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## STRATEGIC COST MANAGEMENT AND COMPETITIVE ADVANTAGE IN SELECTED NIGERIAN MANUFACTURING COMPANIES

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## ABSTRACT

The implementation of cost control systems based on the status quo of cost structure has continued to have negative effect on the performance of manufacturing firms in the marketplace. This has led to a situation where firms are neither able to effectively reduce their costs nor able to deliver products that have competitive values. It is imperative that firms use cost management systems that have strategic orientation so that competitive advantage can be achieved. Therefore, this study seeks to achieve: the examination of the impact of activity - based management on competitive advantage; evaluation of the effect of life cycle costing on competitive advantage; and investigation of target costing influence on competitive advantage. The study used a population of seventy - seven manufacturing firms in Lagos and Ogun States and sixty – five manufacturing firms sampled. Primary data used were collected via questionnaire instrument. The method of analysis used was structural equation modelling. The findings from the study are: Competitive advantage is strongly influenced by activity- based management; life cycle costing strongly affect competitive advantage; and Target costing does not affect competitive advantage strongly. The study concluded that strategic cost management is a strong influence on competitive advantage. Hence, it is recommended that manufacturing firms wishing to attain competitive advantage should implement activity - based management and life cycle costing.

# **Key words:** Activity-based management, life cycle costing, target costing and competitive advantage.



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## **1. INTRODUCTION**

Manufacturing environment in Nigeria today is very competitive and so manufacturing firms have to deploy strategies to improve their competitive positions. To attain competitive position a firm should be able to generate cost information that can be used in cost management so that the cost of its products can be minimal. The manufacture of products that will satisfy customers' desires is another requirement for securing competitive advantage and which can only be possible when contemporary cost management systems which has external orientation is in practice.

Strategic cost management can be implemented by firms wishing to achieve competitive advantage in the market place. The sophistication of the contemporary buyers who are more informed, more cautious and less loyal requires that firms should be more strategic in the management of their production costs so that cost advantage can be attained. In the competitive environment, buyers only purchase products that meet their specifications at minimum prices without sacrificing good quality (Omar, et al., 2015).

One way through which a firm can attain competitive advantage is the manufacturing of its products at a very reduced cost without sacrificing quality in comparison with its competitors. Achieving cost advantage demands that firms should give attention to the determination of accurate cost information. This is where activity based costing /cost management becomes relevant as the traditional cost management systems cannot deliver accurate cost information (Drury, 2012). With accurate cost information, cost can be effectively managed and reduced to secure cost advantage.

When products cost information is accurately determined throughout the stages of a product life cycle, then effective cost management for competitive advantage can be achieved. This can be facilitated with the application of life cycle costing. The determination of accurate cost information of products has become important for firms as the information is required for product pricing and for achieving competitive advantage in the market.

The second way by which competitive advantage can be attained by a firm is through product differentiation. This can be possible when a firm is able to sell its product in the market at a price higher than that of its competitors as a result of high quality or peculiarity of its product. In this situation, the customers prefer good quality product that meets their requirements and so are ready to pay for it at higher price. This is a



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position of competitive advantage. A firm that uses a cost management system that enhances the production of quality products is likely to impact on customers' satisfaction and the competitive position of that firm (Islami et al., 2020).

Studies have shown that manufacturing companies with cost leadership strategy uses activity-based costing, business performance re-engineering and benchmarking; while companies with differential strategy focused companies uses activity-based management (Alsoboa & Aldeheyyat, 2013; Bilbrey, 2009; Johnson, 1988).

This study is meant to contribute to the body of knowledge in the area of strategic management accounting in Nigeria as empirical studies of this nature seems to be very scarce. Most of the studies carried out on Nigerian manufacturing companies focused on traditional management accounting practices. Studies such as Idowu (2014) only focused on target costing impact on competitive position of selected firms using secondary data. The use of secondary data for investigating management accounting practices is not the best. Also, Imeokparia and Adebisi (2014) focused on target costing and performance of manufacturing firms without studying how target costing can be used to achieve competitive advantage by a firm. No empirical study in Nigeria has examined the role of three strategic cost management techniques (activity-based management, life cycle costing, and target costing) in achieving competitive advantage by manufacturing firms. Hence, it is imperative to extend the existing few studies and assess the effect of activity based management, life cycle costing and target costing on competitive advantage of manufacturing companies.

