
Measurement of Accounting Information and Managerial Decision Making: Analytical Evidence from Rwandan Savings and Credit Cooperative Organizations

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Abstract

This study was about evaluating the contribution of accounting information on managerial decision making. The study considered total population is 10 in period of 2016-2018 where a sample size of 8 respondents was considered. The findings show that the predictor variables; income statement, balance sheet and cash flow statement explained the decision making in Cooperative Kanjongo SACCO. R square of 0.956 (95.6%) supported the findings. This implies that the predictor variables (income statement, balance sheet and cash flow statement) can explain the decision making at 95.6%. By conclusion, it is clear from study area that accounting information contribute in decision making of Umurenge SACCO daily operations to ensure its effective management.

Keywords: Information from statement of profit and loss, Information from statement of financial position, Information from cash flow statement, Strategic decision making, Tactical decision making, Operational decision making.

1. Introduction

Accounting information is part and parcel of today's life, which is necessary to understand the accurate financial situation of the organization and used as the basis of making any decisions. Since strategic decisions have a long-term effect on the business and therefore, it is important to analyze accounting information for making strategic decisions. Accounting information helps managers understanding their tasks more clearly and reducing uncertainty before making their decisions (Chong, 1996). Accounting is sometimes referred to as a means to an end, with the ending being the decision that is helped by the availability of accounting information (Arnel & Hope, 1990). Accounting systems can aid in decision making providing information relevant to the decision and the decision maker (Gray, 1996). Effective and efficient accounting information plays a central role in management decision making (Trimisiu & Tunji, 2012).

Accounting information is one type of information recognized as a 'learning machine' that can help to evaluate how objectives might be achieved by quantifying the financial impact of each alternative available to the decision (Burchell, Clubb, Hopwood, Hughes, & Nahapiet, 1980). Accounting and financial information are among the most important information widely used in managerial decisions (Royae, Salehi, & Aseman, 2012). Within contemporary economic conditions, a successful manager needs a lot of reliable accounting information to be able to

make quality business decisions (Miko, 1998). Economical information especially financial and accounting ones are the information which always managers use in short-term and strategic decisions and they may have most application among different variables effective in decision-making and all types of decisions (Royaei, Salehi, & Aseman, 2012)

The making of a decision, as everyone knows from personal experience is a burdensome task, says Wadia (1966). In most cases indecision is as disastrous as making a wrong one. 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. It is therefore pertinent that good accounting information is made available for proper and accurate decision making, maximization of profitability and optimal utilization of the scarce resource. Accounting information is not only necessary for evaluation of the past and keeping the present on course; it is useful in planning the future of the enterprise.

Decision making is the process of choosing alternative courses of action using cognitive processes. Making decision is necessary when there is no one clear course of action to follow. Accounting systems can aid our decision making by providing information relevant to a decision and the decision making. Accounting systems also provide a check for validity through the process of auditing and accountability (Gray, 1996). Effective and efficient accounting information plays a central role in management decision making.

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(Project Topics, 2018) There are some areas where accounting information helps decision making. It provides investors a baseline of analysis for – and comparison between – the financial health of security-issuing institutions. Financial accounting helps creditors assess the solvency, liquidity and creditworthiness of businesses. Financial accounting (and its cousin, managerial accounting) helps organizations make business decisions about how to allocate scarce resources. Financial accounting information helps in making Investment decisions as fundamental analysis depends heavily on a company's balance sheet, its statement of cash flows and its income statement. All of the financial statements for publicly traded companies are created and reported according to the financial accounting standards set forth by the Financial Accounting Standard Board (FASB).

Without the information provided by financial accounting, investors would have less understanding about the history and current financial health of stock and bond issuers. The requirements set forth by the FASB create consistency in the timing and style of financial accounts, which means that investors are less likely to be subject to accounting information that has been filtered based on a firm's current condition (Project Topics, 2018).

Accounting information also aids lending or dividend decisions as number of common accounting ratios that creditors rely on, such as the debt-to-equity (D/E) ratio and times interest earned ratio, are derived from the financial statements. Even for privately owned businesses that do not necessarily follow the requirements of the FASB, no lending institution assumes the liability of a large business loan without critical information provided by financial accounting techniques (Project Topics, 2018).

