Role of Management Accounting Practices in Enhancing Bank Performance

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Abstract

This study explores the impact of Management Accounting Practices (MAPs) on organizational performance in Nepalese commercial banks, focusing on budgeting, decision-making, costing, performance evaluation, benchmarking, and Time-Driven Activity-Based Costing (TDABC). A quantitative research design was employed, with data collected through structured questionnaires distributed to branch managers and customers. Out of 560 distributed questionnaires, 345 responses were analyzed for both managers and customers. The findings reveal a strong positive association between MAPs and organizational performance. Budgeting was identified as a key driver for operational planning and responsibility assignment, while decision-making practices contributed to strategic alignment. Advanced costing methods, including activity-based and Kaizen costing, were noted for improving cost efficiency. Benchmarking and TDABC emerged as significant predictors of innovation, resource optimization, and enhanced customer satisfaction. Despite its robust methodology, the study's findings are constrained by reliance on self-reported data and a focus on the banking sector, limiting generalizability. This study highlights the critical role of MAPs in strategic and operational frameworks, advocating for their adoption to achieve sustainable performance and financial outcomes in the banking sector.

Keywords: Benchmarking, Budgeting, Management Accounting Practices, Organizational Performance, Time-Driven Activity-Based Costing

Introduction

Commercial banks are essential to economies worldwide as they provide critical financial services to individuals, businesses, and governments, supporting economic development and stability. Globally, the integration of strategic frameworks with Management Accounting Practices (MAPs) has been recognized as key to sustaining competitive advantage and fostering growth. For Nepalese commercial banks, this

translates into adopting global best practices while tailoring them to meet local operational, cultural, and economic contexts. The exploration of the connection between strategy and MAPs to enhance perceived performance has been a subject of interest across diverse economic landscapes, including in studies by Mecha et al. (2015), Sakariya & Ruparel (2018), Sangisetti & Kumari (2023), and McLellan (2011).

MAPs globally are pivotal for enabling informed managerial decision-making, ensuring efficient resource management, and achieving competitive advantages. Nepalese banks, however, must adapt these global methodologies to their unique circumstances, including limited resources, technological constraints, and consumer behavior, to prevent performance degradation and enhance customer satisfaction (Dahal, 2022). A robust accounting information system, a universally acknowledged requirement for successful business operations, is equally critical for Nepalese banks. It enables accurate accounting, deviation detection, and effective management, particularly in the face of increasing competition and rapid technological changes (Gnawali, 2017).

While manufacturing industries have significantly influenced global economies, Nepal's commercial banking sector can learn from the management accounting techniques applied globally in manufacturing. These techniques, which include cost control, performance measurement, and resource optimization, have the potential to enhance operational efficiency and organizational success (Horngren et al., 2009; Gichaaga, 2013). Thus, Nepalese banks must blend global strategies with local insights to optimize MAPs, achieving sustainable performance and economic contribution.

Statement of problems

What are the current practices of Management Accounting Practices (MAPs) and organizational performance in Nepalese commercial banks?

Does a significant association exist between MAPs and organizational performance in Nepalese commercial banks?

Objectives of the Study

Management accounting practices (MAPs) play a critical role in shaping the decision-making processes and performance of commercial banks. The integration of MAPs with strategic objectives helps banks optimize resources, improve financial management, and enhance overall organizational performance. Understanding the relationship between MAPs and the performance of Nepalese commercial banks is essential for providing actionable insights that can guide their future strategies and operations.

Objectives of the Study:

1. To analyze the present practices of Management Accounting in Nepalese commercial banks.

2. To examine the significant association between Management Accounting Practices and Organizational Performance of Nepalese commercial banks.

These objectives aim to explore how current management accounting practices impact the performance of commercial banks in Nepal. Based on these objectives, the following hypotheses are formulated:

Hypothesis 1: There is a significant association between the present practices of Management Accounting in Nepalese commercial banks and their organizational performance.

Hypothesis 2: Effective Management Accounting Practices positively influence the organizational performance of Nepalese commercial banks.

These hypotheses are designed to investigate the connection between MAPs and organizational performance, ultimately providing insights that can improve decision-making and performance in Nepalese commercial banks.

