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ROLE OF MANAGEMENT ACCOUNTING TECHNIQUES IN DECISION-MAKING AND PERFORMANCE OPTIMIZATION

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Abstract

The role of management accounting techniques in decision-making and performance enhancement inside companies is investigated in this work. Data from **150 participants** across several sectors were gathered for the quantitative investigation using a **descriptive study approach**. Four main management accounting techniques—budgeting, cost analysis, variance analysis, and performance measurement—are investigated in this paper on organizational performance and decision-making. With the biggest effects indicated for budgeting and performance measurement, **regression analysis** verified that every one of the four approaches significantly influences decision-making processes. Particularly in view of performance measurement, **correlation analysis** also confirmed the presence of a favourable

link between the application of these approaches and performance optimization. The study emphasizes the basic help of management accounting methods in organizational performance enhancement and decision-making improvement. The study offers insightful analysis for companies trying to maximize their management accounting techniques for better performance and decision-making despite restrictions including sample size and possible self-reporting bias.

Keywords: Management Accounting, Decision-Making, Performance Optimization, Budgeting, Cost Analysis, Variance Analysis.

1. INTRODUCTION

Every company depends on managerial performance (Gardi et al., 2021). For various reasons, managerial performance is really remarkable. First of all, managerial performance shows how successfully a manager meets objectives (Hapuarachchi & Amarasinghe, 2019). It also shows profitability and state of the economy. Managerial performance design helps to define personal success. Moreover, effective management performance will accomplish corporate success by a decision-making process that makes use of knowledge (Hiromoto et al., 2019). Indeed, a component of managing involves making decisions. Pramono (2023) contend that the core of management responsibilities is decision-making thus it is essential to make the appropriate ones. One can make better, more informed decisions when they use accounting information provided by the company in conjunction with their knowledge of the accounting system.

An accounting information system used by managers, the management accounting system (MAS) offers Nielsen, 2018 Since MAS generates information (Suriyanti, 2024), it is absolutely vital for decision-makers (Abu Afifa & Saleh, 2022). MAS in the company helps decision-makers to perform administrative responsibilities. Rather, MAS relates managerial performance to raise management quality (Astuty ety al., 2023) and as a source of organizational competitive advantage. Nonetheless, MAS has been under discussion among academics and practitioners that results in MAS research among accounting academics (Ameen, 2018).

Businesses rely on MAS for specific reasons. According to Fuadah et al. (2020), the system provides managers with the information they need first. Furthermore, MAS alters the surrounding environment, which in turn modifies a reference (Rachman et al., 2023). Thirdly, when MAS interacts with budgetary participation, it affects managerial performance. Afifa et al. (2023) found a positive correlation between managerial performance and all MAS features. This brings us to our fourth point. Last but not least, MAS provides the data needed for control and planning. On the sixth point, the system safeguards company procedures, rules, and professionals. Seventh, MAS links to management conduct in logical decision-making and has principles that reflect stakeholder theory. Lastly, MAS supports the decisions and controls made by managers (Joshi & Krishnan, 2023).

In today's highly competitive and ever-changing business environment, companies are continuously seeking methods to improve their decision-making processes and achieve their full potential. Using management accounting techniques effectively is a significant aspect that influences these outcomes. Budgeting, cost analysis, performance measurement, and variance analysis are all important management accounting approaches that help managers and decision-makers receive the financial and operational data they need to make smart, strategic decisions. Aligning company operations with overarching corporate objectives is another benefit of these methods, which also aid in monitoring and regulating organizational resources.

In recent decades, there has been a growing amount of interest in the role of management accounting in improving performance and making decisions.Strategic planning, asset allocation, and performance evaluation are becoming more and more dependent on up-to-date and relevant information as firms undergo transformation. The effects of management accounting systems on organizational performance and decision-making are increasingly recognized as crucial, but these effects also serve as a foundation for ongoing research.

The goal of this research is to investigate management accounting approaches and their effects on decision-making and organizational performance. Specifically, it seeks to determine if these techniques have a significant impact on management decisions and how well firms perform as a result. This study will take a quantitative approach to shed light on how these tactics are implemented and what they contribute in various sectors and organizational environments. The research approach, data collection procedure, and analysis will follow a theoretical assessment of management accounting systems. Using this technique, the study reveals how crucial management accounting is for modern firms, bridging the gap between theory and reality.

