

Influence of Modern Management Accounting Techniques on Perceived Organizational Performance: Evidence from Nepalese Commercial Banks

Purna Narayan Maharjan¹; Padam Dongol^{2*}; Parikshit Maharjan³

¹Faculty of Management, Public Youth Campus, Dhobichaur, Kathmandu Nepal

²Ph.D, Faculty of Management, Lincoln University College, Malaysia

³Faculty of Management, St. Xavier's College, Maitighar, Kathmandu Nepal

¹(<https://orcid.org/0009-0000-5557-5635>)

²(<https://orcid.org/0009-0001-5398-9372>)

³(<https://orcid.org/0009-0004-8597-5700>)

Corresponding Author: Padam Dongol^{2*}

Publication Date: 2025/10/07

Abstract: This study examines the influence of Modern Management Accounting Techniques (MMATs) on the perceived organizational performance (POP) of Nepalese commercial banks. Structured questionnaires were distributed to 350 branch managers, accounting officers, and senior staff in accordance with a causal-comparative research design. Confirmatory factor analysis (CFA), path analysis, and structural equation modeling (SEM) were used to examine the proposed relationship between MMATs and performance outcomes. The results show that MMAT adoption significantly improves financial and nonfinancial performance metrics, including profitability, return on equity, return on assets, customer satisfaction, service quality, and product innovation. These results demonstrate that the effective implementation of MMAT significantly enhances organizational performance and competitiveness in Nepal's banking industry.

Keywords: Modern Management Accounting Techniques, Perceived Organizational Performance, Structural Equation Modeling, Nepalese Commercial Banks.

How to Cite: Purna Narayan Maharjan; Padam Dongol; Parikshit Maharjan (2025) Influence of Modern Management Accounting Techniques on Perceived Organizational Performance: Evidence from Nepalese Commercial Banks.

International Journal of Innovative Science and Research Technology, 10(9), 2632-2638.

<https://doi.org/10.38124/ijisrt/25sep1459>

I. INTRODUCTION

Management accounting has undergone a significant transformation over the past few decades. Historically, its primary goals were cost monitoring and short-term efficiency, with a primary focus on financial control and cost calculation. However, with increasing globalization, technological progress, and dynamic business environments, management accounting has moved beyond this narrow role to become a strategic tool that emphasizes long-term value creation, competitiveness, and sustainability. This development has given rise to a set of practices collectively referred to as Modern Management Accounting Techniques

(MMATs) (Kaplan & Norton, 1996; Cadez & Guilding, 2008).

MMATs include methods such as activity-based costing, balanced scorecard, benchmarking, and customer profitability analysis, among others. In contrast to conventional methods, these strategies aim to provide managers with timely, relevant, and strategically aligned information, enabling businesses to make informed decisions, adapt to changing conditions, and achieve long-term growth. For example, benchmarking enables businesses to compare their operations with industry standards, while customer profitability analysis helps determine the value generated from various customer groups. The Balanced Scorecard

facilitates the integration of financial and nonfinancial measures to track performance (Guilding & McManus, 2002; Chenhall, 2003).

MMATs are very important in the banking industry. Banks must navigate issues such as globalization, technological advancements, and rising customer expectations within a highly regulated and competitive environment. The need to modernize financial systems, draw in clients, and maintain compliance with evolving regulatory frameworks makes these pressures even more intense in developing nations like Nepal. To achieve nonfinancial outcomes like customer satisfaction, service quality, innovation, and long-term sustainability, as well as financial outcomes like profitability, Return on Equity (ROE), and Return on Assets (ROA), banks must now implement MMATs (Banker, Chang & Pizzini, 2004; Hossain, 2021).

Despite these advantages, Nepalese commercial banks still employ a significant number of traditional accounting tools, such as variance analysis and budgeting, and comparatively few advanced techniques (Adhikari, 2012;

Shrestha, 2020). Banks are unable to fully leverage the strategic advantages that MMATs offer due to their reliance on outdated procedures. The scarcity of empirical data on the effects of MMAT adoption on performance in Nepal further complicates the problem. Although research from developed nations indicates that MMATs have a positive impact on both financial and nonfinancial outcomes (Cadez & Guilding, 2008), little is known about their effectiveness in Nepal's banking industry.

