

Management Accounting Practice and Performance of Manufacturing Firms: Evidence from Lagos State

Mustapha Abdulrasaq (PhD)
Kwara State University, Malete
mustabdullah40@gmail.com

Abdullahi Adio Babatunde
Kwara State University, Malete
m.adio1409@gmail.com

Abstract

Management accounting practices generates information required as parts of resources for managers to pursue organization objectives in all ramifications (Drury, 2005) This is even more critical to the success of manufacturing companies with complex business process, wherein any action to be taken on the efficiency and effectiveness on cost management and other production parameters requires detail information (Marriot, 2000). Thus, performance-conscious manufacturing setting should engage in practices of generating information with the aid of various management accounting techniques. The study adopted a cross sectional research design. The population of the study comprises of 2,204 management staffs of the seventy six (76) quoted manufacturing firms in Lagos State, Nigeria. A sample of three hundred and twenty seven (327) quoted manufacturing firms that performing their trading activities in Lagos State was drawn from the population. The sample size was determined using (Krejcie & Morgan,1970) table. The sample data was analyzed using multiple regressions. The findings of the study reported a significant positive relationship between planning activities and performance of manufacturing firms at ($\beta=0.102 < 0.021$), decision making also has a significant positive impact on the performance of manufacturing firms at ($\beta=0.512 < 0.043$) and performance measurement also has a significant positive effect on the performance of management of manufacturing firms at ($\beta= 0.375 < 0.012$) respectively. The study concludes that management accounting practice has significant positive impact on the performance of manufacturing firms in Lagos State, Nigeria. The findings of this study provide guidance to the SMEs owners or managers on how to implement the planning activities and to set the performance standard for the employees in order to enhance firm performance. This study has identified gap in the existing literatures on the impacts of management accounting practice on the performance of manufacturing firms in Lagos State, Nigeria.

Keywords: Planning activities, decision making, performance measurement, management accounting practice

Paper type: Research paper

Introduction

As global competition intensifies, an increasingly important issue for manufacturing companies in Nigeria is performance. Organizational performance is described as the effectiveness and efficiency of quantifying approach that raises the organizational productivity (Hyvonen, 2016). There are so many factors that determine organization performance. These factors consist of both external and internal factors (Steinbart, 2020). Although, these organization driven-parameters are both important, internal factors such as availability of funds, efficient and effective asset management, both intangible and tangible and good management process and techniques, of which management accounting techniques are included, are very critical for performance that can be sustainable. These management techniques: product costing techniques (both process and job costing), marginal and absorption costing techniques, budget and budgetary control techniques, the use of which constitutes what have been previously described as management accounting

practices, is critical internal factors for a serious organization to record continual performance (Chenhall & Langfield-Smith, 1998). Management is expected to make use of these techniques to carry out their various functions ranging from planning, controlling, organizing, communicating and ultimately decision making.

Adding to this issue, to be confident of success, organizations need to make better quality decisions. Globalization and technological progress are making this more complicated. Long-term competitive advantage is being undermined as both the volume and velocity of information flows increase. An effective management accounting practices improves decision-making in organizations. This is because its people communicate decision-relevant insight and analysis to every decision-maker in the organization, while being alert to the organization's social and environmental duties. This is the foundation of the four Principles which set out the fundamental values, qualities, norms and features that represent management accounting practices.

Management accounting practices, if not properly deployed, may aggravate performance problems of an organization, since information needed to pursue various functions of management may not be readily available (Mia, 2020). In effect, critical management function, such as planning, controlling and decision making function, will be carried on rule of thumb.

(Mbogo,2021) asserts that management accounting practices offers the best opportunity for the manufacturing firms to compete in the global market in order to offer best quality products and services at affordable prices to consumers. Most of the previous studies on management accounting practices highly concentrated on financial accounting, information technology adoption, environmental uncertainty as well as access to finance. However, there is scanty literature on the effects of management accounting practices on the performance of manufacturing companies in Nigeria. Despite these numbers of previous studies on management accounting practice such as (Wairegi, 2019); (Makau et al 2020; Waweru, 2021; Mugambi, 2022) there are little or no empirical studies on management accounting practices for planning activities, decision making and performance measurement in Nigeria.

Management accounting practices generates information required as parts of resources for managers to pursue organization objectives in all ramifications (Drury, 2005). This is even more critical to the success of manufacturing companies with complex business process, wherein any action to be taken on the efficiency and effectiveness on cost management and other production parameters requires detail information (Marriot, 2000). Thus, performance-conscious manufacturing setting should engage in practices of generating information with the aid of various accounting techniques. The extent to which this is obtainable among indigenous Nigerian manufacturing business seems to be empirically doubtful for the fact of their abysmal performance compares to multinational companies (Avaram, 2018).