1.1.Research Objectives

The Objectives of present study are:

- To examine how management accounting influences corporate operations and strategic choices.
- To investigate how management accounting techniques can improve organizational performance through cost control, resource allocation, and profitability enhancement.

1.2.Research Hypothesis

Null Hypothesis (H_0A): Management accounting methods do not substantially influence the decision-making procedures of businesses**.**

Alternative hypothesis (H_1A): Management accounting practices greatly influence how firms make decisions.

Null Hypothesis (H_0B): Management accounting procedures do not significantly contribute to optimizing organizational performance**.**

Alternative hypothesis (H_1B): Management accounting approaches are crucial for maximizing the performance of organizations.

2. LITERATURE REVIEW

Anh (2025) looked over 68 books released between 2010 and 2024. The research included a more in-depth discussion of MA as well as an application of MA in Vietnam and a show of research techniques applied in this subject. Specifically, the study revealed the reasons behind the use of MA in practice, compiled data regarding the employment of MA approaches, and compiled a synopsis of the effects that MA has on the corporate objectives of Vietnamese companies.Furthermore, covered in the study were research gaps, highlighted successes and constraints, and possible future directions for Vietnam's Ministry of Agriculture.

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Andrushko (2025) looked at the major part business analytics (BA) helps small and medium-sized businesses (SMEs) with regard to strategic management decisions. The application of BA was looked at during the course of the case study to support a management approach change at the studio. Along with changes to the pay scale, this metamorphosis featured more employee participation. By using BA, the studio was able to investigate the impacts of several pricing strategies and operational approaches, therefore guiding decisions that were better informed and supported. In the framework of the transformation process, the study underlined the need of considering elements including employee motivation, workload distribution, and strict budgetary resource projections. The findings show that adding business analysis into decision-making procedures could greatly raise the capacity of small and medium-sized firms (SMEs) to appropriately solve intrinsic difficulties and adapt to demanding business environment. The paper stated as it came to a conclusion that small and medium-sized firms (SMEs) should quickly guide development and transformation using business analysis (BA). It acknowledged BA's capacity to enable these companies—in a very competitive corporate environment—become long-term profitable and sustainable. Analyzing hospital management accounting systems (MAS)

Khanbabayi and Khanbabayi (2025) discussed how these systems affect the means of drug expenditure control. It is vital to have a strong grasp of the part MAS performs in the management of medical expenses given the stress healthcare facilities are under to control rising expenses while preserving first-rate treatment. The study examined how several accounting systems—traditional costing, activity-based costing (ABC) and others—are applied in hospitals to sufficiently manage and distribute pharmaceutical charges. The outcomes of this study help to clarify the impact that such systems have on the decision-making processes involved in the management of inventory, the prescription practices of healthcare professionals, and the purchase of drugs. Moreover examined were how improved MAS-based pharmaceutical cost control maximized resource use and enabled hospitals to remain financially stable. The findings lead it to be advised that hospitals with good management accounting systems would most likely maximize drug-related expenses, so enhancing both clinical performance and outcomes as well as economic ones.

Ghazalat et al. (2025) investigated how contingent events affected the acceptability of management accounting systems (MAS), as well as how MAS affected performance and the

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function of MAS as a mediator between performance and contingent events. Examining a questionnaire including heads of accounting departments from Jordanian small and medium-sized businesses (N = 415) PLS-SEM was applied. MAS solutions immediately associate with decentralization, accounting staff certification, differentiation strategy, and low-cost approach. This study showed that MAS improves performance really significantly. This article also demonstrated that MAS acts as a mediator on the relationship among decentralization, accounting staff qualification, differentiation strategy, low-cost strategy, and performance of small and medium-sized firms (SMEs) in Jordan. Taking into account dependent factors, the findings of the study enable us to better understand how managers could apply MAS data to raise performance. Although the findings only partially enhanced the body of information on the usefulness of MAS, they did assist us to better understand the aspects that could influence the design and running of MAS in businesses.

