies whose results show that association between cost management and profitability is statistically significant. Using a sample of manufacturing organization in Nigeria,Oyerogba et al(2014), find positive relationship between cost management and the overall performance of company.

There is however a general lack of research linking cost control with profitability. SiayabolaandRaji(2013) reveal that cost control has a significant and positive impact on profitability of manufacturing companies in Nigeria. .Akeen(2017) examine the impact of cost control and cost reduction techniques in organizational performance using questionnaires to collect data and Pearson correlation for analysis. The results show that a direct relationship between cost control, reduction and profit. Therefore, to ensure more profit growth for an organization,it is needed to control and reduce cost to an acceptable limit. In India, Barbole(2013) finds that cost control and cost reduction techniques(value engineering, quality control and budgetary control) are reduced materials cost.

Based on the above arguments and empirical evidence provided by the previous studies it is expected that companies applying proper cost control techniques will ensue survival, experience improved performance and hence will be price competitive.Thus,this study proposes the following hypothesis:

i) there is positive relationship between variance analysis with profitability.
ii) There is positive relationship between budget control and profitability.

3.Research Methodology

3.1 Measurement and Instrumentation

The measurements used from the variables were adapted from past studies and amended to suit the present study. These measurements are explained as follows:-cost control was measured by adopting the measurement used byTajudeen (2015),Abdul and Isiaka(2015),Ayodele and Alabi(2014),Syanbola and Raji(2013),Barbole(2013). Three items for budgetary, three items for variance analysis. The dependent variable was measured by adopting the measurement used by Tajudeen (2015),Ayodele and Alabi(2014),Syanbola and Raji(2013),Barbole(2013).

This section explains the methodology and sample design used. It also indicates the sample population, sample size, research design, the instrument of the data collection and data presentation and data analysis.

3.2 Population and sample

The study population comprised allemployees(in MawiaAlberer manufacturing company) from the staff of production, marketing, accounting and finance and human resource department. It also included a procurement manager and finance manager. Total number of employees are 300.The sample size for the study was 264respondent comprising of staff from production department, marketing department, accounting and finance department and human resource department. The sample size selected is in line with Roscoe's rule of thumb which indicate that a sample size of 30 respondents is appropriate for business research.

4.Results and Discussion

4.1 Descriptive Statistics

Table 1 Level of service in the company

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	19	7.2	7.2	7.2
	6-10	60	22.7	22.7	29.9
	11-15	77	29.2	29.2	59.1
	اكثرمن 16	108	40.9	40.9	100.0
	Total	264	100.0	100.0	

Source: Primary Data

From the table 1 above, 40.9% of the employees had served over 16 years in the organization,29.2% for 11-15 years ,22.7% for 6-10 and 7.2% less than 5 years. This indicates that the information provided by employees was reliable since the majority of them had served for long in the organization.

Table 2: cost control techniques

	N	Mean	Std. Deviation
Whether the organization maintains cost records?	264	4.19	.624
Whether raw materials are purchased from authorized suppliers?	264	4.02	.750
Whether the organization has utilities regulation in place?	264	4.05	.763
Whether the organization uses attendance cards	264	4.04	.741
Whether the organization uses variance analysis?	264	4.03	.748
Whether all the employees are involved in controlling costs?	264	3.80	.949
Valid N (list wise)	264		

Source: Primary Data

It is shown in table 2 that the respondents agreed that maintains cost records since it had a mean response of 4.19 and standard deviation of .624. This is in line withDuncan Williamson(1998) who contends that costs should be accurately recorded so as to compare incurred costs with target costs in order to determine the variance which facilitates decision making.The respondents had also agreed that raw materials are purchased from authorized suppliersof mean 4.02 and standard deviation of .750 which is in line with lucey T(1993) who said that a company should always purchase raw materials from authorized suppliers who are selected after a competitive bidding process. The respondents agree that the organization has utilities regulations gadgets in place and as revealed by mean 4.05 and .763standard deviation response rate respectively. The result also further shows that respondents were agree that attendance cards are used in the organization since it had mean 4.04 with standard deviation .741. This is in line with RashidaKhilawala(2010) cost control strategies in organization, who contends that the management should keep track of time of arrival and presences of the employees using the attendance cards to avoid paying for unutilized time. The findings in the table further show that most respondents agree that the organization uses variance analysis techniques to control the costs. This indicates that variance analysis is the tool that the organization applies. This is in support of Pizzey(2011), principles of accounting who highlights that variance analysis enables management to focus attention in problem solving. The aggregate mean and standard deviation of 3.80 and.949 respectively mean that respondent disagree that they are not involved in controlling organization costs. This indicates that not all employees are involved in the process of controlling costs hence unnecessary costs are incurred by the organization.