In the light of the above, the objectives of this study are to:

- i. evaluate how activity- based management affects competitive advantage in the sampled manufacturing firms;
- ii. assess how competitive advantage can be influenced by the application of life cycle costing in the sampled firms; and
- iii. examine how competitive advantage can be impacted by the implementation of target costing in the sampled firms.

The report of this study is organised into: introduction, literature review, methodology, results and discussion, and conclusion and recommendation.



 Nigerian Journal of Accounting and Finance, Volume 14, Issue 2, 2022

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## 2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

#### Strategic Cost Management

Strategic cost management is the application of cost management techniques which have strategic orientation to generate and use cost and non – cost information in strategic decisions relating to cost reduction, productivity improvement, customer satisfaction and improvement of competitive position (Cooper & Slagmulder, 1998; Hongren et al.2000). According to Anderson (2007), strategic cost management is a key goal of a firm, which aims to enable a cost approximation of a product or service with the firm's strategy and maximize its strategic performance. Guan et al. (2009) viewed strategic cost management as strategically managing costs and the use of data related to the costs of an enterprise by identifying the best strategies that lead to a sustainable competitive advantage.

The objectives of strategic cost management are to secure: cost reduction; productivity improvement; customers' satisfaction, profit maximization and strategic positioning improvement (Hongren et al., 2000; Hovath & Brokemper, 1998; McNair, 2000). Strategic cost management is meant to help a firm indentify and develop superior strategies that can result in sustainable competitive advantage (Berisha, 2017; Intakhan, 2021). This view is supported by Phornlaphatrachakorn (2018) who noted that strategic cost management is a valuable approach that can help firms gain sustainable competitive advantage and achieve superior performance.

To achieving the objectives of strategic cost management, it operates by techniques or practices that have been developed over the years (Hilton et al., 2001). These techniques which are diverse are mostly developed outside the traditional management accounting and are still evolving. These techniques of strategic cost management include activity-based costing, kaizen costing, bench marking, quality costing, activity-based management, target costing and life cycle costing, among others (Hilton et al., 2001). However, this study focused on activity-based management, target costing and life cycle costing techniques of strategic cost management by examining their impacts on competitive advantage.



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#### **Competitive Advantage**

Competitive advantage is the ability of a firm to outperform its competitors in the market place thereby creating a strategic position for itself and this can result from the implementation of strategic cost management techniques (Wickralasinghe & Alawattage, 2007). Mahdi et al., (2019) defined competitive advantage as an ability of firms to sustain their long-term performance better than their competitors in the markets. It can be said that competitive advantage is the attainment of a position by a firm when its profitability is far ahead of its competitors either as a result of achieving cost advantage or being able to produce and market superior or high-quality products (Ambarwati et al., 2019).

A firm can achieve competitive advantage through any of these three strategies as noted by Porter (1980). Product differentiation strategy – ability of a firm to produce higher quality products in comparison with that of their competitors, thereby enjoying consumers' loyalty; cost leadership strategy – gaining cost advantage in production when compared to its competitors; and lastly, focus strategy (niche strategy) – it combines cost leadership and differentiation strategies in focusing efforts on a particular sector (niche) of a market instead of the whole market (Jusoh & Parnell, 2008).

The essence of lowest cost strategy is to come up with the lowest cost of products in the market in order to be the market cost leader in terms of cost and this will result in competitive advantage (Duçi, 2021).

The use of appropriate techniques of strategic cost management such as life cycle costing, activity-based management and target costing can enable a company achieve competitive advantage.