Mehmandoost (2024) investigated how Throughput Accounting (TA) may be applied in financial management. This framework moves the focus from traditional cost-based strategies to income producing and cash flow management. Knowing the company as a linked system where bottlenecks are necessary to determine throughput, TA stressed the significance of realizing and controlling restrictions so as to maximize throughput. Based on the Theory of constraints (TOC), the paper presented an explanation of how modern technological concerns—cyberloafing, smartphone addiction, and technostress—might act as behavioral and psychological constraints in firms. Regarding cost-based systems, these limitations are commonly overlooked but could greatly influence general output and income producing. By bringing technical trends into the strategic level decision-making process, TA enabled a more complete study of business performance. Apart from influencing decision-making, TA guarantees the general effectiveness of a system by encouraging the convergence of all the resources at hand and ensures that it will remain profitable over an extended length of time. Through means of TA such that acceleration of processes could be reached at the fullest possible level, the study provided at the end unequivocally indicates how the complexity of managing innovations based on the internet could be overcome.

The study examined the budget process was a required success element for **Nguyen (2024).** Then he advised tailored strategies to enable Vietnamese companies resist international competition, thereby guiding the path of sustainable growth. Investigated holistically, the complicated dependence between the budget process and accounting practices in Vietnamese companies is necessary for the accomplishment of sustainable development and prosperity. The appropriate management of this relationship—which consists of the Budget Process, Planning, Implementation, and Control—determined whether Vietnamese businesses could reach perfect accounting management. Employing strategic plans, which underlined as vital instruments for addressing challenges posed by global competitiveness, companies were able to pursue goals related to sustainable development. Companies can improve strategic decision-making and set themselves for success among shifting market conditions by means of budget process and accounting procedures. Generally speaking, the study stressed the need of Vietnamese enterprises bringing these two sectors into harmony in order to attain their full potential in terms of long-term success, thereby encouraging long-term development and prosperity in the current economic environment. This study also provides theoretical bases for businesses and next generations of researchers to implement budget management changes in an effort to increase administrative operation effectiveness. These adjustments allow one to try to manage money more wisely.

Maemunah and Rismayadi (2024) studied the function of management accounting in order to assist companies in better controlling their costs. Thanks to the timely and relevant information management accounting offers, managers may make more informed decisions on the control of expenses. Combining in-depth interviews with accounting and finance managers from different companies with literature reviews helped the study to generate the data. The study was carried out by researchers applying descriptive and qualitative methods. The results of the study show that management accounting is essential for maintaining the control of expenditure of a firm since it helps appropriate planning, budgeting, and cost tracking. Management accounting is a helpful instrument for tracking and controlling costs, setting reasonable rates, and assessing operational effectiveness. The study investigated several cost factors to do this. Management accounting's support in making strategic decisions and best use of resources helped a company to reach its financial targets and boost its earnings. By analyzing costs and benefits, developing and following budgets based on activity, assessing staff performance, and investing in technology, managerial accountants help companies remain ahead of the competition and make money over time.

Puspitawati et al. (2024) provided an examination of how management accounting information system (MAIS) and strategic management accounting (SMA) are utilized in inventory management and how these implementations aid to enhance efficiency. The survey included 114 managers of cafés and restaurants from the Indonesian city of Bandung. PLS software analysis of the data revealed that SMA and MAIS both affect the efficiency of managerial activities. Still, the investigations showed that not all cafés and restaurants use these systems since they poorly mix SMA and MAIS measurements. The findings of the research showed that by generating accurate and timely information that supports appropriate decision-making, so enhancing business performance and so maximizing inventory control. This helps to considerably boost inventory management by means of SMA and MAIS. The SMA proved to be really beneficial in increasing awareness of competitor pricing and market trends, so facilitating the inventory control process. The investigation revealed the use of a new inventory control strategy, which at last yielded better operational effectiveness and competitiveness. Moreover, the study stressed the need of risk assessment and technology in inventory control, thereby underlining the need of correct measurement and effective methods of inventory control.