Literature Review

(Waweru,2018) examined the management accounting practices, and management accounting techniques used by publicly quoted companies in Ghana and the type of management accounting reports produced and the frequency of their production. The study also explored the management accounting techniques used by these companies and the extent of their utilization. The basic premises of the study were that the success of any business in a competitive environment depends to a large extent, on the availability of timely and quality information for planning and decision making. (Thanju,2019) evaluate the management accounting changes and determinants of these changes that occurred in these three hospitals in Nairobi between the periods of 2011 to 2017. To achieve the objectives, the researcher used descriptive cross sectional survey design where primary data was collected through structured questionnaires and personal interviews with financial manager's/management accountants of the respective Private hospitals. The data was analyzed using descriptive statistics, presented in narrations, graphical and pictorial designs for interpretation and summarization. The findings suggest that determinants of management accounting change included high competition, advancement in technology, need for financial and non-financial measures, financial

performance, board member's expectation, statutory and regulatory bodies' requirements as well as availability of resources. The study revealed that high accounting staff turnover, inadequate communication with line managers, strict government and regulatory bodies' requirements and difficulties in accessing strategic information about competitors as the main factors that hinder management accounting change. (Ovidian,2018) states that, good accounting information should be available to offer suitable and accurate decision-making that could lead to maximization of profitability of an organization and utilization of scarce resource optimally. Accounting systems also provide check for the validity through the process of auditing and accountability (Gray, 2018). Effective and efficient accounting information plays a central role in management decision making. Accounting is a tool used by business enterprises to record, report, evaluating economic events & transactions that normally affect its operations (Paulson, 2019). Accounting is the language of business as it is the basic tool for recording, reporting and evaluating economic events and transactions that affect business enterprises. It provides financial information about one's business to the internal as well as for external users, such as managers, investors and others (Arnel & Hope 2020).

(Garedew, 2019) assessed the impact of accounting information in effective decision making in Zambia development association; the study used primary source of data; that was collected from 62 office employees with close as well as open ended questions; also interview was made with directorates. Descriptive research design is used and entire population was taken from purposively selected department that has direct relationship with the Accounting related activities. T- Test was used to examine the effect of accounting information system on decision making. Key finding of this study shows that accounting information system has significant effect on decision making in development association. (Isa & Thye,2019) examined the effect of accounting information usage for planning purpose on the performance of manufacturing firms in Malaysia. Management accountants in 500 manufacturing firms were randomly selected. A total of 75 usable responses were received, that represented a response rate of 15%. Respondents comprised of senior level managers, including Chief Executive Officers, General Managers and Management Accountants. The study reported that accounting information for planning has significant and positive effect on the performance of manufacturing firms in Malaysia. (Noor & Malcolm,2021) investigated the factors that influence alignment between the requirements for accounting information (AIS requirements)

(Azize, 2021) measured the relationship between accounting information for decision making and performance of Small and Medium Sized Enterprises in Kayseri-Turkey. The data was obtained from interviews with 60 firms in the organized industrial zone and it was analyzed with the aid of ANOVA. The study reported that there is positive and statistically significant relation between accounting information for decision making and SMEs performance in Kayseri-Turkey. The use of accounting information for effective decision making improve organization performance few empirical studies available on this area of research interest, among them are that of (Samuel, 2020) did a survey of Activity Based Costing Adoption Among Manufacturing Companies in South Africa. The study reveals that inability of the traditional cost systems to provide relevant cost was the most highly ranked reason in their decision to adopt ABC. Traditional methods of allocating overhead were therefore believed to be deficient in terms of improving global competitiveness. Also, 60% of the respondents have adopted ABC due to increased ranges of products, competition and increased overhead. Familiarity with and adoption of ABC was found to be across the manufacturing, more than half of the sample are familiar with it. The 40% of respondents who have not adopted ABC cited the cost and complexity involved with it.