#### **Hypotheses Development**

#### Activity - Based Management and Competitive Advantage

Activity- Based Management (ABM) took its root from activity-based costing and it focuses attention on effective management of activities and costs required to manufacture a product or render a service (Drury, 2004). ABM functions by ensuring that the activities that consume resources are well managed. ABM identifies and analyses activities of a firm into value added and non- value added (Brimson,1988). The analysis of activities provides opportunity to eliminate non-



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value-added activities and the costs of such activities (Hilton, 2000). As non-valueadded activities costs are eliminated, cost reduction can be achieved and which can lead to cost advantage in the market.

Also, activity-based management carries out cost driver analysis by investigating the reasons why cost is incurred for activities through examining and quantifying the effects of cost drivers (Dierks & Cokins, 2001; Laseter et al., 2017). Cost driver analysis will result in cost reduction and cost advantage in a firm. And this can lead to competitive advantage in the long-run (Bonnín Roca et al., 2019). Moreover, managing significant cost elements which activity-based management seeks to achieve is useful in providing a competitive advantage (Yalcin, 2019). In the light of the forgoing, this study proposes that:

 $H_1$ : Activity- based management has significant impact on competitive advantage in manufacturing companies.

## Life Cycle Costing and Competitive Advantage

Life cycle costing is a technique of strategic cost management that focuses attention on tracing and managing the total cost that will be incurred during a product's entire life including its pre-production costs, production costs and post production costs (Asiedu & Gu, 1998; Blocheret al., 2008; Woodward, 1997). It builds on the conceptual frame work that enhances management's ability to exploit internal and external linkages (Hansen & Mowen, 2000).

The life cycle of a product from the point view of manufacturer as noted by Bengu and Kara (2010) is in these stages: conception, design and development, manufacturing, marketing, logistics and service. At each of these stages, it is possible that costs can effectively be managed using life cycle costing (Cooper & Slagmulder, 2004). Hence, life cycle costing not only gives attention to costs incurred by the producer over a product's life cycle but also on the costs to be incurred by the customers on the product (Petrova & Zarudnev (2013).

Life cycle cost information is relevant to managers in planning and taking cost management decisions. The objective of life cycle costing is to ensure that at every stage of the life of a product, cost reduction is achieved without sacrificing quality and which can deliver competitive advantage in a company (Petrova & Zarudnev (2013).



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Arising from the above discussions, it is proposed that:

H<sub>2</sub>: Life cycle costing has significant influence on competitive advantage in manufacturing companies.

## **Target Costing and Competitive Advantage**

Sakurai (1992), in defining target costing using strategic approach, described it as a comprehensive means of strategic cost management that focuses on product total cost reduction right from its conception and design stage. This technique of strategic cost management combines the skills of engineering and marketing to effect cost reduction and management; hence, it is a multi - functional activity (Horvath, 1993). Target costing is a market oriented and customers focused technique as product designed and manufactured is a result of knowing the requirements and taste of customers in terms of products' features and usage through a market survey (Ansari & Bell,1997; Sweenson et al., 2003; Zengin & Ada, 2010).

The objectives which target costing seeks to achieve are: to ensure cost reduction throughout a product's life cycle (Horvah & Tani,1997; Tani et al.,1994); to ensure high quality of product and customers' satisfaction (Juhmani, 2010; Tani et al., 1994); to carry out profit planning (Sakurai,1996); to ensure timely introduction and development of new products (Tani *et al.* 1994; Horvah and Tani, 1997); and to help firms attain and sustain competitive advantage position (Ansari *et al.2006*).

The implementation of target costing can help a firm to achieve cost advantage and to manufacture high quality products and which ultimately can result in a firm securing a competitive advantage position. Abdullah et al. (2019) in their study reported that target costing aids the manufacturing firms in achieving competitive advantage. This position was also held in the study of Alobaidy (2022) that reported that target costing implementation delivers competitive advantage to manufacturing companies

Hence, this study proposes that:

*H*<sub>3</sub>: *Target costing has significant impact on competitive advantage in manufacturing companies.* 



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## **3. METHODOLOGY**

The cross - sectional survey research design was used to examine the strategic cost management impact on competitive advantage in the sampled manufacturing firms in Nigeria. Seventy – seven (77) quoted manufacturing firms having their head offices or factories located in Lagos and Ogun states constituted the population of this study. The listed companies were extracted from relevant documents in Nigerian Stock Exchange Fact book, 2015/2016. The sample size of 65 quoted manufacturing companies was determined statistically using Taro Yamane formula (Imeokparia, 2013). The specific firms used were then selected randomly.