Literature Review

Management Accounting

According to the Chartered Institute of Management Accounting CIMA (2005), CIMA is a global professional organization that provides information for management tasks like policy formulation, enterprise planning, decision-making, disclosure, asset protection, and financial accounting, focusing on stakeholder value generation and management. Global environmental changes have also pushed small and medium-sized enterprises (SMEs) transformation towards sustainability, requiring a greater focus on cost efficiency. The accounting literature has long suggested the benefits of adopting management accounting practices (MAPs) in improving business sustainability (Mueller & Weber, 2023)

Small businesses benefit from MAA, with high MA knowledge resulting in the highest average solvencies. However, a decreasing solvency phenomenon occurs when increasing MA investments lead to decreased solvency when a business operates at a medium level of MA knowledge. This finding warrants further study, focusing on potential underlying variables and small business performance (Yla-Kujala et al., 2023).

MAPs provide essential information for managers to make informed decisions, but insufficient provision can lead to ineffective resource management and performance

degradation. Changes to MAPs should be context-dependent and tailored to support business operations, resulting in competitive advantages and improved performance. Effective MAPs help employees focus on differentiation needs, maintaining and improving consumer expectations (Dahal, 2022).

Framework of Management Accounting Practices (MAPs) and Performance

Management Accounting Practices (MAPs) are essential tools for enhancing organizational performance by enabling informed decision-making, financial planning, and operational control. MAPs contribute to supporting decision-making, policy formulation, asset protection, and financial accounting, all of which generate value for stakeholders. With the increasing pressure for small and medium-sized enterprises (SMEs) to adopt sustainable practices, there is a heightened need to focus on cost efficiency. Research supports the role of MAPs in improving business sustainability.

Costing is a critical aspect of management accounting that determines product or service costs, profitability, and resource allocation. Effective costing systems enable organizations to track, allocate, and control costs, providing valuable insights into operational efficiency. By adopting techniques such as job order costing, process costing, and activity-based costing, businesses can improve financial performance by ensuring accurate cost data, which supports informed pricing decisions. For commercial banks, these costing systems help optimize resources and improve cost-effectiveness, leading to enhanced financial performance.

Budgeting is another key MAP that allocates financial resources over a specific period and tracks performance against set goals. Budgeting helps organizations set clear financial targets and evaluate whether plans are being followed, enabling timely corrective actions. In commercial banks, budgeting aligns financial goals with operational strategies, ensuring efficient resource allocation. This directly influences a bank's ability to meet customer expectations and deliver services effectively, which ultimately impacts organizational performance.

Effective decision-making is essential for guiding an organization's strategic direction. Management accounting supports decision-making by providing tools such as cost-volume-profit analysis, break-even analysis, and financial forecasting. These tools help businesses understand the financial implications of various strategic options. For Nepalese commercial banks, efficient decision-making practices, backed by accurate financial data, enhance their ability to respond to market changes, improve service delivery, and increase customer satisfaction, thus leading to better overall performance.

Performance evaluation is a critical part of MAPs used to assess business strategies and operational efficiency. The Balanced Scorecard integrates both financial

and non-financial metrics to provide a comprehensive view of performance. This approach includes customer satisfaction, internal processes, and employee growth alongside profitability metrics. For commercial banks, performance evaluation systems that combine both financial and non-financial metrics offer a holistic perspective, driving improvements in customer service, employee productivity, and organizational effectiveness, all of which directly impact profitability.

Benchmarking involves comparing an organization's performance with industry standards or best practices. Benchmarking is a vital tool for identifying performance gaps and areas for improvement. For commercial banks, benchmarking against global or regional peers provides valuable insights into enhancing service quality, operational efficiency, and customer satisfaction. This practice encourages continuous improvement and helps banks implement strategies that lead to better financial outcomes and stronger customer loyalty.

Time-Driven Activity-Based Costing (TDABC) is a modern costing method that assigns costs based on the actual time used to perform activities. TDABC offers more accurate cost data by focusing on time as the primary cost driver. This method enables commercial banks to identify inefficiencies in service delivery, allowing managers to allocate resources more effectively, reduce waste, and improve customer satisfaction. By enhancing operational efficiency and speeding up service delivery, TDABC contributes significantly to performance improvement.

Customer satisfaction is a critical performance indicator, particularly in the service industry. Customer satisfaction reflects how well an organization meets or exceeds customer expectations, which leads to higher customer loyalty, repeat business, and positive word-of-mouth. In Nepalese commercial banks, MAPs such as performance evaluation and benchmarking directly influence customer satisfaction by ensuring that service quality and responsiveness are consistently improved. Satisfied customers are more likely to remain loyal, recommend the bank's services to others, and contribute to the bank's long-term success.