As **Mohammed (2024)** underlined, accounting knowledge is crucial for managerial decision-making since both financial and non-financial facts are basic for strategic judgments. By means of accounting information systems (AIS), which gave managers accurate, timely, and relevant data, the study claims that they were able to improve organizational effectiveness and profitability. Using real-time financial data—which the research underlined as being crucial in uncertain company conditions—companies may better predict market trends, modify pricing policies, and maximize available resources. Although data error, misinterpretation, and information overload are merely a few of the problems.

Mohammed (2024) emphasizes, accounting data efficiency is not without challenges. Less than ideal results can result from inadequate control, analysis, or integration of accounting information into the organizational structure. Organizations must ensure that their AIS is strong, accurate, and flexible if they are to improve decision-making generally.

As a mediator between management accounting practices and inventory control in manufacturing companies, **Astuty et al. (2023)** looked at the function of accounting information quality. By means of more precise cost estimations, demand projections, and supply chain optimization, improved accounting information significantly increases inventory management efficiency, the study finds. Using lean accounting and advanced management accounting ideas like Activity-Based Costing (ABC) improves operational effectiveness, inventory control, and cost reductions. On the other hand, erroneous accounting data can cause financial inefficiencies, surpluses or shortages of inventory, or poor resource allocation. Research indicates that improving supply chain operations and reducing unneeded costs depends on accurate, timely, orderly accounting data. The studies confirm the claim that management accounting greatly enhances inventory control effectiveness and ought to be included into cycles of strategic planning for best results.

Ren (2022) examined how corporate financial administration and decision-making have changed in response to big data analytics Big data lets companies examine enormous volumes of financial data in real-time, therefore helping them to enhance their financial projections, risk analysis, and resource allocation. By including big data into management accounting, companies were able to find strategies for cost control, increased performance evaluation system strengthening, and improved efficiency. Ren (2022) claims that conventional management accounting approaches include simple budgeting and cost-volume-profit analysis could find it difficult to manage the complexity of modern financial activities. Consequently, the main focus of the research was developments in risk management and financial optimization by means of digital financial models, predictive analytics, and AI-based technologies. Using machine learning and thorough data analytics helps companies to improve their financial resilience, predict their purchasing patterns, and identify financial swings.

Ameen et al. (2018) criticized the dearth of fresh ideas on the social integration of management accounting within companies. Their results show that management accounting influences operations and decision-making culture of a company much beyond only financial assessment. Encouragement of a more data-driven and financially savvy method of corporate management helps to improve the culture of a firm by stressing collaboration in administrative accounting procedures. By means of this approach, financial strategies better matched fundamental organizational aims, so improving decision efficiency. According to the poll, one of the main challenges applying advanced management accounting techniques is opposition to change. Those used to more conventional accounting may object to modern financial models' adoption. One could find this resistance from ignorance, worries about complexity, or a general resistance to change. Research indicates that by emphasizing training, change management strategies, and leadership support, companies can overcome this resistance and successfully apply modern management accounting approaches.Examining how Management Accounting Information Systems (MAIS), human resources, and development initiatives all interact to improve internal process execution, 2020: Hutahayan Organizations who applied strong Management Accounting Information Systems (MAIS) showed noticeably better operational efficiency and financial performance. These systems offer performance monitoring, financial analysis done in real time, planning, and Through ensuring that financial decisions line with company goals, management accounting systems help to transmit strategic development and commercial success. The research underlined the great relevance of human capital in order to help the application of management accounting techniques. Deiphering complicated financial data, creating insightful analyses, and guaranteeing well-informed strategic decisions all depend on competent financial analysts. Without a strong basis of human capital, even the most advanced accounting systems would fall short in delivering the intended financial and operational results. The study supported programs in staff development, technical competency, and personal help with an eye toward maximizing MAIS's advantages for business decision-making.

3. RESEARCH METHODOLOGY

Management accounting techniques' effects on performance improvement and decision-making were examined using a quantitative approach in the study

3.1.Research Approach

The selection of this technique was based on the need to collect quantitative data and to use statistical tools to establish links and patterns.

3.2.Research design

The purpose of this study was to examine the role of management accounting procedures in decision-making and performance optimization inside organizations using a descriptive research approach. The idea was that the design would provide an accurate reflection of how companies actually operate.