(Muhammad,2019) investigated the evolution of accounting information in hospitals. The study population consisted of financial employees working at the hospitals located in Tehran (Iran). The study sample consisted of 54 private hospitals and 82 public hospitals. The instrument of data collection was questionnaire. Results showed that hospitals managers don't use accounting information to reduce resources waste and create the value. Maybe, it is because of little familiarity with accounting in hospitals. Private hospitals managers use accounting information to planning and control. However, Public hospitals

managers only use accounting information to determine the services cost. Findings showed that public hospitals managers use accounting information less than private accounting. Maybe, it is because of less accountability and using governmental resources in public hospitals. (Firas,2020) examined the effect of the use of accounting information systems on the quality of financial data in Jordan. The study sampled seventy (70) individuals who work in different service sectors, and questionnaire was designed and distributed to those individuals. The study results indicated that there is a statistically significant positive effect of the nature and security of accounting information systems on the quality of financial data. However, the inputs of the accounting information systems did not affect the quality of the financial data. The level of quality of the financial data that the Jordanian service companies depend on has been found to be high. (Natalia,2018) investigated the limitations of management information utilization in decision making. The study employed an exploratory case study design on the company and its customer. The study reported that actor-based features may take different forms in the decision making. Some element of management accounting information may not be included in an organization's decision-making process structure. The study suffered from the following limitations such as insufficient actor-based features in the decision making: that is, managers may lack expertise in the use of management accounting tools, and different managers may also appreciate different scope, content, and timing of management accounting information.

A research effort on the effect of management accounting practice on organization performance has been empirically examined within Nigeria shore. (Stephen,2019) investigated the effect of performance measurement on the growth of small and medium enterprise in Kenya. Data was collected by use of questionnaire method which had both structured and unstructured questions. The study used descriptive research design. It was analyzed by the use of multiple regressions. The study found that there was positive and significant relationship between performance measurement and the growth of SMEs. (William,2021) investigated the effect of management accounting practice on financial performance of manufacturing companies in Ghana. The target population for this study was 455 manufacturing companies in Ghana. Stratified random sampling was adopted to come up with the sample size of 46 manufacturing companies in Nairobi. The study collected primary data from the respondents. The study concludes that information for decision making process is the most highly used management accounting practice among the manufacturing companies in Ghana follow by strategic analysis, budgeting, performance evaluation, costing size and leverage respectively.

(Thanju,2019) assessed the determinants of management accounting changes in three private Hospitals in Ghana. To achieve the objectives of the study, the researcher used descriptive cross sectional survey design where primary data was collected through structured questionnaires and personal interviews with financial manager's/ management accountants of the respective Private hospitals. The data was analyzed using descriptive statistics, presented in narrations, graphical and pictorial designs for interpretation and summarization. The study reported that determinants of management accounting change included high competition, advance technology, need for financial and non-financial measures, board member expectation, statutory and regulatory bodies and availability of resources. (Zabri,2022) explaining the determinants of management accounting practice in Malaysia. The study adopted cross sectional research design and analyze with the aid of multiple regression and ANOVA. The result indicates that size of the firm, intensity of market competition, commitment of owner/manager of firm and advanced manufacturing technology have significant influences on the use of certain MAPs.

Methodology

The study adopted cross sectional research design. This design was adopted where the study seeks to describe the characteristics of certain groups, estimate the proportion of people who have certain characteristics and make predictions (Churchill, 2011). The target population of the study consists of all seventy six (76) quoted manufacturing firms on the Nigeria stock exchange operating in Lagos state as at

31st December, 2021 are ideal research objectives or population. Since the study intent to use primary data to answer the research questions, senior management staff of the listed manufacturing firms constitute the sampling frame. These senior officers, based on the information extracted from their annual reports, include managing director, General Managers, Principal Manager and Seniors Managers responsible for accounting, human resources, sales and marketing, and operation/production department constituted the study sampling frame of 2,204 management staff. A sample of three hundred and twenty-seven (327) owners duly registered and performing their trading activities in Lagos State was drawn from the population. The sample size was determined using (Krejcie & Morgan,1970) table. In order to ensure a fair representation from the various sub-sector of the manufacturing SMEs. The study was analyzed using multiple regressions.

Discussion of Results

The discussion of results are illustrated in different tables.

Table 1

S/N	MD/Department	MD	GM	PM	SM	Total	No. of Company	Grand Total	Proportion of questionnaires to be randomly distributed
1.	Managing Director	1				1	76	76	$\frac{76}{2,204} \times 327 = 11$
2	Production		1	2	4	7	76	532	$\frac{532}{2,204} \times 327 = 79$
3	Accounting		1	2	4	7	76	532	$\frac{76}{2,204} \times 327 = 79$
4	Human Resource		1	2	4	7	76	532	$\frac{76}{2,204} \times 327 = 79$
5	Sales & Marketing		1	2	4	7	76	532	$\frac{76}{2,204} \times 327 = 79$
								2,204	327

Source: Authors Compilation (2022)

Table 2 Reliability Test using Cronbrach's Alpha

Variable	Cronbach's alpha	N
Planning activities	0.703	6
Decision making practices	0.753	6
Performance measurement	0.711	6
Overall total	0.7223	18

Source: Author's Computation, 2022.