Contingency theory suggests that the effectiveness of management accounting practices depends on an organization's specific circumstances. Management accounting systems should be tailored to an organization's strategic goals and structure to influence organizational performance effectively. In Nepalese commercial banks, this theory underscores the importance of adapting MAPs based on market conditions and customer needs to achieve optimal performance outcomes.

Despite the extensive research on MAPs, there is limited focus on the relationship between customer satisfaction and MAPs in Nepalese commercial banks. Research gaps remain in understanding how MAPs are specifically linked to customer satisfaction, customer retention, and financial inclusion in the context of Nepalese

commercial banks. Although several studies in Nepal focus on the role of MAPs in financial performance, few explore their direct impact on customer-related variables such as satisfaction and loyalty. Additionally, research examining the relationship between MAPs and customer retention in Nepalese commercial banks is sparse. This study aims to fill these gaps by exploring how MAPs influence the performance of Nepalese commercial banks, particularly in terms of customer satisfaction and retention, and by contributing to the literature on the role of MAPs in financial inclusion and organizational success.

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Independent variables   **Dependent variables**
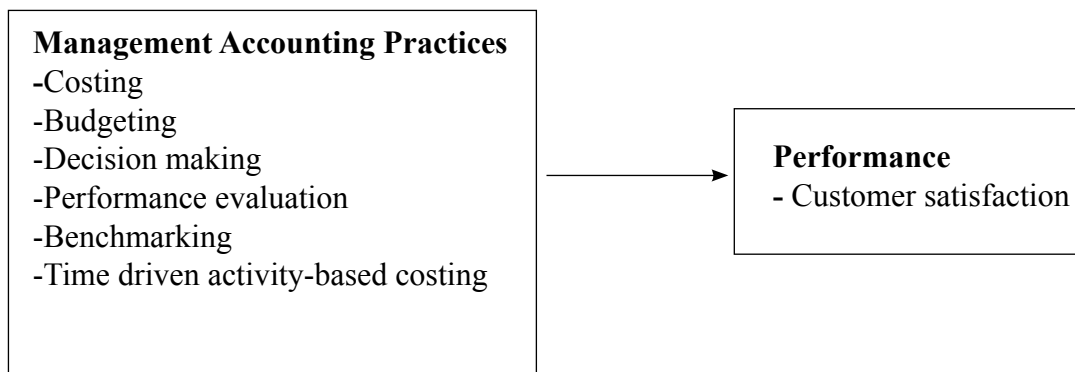

Figure 1

Conceptual Framework

Methodology

This study chooses deductive approach similar to other studies in Strategy and Management Accounting system (Gnawali, 2021; Rahman et al., 2021; Liu et al., 2020). This study uses a quantitative approach to investigate the use of Management Accounting Practices (MAPs) in Nepalese Commercial Banks. It uses a descriptive

research design to describe the extent of MAPs use and an explanatory casual research design to explore the relationship between MAPs and organizational performance. The study selected 7 commercial banks from 20 banks, based on government ownership and highest capital holder bank from private banks. Primary data sources include branch managers and customers, with a representative sample size. The items of the questionnaire were adapted from Gnawali (2017); Gnawali (2021); Dahal (2020); Mechaetal (2015); Sakariya (2018); Sangisetti and Kumari (2023); McLellan (2014).

According to the Annual Report of the Banks, there were 1763 total numbers branch manager in these banks. To determine the sample size, researcher used the following formula prescribed by Adhikari (2021).

$$n = \frac{\frac{Zz^2 P.(1-P)}{e^2}}{1 + \frac{Z^2 P.(1-P)}{Ne^2}}$$

where   n=sample size

      N = 1763

      Z = 1.96

      e = 0.05

      p = 0.5

$$= \frac{\frac{(1.96)^2.0.5.(1-0.5)}{(0.05)^2}}{1 + \frac{(1.96)^2.0.5.(1-0.5)}{1763.(0.05)^2}}$$

      = 316

Hence, for the further analysis of the data, minimum of 316 respondents were necessary.

A convenance sampling of 60 Chief Financial Officers (CFO) and branch managers is taken from each bank (Gnawali, 2017). The researcher distributed 80 questionnaires to 7 province banks branch managers, aiming for a 60% response rate. Out of 350 retuned questionnaires, 345 were used, resulting in a 62.5% response rate. Data collection involved convenance sampling of 70 customers. Where it is expected a large number of respondents are not cooperate and send back the questionnaires, a larger sample should be selected (Gupta, 1996). The distribution of questionnaires to customers was random, with a 50% return rate. Out of 490 questionnaires, 392 were returned, with 345 usable, resulting in an 80% response rate. There were two separate

questionnaires designed for the purpose of data collection from the respondents. One of these questionnaires was designed for employees of the banks and other for customers.

