
Management Accounting Information and Decision Making of Not-for-Profit Organisations in Rwanda

Twesige Daniel¹, Kato Mahazi², Sazir Nsubuga Mayanja^{2,*}

¹School of Business, INES-Ruhengeri, Ruhengeri, Rwanda

²School of Post Graduate Studies, University of Kigali, Kigali, Rwanda

Email address:

saznsumay@gmail.com (S. N. Mayanja)

*Corresponding author

To cite this article:

Twesige Daniel, Kato Mahazi, Sazir Nsubuga Mayanja. Management Accounting Information and Decision Making of Not-for-Profit Organisations in Rwanda. *Science Journal of Business and Management*. Special Issue: *Business Policy & Strategic Management*. Vol. 8, No. 3, 2020, pp. 141-148. doi: 10.11648/j.sjbm.20200803.15

Received: September 7, 2019; **Accepted:** October 15, 2019; **Published:** July 22, 2020

Abstract: The main objective of the study was to examine the contribution of management accounting information to the decision-making process of not-for-profit making organizations, with International Fertilizer Development Centre (IFDC) as the case study. Both qualitative and quantitative research design was used, and respondents were purposively selected. The sample survey involved 140 employees of International Fertilizer Development Centre (IFDC) located in four countries (Rwanda, Burundi, DRC and Kenya). 46 respondents were determined using the Raosoft sample size calculator. Data was collected using questionnaires, interviews and desk research. Analysis was made using SPSS. The findings indicated that management accounting information is frequently used in decision making as represented by 69.5% of the respondents. 98.3% of the respondents agreed that they use it in strategic decisions, 93.5% agreed that they used it in operations decision. The most used management accounting techniques include budgeting (97.8%), financial report analysis (97.8%), management report (95.2%), variance analysis (93.5%), CVP analysis (91.3%) and cost accounting (91.3%). It was recommended that, because of its importance, as evidenced by these findings, managers at all level of the organisation should employ the various management accounting information in their decision-making process.

Keywords: Management Accounting, Decision Making, Not-for-Profit Organizations, Managers, Information, Budgeting, Planning

1. Introduction

CGMA define management accounting from a commercial orientation as the sourcing, analysis, communication and use of decision-relevant financial and non-financial information to generate and preserve value for organisations [1]

Management accounting is the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information used by management to plan, evaluate and control within an entity and to assure appropriate use of and accountability for its resources. Management accounting also comprises the preparation of financial reports for non-management groups such as shareholders, creditors, regulatory agencies and tax authorities" (Chartered Institute of Management Accountants,

Official Terminology) [2]. The term management accounting is composed of 'management' and 'accounting'[3]. The word 'management' here does not signify only the top management but the entire personnel charged with the authority and responsibility of operating an enterprise. Management accounting involves furnishing accounting information to the management, which may base its decisions on it. It is through management accounting that the management gets the tools for an analysis of its administrative actions and can lay suitable stress on the possible alternatives in terms of costs, prices and profits, etc. However, it should be understood that the accounting information supplied to management is not the sole basis for managerial decisions. It has been observed that along with the accounting information, management takes into consideration or weighs other factors concerning actual execution, for example to reach a final decision,

management has to apply its common sense, foresight, knowledge and experience of operating an enterprise, in addition to the information that it already has. [4]

2. Literature Review

Today's business environment is changing faster than ever before, and the organisations' success in the market depends on the timely possession of quality information [5]. The information itself is nothing without its correct interpretation [6]. In recent years organisations pay attention to the regular collection of information on events thus significantly increasing the importance of management accounting. Management accounting is a particularly important source of information for obtaining competitive advantage, and is one of the important arms of strategic management, for example through making optimal cost and pricing decisions.

To make good strategic decisions, and thus achieve competitive advantage, it is necessary that organisations' management uses the wealth of information on relevant factors that affect success in the environment, as well as on the events within the organisation. Without relevant, reliable, and timely information on current and potential competitors the contemporary company does not have a lot of opportunities for survival and development.