Table 3:Profitability

	N	Mean	Std. Deviation
Weather the organization gets high profits compared to other companies in the industry?	264	3.92	.895
Weather targeted profits are always achieved?	264	3.93	.934
Weather all the produced items are always sold?	264	4.10	.764
Weather profit levels have been declining for the last three years?	264	4.08	.699
Weather profits would increase if materials were purchased from the authorized suppliers?	264	4.05	.748
Weather profits would increase if all employees were involved in managing costs?	264	4.00	.861
Valid N (listwise)	264		

The results in table 3 above show that , the respondents are not sure whether the organization gets high profits compared to other companies in the same industry. This indicates that majority of employees do not get access to organization accounting records hence not by a mean of 3.92 and standard deviation of .895. They also not sure that targeted profits are not always met. Since some employees disagree that target profits are always achieved by mean 3.93 and standard deviation .934.The findings also reveal that all the produced items are always sold as shown by mean 4.10 and standard deviation .764.The findings in the table further show that profits have been declining for the last three years as indicated by mean 4.08 and standard deviation .699. The respondents also agree that profits would increase if materials were purchased only from authorized suppliers as shown by the mean 4.05 and standard deviation .748. This indicates that there are many other factors in manufacturing companies of MawiaAlbere company type that influence profitability, authorized purchases play a big role. The respondents also agree that if all employees are involved in managing costs, profit would increase as shown by mean 4.00 and standard deviation .861. This indicates that in addition to other cost control measures the organization takes, all employees should be involved in the cost control process if costs are to be effectively managed(Martin,G. and Stames.H.1994) .

Table 4:

4.2 **Reliability statistics**

Reliability is the degree to which measurement are free from error, high reliability indicates minimum error variance. Sekaran and Bougie(2010) argued that a Crombach's alpha slightly lower than 0.60 is considered to be poor .70 is a cceptable and over .80 is good.

Realiability Analysis of Variables(n=264)

Variable	No. of items	Cronbach's Alpha
variance analysis	3	.852
Budget control	3	.831
profitability	6	.822

Based on table 4 the result shows that cronbach's Alpha for variance analysis, budgetcontrol, profitability are 0.852,0.831,0.822,respectively. Overall, the result shows that the items used in this study to measure the variables can be considered good.

4.3Regression Results

Table 5: Regression of Cost Control with Profitability

	Unstandadized coefficients		Standardized coefficients		
Model	**B**	**Std.Error**	**Beta**	**t**	**sig.**
(constant)	1.3	.167		7.565	.000
Variance analysis	.7	.041	.716	16.61	.000
Budget conrol	.5	.039	.519	13.21	.003
Dependent Variable:Profitablity					
R	.716				
R Square	.513				
Adjusted R Square	.511				
F Statistic	275.858				
Sig	.000				

Source: Primary Data

The results as measured by R Square which indicate the impact of the independent variables on the dependent variable, by which the independent variables explain 51.3% of the variance in profitability as shown in the table 5 above. Based on the adjusted R of 51.1%, it can be confirmed that more than half of relationship with profitability can be explained by the two independent variables used in this study. The remaining 49% of the impact to profitability is explained by other factors. the regressions model was noted to be statistically significant (sig.< .01). further ,Table 5 shows that(Beta=.716, t value=16.61,p=.000) which confirms that there is a positive significant relationship between variance analysis and profitability. In addition, budget control has significant value=.003 which is less than .01, which confirms that there is a positively significant relationship between budget control and profitability.

