

EVALUATION OF ACTIVITY BASED COST ANALYSIS AS A TOOL ON FINANCIAL PERFORMANCE IN SELECTED PUBLIC SUGAR FIRMS IN KENYA

*Wasike Edward Wanyonyi¹ (Mount Kenya University Phd Student)
Dr. Martin Onsiro Ronald² (Mount Kenya University),
Dr. Robert Mindila³ (Mount Kenya University),
Dr. Evans Mwiti⁴ (Mount Kenya University),*

ABSTRACT

Globally, businesses have continued to focus on cost reduction and effectiveness in operations. Organizations have to be transparent when incurring costs. Stakeholders in general need detailed insights about costs and financial performance of organizations to which they are associated. However, this is limited by absence of adequate knowhow, good systems and necessary data. There has been a lot of concern over rising operational costs across the globe and more so particularly in Kenya due to high energy costs, staff costs and borrowing costs among others. Mumias Sugar Company Limited made a total loss of Kshs 10.3 billion from 2013 to 2015 as per the published annual financial statements. The financial performance of Nzoia Sugar Company Limited was also affected by interest on borrowed loans, aged machinery and high input costs of materials, fuel, fertilizer and lubricants. The purpose of the study was to evaluate Activity Based Cost Analysis as a tool on financial performance of the selected public sugar firms. The problem for the research was the apparent high operational costs that were being exhibited uncontrollably and which resulted in losses and therefore poor financial performance of the selected public sugar companies in Kenya. The researcher aimed at filling the gap of showing whether if Activity Based Cost Analysis as a tool was well followed, then the financial performance of the selected sugar firms would have been better. A mixed methodology was used because the data collected was both discrete and continuous which required the employment of both descriptive and inferential techniques. Descriptive research design was used because it covers both the quantitative and qualitative data in the research and also assisted the researcher to collect relevant data at minimal cost, time and effort. This was a census whose target population was top management, accounting staff, internal audit staff, procurement staff, and sales revenue staff. Data was analyzed using SPSS. The null hypothesis had to be accepted, that is there was no significant relationship that existed between application of ABC Analysis as a tool and financial performance. On an overall basis, the researcher concludes that upon evaluation, Activity Based Cost analysis was lowly applied in the selected public sugar firms since it faced a myriad of challenges and therefore could not significantly influence Financial Performance. Direct players and other stakeholders should take keen interest in both accounting and non-accounting tools that would enhance financial performance of firms.

KEY WORDS: Activity Based Cost Analysis, Financial performance, Cost Per Activity, Profitability; Return on Investment; Return on Assets, Earnings per Share

Background of the Study

Organizations have to be transparent when incurring costs. Stakeholders in general need detailed insights about costs and financial performance of organizations to which they are associated. However, this is limited by absence of adequate knowhow, good systems and necessary data (Vedder, 2015). A study in Jordan emphasized that costs were key and played a big role in growing of companies, particularly in the industrial segment (Al-Hroot, Mssadeh, & Amireh, 2015). There is an overwhelming desire among firms to know well their costs and factors that drive them and yet clear understanding of the costs and the tools or methods to distinguish them was not adequate (Cokins, 2006). Globally, businesses have continued to focus on cost reduction and effectiveness in operations.

According to a study by Kannaiah(2015), most firms fail to know the cost of the products they make and those that have them, the information was not clear nor correct. They therefore end up making bad business decisions or even leave products which are profitable to settles on those that result in loss of money (Kannaiah, 2015). This emphasized the need for evaluating application of Activity Based Cost Analysis as a tool in the selected public sugar firms in Kenya based on the apparent high costs of production in the sector.

Statement of the problem

There has been a lot of concern over rising operational costs across the globe and more so particularly in Kenya due to high energy costs, staff costs and borrowing costs among others.