The history of management accounting dates back to the rapid industrialization of the late 19th century. It was the management tool of choice for performance control. Since then, management accounting information has become dominant due to its strategic management role in the early 20th century. Kaplan points out that, during the 21st century, a series of researches appeared in journals that made the case for the recognition of fundamental principles in management accounting. [7] This highlighted the need for decision of manager support information on the inductive principles that underline scientific method. Accounting systems can aid in decision-making providing information relevant to the decision and to the decision maker [8]

Information is indispensable for decision-making in any organization. The problem however lies in the quality and validity of the information, that is, if it is timely, adequate, relevant and clear. The making of decision, from personal experience can be a burdensome task [9]. In most cases indecision is as disastrous as making a wrong decision, therefore a plan of action is indispensable. Management is constantly confronted with the problem of alternative decision-making especially knowing that resources are relatively scarce and limited.

Falsified accounting information was the reason for many failed banks in Nigeria [10]. The major purpose of the use of management accounting information is to minimize risk, failure and uncertainties and also stay ahead of competitors. The importance of management accounting information is distorted by unqualified accountants who generate inaccurate information.

Management accounting information is not only necessary for evaluation of the past and keeping the present on course;

it is also useful in planning the future of the enterprise, and it has been observed that "this planning we may conventionally call budget/budgeting targets, which give meaning and direction to operations of the organization within a defined period [11]. At the end of the budget period the actual results are compared with budgeted performance and discrepancies (variance) are analysed for purposes of exposing the causes so as to prevent re-occurrence. Decision-making is one of the key factors that lead to mild development (growth) of private companies in Africa [12]. There is no evidence in support of the use of management accounting information in the decision-making of Not-for-Profit Organization while those Not-for-Profit Organizations plays an important role in social and economic development of Rwanda. Research findings also reveal the scope of management accounting as limited (relative to comparable sectors); rarely extending beyond budgeting, monitoring spending variances and monitoring conversion ratios. This is despite their size, using complex accounting software, and having qualified accountants as staff. [13] It is within this context that the study analyses the use and effect of management accounting information in the decision making of not-for-profit making organisation. In Ghana, two thirds of NGOs used budgeting as at tool for monitoring and budgeting with techniques for measuring efficiency not being used, other than versions of the three conversion ratios, and in general, management accounting adoption is relatively limited in NGOs [14].

2.1. Conceptual and Theoretical Framework of Analysis

The conceptual framework shows the relationship between variables. The independent variable which is management accounting system is measured by costing, budgeting, CVP analysis, variance analysis, pricing, financial report, financial statement analysis. The dependent variable which is decision-making is measured by strategic decisions and operation decision. In addition, it also shows other variables (moderating variables) which affect the dependent variable which are management style, environment, objectives and goals.

Management accounting consists of a set of tools that have been proven to be useful in making decisions involving cost data, price and profit. Profitability is used especially as an indicator of effective decision making in organizations. Various techniques such as marginal costing, absorption accounting and cost volume profit analysis and how they are used differ from one organization to another [15]. A tool that proves to be very effective in an organization may fail in another organization. Different information is required for different purposes, so the organization must focus on the different accounting tools to support the decision-making process. These different types of information provide the grounds for financial planning and control as well as allow taking of knowledge-based decisions regarding the enterprise future, production, services, departments.

Total Quality Management (TQM) normally associated with production has relationship with management accounting because like TQM, management accounting it

targets continuously improving performance, enhancing accountability and measuring efficiency and effectiveness. It is essentially a way of planning, organizing and understanding each activity, and depends on each individual at each level. The concept of decision-making is a complex

subject with a vast amount of management literature behind it. How businessmen make decisions has been intensively studied. In management accounting, it is useful to classify decisions as: strategic, tactical and short-run and long-run [16].