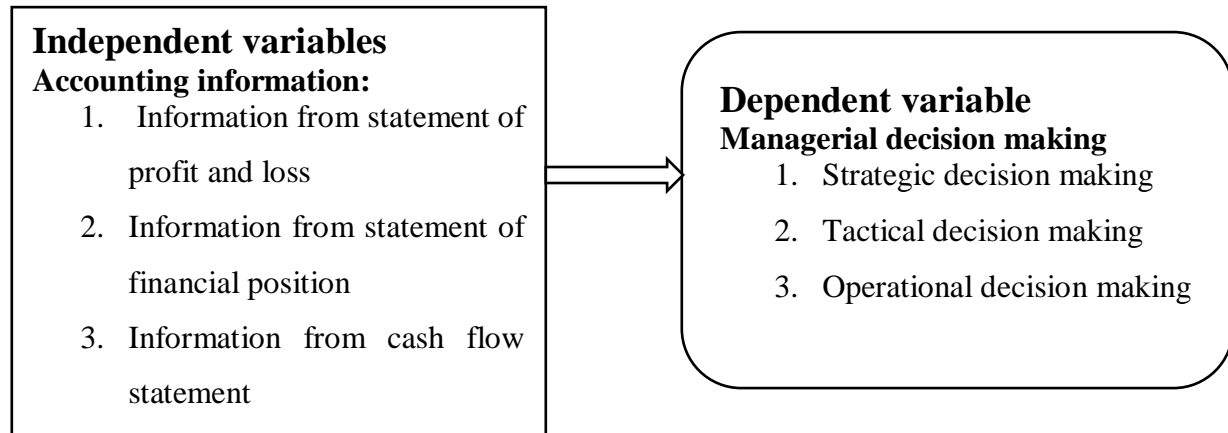
Reliable accounting serves a practical function for the firms themselves. Beyond the regulatory and compliance hurdles that financial accounting helps clear, financial accounting also helps managers create budgets, understand public perception, track efficiency, analyze performance and develop short- and long-term strategies.

In this study three decision areas such as strategic decision, tactical decision and operational decision were selected. These different levels of decision somehow or in one way or the other solely depends on accounting information. Without accounting information individuals, companies or business organization into various kind of management cannot determine strategic, tactical and operational decision to be taken. Accounting information helps to take strategic decisions by giving the proper view of present and future conditions of the organization. This study is initiated to evaluate the importance i.e. the impact of accounting information on managerial decision making in Kanjongo SACCO.

2. Conceptual Framework

A conceptual framework diagrammatically illustrates the predictor variables and how they interact with the dependent variable(s) in the study (Mugenda, 2003).

Figure 1: Conceptual Framework



3. Statement Of The Problem

Information is absolutely necessary for decision making in any business organization. The problem however lies in the quality and validity of the information, i.e. if it is timely, adequate, and clear. The main purpose of the use of accounting information is to reduce risk, failure and uncertainties and also stay ahead of competitors. Not minding the immense benefit derived from the use of accounting information, it is generally acknowledged that most unqualified accountants generate inaccurate information and so result in failure of organizations to achieve desired goal. In other words the major problem discovered when making decisions in an organization is the identification of fundamental concept of accounting information to be implemented by each company which can affect the company positively or negatively.

These problems stated immensely contribute to the failure of the use interpret or understand accounting information in business with the result that inappropriate decisions are made to the

detriment of the organization. It is only through accounting information that managers and external users get a picture of the organization.

This study will seek to show the information organization can derive from accounting information and their usefulness for decision making in business organization. The purpose is to see the need for accounting information to any business organization how it helps in managerial decision making

4. Empirical Framework

According to (Kanani, 2016) through the Impact of Accounting Information on Management Decision Making Process. From his findings, it shows that accounting information play a vital role in making investment, financing, dividend and lending decisions. The sufficient supply and proper use of accounting information had gone a long way in helping management in making efficient and effective decision and for this, there is a significant of impact of the use of accounting information as an aid to management decision making in the institutions. The study also found that accounting information system leads to good financial reports and also leading to better decision making. Furthermore, the findings showed that there were the challenges faced by users of accounting information such as: new technology, time consuming, manual work and external report.