The elventh parliament of Kenya , third session in 2015 noted that the regional production cost averaged USD415 and it was very excessive in Kenya at USD 550 per metric ton (Kenya National Assembly,Eleventh Parliament,Third Session, 2015).Owing to a myriad of financial, general business challenges and the risks that faced Mumias Sugar Company and Nzoia Sugar over the years, the researcher felt that they may get worse in the long run.

Mumias Sugar Company Limited made a total loss of Kshs 10.3 billion from 2013 to 2015 as per the published annual financial statements. The financial performance of Nzoia Sugar Company Limited was also affected by interest on borrowed loans, aged machinery and high input costs of materials, fuel, fertilizer and lubricants. Ability to analyze business costs is a very important aspect to manage costs. Failure to understand the behavior of costs can result in poor decisions that turn out to be disastrous (Novak & Popesko, 2014). The problem for the research was the apparent high operational costs that were being exhibited uncontrollably and which resulted in losses and therefore poor financial performance of the selected public sugar companies in Kenya.

LITERATURE REVIEW

The study was guided by Transaction Cost Theory (Commons, 1931) which was relevant to the study as it focuses on dynamics that influences incurrence of costs. Activity-Based Cost Analysis is a method or tool that assigns an activity`s cost to the final service or product based on real consumption of resources (Al-Hroot, Mssadeh, & Amireh, 2015).When using an ABC system, identify activities which generate costs and then assign costs to products or services (Akyol, Tuncel, & Bayhan, 2007). ABC as an accounting technique is useful in determining correct costs. It is a creative method in accounting for costs that has been adopted across private and public organizations whether in the manufacturing or service sectors (Nitin & Mahto, 2013). The tool emphasizes determination of the Cost per Activity through presentation of schedules of cost items in every task at hand. The literature shows how accurate cost information is important in decision making in organizations and by extension financial performance. Amongst the many accounting – based financial performance measurements are Return on Assets (ROA), Gross Profit Margin, Return on Investment (ROI) and Earnings per Share (San & Heng, 2011).

Conceptual Framework

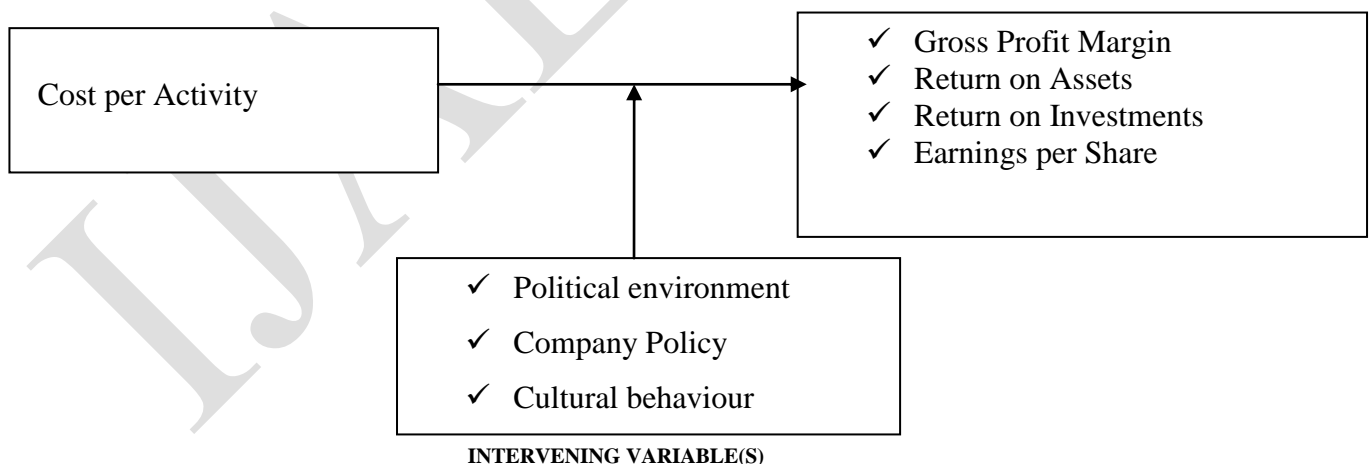
The framework had Activity Based Cost Analysis as the independent variable and financial performance as the dependent variable as shown below:

INDEPENDENT VARIABLE

ACTIVITY BASED COST ANALYSIS

DEPENDENT VARIABLE

FINANCIAL PERFORMANCE



INTERVENING VARIABLE(S)

Figure 1 : Conceptual framework

Source: (Researcher, 2016)

Research Gap

The study of Cost Management Practices and Firm`s Performance of Manufacturing Organizations showed that there exists a positive significant relationship between cost management practices and firm`s performance and recommended that a cost reduction strategy with emphasis on production overhead cost and administrative overhead cost be embarked upon in order to achieve the main objectives of profit maximization and wealth creation (Oyerogba, Olaleye, & Solomon, 2014).The researcher therefore saw the need of evaluating Activity Based Cost Analysis as a tool on financial performance of selected public sugar firms in Kenya.

The reviewed literature above does not show any work done on evaluation of Activity Based Cost Analysis as a tool on financial performance of corporate organizations. The researcher believed that the Evaluation of Activity Based Cost Analysis as a tool would greatly contribute to their understanding and use and help to address the problem of higher operational costs in the selected public sugar firms in Kenya.

RESEARCH DESIGN AND METHODOLOGY

The researcher applied mixed methodology and the study resulted into both quantitative and qualitative data. Descriptive research design was used because it covers both the quantitative and qualitative data in the research and also assisted the researcher to collect relevant data at minimal cost, time and effort and hence achieving optimal efficiency (Kothari, 2004).

Target Population

The target population for the study was top management, accounting staff, internal audit staff, procurement staff, sales revenue staff of selected public sugar firms in Kenya and selected staff of major suppliers of materials and services who totaled up to about 96 in number. The researcher targeted these staff as they were relevant respondents usually involved directly or indirectly with Activity Based Cost analysis as a tool and operations that champion focus on financial performance in the business.

Table 1: Target Population

| Strata | Mumias Sugar Co. | Nzoia Sugar Co. | Total |
|--|---------------------|--------------------|-----------|
| Top Management(CEO & HODs) | 8 | 9 | 17 |
| Management Accounting staff | 4 | 5 | 9 |
| Costing Staff | 5 | 3 | 8 |
| Internal Audit Staff | 7 | 9 | 16 |
| Procurement & Stores Staff | 11 | 9 | 20 |
| Sales Revenue Staff | 6 | 8 | 14 |
| Major Suppliers of materials (accountants) | 5 | 2 | 7 |
| Major Suppliers of services(accountants) | 3 | 2 | 5 |
| Total | 49 | 47 | 96 |

Source: (Researcher,2016)

DISCUSSION OF RESEARCH FINDINGS

The table 1 below summarizes the findings based on the questionnaires that were filled by the respondents from the selected public sugar firms in relation to Activity Based Cost Analysis as a tool on financial performance.

Table 2: Cross tabulation of Activity Based Cost (ABC) Analysis tool being well understood and improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share from 2011 to 2015

Application of Activity Based Costing Analysis has improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share

Total

| | | | Strongly Disagree | Disagree | Agree | Strongly Agree | |
|---|----------------|-------------------|-------------------|-----------|----------|----------------|-----------|
| Activity Based Cost(ABC) as a tool is well understood | Based Analysis | Not Applicable | 1 | 2 | 0 | 0 | 3 |
| | | Strongly Disagree | 0 | 3 | 0 | 0 | 3 |
| | | Disagree | 1 | 14 | 1 | 1 | 17 |
| | | Agree | 2 | 42 | 3 | 3 | 50 |
| | | Strongly Agree | 2 | 6 | 1 | 2 | 11 |
| Total | | | 6 | 67 | 5 | 6 | 84 |

Source: Research data 2016

The cross tabulation results in table 2 above show that Activity Based Cost Analysis as a tool being well understood and is agreed but disagreed on improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share from 2011 to 2015 as indicated by 42 respondents, being 50%. The analysis by the software did not bring out a Not Applicable column in the table above since there were no respondents who gave as an answer to the question whether Activity Based Cost Analysis as a tool being well understood had improved financial performance of firms.