The assumption of Cronbach alpha is that any value greater than 0.7 is acceptable and makes the data to be reliable and the instrument is unreliable if otherwise. The Cronbach Alpha coefficient of each of the above variables is relatively reliable at 0.703%, 0.753% and 0.711% for panning, decision making and performance measurement respectively. Therefore, research can rely on the variables as a measure of management accounting practice.

Table 3 Normality Test

S/N	Constructs	Mean	S.D	Skewness	Kurtosis
1.	Planning activities	4.6774	.33685	-1.371	1.846
2.	Decision making practices	4.7462	.35698	-1.492	1.703
3.	Performance measurement	4.8022	.27717	-1.597	1.635

Source: Author`s Computation, 2022.

This study also carried out a normality distribution test with the aid of skewness and kurtosis. The rule of thumb is that a normality distribution problem arises when the values of skewness and kurtosis fall outside the range of -3 and +3. Based on the results in table 3 it shows that the data is normally distributed because none of the variables has values that falls outside the range of -3 to +3 (Tabachnick & Fidell, 2007).

Table 4 Regression results on effect of management accounting practice on Firms performance

Variables	Coefficient	Standard Errors	t-value	P-value
Planning activities	0.102	0.024	4.248	0.021
Decision making	0.512	0.026	19.692	0.043
Performance Measurement	0.375	0.029	12.931	0.012
Constant	0.184	0.089	2.067	0.040
F-statistic	72.50			
P-value	0.002			
R-square	0.682			
Adjusted R-square	0.680			

Sources: Author`s computation, 2022

The result in table 4 showed the coefficient of determination (R^2) and the fitness of the model. The result shows that the independent variables used in the study explained more than 68% variations in the dependent variable, as shown by the coefficient of determination (R^2) value of 0.682. The remaining 32% represents other proxy of independent variables that were not used in this study. The result in table 4 also revealed that the model is fitted as indicated by F-statistic of 72.50 which is significant at 5% as indicated by the p-value of 0.002. The testing of hypotheses was conducted following the fitness of the model.

Discussion of Findings

Extant literature revealed that much empirical studies focused on the level of adoption of accounting information among the manufacturing firm instead of the effect of management accounting practices on firm performance. This trend motivated the need to examine the effect of management accounting practice and the extent to which management accounting practices has improved the performance of manufacturing

firms in Lagos State, Nigeria. This research effort has suggested based on the results, that firms performance is significantly influenced by management accounting practice.

The first research question is used to investigate the first objective, which examine the effect of accounting information for planning on the performance of manufacturing firms. The result shows that accounting information for planning has a significant positive effect on the performance of manufacturing firms in Lagos State. This suggested that if the organization fails to use accounting information to plan they will plan to fail and consequently result in poor performance. This is similar to argument put forth by Some authors such as (Anand,2017), (Azize ,2017),(Chenhall &Langfield-Smith 2019); (Hopwood ,2018),(Outley,2018), (Merchant ,2018),(Adler et al, 2018), (Abdel-Kader & Luther,2018), (Waweru, 2018), (Isa & Thye,2019), (Thanju, 2019), who reported that management accounting practice has significant positive effect on the performance of manufacturing firms. This contrasted with the findings of (Muhammad,2016), (Daniel, 2019), (Majeed,2020) and (Salawu, 2020) who used different proxy for management accounting practice such as activity based costing to measure management accounting practice.

The second research question which is used to investigate the second objective, sought to determine the effect of accounting information for decision making on the performance of manufacturing firms. It is adduced from the findings that decision making has a significant positive relationship with the performance of manufacturing firms. This implies that if decision making is very effective in an organization, it will enhance the performance of the manufacturing firms. The significant effects match the findings of (Sadiya, 2016), (Yusuf & Bolarinwa,2019), (Natalia ,2018), (Majeed ,2020), who found that effective decision making is a major determinants of organization performance. However, the finding is also in contrast to the studies carried out by (Noor & Malcolm,2017), (Arneld &Hope,2019), and (Ovidian, 2018) who found insignificant relationship between accounting information for decision making and performance of manufacturing firms.