The study explores Management Accounting Practices and Organizational Performance using 50 opinion statements from literature reviews and a questionnaire using a Likert 5-point scale. It assesses costing, budgeting, decision making, performance evaluation, benchmarking, and customer satisfaction, influenced by factors like personnel response, appearance, social responsibility, services innovation, word-of-mouth, competence, and reliability. A scale is a measurement tool that can be used to measure a question with a predetermined number of outcomes (Hair et al., 2007). The use of a five-point scale is aligned with previous studies in the management accounting area for example those by Drury et al. (1993); Guilding et al. (1998); Hoque and James (2000); Hoque (2004); and Abdel-Kader and Luther (2006). Responses to questions in these sections is measured through the use of scales. The study used SPSS V-25 software to analyze primary data, generating descriptive and inferential statistics. Three hypotheses were tested using correlation, regression analysis, and moderation. Descriptive measures included frequency distributions, central tendency, and dispersion. Inferential statistics Pearson's correlation coefficient test. A data reduction tool was used for a concise study.

Data Analysis

Demographic profile shows the general information of the respondents. This study was based on the information collected from 345 managers, CFO and customers of commercial banks. They provided information about their gender, age, number of children, education level, work experience and training.

Table 1

Description of Demographic Factor

Demographic Factor	Frequency	Percent
Gender Male	209	60.6
Female	136	39.4
Age 18-30	3	.9
31-50	342	99.1
Education level Postgraduate	345	100.0
Work Experience 1-10 years	5	1.4
11-20 years	338	98.0
Above 20 years	2	.6
Training National	336	97.4

Both	9	2.6
Position Branch manager	343	99.4
CFO	2	.6
Province Bagmati	52	15.1
Gandaki	49	14.2
Karnali	50	14.5
Koshi	49	14.2
Lumbini	48	13.9
Madesh	49	14.2
Sudurpaschim	48	13.9
Customer gender Male	196	56.8
Female	149	43.2
Customer age 18-30	257	74.5
31-50	64	18.6
51 and above	24	7.0
Customer education +2/ Bachelor	44	12.8
Master	267	77.4
M.Phil./PH. D	34	9.9
Customer visit Daily	40	11.6
Weekly	24	7.0
Monthly	256	74.2
Other	25	7.2

The table 1 reveals the distribution of respondents based on gender, age group, education level, work experience, training, position, and province. Out of 345 respondents, 209 are male and 136 are female. The majority have completed postgraduate education. Out of 345 respondents, 5 have 1-10 years of work experience, 338 have 11-20 years, and 2 have above 20 years. 336 have attended national level training, while 9 have attended both national and international level training. Out of 343 respondents, 343 are branch managers and 2 are CFO. The highest number of respondents is in Bagmati, followed by 14.5%, 14.2%, 14.2%, 13.9%, and 13.9% in Karnali, Gandaki, Koshi, Madhesh, Lumbini, and Sudurpaschim.

The study reveals that out of 345 respondents, 196 are male and 149 are female. The majority of customers are aged between 18-30, with 257 aged 31-50 and 64 aged 31-50. The highest degree received is a master's degree, followed by a +2/bachelor and M. Phil/PhD. The majority of customers visit banks monthly, with 74.2% visiting monthly, followed by 11.6% daily, 7.2% other times, and 7% weekly.

The items in the questionnaire require respondents to indicate their response base on 1-to-5-point Likert scale. In this study, respondents' responses with a mean score of 1.00 to 1.80 are considered as very low, 1.81 to 2.00 are considered low, 2.61 to 3.40 are considered as enough, 3.41 to 4.20 are considered as high while responses with mean score of 4.21 to 5.00 are considered as very high (Kurniawati & Siahaan, 2021).

The means all items are above 3 as the threshold, indicate that the surveyed respondents feel that there is appropriate budgeting for management accounting practice.