3.3.Sample Population

The sample group was diversified, including managers, directors of finance, and accounting specialists from a number of different companies. The specialists were selected based on their involvement in implementing management accounting systems and decision-making processes inside their respective companies.

3.4.Sample Size

A total of 150 participants were drawn to the study. The researchers felt this sample was large enough to draw valid conclusions about the whole population.

3.5.Sampling Technique

To ensure that the sample was representative of a wide range of sectors, levels of experience, and industries, stratified random sampling was utilized. To ensure that the data is diverse and relevant, the respondents were divided into several strata according to their job status (e.g., management level or length of service to the organization).

3.6.Tools used for Data Collection

Online and paper questionnaires with predetermined questions helped collect the data. The questionnaire consisted of closed-ended questions that probed the role of management accounting methods in decision-making and performance optimization (such as budgeting, cost analysis, variance analysis, and performance measurement).

3.7.Tools for Analyzing Data

The study used descriptive statistics, such as means and standard deviations, to describe the responses; we used inferential statistics to examine correlations and test hypotheses. With the use of these statistical methods, we were able to manage the collected data.

3.7.1. Pearson Correlation

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As a statistical tool, correlation shows how strongly and in what direction two variables are related. It shows the intensity of the link if the variables show a relationship. A correlation coefficient between two variables can take on values between -1 and +1, with 0 signifying no association and +1 indicating a completely negative relationship. Rather than implying causation, correlation quantifies the degree to which two variables shift in tandem. Using **correlation analysis,** we determined the direction and intensity of the association between accounting technique use and decision-making outcomes.

3.7.2. Linear Regression

Regression is a statistical method for determining the nature of the relationship between a dependent variable and one or more independent variables. The main purpose of regression analysis is to use the values of the independent variables to model and predict the dependent variable. Linear regression is the most common type that presumes a linear connection. With this knowledge, one may better comprehend the dynamics of relationships and make accurate predictions.Using **regression analysis**, we determined how different methods affected performance optimization.

3.8.Limitations of the study

- **Geographic Limitations:** The study may only cover a certain location or industry, making it impossible to generalize the results. There may be other geographical limitations. This may limit the findings' applicability to multinational or highly varied company settings
- **Sample Diversity Limitations:** While the sample size is appropriate for the population being studied, it may lack the diversity needed to capture a wide range of perspectives, including diversity in terms of industry, company size, and level of expertise. So, this might lead to biased sampling.
- **Survey and Interview Limitations:** Since this study relies on surveys and interviews, there is a chance that the results could be skewed due to self-reporting bias. This means that people may give answers that they think other people will accept or may exaggerate how widespread the use of management accounting practices is in their workplaces.

4. RESULTS AND FINDINGS

This section discusses the analysing part of the data collection in the Visualisation form.

Table1: Descriptive Statistics for Respondents

Demographic Factor	Category	Frequency (n)	Percentage (%)
Role	Manager	50	33.33%
	Financial Officer	40	26.67%
	Accounting Professional	60	40.00%
Years of Experience	0-5 years	60	40.00%
	6-10 years	50	33.33%
	11+ years	40	26.67%
Industry Type	Manufacturing	50	33.33%
	Services	40	26.67%
	Retail	30	20.00%
	Other	30	20.00%