The third research question is used to investigate the third objective. This objective examines the effect of accounting information for performance measurement on the performance of manufacturing firms. Performance measurement has significant positive relationship with the performance of the manufacturing firms. The results suggest that performance measurement such as return investment, budget, balanced scored card and variance analysis influence the performance of manufacturing firms. The finding is in accordance with prior studies such as (Okoli ,2018), (Ahmad,2019), and (Shamsudeen,2020) who reported a significance positive relationship between performance measurement and Firm`s performance. This finding also matches the findings of (Xiao, 2015), (Hvonen ,2016) and (Clark,2019). Similarly, (Olutlay, 2018) who also reported a significant positive relationship between accounting information for performance measurement and Firm`s performance.

These findings are dissimilar to the finding of (Haldman & Laats,2006) who studied the effect of performance measurement on firm performance. The finding revealed that there is no significant relationship between performance measurement and firm performance. Against the findings of the study, (Mat,2017) also deduced that sampled respondents reported that there is negative and insignificant relationship between performance measurement and Firm performances.

Conclusion

This study investigates the effect of management accounting practice on the performance of manufacturing firms in Lagos State. The findings of the study revealed that substantial numbers of management accounting studies investigated do explain variation in performance of the sampled firms. In view of the above reported findings, the study arrived at the following conclusion below:

The study concludes that the use of planning activities to develop strategy and monitor employees has capacity to influence the performance of the manufacturing firms in Lagos State. The study also discovers

a positive impact of effective decision making practice on the performance of manufacturing firms. In the same vein, the study also revealed that where the performance of employees is highly measurable and predictable, it will have positive effect on the performance of manufacturing firms.

Limitations of the study

One of the limitations experienced in this study is the uniqueness nature of the study. There is limited literature on management accounting practice specifically in the developing country context like Nigeria which restricted the ability of the researcher to compare the findings of this study to a greater extent. It was therefore important to borrow theories and empirical evidence from other disciplines to address the gap. Given that the study was conducted in Lagos State, Nigeria. Therefore, this study is required to be replicated in other part of Nigeria. This study also adopted a cross sectional design which only provides a snapshot at a particular time period.

Contribution to knowledge

This section presents areas in which the present study contributes to the management accounting literature. For the first time, management accounting practice was studied from the perspective of planning activities, decision making and performance measurement which is often neglected from the Nigeria perspective. The dimension of management accounting practices in context of planning, decision making and performance evaluation will provide insight to business owner on how various management accounting techniques can be used to perform various management functions

References

- Avaram, O. (2018). Effect of decision making practices on the performance of manufacturing firms in Nigeria. *International journal of management Science*, Vol. 2, No. 5, Pp. 103-137.
- Arneld, Y. & Hope, I. (2019). Effect of financial reporting on organizational performance. *Journal of Small Business Enterprise Development*, Vol. 1, No. 1, Pp. 140-149.
- Azize, W. (2017). Effect of accounting information system on the performance of small and medium sized enterprise in Kayseri-Turkey. *Journal of Banking & Finance*, Vol. 3, No. 2, Pp. 299 - 315.
- Barney, D. (2010). The Impact of accounting information systems on firm performance: empirical evidence in Turkish small and medium sized enterprises. *International Review of Management and Marketing*, Vol. 2, No. 3, Pp. 413-429.
- Chenhall, K. & Langfield-field, M. (2019). Effect of management accounting techniques on the performance of manufacturing firms in Australian. *Journal of Interdisciplinary Studies*, Vol. 2, No. 3, Pp.101-119.
- Churchill, Y. (2011). Adoption of activity management practices: a note on the extent of adoption and the influence of organizational and cultural factors. *Journal of Management Accounting Research*, Vol. 15, No. 4, Pp. 383-399.
- Daniel, T. (2019). Determinants of management accounting system in Nigeria manufacturing and trading enterprises. *International Journal of Tourism Research*, Vol. 3, No. 2, Pp. 119–127.