Table 2
Reliability of Items

Variables	Code	Items	Cronbach's Alpha
Budgeting	B	7	.710
Decision Making	DM	7	.766
Costing	C	7	.702
Performance Evaluation	PE	7	.718
Time Driven Activity Based Costing	TDABC	7	.786
Benchmark	BE	7	.821
Customer Satisfaction	CS	8	.918

Before performing the analysis of the collected data, the reliability of the questionnaires was tested. Table 2 shows the value of Cronbach's Alpha for each summated scale is greater than 0.7, the summated scales are considered reliable for further analysis. These values are far higher than the thresholds recommended by scholars (Nunnally & Bernstein, 1994). However, it is important to visit the literature of Cronbach's Alpha if any items were deleted during the reliability test, as this can impact the final reliability scores (Hair et al., 2010).

Table 3

Descriptive Statistics of Budgeting in Management Accounting Practices

Item	Mean	Standard Deviation
B1: Budgeting develops a sense of responsibility, policy among the employees and assists in assignment of responsibility.	3.4928	0.52891
B2: Budgeting increases operational efficiency; reduces waste and uncertainty of future.	4.0261	0.30862

Item	Mean	Standard Deviation
B3: With the installation of budgeting system, employees of the organization become conscious of the need to conserve business resources.	4.1565	0.53251
B4: Budget ensures better understanding and harmonious relations between top management and workers.	4.2725	0.54021
B5: Budgeting acts as a control tool for administration and a medium of written communication.	4.2087	0.51426
B6: Budgeting helps to plan about the sources and uses of money and when and where additional cash borrowing is necessary.	4.2174	0.50202
B7: Planning and budgeting are concerned with the implementation of a plan and strategy for the year ahead.	4.2725	0.47736

Note: Responses were measured using a 1-to-5-point Likert scale. In this study, the following scoring scale was used: 1.00 to 1.80 = Very Low, 1.81 to 2.00 = Low, 2.61 to 3.40 = Enough, 3.41 to 4.20 = High, 4.21 to 5.00 = Very High (Kurniawati & Siahaan, 2021).

The table 3 presents the descriptive statistics for each item related to budgeting practices within the framework of management accounting. The mean scores for all items fall within the high to very high range, with values consistently above 3.00. For example, Item B1 has a mean of 3.4928 and Item B7 has a mean of 4.2725, indicating that respondents generally consider the budgeting process as highly beneficial in terms of its influence on responsibility, operational efficiency, and planning.

The standard deviation values are also presented, showing that the responses are relatively consistent, with deviations ranging from 0.30862 (B2) to 0.54021 (B4), reflecting moderate agreement among respondents about the importance and effectiveness of budgeting.

The Likert scale used for this study categorizes the responses as follows: a mean score between 1.00 to 1.80 is considered very low, between 1.81 to 2.00 is low, 2.61 to 3.40 is enough, 3.41 to 4.20 is high, and 4.21 to 5.00 is very high. Based on this scale, the mean scores of all items indicate that the respondents perceive the budgeting management accounting practices as generally high or very high in terms of their effectiveness. This suggests that the surveyed respondents believe that budgeting plays a critical role in management accounting within the organization.

Table:4

Descriptive Statistics for Decision Making in Management Accounting Practices

Item	Mean	Standard Deviation
DM1: MAP provides accurate cost information to management accountants with respect to product pricing.	4.2841	0.53419
DM2: Investment decision is made on the basis of Net Present Value and profitability Index.	4.2609	0.45915
DM3: Capital structure decision is made based on the basis of earning per share and Net profit analysis.	4.2754	0.48477
DM4: The organization has made a decision about which product is more profitable or less profitable based on benefit-cost analysis of a product/services.	4.2609	0.51861
DM5: Decision making has helped to develop proper and effective corporate, business, and functional strategy.	4.2870	0.49589
DM6: MAP helps bank management to make inventory, dividend, financing, marketing, and outsourcing decisions.	4.2899	0.49713
DM7: MAP helps bank managers to eliminate products and services that are incurring losses.	4.3072	0.46202

Note: Responses were measured using a 1-to-5-point Likert scale. In this study, the following scoring scale was used: 1.00 to 1.80 = Very Low, 1.81 to 2.00 = Low, 2.61 to 3.40 = Enough, 3.41 to 4.20 = High, 4.21 to 5.00 = Very High (Kurniawati & Siahaan, 2021).