According to (Lengauer, 2006) examined the Impact of Accounting Information on Management Decision Making Process in Wexiödisk. Throughout this thesis the importance of financial information as gained through management accounting tools was underlined. Apparently, decisions are affected by this data. This is also the case in Wexiödisk. This leads us to the answer how those accounting tools affects the decisions made by the company

Also, (Siyanbola & Trimisui, 2012), explained “accounting information as an aid to management decision. Findings on accounting information does not have any significant effects on management decision making concludes that accounting information has significant effect on management decision agrees with the work of (Keimer, 2008) who found out that accounting information obviate the necessity of remembering various transaction. Furthermore, he confirms that there is a significant relationship between the perception of employees and accounting information falls in line with the finding of (Douglas & Carichael, 2007) who postulated that employees and their representative are interested in information about the stability and profitability of their employers and also interested in the information which enables them to assess the ability of the enterprises to provide remuneration, retirement benefits and employment opportunities. Finally, he concludes that the study revealed that accounting information performs a crucial role on management decisions and organization performances, which has been shown to be major force in decision making. This is achieved by implementing the best fundamental concept of accounting suitable for each company.

(Nnenna, 2012), aimed at studying how effective and efficient the instrument of good accounting information is in decision making in an organization. From her findings, she revealed that the use of accounting information improves/enhances decision making in organizations.

(Ng’wandu P. , 2009) In his study titled “The Impact of Financial Statement in Decision Making Process” came up with the findings that the management relies on financial statement to the high extent of ninety-one percent. Reliability and accuracy of financial statement of a non-government hospital known as Mbeya hospital was due to the fact that it was somehow computerized this facilitated recording competence and developing experienced workers as well as good supervision by the management. He also found that some important information for

decision making was not reflected on the financial statement. Normally financial statements issue historical information while decision making is about the future.

(Ng'wandu P. , 2013) In his study entitled "The Impact of Financial Statement in Decision Making in Mbeya" came up with the findings that the management relies on accounting information to a high extent that was ninety-one percent.

(Michael, 2008) In his research study entitled "Factors to Contributing to Poor Accounting Information Systems", carried out a study on Mwanza city council. He found that in Mwanza City Council there is a shortage of accountants and computers, this leads to the results that accounting information does not go thorough in time the required; therefore, the organization needs to solve this problem. A failure to solve this problem can be a huge burden too few accountants are available. They should provide more training courses to the existing personnel in internal management. It was strongly recommended that the management especially in accounting system should attend short courses. Another recommendation was that the organization should improve its working condition. For example, by providing equitable working tools such as computer.

(Harendra, 2016) Studied relationship that existed between accounting information and decision making in Sri Lankan Industrial Division. Sample for the study consisted of 70 public quoted manufacturing companies operating in the country. The relationship between accounting information and marketing and manufacturing related strategic decision making was analyzed using Pearson's Correlation. Findings from the study indicated that accounting information has a statistically significant strong positive correlation with both marketing related strategic decision making of companies operating in Sri Lanka's manufacturing sector.

(Hafij, Jamil, & Syeda, 2014) Did study on what role of accounting information has in making strategic decisions specifically in industrial businesses in Bangladesh. Five areas that require strategic decision such as manufacturing decision, human resource decision, basic strategic decision, long term investment decision and marketing decision were considered for the study. T-test, Mean, Standard deviation and percentages, were used to define efficiency of the accounting information when making strategic decisions that are long-term. The study proved that there is noteworthy relationship that exists between accounting information and strategic decisions in all the designated areas that considerably depend on accounting information.

5. Methodology

The methodology of conducting this research is based on different methods among which we have to compare and analyze different sources of information regarding information system and decision making. The data were analyzed through SPSS software by applying the linear regression and the Pearson correlation to access significance of the variables and their relationship.

5.1 Data

Data were collected from the field using questionnaire which was self-directed, observation and interview responding by Kanjongo SACCO staff. On the client's interview, the researcher used directive and semi-directive interviews. The total population under this study is 10 where all have been chosen for study purpose

5.2 Research instruments

Primary data and second data collection had been used in order to achieve the research purpose. Primary data has been collected through observation, interview and questionnaire. References has been made through an intensive review of the reports, journals, books, magazine and internet materials for making a clear understanding of the institution understudy which is Kanjongo SACCO and making a good linkage of Kanjongo SACCO accounting information system and decision making by using SPSS version 20.0.

6. Result and Discussion of Findings

6.1 Income statement and decision making in study area

In this case income statement as a determinant of accounting information was assessed to know how income statement influence the determinants of decision making.