- Davies, K. & Karr, M. (2019) Effect of management accounting practice on the performance of listed manufacturing companies in Lagos State. *International Review of Management and Business Research*, Vol. 2, No. 2, Pp. 34-47.
- Drury, C. (2008). *Cost and management accounting*. (3rd Edition). LTD Press.
- Galbreath, M. & Galvin, I. (2008). Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms, *Journal of Information Systems and Small Business*, Vol. 1, No. 2, Pp. 71-91.
- Garedew, K. (2019). Impact of accounting information in effective decision making in Zambia. *Journal of International Accounting, Auditing and Taxation*, Vol. 1, No. 1, Pp. 53-69.
- Firas, R. (2020). Effect of accounting information on effective decision making. *Journal of Operations Management*, Vol. 3, No. 2, Pp. 313-336.
- Gulick, M. & Urwrik, W. (2016). Determinants of organization performance in Nigeria. *International journal of Management Information Technology*, Vol. 2, No. 1, Pp. 18-34.
- Haldma, K. & Laats, F. (2019). Effect of contingency factors on management accounting practice. *International journal of information science and technology*, Vol. 6, No. 3, Pp. 602- 619.
- Hvonen, A. (2016). Determinants of the level of accounting information on large manufacturing firms in Finland. *The British Accounting Review*, Vol. 2, No. 6, Pp. 155–172.
- Hyvonen, J. (2016). Determinants of accounting information on large manufacturing firms in Finland. *International Journal of Innovative Research in Management*, Vol. 3, No. 2, Pp. 13 - 18.
- Malcom, B. (2021). Management accounting and organization change in Malaysian. *Journal of Investment Management and Financial Innovations*, Vol. 4, No. 2, Pp. 216-232.
- Muhammed, L. (2019). Effect of management accounting control system in Kenya. *International Journal of Business Administrative and Management*, Vol. 2, No. 4, Pp. 65-77.
- Marriot, D. (2000). The impact of information communication Technology on the Financial Performance of banks in Ghana. *European Journal of Information and Communication Technology*, Vol. 2, No. 4, Pp. 227-236.
- Mia, S. (2020). Effect of accounting information on decision making process. *Journal of Management Accounting Review*, Vol. 6, No. 9, Pp. 716-731.
- Natalia, U. (2018). Effect of management accounting information on the decision making process. *International Journal of Accounting Information Systems*, Vol. 6, No. 4, Pp. 241-259.
- Noor, M. & Malcolm, G. (2017). Effect of accounting information on the performance of manufacturing SME in Malaysia. *Journal of Economics, Business and Management*, Vol. 4, No. 2, Pp. 102-120.

- Outlay, I. (2018). An empirical study on the relationship between organizational factors and adoption of ICT among health related SMEs in Nairobi, Ghana. *International Journal of Arts and Commerce*, Vol. 2, No. 3, Pp. 1-16.
- Ovidian, L. (2018). Effect of accounting information on decision making. *Journal of Enterprise Information Management*, Vol. 1, No. 1, Pp. 13-29.
- Paulson, W. (2017). Effect of accounting information on organization performance. *International of Innovation in Business*, Vol. 2, No. 6, Pp. 604-629
- Shamsudeen, I. (2020). The relationship between system quality, information quality, and service quality among Nigeria banks. *Journal of Business Finance and Accounting*, Vol. 4, No. 2, 127-141
- Samuel, O. (2020). Determinants of activity based costing adoption among manufacturing companies in South Africa. *Journal of International Business Review*, Vol. 2, No. 1, Pp. 284 - 292.
- Samuel, Y. (2018). *Introduction to production management*. (6th Edition). Ibadan: ABC Press.
- Smith, A. (2010). Effect of staff motivation on job performance in selected manufacturing firms in Lagos State. *International Journal of Management Science*, 2(3), 79-93.
- Thanju, Q. (2019). Determinants of management accounting changes in three private Hospitals in Nairobi. *International Journal of Information Management*, Vol. 4, No. 2, Pp. 288-296.
- Thye, D. (2019). Impact of accounting information system in decision making process in local non-governmental organization in Ethiopia. *International Journal of Business and Management Invention*, Vol. 2, No. 6, Pp. 114-129.
- Waweru, K. (2018). Factors influencing activity based costing (ABC) adoption in manufacturing Industry. *Interdisciplinary Journal of Information, Knowledge and Management*, Vol. 3, No. 4, Pp. 910-926.
- Wernerfelt, D. (1984). Impact of accounting information system in decision making process in local non-governmental organization in Ethiopia. *International Journal of Business and Management Invention*, Vol. 2, No. 6, Pp. 114-129.
- Xiao, E. (2015). Effect of management accounting practice on organizational performance in China. *Journal of Accounting and Economics*, 17(9), 819-833.
- Williams, K. (2012). The impact of accounting information in assisting organizations in making sound and effective decision. *International Journal of Accounting Education and Research*, Vol. 1, No. 4, Pp. 139-156.