The table presents the descriptive statistics for decision-making practices within the framework of Management Accounting Practices (MAPs). The **mean** scores for all items fall within the **high** to **very high** range, with values consistently above 4.00. For instance, Item DM7 has the highest mean score of **4.3072**, indicating that respondents perceive decision-making related to eliminating loss-incurring products and services as highly effective. Similarly, Item DM6 has a mean of **4.2899**, reflecting the strong impact of MAPs in facilitating key decisions in areas such as inventory, financing, marketing, and outsourcing.

The **standard deviation** values, ranging from **0.45915** (DM2) to **0.53419** (DM1), show that the responses are relatively consistent, suggesting that most respondents agree on the importance and effectiveness of decision-making practices supported by MAPs.

Given that all items have a mean score above **3.00**, this indicates that the surveyed respondents generally feel that the decision-making process in management accounting practices is effective, enhancing organizational performance. This suggests a strong agreement among respondents that the decision-making practices, aided by MAPs, contribute positively to the overall performance of their organizations.

Table:5

Mean Value of Costing Management Accounting Practices

Item	Mean	Standard Deviation
C1: MAP has effectively divided total costs into fixed, variable, and semi-variable components, thereby reducing costs and increasing revenue and profit.	4.2261	0.48932
C2: MA helps to reduce cost in areas of product improvement, operation methods, and marketing areas, administrative and financial areas.	4.2174	0.48433
C13: Activity-based costing/management technique has helped to identify and eliminate non-value-added activities and cost in your organization.	4.3014	0.49016
C4: Target costing helps to examine a competitor's product in order to identify opportunities for product improvement and cost reduction.	4.2812	0.48142
C5: Kaizen costing (continuous improvement on process) has helped to reduce the cost of components and products by a pre-specified amount more effectively.	4.1420	0.63804
C6: The organization has adopted and applied standard costing technique in controlling cost, i.e., salary, operational cost, and R&D cost.	4.2348	0.48219
C7: The organization has used cost information (i.e., operating cost, cost of delivering services, and cost of serving a customer) to develop competitive strategies.	4.2725	0.47736

Note: Responses were measured using a 1-to-5-point Likert scale. In this study, the following scoring scale was used: 1.00 to 1.80 = Very Low, 1.81 to 2.00 = Low, 2.61 to 3.40 = Enough, 3.41 to 4.20 = High, 4.21 to 5.00 = Very High (Kurniawati & Siahaan, 2021).

*Note: The same scoring scale applies to all tables in this document.

The table 5 presents the descriptive statistics for Costing Management Accounting Practices (MAPs). The mean values for all items are consistently above 3, indicating

that respondents perceive the costing methods as highly effective in enhancing organizational performance. For instance, C13, which evaluates the effectiveness of activity-based costing in identifying and eliminating non-value-added activities, has the highest mean score of 4.3014, reflecting strong agreement among respondents regarding the role of this method in improving performance. Similarly, C2 and C4 have high mean scores of 4.2174 and 4.2812, respectively, suggesting that MAPs help reduce costs and improve efficiency in various operational and marketing areas.

The standard deviation values range from 0.47736 (C7) to 0.63804 (C5), indicating that while the responses are generally consistent, some variation exists, particularly in the item related to Kaizen costing (C5), which had the highest standard deviation.

All mean scores in this table fall into the high to very high range, indicating that the surveyed respondents believe that appropriate costing practices are being implemented, which is positively influencing the overall organizational performance.

Table 6

Mean Value of Performance Evaluation

Item	Mean	Standard Deviation
PE1: The organization makes customer satisfaction surveys frequently.	4.2058	0.45235
PE2: Benchmarking system has been adopted for the quality delivery of services.	4.2696	0.48203
PE3: Balance sheet analysis and income statement are made to measure the performance, which helps to get information about strengths & weaknesses.	4.3217	0.51514
PE4: Performance evaluation is based on variance analysis between expected and actual.	4.1855	0.49453
PE5: Performance evaluation is made based on Residual income, ROI, Divisional profit, return on asset, Return on Equity that assesses organizational performance.	4.2580	0.49427
PE6: Performance evaluation is made based on employee's attitude/behavior.	4.2319	0.50420
PE7: An effective measurement and reporting process can improve performance and lower costs.	4.2522	0.46085

The table 6 displays the descriptive statistics for Performance Evaluation practices within management accounting. The mean values for all items in this table are above 3, falling within the high to very high range. For example, PE3,

which focuses on balance sheet analysis and income statement use in performance measurement, has the highest mean of 4.3217, indicating that respondents view these performance evaluation techniques as very effective. Similarly, other items like PE2 and PE5 also reflect high mean scores of 4.2696 and 4.2580, demonstrating the strong impact of benchmarking, ROI analysis, and other performance evaluation metrics on organizational performance.