Table 3: Cross tabulation for the level of Activity Based Costing Analysis application in operations at work and improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share from 2011 to 2015

| | | | Application of Activity Based Cost Analysis has improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share | | | | |
|---|--------------------|----------------|---|-----------|----------|----------------|--------------|
| | | | Strongly Disagree | Disagree | Agree | Strongly Agree | Total |
| To what level is Activity Based Costing Analysis is applied | Moderately Applied | Lowly Applied | 4 | 47 | 3 | 7 | 61 |
| | | Highly Applied | 2 | 19 | 2 | 0 | 23 |
| | | Total | 6 | 66 | 5 | 7 | 84 |

Source: Research data 2016

The cross tabulation of the results in table 3 above for the level of Activity Based Cost Analysis application in operations at work show that 47 respondents (56%) moderately applied the tool, being the majority and disagreed that it improved financial performance of firms. The SPSS software did not show results for Not Applicable amongst columns and Highly Applied amongst the rows as the respondents provided neither of the two as an answer to the questions posed thus whether Activity Based Costing Analysis application in operations at work had improved financial performance and to what level is the tool applied in operations at work respectively. The implication is that respondents in the study simply do not see themselves as highly applying the tool and that it had improved financial performance. This explains why there is no row for highly applied in the above table.

Table 4: Cross tabulation of result Activity Based Cost Analysis for improved financial decision making process and improved financial performance of firms in terms of Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share from 2011 to 2015

| | | | | Application of Activity Based Cost Analysis has improved financial performance of firms in terms of Gross Profit Margin, Return on Assets, Return on Investments and Earnings per Share | | | | |
|---------|---|-------------------|--|---|-----------|----------|----------------|-----------|
| | | | | Strongly Disagree | Disagree | Agree | Strongly Agree | Total |
| | | Not Applicable | | 1 | 2 | 0 | 0 | 3 |
| Result: | Activity Based Cost(ABC) Analysis can improve financial decision making process | Strongly Disagree | | 0 | 2 | 0 | 0 | 2 |
| | | Disagree | | 0 | 3 | 0 | 0 | 3 |
| | | Agree | | 2 | 42 | 5 | 2 | 51 |
| | | Strongly Agree | | 3 | 16 | 1 | 4 | 24 |
| | | | | 0 | 1 | 0 | 0 | 1 |
| | | Total | | 6 | 66 | 6 | 6 | 84 |

Source: Research data 2016

The cross tabulation results in table 4 above show that 42 out of 84 respondents, that is 50% agree with the fact that Activity Based Cost analysis as a tool can improve financial decision making process and however disagree that the awareness in itself improved financial performance of the selected public sugar firms in terms of Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share from 2011 to 2015. None of the respondents gave a Not Applicable answer to the question that asked whether application of Activity Based Cost Analysis had improved financial performance, which implied that all of them were not in agreement at all. The disagreement to the effect that awareness of the good contribution of ABC to financial performance is corroborated by a study in Morocco which affirmed that non-organizational behavioral determinants such as styles of leadership and culture they affect its usage (Elhamma, 2015).

The percentage of 50% from the findings agreeing that Activity Based Cost analysis can improve financial decision making is in line with those of Kumar & Mahto(2013) who found out that using ABC assists an organization to correctly estimate the cost elements of commodities and therefore inform the company's decisions in doing away with unprofitable lines of business and even lowering prices of products or services that are overpriced. The study further stated that ABC is generally used as a tool for understanding operational costs and support strategic decisions on pricing, outsourcing and identifying plus measuring operational improvement initiatives. The study emphasized understanding the need and importance of ABC costing in business organizations.