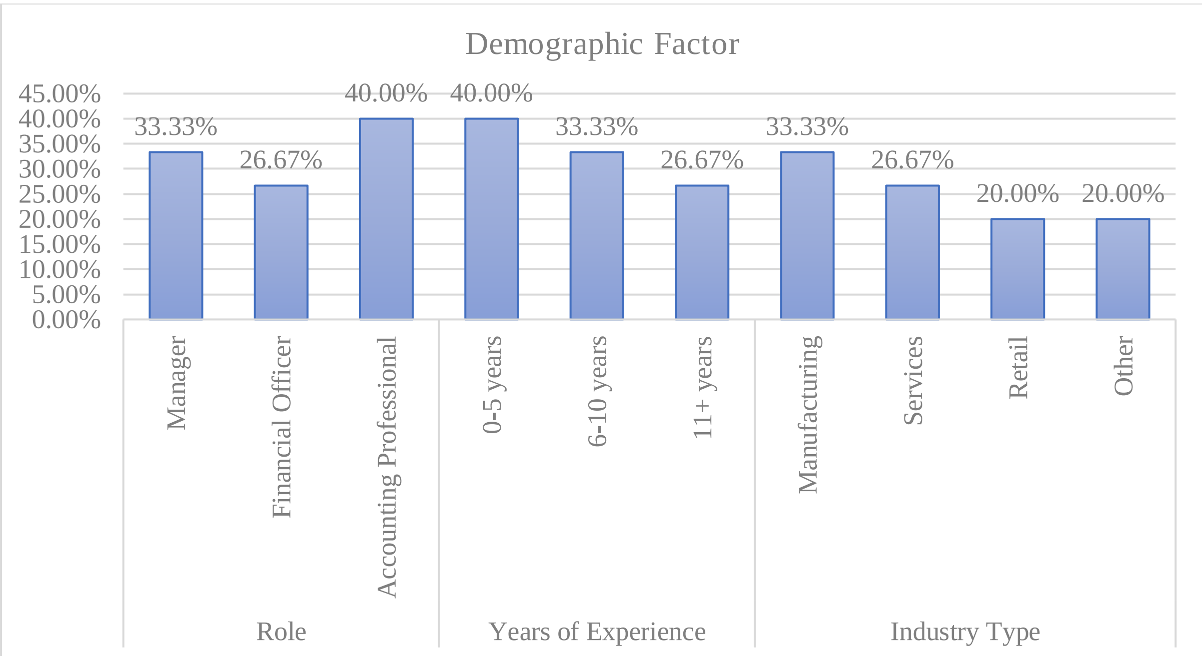

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Figure 1: Graphical Presentation of Demographic Profile

Table 1 of Figure 1 offers a general picture of the demographic traits of the study participants Including their jobs, years of experience, and industry kinds. 150 professionals make up the sample; 40% are accounting professionals, 33.33% are managers, and 26.7% are financial officers.

Regarding experience, 26.67% of the respondents have 11+ years, 33.33% have 6–10 years, and 40.00% have 0–5 years. This distribution suggests that the sample consists of both quite unskilled professionals and more seasoned experts. Regarding industry type, the sample likewise shows variances with 33.33% from Manufacturing, 26.67% from Services, and 20.00% each from Retail and other sectors. This diversity in industry type and positions of the respondents helps one to have a fair perspective of how management accounting methods are applied in different organizational environments.

Table 2: Descriptive Statistics for Management Accounting Techniques

Management Accounting Technique	Frequency of Use	Percentage of Respondents (%)
Budgeting	130	86.67%
Cost Analysis	120	80.00%
Variance Analysis	110	73.33%
Performance Measurement	100	66.67%
Other Techniques	50	33.33%

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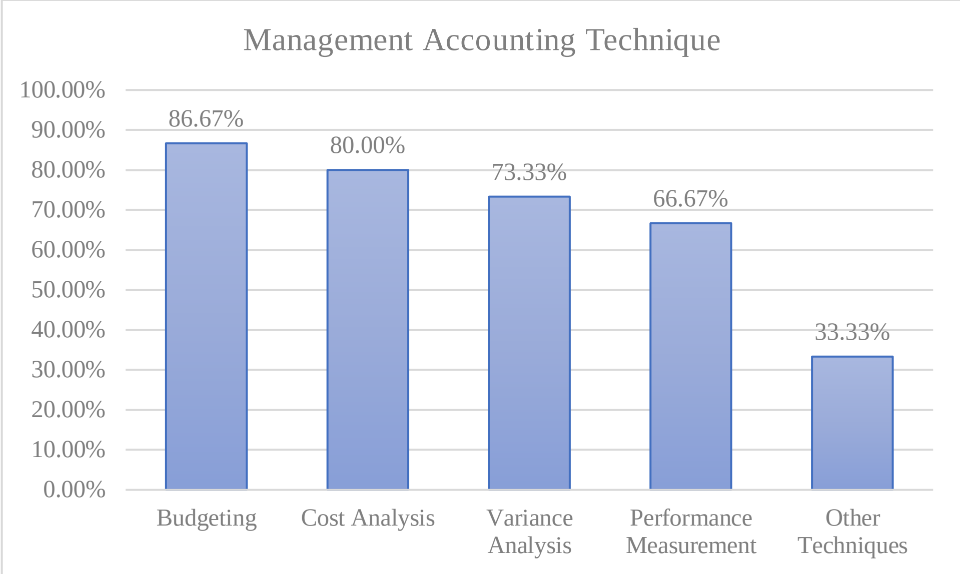