This disparity raises an important research question: *Does the perceived performance of Nepalese commercial banks improve significantly with the adoption of modern management accounting techniques?* Answering this question is crucial because it will reveal how MMATs can enhance the banking sector in Nepal in terms of efficiency, accountability, competitiveness, and sustainability. Additionally, it will contribute to both scholarly understanding and real-world management accounting applications by bridging the gap between global evidence and regional practice.

Table 1 Research Questions, Objectives, and Methods Summary

Research Questions	Objectives	Research Methods
How does the adoption of modern management accounting techniques influence Nepalese commercial banks' performance?	To examine the influence of modern management accounting techniques on the perceived performance of Nepalese commercial banks.	A questionnaire supported by structural equation model analysis and a literature review

II. LITERATURE REVIEW

Numerous studies have been conducted in various contexts to examine the relationship between management accounting practices and organizational performance. Over time, traditional cost accounting has evolved into MMATs, which offer additional information about efficiency, customer value, and strategic decision-making (Kaplan & Norton, 1996; Chenhall & Langfield-Smith, 1998; Cadez & Guilding, 2008). These methods enable businesses to enhance their sustainability and competitiveness, while also achieving long-term benefits that extend beyond temporary cost reductions.

➤ Modern Management Accounting Techniques

Activity-based costing was one of the earliest innovations, introduced to improve cost accuracy by linking overheads to activities rather than products. According to research, ABC enhances decision-making by identifying unprofitable goods or services (Cooper & Kaplan, 1988; Kaplan & Anderson, 2007). Another crucial strategy is target costing, which enables businesses to create goods within budgetary restrictions while maintaining competitiveness (Ansari & Bell, 1997; Cooper & Slagmulder, 1997).

One of the most widely used instruments for evaluating organizational performance is the Balanced Scorecard, which combines financial and nonfinancial metrics (Kaplan & Norton, 1996). Research indicates that by linking day-to-day activities to long-term objectives, the BSC enhances strategic alignment (Hoque & James, 2000). Similarly, benchmarking

enables organizations to compare their processes and results with best practices in the industry, promoting continuous improvement (Chenhall & Langfield-Smith, 1998; Cadez & Guilding, 2008).

Furthermore, competitor analysis supports strategic positioning in competitive markets, while customer-focused techniques, such as customer profitability analysis, help managers identify lucrative customer groups (Guilding & McManus, 2002; Simons, 1995). Advanced methods, such as value-based management and risk-based performance measures, link shareholder value creation with performance evaluation, reflecting a broader perspective on organizational success (Ryan & Trahan, 2007; Bessis, 2015).

➤ MMATs and Organizational Performance

A growing body of literature highlights that MMATs have a positive impact on both financial and nonfinancial performance. For instance, research shows that when businesses use advanced management accounting tools, their profitability, return on assets (ROA), and return on equity (ROE) all improve (Hossain, 2021; Dahal et al., 2024). At the same time, MMATs enhance nonfinancial outcomes, such as customer satisfaction, service quality, and innovation (Kaplan & Norton, 1996; Ittner & Larcker, 1998; Banker, Chang, & Pizzini, 2004).

Cadez and Guilding (2008) provide evidence that combining strategic management accounting practices with traditional methods creates significant advantages in dynamic industries. Chenhall (2003) contends that the contingency

theory posits that the efficacy of MMATs is contingent upon their ability to adapt to the organizational environment. This implies that MMAT adoption is more likely to be advantageous for banks operating in highly regulated and competitive environments, such as those in Nepal.

Despite the obvious advantages demonstrated by international research, there is still a dearth of empirical data from developing nations. Advanced techniques are rarely employed in nations like Nepal, where traditional tools such as variance analysis and budgeting predominate in management accounting (Adhikari, 2012; Shrestha, 2020). However, Nepalese banks are under increasing pressure to implement innovative practices as a result of growing competition and rising customer expectations. The banking

industry can benefit greatly from MMATs in terms of efficiency, accountability, and customer focus, according to studies conducted in other emerging markets (Guilding & McManus, 2002; Farouk et al., 2016).

➤ Framework for Research

The study aims to answer the following research question: How does the adoption of management accounting techniques affect the nonfinancial organizational performance of Nepalese commercial banks? The hypothesis was conceptualized based on insights gleaned from the empirical literature review. Previous studies have demonstrated a strong correlation between management accounting practices and a range of performance indicators, including non-monetary ones.