Table 1: Income statement and decision making in study area

| Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Mean | Std deviation |
|---|-------------------|----------|---------|-------|----------------|-------------|-----------------|
| Income statement to strategic decision making | 0% | 0% | 0% | 37.5% | 62.5% | 1.3750 | 0.51755 |
| Income statement to tactical decision | 0% | 0% | 0% | 12.5% | 87.5% | 1.125 | 0.353553 |
| Income statement to operational decision | 0% | 0% | 0% | 25% | 75% | 1.25 | 0.462910 |
| Average | | | | | | 1.25 | 0.444671 |

Source: Primary data, July, 2019

In table 1 the researcher sought to know how the income statement influence decision making; in fact it was revealed that information from income statements of one accounting period helps the management of SACCO to strategic decision making as reported by 100% of respondent who agreed to this statement; 100% of respondents said that income statements prepared by SACCO are used when making tactical decisions and users of income statement information were able to use in operational decision making as 100% of respondents reported this situation. The overall mean was 1.25 and overall standard deviation was 0.444671. The findings imply that the respondents agreed in general that income statement have an impact on decision making.

6.2 Balance sheet and decision making

It necessary to evaluate whether balance sheet as a determinant of accounting information was influencing the determinants of decision making.

| Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Mean | Std deviation |
|--|-------------------|----------|---------|-------|----------------|----------------|-----------------|
| Balance sheet to strategic decision making | 0% | 0% | 0% | 50% | 50% | 1.5 | 0.543452 |
| Balance sheet to tactical decision | 0% | 0% | 0% | 37.5% | 62.5% | 1.3750 | 0.51755 |
| Balance sheet to operational decision | 0% | 0% | 0% | 37.5% | 62.5% | 1.3750 | 0.51755 |
| Average | | | | | | 1.41667 | 0.526184 |

Table 2: Balance sheet and decision making

Source: Primary data, July, 2019

Table 2 shows balance sheet influences decision making; actually it was revealed that accounting information from balance sheet is used by management of SACCO in strategic decision making as reported by 100% of respondent who agreed to this statement; 100% of respondents said that balance sheet information is faithfully represented and this is key in management tactical decision-making process and balance sheet information, the employees of SACCO can be depended on when making operational decisions as 100% of respondents reported this situation. The overall mean was 1.41667 and overall standard deviation was 0.526184. The findings imply that the respondents agreed in general that balance sheet has an impact on decision making.

6.3 Cash flow statement and decision making

It necessary to evaluate whether cash flow statement as a determinant of accounting information was influencing the determinants of decision making.

Table 3: Cash flow statement and decision making

| Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Mean | Std deviation |
|--|-------------------|----------|---------|-------|----------------|----------------|----------------|
| Cash flow statement to strategic decision making | 0% | 0% | 0% | 25% | 75% | 1.2500 | 0.46291 |
| Cash flow statement to tactical decision | 0% | 0% | 0% | 50% | 50% | 1.5000 | 0.53452 |
| Cash flow statement to operational decision | 0% | 0% | 0% | 25% | 75% | 1.2500 | 0.46291 |
| Average | | | | | | 1.33333 | 0.48678 |

Source: Primary data, July, 2019

Table 3 shows cash flow statement influences decision making; actually it was revealed that accounting information from cash flow statement is important information especially when making strategic decisions SACCO as reported by 100% of respondent who agreed to this statement; 100% of respondents pointed out that users of accounting information have information from cash flow statement can depend on when they making tactical decisions and information form cash flow statement is clear and highly understandable with SACCO's employees when making operational decisions as 100% of respondents reported this situation. The overall mean was 1.33333 and overall standard deviation was 0.48678. The findings imply that the respondents agreed in general that cash flow statement has an impact on decision making.

6.4 Decision making in Kanjongo SACCO

The researcher evaluated how decisions are made in study area referring to different decision making indications reported in study area.