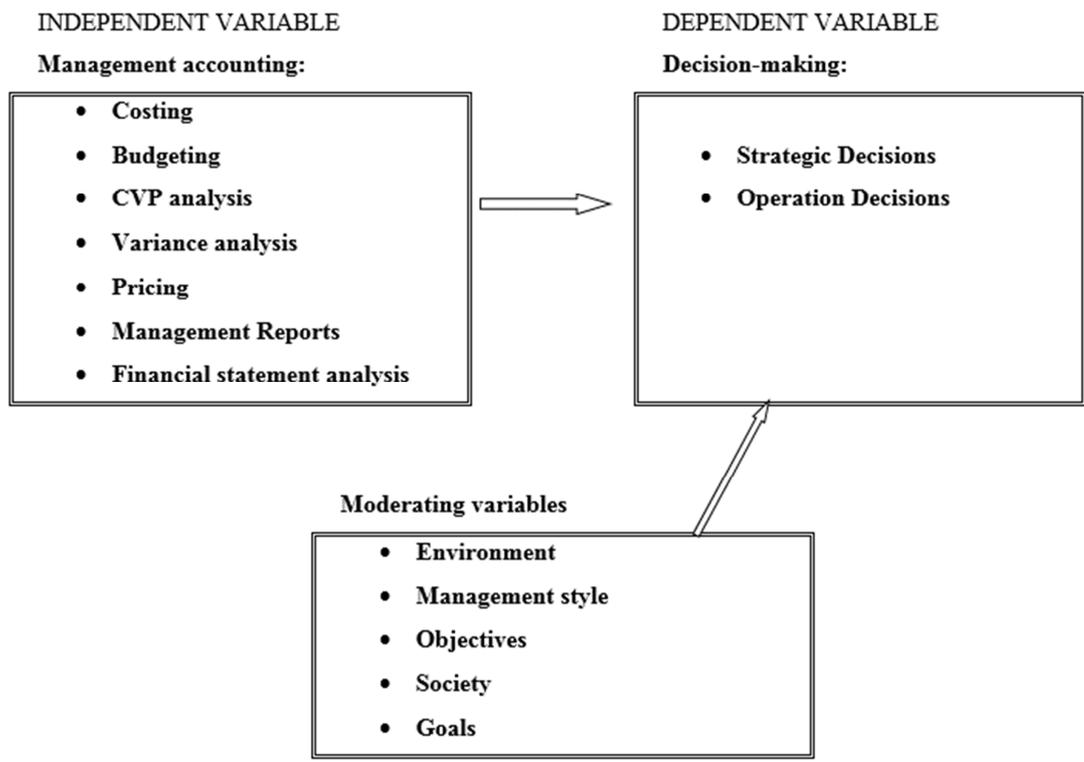


Figure 1. Conceptual Framework.

2.2. Management Accounting

In management accounting, the objective is not necessarily to make the best decision but to make a good decision. Because of complex and interacting relationships, it is very difficult, even if possible, to determine the best decision. Management decision-making is highly subjective. This is partly because of complex interacting relationships of the factors in the micro and macro environment of business and partly because it is not feasible to have all the information, resources and time required to make the perfect decision. Management decision-making is highly subjective.

Whether a decision is good or acceptable depends on the goals and objectives of management. Consequently, a prerequisite to decision-making is that management has set the organization’s goals and objectives. In setting goals and objectives, it is useful to distinguish between strategic and tactical decisions. In setting goals and objectives, it is useful to distinguish between strategic and tactical decisions. [17] A strategic decision is one which is made during a current time but whose primary effect will be felt during some future time. Strategic decisions affect organizational structure and objectives. Strategic decision cannot be delegated lower than a particular level [18]

Strategic decisions are broad-based qualitative type of

decisions which include or reflect long term goals and objectives. Generally, they are non-quantitative in nature and are based on the subjective thinking of management concerning goals and objectives. Tactical decisions are quantitative executable decisions which result directly from the strategic decisions. The distinction between strategic and tactical is important in management accounting because the techniques of management accounting pertain primarily to tactical decisions. Tools in management accounting such as C-V-P analysis, variance analysis, budgeting, and incremental analysis are not designed to deal with long range objectives and decisions. The only tools that look forward to more than one year are the capital budgeting models. Consequently, the results obtained from using management accounting tools should be interpreted as benefits for the short-run and not necessarily the long-run.