The instrument of primary data collection used in this study is the questionnaire designed and used by (Adigbole 2018). The questionnaire was designed to collect relevant data from the respondents in the sampled quoted manufacturing companies. A copy of the extracts of the questionnaire relevant to this study can be found under Appendix 1.

Five (5) copies of the questionnaire were administered to each of the sixty - five (65) sampled companies and this gives a total of 325 copies distributed (Adigbole 2018). The questionnaire was targeted at the financial accountants, cost accountants, management accountants, chief accountants / finance directors and the chief internal auditors of the manufacturing companies under study (Adigbole, 2018). After several visits made to the sampled companies, two hundred and forty – four (244) copies of the administered questionnaire were retrieved out of which eleven (11) were unusable due to improper filling by the respondents. The valid copies of the questionnaire instruments used for analysis were two hundred and thirty - three (233) from 57 manufacturing firms, which represents 71.7% success rate of return.

#### Variable Measurement

#### **Competitive Advantage (CA**

Competitive advantage is the dependent variable and was measured with seven items in the questionnaire developed from literature and anchored on a seven–point Likert scale ranging from strongly disagree (1) to strongly agree (7)

#### **Activity-Based Management Capability (ABMC)**

Activity Based Management Capability used as a proxy for activity-based management is an independent variable and described in the questionnaire using six



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items developed from literature and the items were measured using seven–point Likert scale ranging from strongly disagree (1) to strongly agree (7).

### **Target Costing Implementation (TCI)**

Target costing implementation as a proxy for target costing is an independent variable and was measured using seven items in the questionnaire developed from literature and anchored on a seven-point Likert scale ranging from disagree (1) to strongly agree (7).

#### Life Cycle Costing Orientation (LCCO)

Life cycle costing orientation as a proxy for life cycle costing is an independent variable and was measured in this study using six items in the questionnaire developed from literature and anchored on a seven-point Likert scale ranging from disagree (1) to strongly agree (7).

#### Method of Analysis

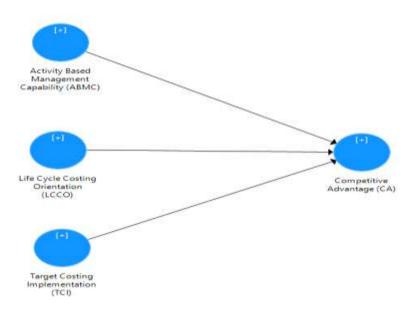
The Partial Least Squares - Structural Equation Modeling (PLS - SEM) was used in this study for data analysis. SEM is a second-generation regression analysis and it is an alternative to ordinary least squares regression and canonical correlation and it is very suitable for primary data analysis especially when cause or effect relationships are being investigated (Adigbole, 2018).

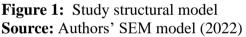
#### Study structural model specification

In using Partial Least Square (PLS -SEM) to examine the hypothesized effects of activity- based management, life cycle costing and target costing on competitive advantage, the structural equation of the relationships between the variables involved in the study must be specified in pictorial form. The use of PLS -SEM software (SmartPLS 3.0) only understands models stated pictorial form as depicted in Figure 1. From the figure, the independent variables known as the exogenous variables are: Activity-Based Management Capability (ABMA), Life Cycle Costing Orientation (LCCO) and Target Costing Implementation (TCI) which are proxies for activity-based management, life cycle costing and target costing respectively; and the dependent variables are in blue oval shapes and are linked by arrows. The arrows show the relationships between the variables; an arrow moves from the independent latent variables to the dependent latent variable.