Table 4: Decision making in Kanjongo SACCO

| Statement | Strongly disagree | Disagree | Neutral | Agree | Strongly agree | Mean | Std deviation |
|--|-------------------|----------|---------|-------|----------------|--------------|-----------------|
| Strategic decisions are made by board of directors through accounting information | 0% | 0% | 0% | 50% | 50% | 1.5 | 0.53452 |
| Decisions of the management largely depends on accounting information | 0% | 0% | 0% | 37.5% | 62.5% | 1.3750 | 0.51755 |
| Decisions about the perception of employees is made through accounting information | 0% | 0% | 0% | 12.5% | 87.5% | 1.1250 | 0.35355 |
| Decisions as to whether the SACCO is making profits or not is made via accounting information | 0% | 0% | 0% | 62.5% | 37.5% | 1.6250 | 0.51755 |
| Time factor in decision making is largely dependent on accounting information | 0% | 0% | 0% | 25% | 75% | 1.2500 | 0.46291 |
| Decisions about overall performance of the organization via growth, effectiveness, productivity etc. is made through accounting information. | 0% | 0% | 0% | 25% | 75% | 1.2500 | 0.46291 |
| Management can easily make effective decisions that would move the SACCO forward through accounting information. | 0% | 0% | 0% | 50% | 50% | 1.5000 | 0.53452 |
| Average | 0% | 0% | 0% | | | 1.375 | 0.483359 |

Source: Primary data, July, 2019

Table 4 shows decision making was executed as different decision making indications were reported; actually it was revealed that Strategic decisions are made by the board of directors

through accounting information as reported by 100% of respondent who agreed to this statement; 100% of respondents pointed out decisions of the management largely depends on accounting information, 100% of respondents said that decisions about the perception of employees is made through accounting information, decisions as to whether the SACCO is making profits or not is made via accounting information was reported to be decided as it was reported by 100% who agreed while responding to the corresponding question, 100% of respondents agreed while responding that time factor in decision making is largely dependent on accounting information, for performance, 100% of respondents agreed that decisions about overall performance of the organization via growth, effectiveness, productivity etc. is made through accounting information and finally, management can easily make effective decisions that would move the SACCO forward through accounting information as it was reported by 100% of respondents. The overall mean was 1.375 and overall standard deviation was 0.483359. The findings imply that the respondents agreed in general that decision making is effectively done due to accounting information.

6.5 Regression analysis

The findings were analyzed using regression analysis using fit model, ANOVA and regression of coefficient to evaluate whether accounting information have impact on decision making.

6.5.1. Fit analysis

Table 5: Fit analysis

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .978 ^a | .956 | .924 | .41115 |

a. Predictors: (Constant), Cash flow statement, Income statement, Balance sheet

Table 5 shows the fitness of the regression model in explaining the variables under the study. The findings show that the predictor variables; income statement, balance sheet and cash flow statement explained the decision making in Cooperative Kanjongo SACCO. R square of 0.956 (95.6%) supported the findings. This implies that the predictor variables (income statement, balance sheet and cash flow statement) can explain the decision making at 95.6% and the remaining 4.4% are explained by other variable which were not studied in this research and the researcher recommend that that they could be put into consideration in future studies.

6.5.2. Analysis of variance

Table 6: Analysis of variance (ANOVA)

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1 | Regression | 14.824 | 3 | 4.941 | 29.231 | .004 ^b |
| | Residual | .676 | 4 | .169 | | |
| | Total | 15.500 | 7 | | | |

a. Dependent Variable: Decision making

b. Predictors: (Constant), Cash flow statement, Income statement, Balance sheet

Table 6 presented ANOVA statistics which indicates that the overall model was statistically significant. Probability (p) value of 0.004 supported this. The reported p was significant in this study because it was less than the conventional probability of 0.05 significance level. These results indicate that income statement, balance sheet and cash flow statement are good predictors of decision making.

6.6 Regression of coefficients

Table 7: Regression of coefficient

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---------------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| (Constant) | -.208 | .325 | | -.641 | .556 |
| 1 Income statement | .291 | .107 | .304 | 2.729 | .053 |
| Balance sheet | .641 | .377 | .641 | 1.700 | .164 |
| Cash flow statement | .199 | .344 | .214 | .578 | .594 |

a. Dependent Variable: Decision making

A linear regression line is used as an equation of the form $Y = a + bX$, where X is the explanatory variable and Y is the dependent variable. The slope of the line is b , and a is the intercept (the value of y when $x = 0$). The study uses linear regression by analyzing the decision making in terms of income statement, balance sheet and cash flow statement as independent variables, with managerial decision making in terms of “*decision making*” as dependent variable. The study used the formula of $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon$

Y is dependent variable indicator which is “decision making” independent variable factors which are “income statement, balance sheet and cash flow statement”.