Table 5: Relationship between the application of ABC Analysis as a tool and financial performance of selected public sugar firms in Kenya from 2011 to 2015

| Correlation analysis | | Application of Activity Based Cost Analysis has improved Financial Performance | |
|---|--|--|-------|
| Kendall's tau_b | Activity Based Cost(ABC) Analysis as a tool is well understood | Correlation Coefficient | .108 |
| | | Sig. (1-tailed) | .167 |
| | | N | 84 |
| | To what level is Activity Based Cost (ABC) Analysis applied in operations at work. | Correlation Coefficient | -.108 |
| | | Sig. (1-tailed) | .185 |
| | | N | 84 |
| Result: Activity Based Cost(ABC) analysis can improve financial decision making process | Correlation Coefficient | .097 | |
| | Sig. (1-tailed) | .197 | |
| | N | 84 | |

** Correlation is significant at the 0.01 level (1-tailed). **Source: Research data 2016**

The results of analysis in table 5 above indicate that there was no significant influence to the selected public sugar companies' financial performance from just understanding of activity based costing, non sufficient application of activity based costing and by mere agreement among the respondent that activity cost benefit analysis can improve financial decision making at ($r = .108, p > .05$), ($r = -.108, p > .05$) and ($r = .097, p > .05$), respectively.

Challenges in application of ABC Analysis on Financial Performance were mentioned during interviews by

respondents such as resistance to adoption of the tool, misplaced priorities, absence of data for estimation, lack of top management support, ambiguity of activities and poor system set up. The results were supported by Al-Hroot et al.(2015) in a study in Jordan which established that ABC as a tool requires changes in the culture of the organization, knowledge, willingness towards learning and presence of adequate resources. The study by Zaman(2009) on the Australian Experience with ABC on firm performance found out that application of Activity Based Costing improves allocation of resources and results in reduction of costs .There were also views in regard to behavioral aspects of staff such that they determine successful usage of Activity Based Costing as a tool at the work place. The sampled firm executives in Australia affirmed that ABC as an accounting tool assists in establishing main costs in processes that results in decisions to bring down cost of production. Its application enhances effectiveness and efficiencies so as to increase operational revenues (Zaman, 2009). The researcher concurs with this view in that the behavior of stakeholders within and outside a business enterprise at all levels should be the right one to foster the firm's performance.

The comments by respondents concerning poor system set up as a challenge that hinders use of ABC was in line with findings published by Canadian Center of Science and Education that emphasized the tool in improving accuracy of costs, profitability of specific products, knowing of real costs that would assist management to delete those commodities with poor returns from the production portfolio and deciding which ones to make in-house or out-source.ABC as a costing tool should be implemented with the right mindset that is practically oriented. One should rely on it but think to resolve business problems. Thus the right knowledge and talents are necessary for interpretation of cost information. The tool assists to understand demand sources for activities so that management can create incentives for behavior and hence improve in excellence operationally. It generally addresses complexities in processes (Kannaiah, 2015). Thus, there should be a proper system for costing and decision making and ABC come in handy in endeavoring to improve financial performance of business firms.

Based on collected data and subsequent regression analysis, the following table of Coefficients was obtained.

Table 6: Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. | 95.0% Confidence Interval for B | | Correlations | | Collinearity Statistics | | VIF |
|---|-----------------------------|------------|---------------------------|-------|------|---------------------------------|-------------|--------------|---------|-------------------------|-----------|-------|
| | B | Std. Error | | | | Lower Bound | Upper Bound | Zero-order | Partial | Part | Tolerance | |
| (Constant) | 2.773 | .409 | | 6.781 | .000 | 1.956 | 3.590 | | | | | 1.000 |
| 1 To what level is Cost – Benefit Analysis applied | .064 | .143 | .056 | .447 | .657 | -.221 | .348 | .056 | .056 | .056 | 1.000 | 1.000 |
| (Constant) | 2.651 | .457 | | 5.799 | .000 | 1.737 | 3.565 | | | | | 1.000 |
| 2 To what level is Cost – Benefit Analysis applied | .052 | .145 | .046 | .357 | .722 | -.237 | .341 | .056 | .045 | .045 | .981 | 1.019 |
| To what level is Cost – Effectiveness Analysis used | .066 | .109 | .077 | .606 | .547 | -.152 | .284 | .084 | .077 | .077 | .981 | 1.019 |