3. Methodology

A case study and a survey design were used in this study. The study design was based on a multi-method strategy which used both qualitative and quantitative research approaches. This helped to have a triangulation of different results. A multi-method strategy occurs when more than one research strategy and data source are used in a study of social phenomena. [19]

Employees of IFDC located in four countries; Rwanda, Burundi, DRC and Kenya totaling 140 were the population for the study. A sample size of 46 was calculated and determined using the Raosoft sample size calculator. The respondents within the selected population were selected purposively. This was because the study required people with technical knowledge about the study. In order to achieve the objectives of the study, primary data was collected by holding in-depth interviews. The interviews involved discussions between the researcher and the respondents on the importance of management accounting information in decision-making. This approach was consistent with the work of researchers who argued that in-depth interviews constitute one of the vital approaches for understanding phenomena that have not been significantly studied. During the interview, a set of questions were designed to guide the researcher in the interview process. [20] The quantitative data was collected using one set of questionnaires which was designed using a five point scale, both closed and open ended questions were used. The other approach that was used in data collection is the documentation of literature search.

The data which was collected through interview was edited and imported into SPSS through rich text format. Data was classified and organized into themes using mother and child nodes. Themes were merged and modified as meaning was attached to the data being analysed. The coding resulted into concepts that were used to identify the emerging relationships amongst the different variables. The survey data that was generated from the questionnaires was analysed using both exploratory and confirmatory statistical techniques. After receiving the completed questionnaires from the field, a data entry capture template was designed in the Statistical Package for Social Scientists (SPSS) which was used for data entry. After data entry and cleaning up, exploratory statistical data analysis was conducted using frequency distribution tables to summarise and display the respondents' views on the questions under study.

4. Findings and Discussion

This section presents, analyses and interprets the data and information collected from the respondents

Table 1. Frequency of the use of management accounting information in decision-making.

Question: How frequently do you use management accounting information in strategic (long-term) decision-making?					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sometimes	7	15.2	15.2	15.2
	Frequently	32	69.6	69.6	84.8
	Always	7	15.2	15.2	100.0
	Total	46	100.0	100.0	

In order to establish the level of the use of management accounting information in the decision-making of IFDC, the respondents were asked to rate the frequency of the use of management accounting information. In table 1 above 15.2% of the respondents indicated that they sometimes use management accounting information in the decision-making,

69.6% of the respondents indicated they frequently use the management accounting information and 15.2% indicated that they always use management accounting information in the decision-making. The results from the survey revealed that management accounting is a key component in the decision-making.

Table 2. Reasons for the use of Management Accounting Information.

Question: Why do you use Management Accounting information for decision-making					
	Reasons	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to have basis of decision-making	15	32.6	32.6	32.6
	to increase the accuracy of decisions	16	34.8	34.8	67.4
	decision is not possible without management accounting information	15	32.6	32.6	100.0
	Total	46	100.0	100.0	

Respondents were asked the reasons as to why they use management accounting information in their decision-making process. The results in table 2 above show that 32.6% of the respondents use management accounting information in order to have basis of making decision, 34.8% use it in order to increase the accuracy of the decision made and

32.6% of the respondents use management accounting information because making decision is impossible without management accounting information. Results from the survey as indicated in the table above show that management accounting information is very important to the decision-making.

Table 3. Use of Accounting Information in Strategic and tactical Decisions.