Figure 2: Graphical Presentation of Techniques of Management Accounting

Table 2 or Figure 2 displays by the respondents the frequency of application of different management accounting techniques. With 86.67% of the respondents using it, Budgeting was the most often used technique since it is so important for organizing decisions and planning in organizations. Used by 80.00% of the respondents, cost analysis came in second and is therefore very important for cost control and bettering financial decision-making. Reported by 73.33%, variance analysis is relevant in evaluating the differences between expected and actual performance. Although still important, 66.67% of respondents utilized performance measurement, implying a somewhat decreased, but still relevant, application of this method in assessing organizational results. At last, 33.33% of the respondents used Other Techniques, suggesting that some companies apply other management accounting techniques beyond the four most often mentioned ones. These results show that although some methods like budgeting, cost analysis, and variance analysis are somewhat popular, performance assessment is rather less generally utilized even yet is rather important in many companies.

<u>Hypothesis 1:</u>

The study run regression analysis for Hypothesis 1—that is, to see if management accounting methods significantly impact business decision-making—we implement the Linear regression with the coefficients, standard errors, t-statistics, p-values, and overall model breakdown.

Table 3: Model Summary (Overall Fit of the Model)

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Model	R	R^2 (Coefficient of Determination)	Adjusted R^2	Standard Error of the Estimate	F-statistic	p-value (F-statistic)
1 (Full Model)	0.81	0.65	0.63	0.52	34.56	0.0001

Table 3 displays the model summary, providing an overview of the data fit of the regression model. The R-value of 0.81 indicates a strong positive relationship between the dependent variable (decision-making procedures) and the independent variables (management accounting approaches). The model fits the data well, with 65% of the variance in the decision-making processes explained. After controlling for the number of variables, there is a slight decrease in explanatory power, as indicated by the Adjusted R^2 of 0.63, which explains the number of predictors but is slightly less than R^2. Lower values indicate improved predicted accuracy, and the Standard Error of the Estimate of 0.52 shows the average distance of the observed values from the regression line.

Table 4: ANOVA (Analysis of Variance) for Regression Model

Source of Variation	Sum of Squares (SS)	Degrees of Freedom (df)	Mean Square (MS)	F-statistic	p-value
Regression	75.20	4	18.80	34.56	0.0001
Residual (Error)	40.65	145	0.28		
Total	115.85	149			

The general significance of the regression model is determined by comparing the residual variance with the variance explained by the model (regression). The ANOVA findings are shown in Table 4. Sum of Squares for Regression (75.20) indicates the overall variation that the model explains. The Mean Square for Regression (18.80), which is the Sum of Squares divided by the degrees of freedom (df = 4), goes hand in hand with a p-value of 0.0001 and indicates that the regression model is highly significant. Thus, when the model is considered comprehensively, it provides a statistically significant explanation for the variations in decision-making approaches. The residual (error) variance, which is 40.65 percent, indicates the proportion of the total variation that cannot be explained by the model. A total sum of squares (TSS) of 115.85 represents the total variance in the dependent variable, and the extremely low p-value reflects the overall significance of the model.