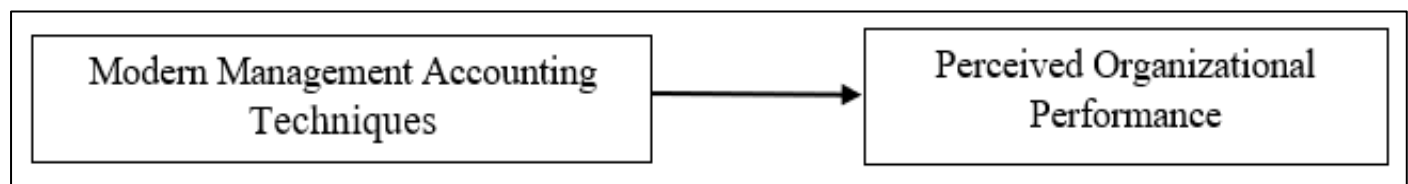


Fig 1 Research Framework

This conceptual framework, as exhibited in Figure 1, provides a structured approach to examining how effective MMATs drive performance, offering practical implications for banks in Nepal. Given this foundation, the study hypothesizes that modern management accounting techniques have a significant positive impact on perceived organizational performance in Nepalese commercial banks.

- H₁: There is a significant positive effect of MMATs on banks' perceived performance.

III. RESEARCH METHODOLOGY

This study uses a causal-comparative research design, which enables the analysis of cause-and-effect relationships using actual data, to investigate the effects of implementing Modern Management Accounting Techniques (MMATs) on Perceived Organizational Performance (POP) in Nepalese commercial banks (Zhang & Morris, 2014). Purposive sampling was employed to distribute 500 questionnaires, and 350 valid responses were received from managers, accounting officers, and senior staff members with at least

three years of experience, representing 70% of the total (Farouk et al., 2016). Activity-based costing, target costing, balanced scorecard, benchmarking, value-based management, competitor analysis, customer profitability analysis, and risk-based performance measures were the eight main dimensions used to evaluate MMATs (Cooper & Kaplan, 1988; Kaplan & Norton, 1996; Cadez & Guilding, 2008). Profitability, ROA, ROE, customer satisfaction, service quality, and product innovation were the six metrics used to measure POP (Tiffany & Sufiyati, 2023; Banker, Chang & Pizzini, 2004). A five-point Likert scale was used to rate these indicators (Hair et al., 2019).

SPSS and AMOS were used for data analysis, which included multicollinearity diagnostics (VIF < 5; Hair et al., 2019), validity checks (CR, AVE; Fornell & Larcker, 1981), reliability tests (Cronbach's Alpha > 0.70; Nunnally, 1978), and sophisticated methods like Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) to validate the measurement model and test the hypothesis. Table 2 shows the sources of test items for the MMATs and POP that are the subject of the study.

Table 2 Measurement Items

Constructs	Items	Measurements Items	Sources
Modern Management Accounting Techniques (MMATs)	MMA1	Activity-Based Costing	Cooper & Kaplan (1988); Kaplan & Anderson (2007)
	MMA2	Target Costing	Cooper & Slagmulder (1997); Ansari & Bell (1997)
	MMA3	Balance-scored card	Kaplan & Norton (1996); Hoque & James (2000)
	MMA4	Bench marking	Chenhall & Langfield-Smith (1998); Cadez & Guilding (2008)
	MMA5	Customer profitability analysis	Guilding & McManus (2002); Cadez & Guilding (2008)
	MMA6	Value-Based Management	Ryan & Trahan (2007)
	MMA7	Competitor Analysis	Simons (1995); Chenhall (2003); Cadez & Guilding (2008)
	MMA8	Risk-based performance measures	Bessis (2015); Banker, Chang & Pizzini (2004)

Perceived Organizational Performance (POP)	POP1	Increase in profitability	Tiffany & Sufiyati (2023); Kartal Demirgunes & Gulbahar Ucler (2015)
	POP2	Increase in return on assets	Saimum Hossain(2021); Dahal et al. (2024)
	POP3	Increase in return on equity	Saimum Hossain(2021); Dahal et al (2024)
	POP4	Increase in customer satisfaction	Kaplan & Norton (1996); Ittner & Larcker (1998)
	POP5	Increase the quality of services	Kaplan & Norton (1996); Ittner & Larcker (1998)
	POP6	Increase in Product Innovation	Kaplan & Norton (1996); Banker, Chang & Pizzini (2004)