Question: Do you use management accounting information in strategic and tactical related decisions					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	19	41.3	41.3	41.3
	Agree	26	56.5	56.5	97.8
	Not Sure	1	2.2	2.2	100.0
	Total	46	100.0	100.0	

In table 3 above, respondents were asked whether they use management accounting information in the strategic and tactical decision of the organisation. Results from the survey show that 41.3% of the respondents strongly agreed that they use management accounting information in the strategic decision and tactical, 56.5% of the respondents agreed

whereas 2.2% of the respondents were not sure. The results as indicated above imply that the majority of the respondents agreed that they use management accounting information in the strategic and tactical decision of the organisation. This, therefore, means that management accounting information is key tool in the strategic and tactical decision-making process.

Table 4. Use of Accounting Information in Operation Decision.

Question: Do you use management accounting information in operations related decisions					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	24	52.2	52.2	52.2
	Agree	19	41.3	41.3	93.5
	Not sure	3	6.5	6.5	100.0
	Total	46	100.0	100.0	

Operations decisions are very important in the effective and efficient management of the organisation. The results as presented in table 4 above show that 52.2% of the respondents strongly agreed that they apply management accounting information in the operations decision, 41.3% of the respondents agreed and 6.5% of the respondents were not

sure. As indicated in the table above, the majority of the respondents (93.5%) agreed that they use management accounting information in the operations decision of the organisation. This, therefore, means that management accounting information is very fundamental in the operations decision-making process of the organisation.

Table 5. Use of Management Accounting Information in Geographical Decision.

Question: Do you use management accounting information in Geographic Composition related decisions					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	18	39.1	39.1	39.1
	Agree	23	50.0	50.0	89.1
	Not sure	5	10.9	10.9	100.0
	Total	46	100.0	100.0	

The researchers were interested to know whether they apply management accounting information before operating in any geographical context. The results from the survey in table 5 above revealed that majority of the respondents

(89.1%) agreed that they apply management accounting information in the geographical decision of the organisation. This helps them to determine best location to start their operations.

Table 6. Use of Management Accounting Information in Planning and Controlling.

Question: Do you use management accounting information in planning and control decision					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	23	50.0	50.0	50.0
	Agree	19	41.3	41.3	91.3
	Not sure	4	8.7	8.7	100.0
	Total	46	100.0	100.0	

Planning and controlling are key functions of management. The results as presented in the table 6 above show that 50% of the respondents strongly agreed that they use management accounting information in planning and controlling, 41.3% of

the respondents agreed and 8.7% of the respondents were not sure. The results revealed that the majority of the respondents (91.3%) agreed that they use management accounting information in the planning and controlling decisions. making.

Table 7. Use of Management Accounting Information in Quality Decision.

Question: Do you use accounting information in service Quality decisions					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	17	37.0	37.0	37.0
	Agree	20	43.5	43.5	80.4
	Not Sure	8	17.4	17.4	97.8
	Disagree	1	2.2	2.2	100.0
	Total	46	100.0	100.0	

Quality is one of the key dimensions for measuring the

efficiency and effectiveness of the management team. The

results presented in table 7 above show that 37% of the respondents strongly agreed that they use management accounting information in the decision-making, 43.5% agreed, 17.4% of the respondents were not sure and 2.2% of

the respondents disagreed. The results from the survey revealed that, the majority of the respondents (81.5%) agreed that they use management accounting information in the quality decision.

Table 8. Use of Accounting Information in Human Resource Policies.

Question: Do you use accounting information in Human resources policies [Acquisition, Recruitment (internal and external), and Selection and hiring decisions] related decisions					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	22	47.8	47.8	47.8
	Agree	22	47.8	47.8	95.7
	not sure	2	4.3	4.3	100.0
	Total	46	100.0	100.0	

The results in table 8 above show that the majority (95.6% of the respondents) agreed that they use management accounting information in human resource policy decisions.

Table 9. Use of Accounting Information in Performance Analysis.