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## 4. RESULTS AND DISCUSSION

#### PLS - SEM Analysis and Testing of Hypotheses

Data analysis was carried out using PLS – SEM in two stages: at the first stage, SmartPLS 3.0 software was used in producing the preliminary results for the evaluation of the measurement model, and  $\beta$  values and the R<sup>2</sup>. The second stage was the use of SmartPLS 3.0 bootstrapping process to generate the t – statistic and the p – values that indicate the significance value of  $\beta$  values. The results obtained at the second stage were used in testing the hypotheses formulated in the study.

#### **Preliminary Tests Results**

Preliminary test results generated by running the data in SmartPLS 3.0 software are examined here:



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#### **Indicators Reliability Test**

There are two measures of indicators reliability and these are: indicators loading and indicators reliability value. Figure 2 shows the results of the indicators loading as can be seen by the arrows shutting out from each construct. While Table 1 shows the results of the indicators loading and indicators' reliability values. From the table, all the indicators used in this model have values of loadings that are more 0.70 threshold (Ringle, 2006); and all the indicators have reliability values that are more than 0.50 threshold (Hair *et al*, 2014). From the results in Table 1 the measurement model is strong as all the indicators are reliable.

Table 1 Indicator Reliability									
Latent Variable	Indicators	Loadings	Indicator Reliability						
Activity Based Management									
Capability (ABMC)	ABMC1	0.843	0.711						
	ABMC2	0.889	0.790						
	ABMC3	0.900	0.810						
	ABMC4	0.874	0.764						
	ABMC5	0.857	0,734						
	ABMC6	0.838	0.702						
Competitive Advantage (CA)	CA1	0.811	0.658						
	CA2	0.803	0.645						
	CA3	0.845	0.714						
	CA4	0.844	0.712						
		0.700	0.684						
	CA6	0.827							
	CA7	0.829	0.687						
Life Cycle Costing Orientation (LCCO	LCC01	0.806	0.650						
	LCCO2	0.872	0.760						
	LCCO3	0.900	0.810						
	LCCO4	0.848	0.719						
	LCCO5	0.821	0.674						



	TC1	0.878	0.771
Target Costing Implementation (TCI)	TCI2	0.844	0.712
	TCI3	0.849	0.721
	TCI4	0.886	0.785
	TCI5	0.866	0.750

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Source: Authors' Analysis (2022) using SmartPLS 3.0

#### **Construct Internal Consistency Reliability**

Cronbach's Alpha and Composite Reliability (CR) values are used in determining construct internal consistency reliability. Table 2 shows the results of Cronbach Alpha, Composite reliability and Average variance extracted of all the variables in the study. From the table, the values of Cronbach's Alpha and Composite reliability for all the four (4) constructs (variables) were above the required 0.70 threshold (Hair, Ringle & Sarsted, 2011). These results indicate that all the constructs in the study are consistent and reliable.

#### **Convergent validity**

Convergent validity is measured by the Average Variance Extracted (AVE). From Table 2, the AVE values of all the variables in the study are more the threshold of 0.50 (Hair *et al.*, (2011). It can be implied from the result that there is convergent validity.

Table	2									
Construct Reliability and Validity										
Latent Variable	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)							
Activity Based Management Capability (ABMC)	0.934	0.948	0.752							
Competitive Advantage (CA)	0.920	0.936	0.677							
Life Cycle Costing Orientation (LCCO)	0.904	0.929	0.723							
Target Costing Implimentation (TCI)	0.916	0.937	0.748							

Source: Authors' Analysis (2022) using SmartPLS 3.0



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#### **Discriminant Validity**

The modern way of testing for discriminant validity is using the Heterotrait – Monotrait (HTMT). From Table 3, the HTMT ratios for each pair of constructs are below the maximum HTMT<sub>0.90</sub> (Henseler, Ringle & Sarstedt, 2015). Hence, the results indicates that discriminant validity was met in this study using HTMT ratio.