The Linear Regression Test between accounting information and managerial decision making show the result of;

$$y = -0.208 + 0.291X_1 + 0.641X_2 + 0.199X_3 + \epsilon$$

The X_1 represents income statement, X_2 represent balance sheet and X_3 represent cash flow statement and lastly ϵ represents standard errors. As explained by the linear regression equation, it is clear that one unit change of X_1 and X_2 , lead to change times 0.291, 0.641 and 199 of dependent variable respectively. In the other case if all independent variable indicators are zero, the dependent variable equals to the constant (-0.208).

Thus, according to the results indicated to the table 13, there is positive relationship between managerial decision making and income statement, balance sheet and cash flow statement and decision making

a) When Kanjongo SACCO use income statement only without other factors, result on the decision making became

$$y = -0.208 + 0.291107X_1 + .0.107$$

b) Therefore, when Kanjongo SACCO use balance sheet only, the decision making was becoming

$$y = -0.208 + 0.641X_2 + 0.377$$

c) Therefore, when Kanjongo SACCO use balance sheet only, the decision making was becoming

$$y = -0.208 + 0.199X_2 + 0.344$$

7. Conclusion

This study was interested on the impact of accounting information on managerial decision making in study area, actually the motivation for this research was that accounting information contribute in Umurenge SACCO workers in their daily decision making. The objectives of this study were; to assess the determinant of accounting information in study area, to analyze the indications of decision making in study area, to measure the relationship between determinants of accounting information and indication of Managerial decision making in study area.

By conclusion, it is clear from study area that accounting information contribute in decision making of Umurenge SACCO daily operations to ensure its effective management. Normally, they have expanded and managed their daily operations and made effective decisions. Actually, they have moved from situations of multiple problems, particularly financial, to seeing themselves as viable in decision making. They feel more secure because they can meet their effective financial statements operations and decision making. However, they are still facing some challenges in the integration of accounting information in decision making of Umurenge SACCO operations and once they are mitigated with proposed strategies the small businesses will be effectively promoted.

References

- 1) Anderson, D., & Raun, D. (1978). *Information Analysis in Management Accounting*. New York: A Wiley/Hamilton Publication.
- 2) Arnel, & Hope. (1990). *Accounting for Environmental Decision making*. Retrieved from www.imanet.org
- 3) Babbie, E. (2008). *Research Methods for Social Work*. Brooks/Cole, Belmont.
- 4) Birnbaum, M. H. (1983). Base Rates in Bayesian Inference: Signal Detection Analysis of the Cab Problem. *American Journal of psychology*, 85-94.
- 5) Burchell, S., Clubb, C., Hopwood, A., Hughes, J., & Nahapiet, J. (1980). The roles of Accounting in organizations and society. *Accounting, Organizations and Society*, 5, 5-27. doi:10.1016/03613682(80)90017-3
- 6) Chapman, L. (2018). *Define Accounting Information*. Retrieved from Biz Fluent: <https://bizfluent.com/facts-7952572-define-accounting-information.html>
- 7) Chong, V. K. (1996). Management Accounting Systems, Task Uncertainty and Managerial performance. *A research note*, 21, 415-421. doi:10.1016/0361-3682(95)00045-3
- 8) Cooper, D., & Schindler, P. (2006). *Business Research Methods* (11th ed.). New Delhi, India: McGraw-Hill Publishing, Co. Ltd.
- 9) Creswell, J. (2003). *Research Design. Qualitative, Quantitative, and Mixed Method Approaches*.
- 10) Creswell, J. W. (1994). *Research Design. (Sage, Ed.) Qualitative and Quantitative Approaches*.
- 11) Cronbach, R. (1951). Mortgage Default among Rural. *Journal of Housing Research*, II, 349-369.
- 12) Dawes, R. M. (1979). The Robust Beauty of Improper Linear Models. *American Psychologist*, 571-582.