Question: Do you use accounting information in the Performance measurement related decisions?					
	Response	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	41.3	41.3	41.3
	Agree	22	47.8	47.8	89.1
	Not sure	5	10.9	10.9	100.0
	Total	46	100.0	100.0	

Whereas the profit-making aims at maximising profit, the non-profit organisation aims providing service to the clients. The results as presented in table 9 above show that 41.3% of the respondents strongly agreed that, they management accounting information in the performance

analysis, 47.8% agreed and 10.9% of the respondents were not sure. The information from the survey revealed that, the majority of the respondents (89.1%) use management accounting information in the performance analysis of the organisation.

Table 10. Use of Accounting Information in Fixed Asset Decision.

Question: Do you use accounting information in Investment in fixed assets (lease or purchase) related decisions					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	15	32.6	32.6	32.6
	Agree	29	63.0	63.0	95.7
	not sure	2	4.3	4.3	100.0
	Total	46	100.0	100.0	

Management of fixed assets is very important in the smooth running of the organisation. Managers need to make decision on whether to invest or divest in the fixed assets. The results presented in table 10 above, show that 32.6% of the respondents strongly agreed that they, management

accounting information in the fixed assets management decisions, 63% agreed and 4.4% of the respondents were not sure. The results from the survey revealed that management accounting information is highly applied in the management of assets as represented by 95.6% of the respondents.

Table 11. Management Accounting Techniques used in IFDC.

Question: Which of the following management accounting technique do you use in the decision-making		
Techniques	Frequency	Percentages
Cost Accounting	42	91.3
Financial Reports analysis	45	97.8
CVP Analysis	42	91.3
Budgeting	45	97.8
Variance Analysis	43	93.5
Management Reports	44	95.5

Literature provides various management techniques that are used in the decision-making. Results from the survey in table 11 above show that 91.3% of the respondents indicated use of cost accounting information. 97.8% indicated the use

of financial report in the decision-making, 91.3% indicated the use of CVP analysis in the decision-making, 97.8% indicated the use of budgeting in the decision-making and 95.5% indicated the use of management reports.

Table 12. Information on the components that are contained in the performance Management Accounting Systems.

Question: Which of the following components that are contained in the performance Management Accounting Systems			
	Response	Frequency	Percent
Valid	Planning	30	65.2
	KPIs	20	43.5
	Business intelligence	0	0
	Governance risks and compliance	15	32.6
	Standardised reports	10	21.7
	Objective Optimisation and analytics	20	43.5
	We do not have any	0	0

In table 12 above 65.2% of the respondents indicated that system has the planning tool, 43.5% indicated key performance indicators (KPI), none of the respondents indicated the existence of business intelligence, 32.6% indicated the existence of the governance risk and

compliance tools, 21.7% indicated the existence of standardised reports and 43.5% indicated the existence of objective optimisation and analytics. The results revealed that the organisation uses various management tools. This can help in the effectiveness of the decision-making.

Table 13. Components that are contained in the enterprise resource System (ERS).

Question: Which of the following components that are contained in your enterprise resource System			
	Components	Frequency	Percent
Valid	Finance and accounting systems	43	93.4
	Supply Chain Management (value chain management)	40	86.9
	Manufacturing (Producing service)	25	62.5
	Human resource management	42	91.3
	Project management	42	91.3
	E-Commerce	15	32.6
	We do not have any	0	0

Another important tool in the effective management accounting information is the existence of the enterprise resource system tools. Results in the table 13 above show that 93.4% of the respondents indicated the existence of finance and accounting systems, 86.9% indicated the existence of supply chain management systems, 62.5% indicated manufacturing systems, 91.3% indicated the

existence of human resource management systems, 91.3% indicated the project management systems and 32.6% indicated the use of e-commerce. The results from the survey revealed that the organisations' enterprise resource system contains various tools that are used in providing management accounting information which eases the decision-making process.

Table 14. Importance of the Techniques in the Decision-making.