Source: Research data 2016

a. Dependent Variable: Application financial tools have improved financial performance of firms in terms Gross Profit Margin, Return On Assets, Return On Investments and Earnings Per Share since 2011 to 2015

The established simple linear regression equation becomes:

$$\text{Financial performance of selected public sugar firms in Kenya from 2011 to 2015 (Y)} = 2.773 + .0X_3(\text{activity based cost analysis})$$

Where

$\alpha_0 = 2.773$, shows that if all independent variables were rated zero, financial Performance of sugar companies rating would be 2.773

$\alpha_3 =$ non results in regression line shows that there was very limited or totally no application of Activity Based

Cost (ABC) analysis as a tool to increase Financial Performance by selected public sugar companies

Hypothesis Testing Results

Ho: There was no significant relationship that exists between application of ABC Analysis as a tool and financial performance.

Ha: There was a significant relationship that exists between application of ABC Analysis as a tool and financial performance. Thus the null hypothesis had to be accepted. This implies that this factor did not have any a direct contribution to improve financial performance of sugar companied since it was lowly applied as we so earlier.

Statistical hypotheses were as follows:

Ho: $\beta \leq 0$

Ha: $\beta > 0$

Regression results for application of activity based costing tool had a rating of zero. This implies that ABC had no significant contribution to enhance financial performance no sugar companies. Thus the null hypothesis had to be accepted. This implies that the tool did not have any a direct contribution to improve financial performance since it was lowly applied.

This result is in line with the finding that the Activity Based Cost Analysis Tool was lowly applied in the selected public sugar firms whereby they faced a myriad of challenges and therefore could not significantly influence Financial Performance.

Results in table 2 showed that 42 out of 84 respondents, thus 50% agree with the fact that activity based costing analysis as a tool can improve financial decision making process and however disagree that the awareness in itself improved financial performance of the selected public sugar firms. The findings agreeing that Activity Based Cost analysis can improve financial decision making is in line with those of Kumar & Mahto(2013) who found out that using ABC assists an organization to correctly estimate the cost elements of commodities and therefore inform the company`s decisions in doing away with unprofitable lines of business and even lowering prices of products or services that are overpriced. Their study further states that ABC is generally used as a tool for understanding operational costs and support strategic decisions on pricing, outsourcing and identifying plus measuring operational improvement initiatives. The study emphasized understanding the need and importance of ABC costing in business organizations.

In the study by Oseifuah(2013), the South African experience, it was established that utilization of ABC enhances insight as to the causes of dynamics in costs so as to effectively manage and control the same; understanding opportunities to reduce costs; improvements in making managerial decisions in regard to pricing and other operational areas. It was agreed that usage of ABC improves performance of the organizations financially (Oseifuah, 2013).

The results indicate that there was no significant influence to the selected public sugar companies` financial performance from just understanding of activity based costing, non sufficient application of activity based costing and by mere agreement among the respondent that activity cost benefit analysis can improve financial decision making at ($r = .108, p > .05$), ($r = -.108, p > .05$) and ($r = .097, p > .05$), respectively. This finding resonates with Cokins(2006) who wrote that in the modern days, organizations need cost information which is relevant and accurate since they seek to maintain and improve business competitiveness. More so, the report stated that the illusion of precision for firms using broad allocation of averaged costs leads to misleading decision making information. The implication herewith to organizations is that Activity Based Cost analysis as a tool should be sufficiently applied to enhance its resultant improvement on financial performance as per the agreement of the respondents that its application in the decision making process is useful.