- 13) Douglas, R., & Carichael, R. (2007). Accountants' Handbook: Accounting policies. Business and Economics, 1056.
- 14) Drury, C. (2000). Management & Cost Accounting (5nd ed.). London: Thompson Business Press.
- 15) Emmanuel, C., Otley, D., & Merchant, K. (1990). Accounting for Management Control (2nd ed.). London: Chapman & Hall publishing.
- 16) Gray. (1996). Accounting will only be relevant. pp. 56-86. Retrieved from <http://www.oppapers.com/essays/accounting>.
- 17) Hafij, U., Jamil, A., & Syeda, T. (2014). Role of Accounting Information in strategic Decision Making in Manufacturing Industries in Banladesh. Double Blind Peer Reviewed International Research Journal, I(14), 5-12.
- 18) Hair, F. Bush, D. & Ortinau, M. (2000). Research methods for business: (5th ed.). Aggarwal printing press.
- 19) Harendra, K. (2016). Relationship between accounting information and decision making in the Sri Lankan Manufacturing sector. International Journal of Business and Management Invention, IV, 524-554.
- 20) Holsapple, C., & Whinston, A. (1996).
- 21) Horngren, C. T., Sundem, G. L., & Stratton, W. O. (2002). Introduction to Management Accounting (12th ed.). (E. Cliffs, Ed.) NJ:: Prentice-Hall International.
- 22) James, W. (2013, July 24). Management Definition. (WikiCFO) Retrieved from The Strategic CFO: <https://strategiccfo.com/management-definition/>
- 23) Kahneman, D., L, K. J., & Thaler, R. H. (1990). ExperimentAL test of the endowment and the Coase theorem. Journal of political Economy, 1325-1348.
- 24) Kanani, A. R. (2016). Impact of Accounting Information on Management Decision Making Process. Research paper, Sumve Hospital in Kwimba District, Mwanza Region.
- 25) Keimer, A. (2008). Uses of Accounting and Limitation of Financial Accounting. Gupta Platinum Ezine Articles.
- 26) Kothari, C. (2004). Research Methodology. Methods and Techniques (2).
- 27) Kothari, C. (2010). Research Methodology. Methods and Technique.
- 28) Krishnaswani, & Ranagnathan. (2006). Methodology of Research in Social Sciences (2nd ed.). India: Himalaya Publishing.
- 29) Langlely, A., Mintzberg, H., Pitcher, P., Posada, E., & Saint-Macary, J. (1995). Opening up Decision Making (Vol. 3). Institute for Operations Research and the Management Sciences.
- 30) Lawrence, A., Gordon, & Narayanan, V. (1984). Management Accounting Systems. Environmental Uncertainty and Organization Structure, IX(1), 33-47.
- 31) Lengauer, V. (2006). The impact of accounting information on management's decision-making process. Wexiödisk.
- 32) Michael, M. (2008). Mollé Michael, (2008). Factors to Contributing to Poor Accounting Information Systems. Research report, Mwanza.
- 33) Miko, L. (1998). Accounting Management Information Used For Strategic Decisions. Original scientific paper, 22, 52-53.
- 34) Mugenda, O., & Mugenda, A. (2003). Research methods. Nairobi: African centre for technology.
- 35) Ng'wandu, P. (2009). The Impact of Financial Statements in Decision Making process. Research report, Tanzania Revenue Authority , Dar es Salaam.

- 36) Ng'wandu, P. (2013). The Impact of Financial Statement in Decision Making. Research paper, Mbeya.
- 37) Nnenna, O. M. (2012). How effective and efficient the instrument of good accounting information is in decision making in an organization. Research paper.
- 38) Project Topics. (2018). Impact of Accounting information on Decision Making Process. Retrieved from project topics: <https://www.projecttopics.org/impact-accounting-information-on-decision-making-process/>
- 39) Reneau, J. H., & Grabski, S. V. (1987). A review of research in computer-human interaction and individual differences within a model for research in accounting information systems. *Journal of information system*(2), 33-53.
- 40) Royae, R., Salehi, A., & Aseman, H. S. (2012). Does Accounting Play A Significant Role In Managerial Decision-Making? *Research Journal of Business Management and Accounting*, I, 57-63.
- 41) Sadeghi, R. H. (2015). The impact of presentation quality of financial statements on improving organizational decisions. *Research and Training Center of railway*(273).
- 42) Siyanbola, & Trimisiu, T. (2012). Accounting Information as an Aid to Management Decision Making. *Accounting Information as International Journal of Management and Social Sciences Research (IJMSSR)*.
- 43) Trimisiu, & Tunji. (2012). Accounting Information As An Aid To Management Decision Making. *International Journal of Management and Social Sciences Research (IJMSSR)*, 1, 29-30.