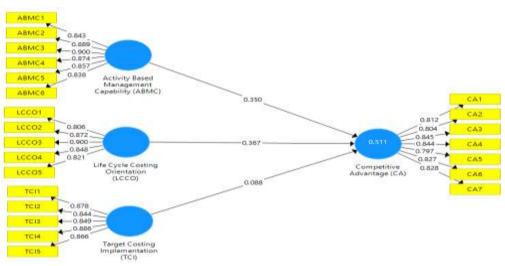
Table 3Heterotrait – Monotrait (HTMT)										
Latent Variable	Activity-Based Management Capability (ABMC)	Competitive Advantage (CA)	Life Cycle Costing Orientatio n (LCCO)	Target Costing Implementa tion (TCI)						
Activity Based Management Capability (ABMC)										
Competitive Advantage (CA)	0.678									
Life Cycle Costing Orientation (LCCO)	0.641	0.701								
Target Costing Implementation (TCI)	0.772	0.675	0.847							

Source: Authors' Analysis (2022) using SmartPLS 3.0

From the above analysis the preliminary test results are very satisfactory. These indicate that the measurement (manifest) variables are able to measure their constructs correctly and that the constructs were able to measure what they were intended to measure. Having evaluated the outer model properly, the structural or inner model of the study can then be evaluated.



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**Figure 2 Source:** Authors' Analysis (2022) using SmartPLS 3.0

The preliminary test results for Indicators reliability, construct internal consistency reliability, Construct reliability and validity, and Discriminant validity are very satisfactory as can be seen in Tables 1 to 3. The implication of this is that the four (4) constructs in the study were correctly measured by the measurement variable (Questions measuring the constructs in the questionnaire) and that the constructs have measured what they are meant to measure.

With the satisfactory evaluation of the preliminary test result, it implies that the t - statistic and the p - values produced by SmartPLS bootstrapping process is reliable and can be used in testing the hypotheses formulated in the study.

#### Pathes' Coefficients and Testing of Hypotheses

Table 4 shows the coefficients of the variables (Constructs) in the study. The coefficients value indicates the strength and nature of the effect of independent variable on the dependent variable. From Figure 2 and Table 1, Activity based management has a positive effect on Competitive advantage with a beta value ( $\beta$ ) of 0.350. This implies that 35% changes in competitive advantage can be due to improvement in activity based management. The result from Table 1 also shows that Life cycle costing has a positive impact on Competitive advantage with a coefficient ( $\beta$ ) of 0.367. It implies that 37% changes in competitive advantage can be due to improvement in competitive advantage. And lastly, the result also indicates that



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Target costing has a slight positive effect on Competitive advantage with a beta value ( $\beta$ ) of 0.08. This implies that 9% changes in competitive advantage can be due to a improvement in activity based management.

In testing the hypotheses of the study, the t-statistics and the p- values produced by the bootstrapping process in SmartPLS 3.0 are used.

As can be seen in Table 4, Activity – based management represented by ABMC has a positive significant impact on competitive advantage ( $\beta = 0.350$ , p < 0.000). Hence, Ho<sub>1</sub> is not accepted.

Also, in Table 4, Life cycle costing represented by LCCO has a positive significant effect on competitive advantage ( $\beta = 0.367$ , p < 0.000). Therefore, Ho<sub>2</sub> is also not accepted.

Lastly, from the result in Table 4, Target costing represented by TCI has a positive insignificant impact on competitive advantage ( $\beta = 0.088$ , p > 0.10). Hence, Ho<sub>3</sub> is accepted.

	Table 4										
	Path Coefficients with the Significance Values										
Paths	Hypothesis	Coefficient (β)	Deviation Statistics (β/STDEV)		P Values	Decisions					
ABMC -> CA	1	0.350	0.098	3.561	0.000*	Accepted					
LCCO -> CA	2	0.367	0.084	4.350	0.000*	Accepted					
TCI -> CA	3	0.088	0.100	0.879	0.379**	Not Accepted					

Note: \* p < 0.01

\*\* p > 0.10

Source: Authors' Analysis (2022) using SmartPLS 3.0

#### **Discussion of Results**

The finding of the study in respect of the first objective is that competitive advantage is positively and strongly impacted by implementation of activity-based management in the sampled manufacturing firms. Hence, the application of activity-based management can improve considerably the competitive position of manufacturing



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firms. This finding is consistent with the study of Hooshang (2004), who reported that activity-based cost management can enhance the competitive position of a firm. It is also in agreement with the finding of Blocher *et al.* (2001), who found that ABM application improved the competitive position of a firm. This present finding could be as a result of lack of effective implementation of activity-based management, and where this technique is not effectively used, good results may not be realised.