Thematic discussions on extent of application of ABC Analysis as a tool on financial performance of selected public sugar firms in Kenya from 2011 to 2015

The questionnaire had an open ended question on extent of application of ABC Analysis as a tool and how it influences financial performance of the selected public sugar firms. The interview schedule had a similar question in regard to the third objective. The results on a thematic basis showed that ABC Analysis as a tool was well understood and its application would contribute to good financial performance of the firm. Comments were made by respondents in general to the effect that the tool faced a myriad of challenges in regard to its application such as laxity of staff, its complexity, not being practical for various decisions. These comments were found to be in line with Edwards(2008) who in a write-up on Activity Based Costing in CIMA series stated that ABC is not easy and consumes time when collecting data in respect to drivers of costs within activities. More so, certain overheads are complex to be assigned to commodities that therefore leads to arbitrary allocation of costs (Edwards, 2008). The findings of this study to the fact that application of ABC was being hindered by laxity of staff, its complexity and not being practical require quick management attention given that Kannaiah(2015) established that the tool can reveal opportunities of bringing down costs through innovative product designs and

continuously improving processes. It emphasized that ABC provides the right data on time for ensuring efficiency in management of costs. The findings were that the tool is lowly applied in the selected public sugar firms require attention by management and other stakeholders in the country and region. The study by Nitin(2015) strengthened the behavioral aspects of people in that they ought to be empowered to utilize ABC generated information for real time accounting to avoid wastage in organizations. The researcher feels that the challenges limiting the application of ABC Analysis as a tool should be addressed to enhance its usage and see whether the current trend of high operational costs that lead to losses would be reversed.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The study accepted the null hypothesis, thus there was no significant relationship that existed between application of ABC Analysis as a tool and financial performance. This was supported by the regression results for application of Activity Based Cost Analysis tool which showed the rating was zero. This means that ABC had no significant contribution to enhance financial performance of the selected public sugar companies. This implies that this factor (application of Activity Based Cost Analysis) did not have any direct contribution to improve financial performance of the selected public sugar companies since it was lowly applied.

The researcher notes that misplaced priorities, corrupt mind set, resource constraints like time, estimation shortcomings, low morale, low levels of top management enthusiasm, ambiguities in activities, poor practical techniques and general resistance in the system affect influence of costing tools on financial performance of firms. This in line with Burrus et.al(2009) whose report stated that organizations are faced with the challenge of reducing labor costs and at the same time retain the right workforce to succeed. More so, the morale and commitment of those remaining is guaranteed to decline greatly because of taking over the work of the missing workmates (Burrus, et al., 2009). The results on a thematic basis showed that ABC Analysis as a tool was well understood and its application would contribute to good financial performance of the firm. Comments were made by respondents in general to the effect that the tool faced a myriad of challenges in regard to its application such as laxity of staff, its complexity, not being practical for various decisions. The findings were that the tool is lowly applied in the firms. The researcher feels that the challenges limiting the application of ABC Analysis as a tool should be addressed to enhance its usage and see whether the current trend of high operational costs that lead to losses would be reversed.

Conclusions

The conclusions of this study on Evaluation of Activity Based Cost Analysis as a Tool on Financial Performance of selected public sugar do show how they fill the research gap and specifically in terms of new knowledge created. Thus the null hypothesis had to be accepted, that is there was no significant relationship that existed between application of ABC Analysis as a tool and financial performance. This implies that this factor (Activity Based Cost Analysis) did not have a direct contribution to improve financial performance of the selected public sugar firms. This is supported by the findings that it was lowly applied and other factors that limited its application like misplaced priorities, corrupt mind set, resource constraints like time, estimation shortcomings, low morale, low levels of top management enthusiasm, and ambiguities in activities, poor practical techniques and general resistance in the system.