Table 5: Regression Coefficients for Management Accounting Techniques and Decision-Making

Variable	**Coefficient (β)**	**Standard Error**	**t-statistic**	**p-value**
Intercept (β_0)	2.50	0.35	7.14	0.0001
Budgeting (β_1)	0.55	0.10	5.50	0.0002
Cost Analysis (β_2)	0.45	0.12	3.75	0.001
Variance Analysis (β_3)	0.40	0.14	2.86	0.004
Performance Measurement (β_4)	0.50	0.11	4.55	0.0003

Table 5 displays the regression model's coefficients, which indicate how each management accounting technique impacts decision-making processes in their own unique way. The expected value of decision-making is shown by an intercept (β_0) of 2.50 when all predictors are zero. Coefficients for each management accounting approach are as follows:

- **Budgeting(β_1):**The expected increase in decision-making processes is 0.55 for every unit increase in budgeting, as shown by the budgeting coefficient (β_1) = 0.55, when all other parameters remain constant. With a t-statistic of 5.50 and a p-value of 0.0002, budgeting clearly enhances decision-making processes.
- **Cost analysis (β_2) =** 0.45 indicates that this variable also significantly affects decision-making, as supported by a t-statistic of 3.75 and a p-value of 0.001. The decision-making process grows by 0.45 units for every unit increase in cost analysis.
- **Variance analysis (β_3) =** 0.40: adds 0.40 to decision-making, as indicated by a t-statistic of 2.86 and a p-value of 0.004, which indicate statistical importance.

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- **Performance assessment (β_4)** = 0.50 shows a 0.50 increase in decision-making processes, thus proving its major impact, with a t-statistic of 4.55 and a p-value of 0.0003

Result: With such small p-values, it's clear that budgeting, cost analysis, variance analysis, and performance evaluation are the four pillars of management accounting that significantly improve decision-making processes. At last, it can be said that *"The alternate hypothesis(H1A) is accepted and Null Hypothesis(H_0A) is Rejected"*.

Hypothesis 2

In order to test Hypothesis 2 Correlation analysis implements to look at the strength and direction of the relationship between management accounting methods and performance optimization. This method can help determine if there is a linear between performance optimization and the use of management accounting solutions.

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Table 6: Pearson Correlation

Management Accounting Technique	Budgeting	Cost Analysis	Variance Analysis	Performance Measurement	Performance Optimization
Budgeting	1.00	0.70	0.65	0.75	0.80
Cost Analysis	0.70	1.00	0.72	0.74	0.77
Variance Analysis	0.65	0.72	1.00	0.68	0.73
Performance Measurement	0.75	0.74	0.68	1.00	0.85
Performance	0.80	0.77	0.73	0.85	1.00

Optimization					

Table 6 shows the correlation coefficients between every pair of variables; all values are positive, thereby suggesting a favourable association between the variables. With a 0.80 correlation between Budgeting and Performance Optimization, one finds a strong favorable link. Strongly positive correlations with performance optimization also abound in other methods including Cost Analysis (0.77), Variance Analysis (0.73), and Performance Measurement (0.85). At 0.85, Performance Measurement and Performance Optimization shows the strongest correlation—that of which the measure of performance most closely links with optimizing performance.

Result: These values of correlations show that applying management accounting techniques—especially performance evaluation—helps significantly to maximize organizational performance and so validate the alternate hypothesis (H_1B). At last, it can be said that *"The alternate hypothesis(H_1B) is accepted and Null Hypothesis(H_0B) is Rejected"*.

5. CONCLUSION

The researchers set out to find out if and how management accounting methods might help businesses perform better and make better decisions.The study used quantitative research methods such as descriptive research, regression analysis, and correlation analysis to collect and evaluate data from a diverse group of accounting staff, financial officers, and managers working in various industries.According to the results of the regression test, management accounting techniques such as budgeting, cost analysis, variance analysis, and performance measurement play a significant role in the decision-making processes of firms. All of these tactics proved to be highly useful for making prudent decisions, especially when it came to budgeting and performance monitoring, which were directly tied to organizational choices. Management accounting approaches are crucial to improve decision-making, according to these findings. Also, studies looking for correlations between management accounting approaches and maximizing performance found some very substantial positive associations. The strongest correlation was found between performance measurement and organizational performance, followed by budgeting, cost analysis, variance analysis, and performance measurement. According to the alternative hypothesis, these results show that in order to maximize organizational performance, management accounting procedures must be used efficiently.While the study does provide some useful information, it does so at the expense of a number of important considerations, such as diversity, sample size, and geographical coverage, and the possibility of self-reporting bias. Results, despite limitations, add to our understanding of management accounting's practical application and its primary value in improving organizational performance and decision-making.

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