Question: Rate the importance of management accounting information in the decision-making					
	Responses	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Important	31	67.4	67.4	67.4
	Important	15	32.6	32.6	100.0
	Total	46	100.0	100.0	

In table 14 above, respondents were asked to rate the importance of management accounting information in the decision-making. Results from the survey show that 67.4% rated management accounting as very important and 32.6% rated it important. The results from the survey reveal that 100% of the respondents indicated that management accounting information is important in the decision-making.

5. Conclusion and Recommendations

Management accounting information is a key input to the decision making. Managers at all level of the organisation should employ various management accounting information in their decision-making process. Management accounting

succeeded to convert challenges to opportunities. Management accounting information extends services to various organisations. Decision makers must be equipped with the new technology and management accounting Basing on the results coupled with the theories from the previous studies, the following recommendations were suggested. The organisation should provide periodic training to the employees on the new rules, regulations and accounting technique in order to enable them to compile up to date information for the decision making. The accounting system and the computer system should be flexible to accommodate the changes in the accounting rules, regulations and techniques. All the organisation processes should be automated to enable quick decision making. Decision support

systems should be installed and integrated in the management accounting information system in order to simplify the decision-making process techniques.

References

- [1] CGMA (2014). Global management accounting principles. London: CGMA.
- [2] CIMA (2014) CIMA Official Terminology.
- [3] Horngren's Cost Accounting (2019) A Managerial Emphasis 16th Edition Datar Solutions Manual.
- [4] Horngren A Textbook of Accounting for Management, 3rd Edition, Vikas Publishing House, 2012-Business & Economics.
- [5] Inanga, E. and B. Schneider (2005). The failure of accounting research to improve accounting practice: a problem of theory and lack of communication. *Critical Perspectives on Accounting*, 16, 227-248.
- [6] Horngren, C., Sundem, G., Stratton, W., Burgstahel, D., Schatzberg, J. (2008). *Introduction to management accounting*, Person, Prentice Hall, Australia.
- [7] Robert S. Kaplan, Ella Mae Matsumura, S. Mark Young (2012) Management Accounting: Information for Decision-Making and Strategy Execution, 6th Edition, 2012, *Pearson*.
- [8] Mia, L. & Patier, A. (2001). The use of management accounting systems in hotels: an exploratory study. *Hospitality Management Journal*, 20/2, 111-128.
- [9] Fitsum K. (2012). *Decision-making and The role of Management Accounting*, New York.
- [10] Joints Auditors' First Bank (2001). *Annual Report and Account (2000/2001)*. Accounting information and performance of banking sector in Nigeria: Journal of management.
- [11] Collier, P. & Gregory, A. (1995). Strategic management accounting: a UK hotel sector case study, *International Journal of Contemporary Hospitality Management*, 7, 450.
- [12] Kaberuka, D. (2014). *Decision-making and organisational development in Africa: Conference paper*, African Development Bank, Addijan
- [13] Brendan Clerk (2017): Management Accounting a tInternational Development NGOs A thesis submitted to Dublin City University Business School In partial fulfilment of the requirements for the degree of Doctor of Philosophy submitted August, 2017.
- [14] Fiador, V. (2013). Determinants of financial governance practices: Evidence from NGOs in Ghana. *International Journal of Sociology and Social Policy*, 33 (1/2), 114-130.
- [15] Pellinen, J. (2003). Making price decisions in tourism enterprises. *Hospitality Management*, 22/3, 217-235.
- [16] Atrill, P., McLaney, E. (2009). *Management Accounting for Decision Makers*, Pearson.
- [17] Education Limited, England.
- [18] Bounds, G., Dobbins, G., Fowler, O. (1995). *Management. A total quality perspective*, South-Western College, Cincinnati, Ohio.
- [19] Kaplan, S. Robert & Anthony A. Atkinson. (2010). *Advanced Management Accounting*, Addison Wesley & Longman, Pte. Ltd, New Delhi.
- [20] Bryman & Bell. (2003). *Business Research Methods*, Oxford University Press. New York.
- [21] Kothari, C. R. (2000). *Research Methodology, Methods and Techniques*: Wiley East Limited.