The standard deviation values range from 0.45235 (PE1) to 0.51514 (PE3), suggesting that responses are relatively consistent, with slight variation in the assessment of performance evaluation tools.

The Likert scale categorization used in this study places all responses in the high or very high range, indicating that the surveyed respondents generally feel that effective performance evaluation systems are in place, which helps improve organizational performance.

Table 7

Mean Value of Time-Driven Activity-Based Costing

Item	Mean	Standard Deviation
TDABC1: TDABC improves the accuracy of cost allocation to products and services.	4.1043	0.49487
TDABC2: TDABC helps in identifying and utilizing resources more efficiently.	4.3681	0.51785
TDABC3: TDABC enhances decision-making by providing more accurate cost information.	4.2870	0.46566
TDABC4: TDABC encourages process improvement by identifying non-value-added activities.	4.1449	0.47847
TDABC5: TDABC helps in understanding the profitability of different customer segments.	4.2667	0.45580
TDABC6: TDABC facilitates better communication of cost information across departments.	4.3072	0.50988
TDABC7: Overall, I am satisfied with the impact of TDABC on our organization's performance.	4.2464	0.45768

Table 7 outlines the descriptive statistics for Time-Driven Activity-Based Costing (TDABC) practices in management accounting. The mean scores for all items range from 4.1043 to 4.3681, indicating that respondents perceive TDABC practices as highly effective in improving cost allocation accuracy, identifying resource utilization, and enhancing decision-making. The item TDABC2 has the highest mean score of 4.3681, suggesting that respondents find TDABC particularly useful in improving resource efficiency.

The standard deviation values range from 0.45580 (TDABC5) to 0.51785 (TDABC2), indicating slight variation in responses, with higher consistency observed in responses regarding profitability understanding and customer segmentation.

The Likert scale categorization places all items within the high to very high range, showing that the respondents strongly agree that TDABC practices enhance organizational performance through better cost management and decision-making.

Table 8
Mean Value of Benchmarking

Item	Mean	Standard Deviation
BE1: Benchmarking has provided valuable observations that have significantly improved key performance indicators (KPIs).	4.1768	0.58123
BE2: Benchmarking has helped our organization gain a competitive advantage.	4.1942	0.49997
BE3: Benchmarking has significantly enhanced the operational efficiency of our organization.	4.2638	0.49119
BE4: Benchmarking information is frequently utilized in strategic decision-making processes.	4.3188	0.51975
BE5: Benchmarking encourages innovation and creativity within our organization.	4.3333	0.51339
BE6: Benchmarking has positively enhanced customer satisfaction.	4.2638	0.51994
BE7: Benchmarking has guided effective resource allocation within our organization.	4.2290	0.52526

The table 8 presents descriptive statistics for Benchmarking practices within management accounting. The mean scores for all items are above 4.00, indicating a strong positive perception of the role of benchmarking in enhancing performance. For example, BE5, which assesses benchmarking's impact on innovation and creativity, has the highest mean score of 4.3333, reflecting the strong belief that benchmarking fosters innovation. Similarly, BE4 and BE6 show high mean scores of 4.3188 and 4.2638, demonstrating the significant impact of benchmarking on strategic decision-making and customer satisfaction.

The standard deviation values range from 0.49997 (BE2) to 0.58123 (BE1), suggesting that responses were generally consistent, with slight variation in respondents' views on benchmarking's effect on KPIs.

The Likert scale categorization places all items in the high to very high range, demonstrating that benchmarking practices are perceived as crucial for improving organizational performance, customer satisfaction, and innovation.

Correlation Analysis

Heatmap of Correlation Between Management Accounting Practices and Organizational Performance

The heatmap above displays the correlation coefficients between different aspects of Management Accounting Practices (MAPs) — including costing, budgeting, decision making, performance evaluation, benchmarking, and time-driven activity-based costing — and organizational performance (SUM_P). The correlations were calculated based on the responses from 345 participants, offering insights into the relationship between these practices and their impact on organizational performance.

The findings reveal that there are high correlations between several MAPs and organizational performance, with the highest observed correlation between Benchmarking (SUM_BE) and Time-Driven Activity-Based Costing (SUM_TD), which shows a very high correlation of 0.940. This indicates a substantial and significant relationship between these two practices, meaning that the more effectively these MAPs are implemented, the more likely they are to positively impact organizational performance.