5.CONCLUSION

The purpose of this study is to investigate the relationship of cost conrol techniques namely variance analysis, budget control with profitability of MawiaAlbere manufacturing company. The findings indicate that there is a positive relationship between variance analysis and profitability. This implies that when manufacturing company applied variance analysis techniques , this would automatically lead to reduce the cost and thus enhanced profitability. This is consistent withSiayabola and Raji(2013) who assert that, good cost control techniques reduce cost and increase profit.Sterdy and Key(2011) also maintain that the reason for poor performance in many companies was a result of poor cost control systems. The findings of the study further revealed a positive relationship between budget control and profitability. This indicates that the budget control in place, the organization will be able among others to provide accurate information on performance and ensure survival, experience improved performance and hence will be price competitive. This is supported by Pizzey(1987) who argues that budget control allows comparison of standard costs and actual costs and control income and expenditure which will minimize waste, losses and eliminate inefficiency hence leading to improve profitability and performance.Sterdy and Key(2011),urged that setting budgets leads to higher profits than a situation or vagueness. Hirst(2015) contends that with setting specific objectives like budget, lower uncertainty arises and the budget goals set will promote profitability and minimize behaviors like falsifying accounting information.

References

Abdul, A., &Isiaka, T. A., (2015). Relationship between cost management and profitability: A study of selected manufacturing firms. *International Journal of Management Sciences and Humanities.* 3(1), 33–45.

Akeem, L.B., 2017. *Effect of Cost Control and Cost Reduction Techniques in Organizational Performance*. International Business and Management, 14(3), pp.19-26.

Amalokwu O. John & Lawrence N. (2010), Budgetary and Management Control Process in a Manufacturing Organization. The Journal of Finance, Vol. LII No. 2, pp.715-761..

Ayodele, E. O., &Alabi, M. O. (2014). Effect of cost control on building projects delivery in Nigeria. *Civil and Environmental Research*, 6(2), 76-79.

Barbole A.N, Yuvraj D.N, Santosh.D.P, (2013), *Impact of cost control and cost reduction techniques on manufacturing sector;* Indian streams research journal, vol 3, issue. 5, june 2013. ISSN:-2230-7850.

Frank Wood and Sangster(2010),Business Accounting2,10thedition,Pitman Publishers, London.

Good win, Amos and Sunday(2019).cost control and profitability of selected manufacturing companies in Nigeria. Journal of accounting and strategic finance,2(1),pp14-33.

Grey Williams (1997), Just in Time Manufacturing and inventory control system. Financial Management , pp 80-89.

Hirst(2015), Managerial Competences in Small Firms, Journal ofManagement Development, 13(7), 23-34.

I.M Pandey (2001), Financial Management,(8thedition), Vikas Publishing house PVT Ltd.

Lipsey Richard(2002), An Introduction to Positive Economic,(12thedition), Weinfeld and Nicolson, London.
Lucey T(1993), Costing,(4thedition), DP Publications, London.
Martin, G. and Staines, H. (1994). Managerial Competences in Small Firms, Journal of Management Development, 13(7), 23-34.
Olalekan, L. I., &Tajudeen, N. F. (2015). Cost control and its impact on the survival of Nigeria firms: A case study of Nigeria bottling company Plc. *International Journal of Management, Accounting, and Economics*, 2(4), 312-324.
Oyerogba, E. O., Olaleye M. O., & Solomon, A. Z. (2014). Cost management practices and firm's performance of manufacturing organizations. *International Journal of Economics and Finance*, 6(6), 234-239.
Pizzey Allan(1987),Principles of Cost Accounting(5thedition) Cassel, London.
RashidaKhilawala (2010),Cost control Strategies in an Organization. ManagerialAuditingJournal Vol.23 pp.744-778
Sekaran,U,&Bougie, R.(2010). Research methods for business: A skill building approach,5th ed. West Sussex: John Wiley and Sons ltd.
Siyanbola, T.T. &Raji, G.M. (2013) The impact of cost control on manufacturing industries' profitability. *International Journal of Management and Social Sciences Research*, 2(4), 1-7