IV. RESULTS AND DISCUSSION

➤ Respondent's Profile

The study collected 350 valid responses from branch managers, accounting officers, and senior staff of commercial banks in Nepal, resulting in a 70% response rate. The sample was composed of 36.29% female respondents and 63.71% male respondents. Participants between the ages of 30 and 40 made up the largest percentage (41.43%), followed by those between the ages of 41 and 50 (30.86%), with smaller percentages below 30 (13.71%) and over 50 (14%). In terms

of education, a significant portion (70.29%) held a master's degree, followed by those with a bachelor's degree (21.71%) and those with credentials higher than a master's (8%). 32% had over ten years of work experience, 42.86% had between six and ten years, and 25.14% had three to five years of work experience. This profile enhances the credibility of the findings by demonstrating that the information was obtained from competent and experienced specialists (Zhang & Morris, 2014). Table 3 provides a summary of the respondents' comprehensive demographic profile.

Table 3 Respondent's Background Profile

Demographic	Categories	Respondents	Percentage
Gender	Male	223	63.71
	Female	127	36.29
Age group	Below - 30	48	13.71
	30-40	145	41.43
	41-50	108	30.86
	Above-50	49	14.00
Education Level	Bachelor	76	21.71
	Master	246	70.29
	Above Master	28	8.00
Experience	3 to 5 years	88	25.14
	6-10 years	150	42.86
	Above 10 years	112	32.00

Note: Field Survey

➤ Measurement Model

The measurement model was assessed for reliability and validity.

Table 4 Measurement Model

Constructs	Items					
	Code	Factor Loading	CA	CR	AVE	VIF
Modern Management Accounting Techniques (MMAT)	MMA1	0.82	0.88	0.91	0.59	1.8
	MMA2	0.79				1.9
	MMA3	0.85				2.1
	MMA4	0.80				1.7
	MMA5	0.83				1.8
	MMA6	0.78				2.0
	MMA7	0.81				1.9
	MMA8	0.76				1.6
Perceived Organizational Performance (POP)	POP1	0.84	0.87	0.90	0.58	1.5
	POP2	0.82				1.7
	POP3	0.80				1.6
	POP4	0.79				1.8
	POP5	0.81				1.7
	POP6	0.77				1.5

- Note: Cronbach's Alpha (CA), Composite Reliability (CR), Average Variance Extracted (AVE), Variance

➤ *Inflation Factor (VIF)*

All factor loadings above 0.75 indicated high item representation (Hair et al., 2019). Cronbach's Alpha (CA) and Composite Reliability (CR) were both above 0.70, indicating exceptional internal consistency, as noted by

Nunnally (1978). AVE values (> 0.50) confirmed convergent validity (Fornell & Larcker, 1981), and VIF values < 5 did not suggest multicollinearity issues.

➤ *Structural Model Assessment*

The structural model was evaluated using multiple fit indices, all of which satisfied recommended thresholds (Kline, 2016; Hu & Bentler, 1999).

Table 5 Fit Indices Values of the Structural Model

Model Fit Indices	Threshold value	Sources	Obtained Value	Interpretation
χ^2/df	≤ 3.00	Kline (2016)	1.83	Good Fit
CFI	≥ 0.90	Hair et al. (2019)	0.95	Excellent Fit
TLI	≥ 0.90	Hair et al. (2019)	0.94	Excellent Fit
RMSEA	≤ 0.08	Hu and Bentler (1999)	0.06	Acceptable Fit
SRMR	≤ 0.08	Hu & Bentler (1999)	0.05	Acceptable Fit

The results indicate that the model demonstrates excellent fit across all indices, validating the appropriateness of the proposed conceptual framework. Figure 2 displays the

path diagram of the structural model and its regression coefficient.