In realizing the second objective of the study, it was also found that competitive advantage in the sampled manufacturing firms is positively and strongly influenced by the application of life cycle costing. This indicates that life cycle costing implementation in the manufacturing companies can tremendously improve the competitive positions of manufacturing firms. This finding is consistent with that of Petrova and Zarudnev (2013), who reported that a successful implementation of Life cycle costing provided a competitive advantage for the companies. It is also in line with the findings of Ilic, Milicevic and Cvetkovic (2010); and Bengu and Kara (2010).

The finding of the study in respect of the last objective is that competitive advantage is slightly but positively impacted by the usage of target costing in the sampled manufacturing firms. The import of this finding is that the implementation of target costing in the manufacturing companies can lead to insignificant improvement in their competitive positions. This finding disagrees with that of El –Dyasty (2007), who reported that target costing could enhance the ability of a company to be able to survive and compete successfully. The finding of this current study could be as a result of the sampled firms not using target costing to secure competitive position or that the environment for effective implementation of target costing was not available in the sampled firms.

## 5. CONCLUSSION AND RECOMMENDATION

#### Conclusion

This study examined the impact of the implementation of target costing, life cycle costing, and activity – based management techniques of strategic cost management on competitive advantage in the sampled manufacturing firms. The results arising from the use of PLS-SEM in data analysis and testing of hypothesis are that: life cycle costing and activity-based management contributed to improving the competitive advantage in the sampled manufacturing firms; while competitive



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advantage in the sampled firms is positively but not significantly influenced by target costing.

It can be concluded that manufacturing firms that implement life cycle costing or activity-based management can have their competitive positions improved. Hence, strategic cost management practices can be relevant for competitive advantage enhancement in manufacturing firms.

#### Recommendations

Arising from the findings of this study, the following recommendations are made:

i. Manufacturing companies that want to improve their competitive position could consider implementing life cycle costing and activity-based management techniques if they have not done so. These techniques of strategic cost management have been proved empirically to significantly impact on the performance of manufacturing companies.

ii. Further research could be carried out focusing on the implementation of strategic cost management techniques for competitive advantage in service rendering companies in order to find out if the findings of this study will still hold in these firms.

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#### **Appendix: Questionnaire used for the Study**

#### SECTION B: ADOPTION OF STRATEGIC COST MANAGEMENT PRACTICES

- (1) Into which category does your company falls? (Please tick either Yes or No)
  - (i) My company is familiar with strategic cost management techniques, Yes / No.
  - (ii) My company is currently using strategic cost management techniques, Yes / No.
- (2) Please tick any one or more of the following strategic cost management techniques that are contained in the cost systems of your company. Activity-based costing Activity – based management

Target costing Life - cycle costing

(3) Please indicate by ticking the extent of the Implementation of Strategic cost management techniques from: 1 (to No extent at all), 2 (to a very limited extent), 3 (to a limited extent), 4 (to a moderate extent), 5 (to a considerable extent), 6 (to a great extent) and 7 (to a very great extent).



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Strategic cost management techniques	To no extent at all 1	2	3	4	5	6	To a very great Extent 7
Activity – based costing							
Activity – based management							
Target costing							
Life - cycle costing							

#### SECTION C: ASSESSMENT OF THE IMPLEMENTATION OF STRATEGIC COST MANAGEMENT TECHNIQUES as it affects: Accurate cost information, Competitive advantage, Customer value enhancement and Organisational Performance in your Company.

Please tick as appropriate from the options of: Strongly disagree (1), Disagree (2), Somewhat disagree (3), Neutral (4), Somewhat agree (5), Agree (6), and Strongly agree (7).