On an overall basis, the researcher concludes that upon evaluation, Activity Based Cost analysis was lowly applied in the selected public sugar firms since it faced a myriad of challenges and therefore could not significantly influence Financial Performance. Direct players and other stakeholders should take keen interest in both accounting and non-accounting tools that would enhance financial performance of firms. The researcher is convinced that if the costing tool was sufficiently applied, the financial fortunes of the selected public sugar firms would have changed for the better.

All in all, the results of this study show that there is no correlation between application of Activity Based Cost Analysis and financial based indicators like profitability, Earnings Per Share, Return on Investments and Return On Assets. The researcher cautions that the major limitations of the study were lack of enthusiasm of respondents and that only two public sugar firms were selected as units of evaluation.

RECOMMENDATIONS FOR FURTHER RESEARCH

- i) Assessment of training techniques on application of Activity-Based Cost Analysis as a tool to improve financial performance in organizations.
- ii) Analyze practical approaches of Activity Based Cost Analysis on Cost Reduction

REFERENCES

- Adongo, K. O. (2013). Budgetary Control as a Measure of Financial Performance of State Corporations in Kenya. *International Journal of Accounting and Taxation*.
- Akyol, D. E., Tuncel, G., & Bayhan, M. G. (2007). A comparative analysis of activity-based costing and traditional costing. *World Academy of Science, Engineering and Technology*.
- Al-Hroot, Y. A., Mssadeh, A. A., & Amireh, M. S. (2015). The Effect of Activity-Based Costing On Companies`Financial Performance: A Study among Jordanian Industrial Shareholding Companies. *European Journal of Business and Management*.
- Belfield, C., Levin, H. M., Hollands, F., Bowden, B., Cheng, H., Shand, R., . . . Cerda-Hanish, B. (2013). Cost-Effectiveness in School Education. *Grattan Institute Conference*. Washington.
- Burrus, D., Burud, S., Klun, S., Lingle, K., Roundtree, L., & Yost, C. w. (2009). *A Cost/Benefit Analysis Tool and Guide for Human Resources, Organizational and Business Leaders*. Scottsdale: Alliance for Work-Life Progress.
- Cokins, G. (2006). *Implementing Activity-Based Costing*. Montvale: Institute of Management Accountants.
- Commons, J. R. (1931). *American Economic Review*, 648 - 657.
- Edwards, S. (2008). *Activity Based Costing*. London: CIMA.
- Elhamma, A. (2015). The Relationship between Activity Based Costing, Perceived Environmental Uncertainty and Global Performance. *International Journal of Management, Accounting and Economics*.
- Kannaiah, D. (2015). Activity Based Costing(ABC): Is It a Tool for Company to Achieve Competitive Advantage? *International Journal of Economics & Finance*.
- Kothari, C. (2004). *Research methodology: Methods and Techniques (Second Revised Edition)*. New Delhi: New Age International Publishers.
- Magbool-ur-Rehman, S. (2011, April). Which management accounting techniques influence profitability in the manufacturing sector of Pakistan? *Pakistan Business Review*.
- Nitin, K., & Mahto, D. (2013). Current Trends of Application of Activity Based Costing(ABC): A Review. *Global Journal of Management and Business Research; Accounting and Auditing*.
- Oseifuah, E. K. (2013). Activity Based Costing Approach to Financial Management in the Public Sector; The South Africa Experience. *European Scientific Journal*.
- 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*.
- San, O. T., & Heng, T. B. (2011). *Capital Structure and Corporate Performance of Malaysian Construction Sector*. USA: Centre for Promoting Ideas.
- Vedder, R. (2015). *Effective Cost Management and Profitability Analysis for the Financial Services Sector; A Structured Approach Supported by Automated Solutions*. EY Financial Services Advisory.
- Zaman, M. (2009). The Impact of Activity Based Costing on Firm Performance: The Australian Experience. *International Review of Business Research Papers*.