In addition to the high correlations, there are moderate correlations between costing (SUM_C), budgeting (SUM_B), decision making (SUM_DM), and performance evaluation (SUM_PE) with organizational performance, with correlation values ranging from 0.333 to 0.548. This suggests that these MAPs also positively influence organizational performance, although the relationship is less pronounced than that of the highly correlated practices (Burns & Burns, 2008).

The p-value for these correlations is 0.000, indicating that the results are statistically significant at the 1% level. This further supports the reliability of the findings, confirming that the correlations observed are not due to random chance.

As seen in the heatmap, most correlations fall into the moderate to high range, with the strongest relationship observed between Benchmarking and Time-Driven Activity-Based Costing. This suggests that the effective adoption and implementation of these MAPs are closely related to improved organizational performance. The results underscore the importance of integrating these MAPs to achieve better financial outcomes, operational efficiency, and overall organizational success.

Discussion

The study provides comprehensive insights into the role of Management Accounting Practices (MAPs) such as budgeting, decision-making, costing, performance evaluation, benchmarking, and time-driven activity-based costing (TDABC) in enhancing organizational performance. These practices, as implemented in the surveyed organizations, demonstrate their effectiveness in driving strategic alignment, operational efficiency, and financial performance.

Budgeting Practices

The findings reveal that budgeting is perceived as highly effective in fostering responsibility, reducing uncertainty, and improving operational efficiency. High mean scores for items such as planning cash flows (B6) and aligning strategy with implementation (B7) underscore its significance. These results are consistent with existing literature that emphasizes budgeting's critical role in resource allocation and strategy execution (Horngren et al., 2014).

Decision-Making Practices

Decision-making practices within MAPs were also rated highly by respondents. Key areas of strength include the elimination of non-profitable products (DM7) and support for strategic decisions such as investment and capital structuring (DM2, DM3). These findings highlight the importance of accurate cost information in enabling effective managerial decisions, echoing prior studies (Zimmerman, 2017).

Costing Practices

The study demonstrates the effectiveness of advanced costing methods, such as activity-based costing and Kaizen costing, in identifying inefficiencies and reducing costs. For example, respondents noted the significant role of activity-based costing in eliminating non-value-added activities. These findings align with the work of Cooper and Kaplan (1992), which underscores the importance of modern costing techniques in improving profitability.

Performance Evaluation

Performance evaluation practices were perceived as highly effective, particularly tools like ROI analysis, variance analysis, and customer satisfaction surveys. These tools were credited with enhancing strategic alignment and operational efficiency. These results align with the conclusions of Kaplan and Norton (1996), who emphasize performance evaluation as a key driver of organizational success.

Benchmarking and TDABC

Benchmarking and TDABC practices exhibited a strong correlation with organizational performance, particularly in fostering innovation, resource efficiency, and customer satisfaction. The high correlation (0.940) between benchmarking and TDABC highlights their complementary roles in enhancing performance, as supported by contemporary research (Kurniawati & Siahaan, 2021).

Conclusion

The study reveals that MAPs play a significant role in enhancing organizational performance by supporting critical managerial functions. The findings highlight the high effectiveness of budgeting in operational planning, the critical role of decision-making in strategic alignment, and the contribution of advanced costing techniques to cost efficiency. Furthermore, benchmarking and TDABC emerge as strong predictors of improved organizational performance. The results emphasize the need to integrate these MAPs into strategic frameworks to achieve financial and operational excellence.

Limitations

This study has certain limitations that should be considered when interpreting the findings. The sample is limited to 345 respondents from specific provinces, which may restrict the generalizability of the results. The reliance on self-reported perceptions introduces the potential for response bias. The cross-sectional design of the study limits insights into causal relationships or longitudinal impacts of MAPs. Additionally, the focus on the banking sector may not fully represent the applicability of MAPs in other industries.

Action Implications

Organizations should prioritize training employees on advanced costing methods, such as TDABC and Kaizen costing, to enhance resource utilization and operational efficiency. Integrated benchmarking strategies should be developed to foster innovation and strategic alignment. Decision-making frameworks should incorporate robust data analytics tools to ensure more accurate and effective managerial decisions. Policymakers in the banking sector should advocate for the standardized adoption of MAPs to promote improved organizational performance across the industry.

Conflict of Interest Statement

The authors declare no conflict of interest related to the conduct, analysis, or publication of this study.

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