(	<b>(2)</b>	Activity –	based	management	Caj	pability	7
- 6							

What is the extent of your agreement as to the implementation of Activity-based management for achieving accurate cost information, competitive advantage, customer value enhancement and organisational performance?	SD 1	2	3	4	5	6	S A 7
(a) Analysis of the value chain activities of the company is normally carried out.							
(b) The causes of the company's activity costs are normally investigated.							
(c) Activities are usually analysed into added value and non - added value activities and performance measures are determined for each activity.							
d) The company examines and qualifies the effect of cost drivers.							
<ul> <li>(e) Activities required for the manufacture of products which drive costs are effectively managed in the company.</li> <li>(e)</li> </ul>							
(f) The relationships and linkages between activities of the company are usually established.							



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#### (3). Target Costing Implementation

What is the extent of your agreement as to the implementation of Target costing to achieve accurate cost information, competitive advantage, customer value enhancement and organizational performance?	S D 1	2	3	4	5	6	S A 7
(a) A market survey is usually conducted to determine the specifications desired by customers before new products are manufactured.							
(b) Target price and target profit of new products are usually determined before production take place.							
c) The company usually researched for and sets competitive prices for their new products.							
d) The desirable or allowable production cost of new products which is determined as the difference between the target selling prices and target profit margin is usually estimated.							
e) Improvements and adjustments on the current design of the proposed product are usually made in target costing thus leading to cost reduction and achievement of the target cost.							

#### (4) Life Cycle Costing Orientation

To w Life - comp	hat extent do you agree as to the implementation of cycle costing for achieving accurate cost information, betitive advantage, customer value enhancement and hizational performance?	SD 1	2	3	4	5	6	S A 7
(a)	Information about customers and competitors are gathered by the company							
	Costs incurred at each stage of the product life cycle are properly determined for the purpose of cost management.							
	The stage and time of achieving improved revenue and cost reduction for all the stages of the product life cycle are determined.							



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(d) Other tools of strategic cost management such as target costing and value engineering are used in effecting cost reduction at each of product life cycle.				
(e) There is trade off and balancing between the standards specified by the customers in term of the quality and response time and the selling price.				

#### SECTION D : CONSEQUENCES OF STRATEGIC COST MANAGEMENT PRACTICES

Please indicate the extent of your agreement with any of these options-Strongly disagree (1), Disagree (2), Somewhat disagree (3), Neutral (4), Somewhat agree (5), Agree (6), and Strongly agree (7).

#### (1) Accurate cost Information:

Accurate cost Information is achieved as follows resulting from the practice of strategic cost management by the firm and which enhances organizational performance:	SD 1	2	3	4	5	6	SA 7
(a) Allocations of indirect cost of production are based on activities performed.							
(b) Multiple cost drivers are used in cost allocations							
(c) Cost drivers used in allocating costs do have causes and effect relationship with production overheads.							
<ul> <li>(d) Accurate cost information generated is timely, relevant and reliable for making strategic decisions in enhancing the company's competitive position and performance.</li> </ul>							

#### (2) Competitive Advantage

Competitive advantage is achieved as follows resulting from the practice of strategic cost management by your firm and which enhances organizational performance:	SD 1	2	3	4	5	6	SA 7
<ul> <li>(a) Competitive advantages is achieved with the implementation of strategic cost management in the company and which leads to improvement in organisational performance.</li> </ul>							



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(b)	The company is able to sell its products at lower cost when compared with its competitors.				
(c)	The company is efficient in its production and so could avoid unnecessary costs thereby leading to cost reduction.				
(d)	The company is able to launch higher quality products into the market and achieves greater product acceptance.				
(e)	The company is able to source for quality raw materials at reduced prices and leading to lower				
(f)	The company achieves higher profit margin greater return on assets with valuable resources such or unique competence.				
(g)	The company has created a brand name for itself.				

#### (3) Customer Value Enhancement

Customer Value Enhancement is achieved as follows resulting from the practice of strategic cost management by the firm and which enhances organizational performance:	1	2	3	4	5	6	SA 7
(a) Products are manufactured to suit customers' satisfaction.							
(b) Customers receive value for their money.							
(c) Products launched into the market are of							
(d) The company renders high quality after sale services to the customers satisfaction							