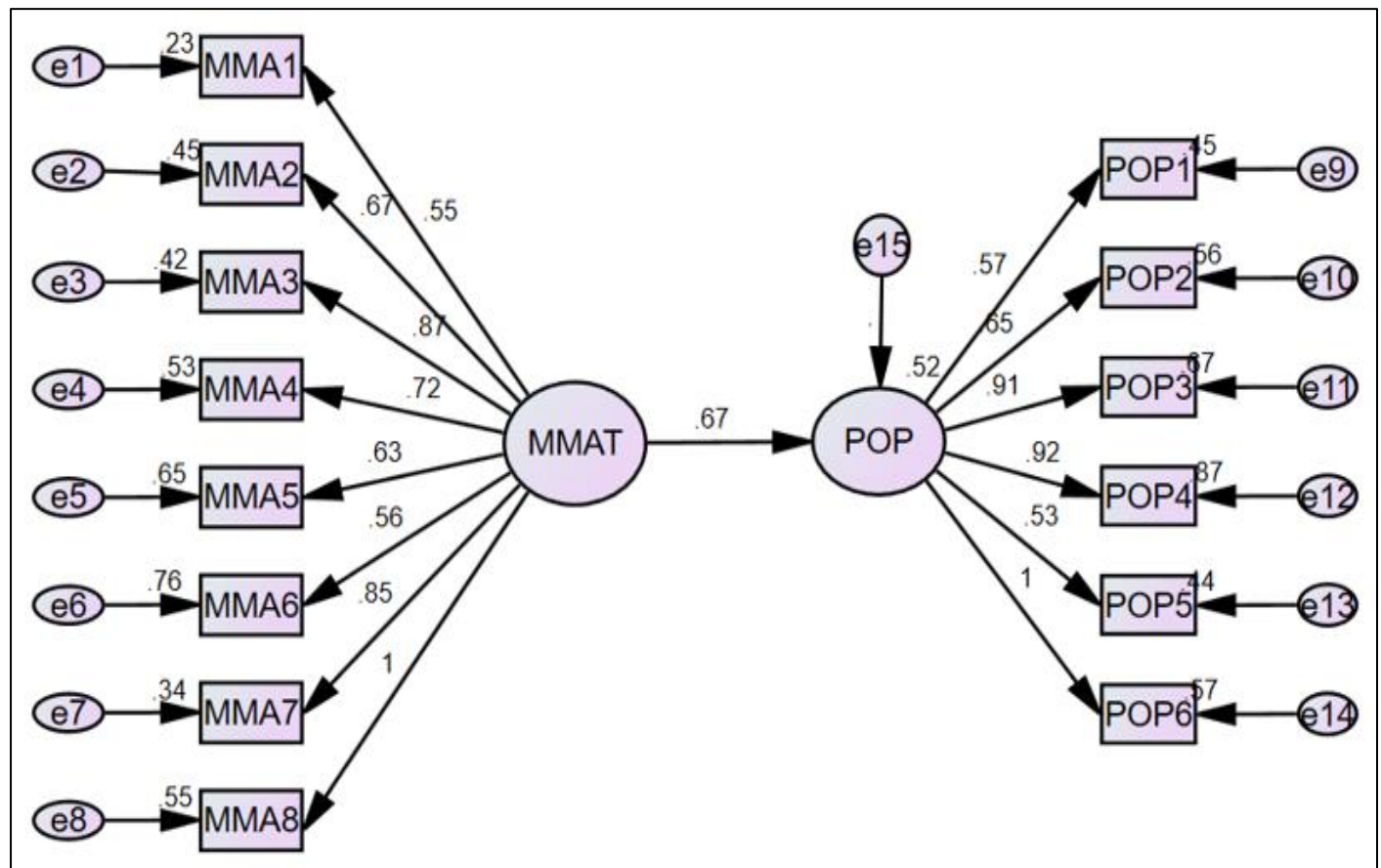


Fig 2 Structural Model

Analysis of the Structural Equation Model. The Structural Equation Model (SEM) results indicate that the MMAT adoption explains a substantial portion of the

variance in POP ($R^2 = 0.52$), indicating that 52% of the changes in organizational performance perceptions can be attributed to the use of MMATs.

Table 6 Value of R^2 of the Model

Exogenous Variables	Endogenous Variable	Squared Correlations (R^2)
Modern Management accounting techniques	Nonfinancial organizational performance	0.52

➤ Hypothesis Test

The results of the Structural Equation Modeling (SEM) confirmed a significant positive effect of MMATs on POP:

Table 7 Values of Regression Coefficients of Influence of MATs Adoption on Nonfinancial Organizational Performance

Hypothesis	Path	β	t-value	p-value	Decision
H1	POP <--- MMAT	0.67	8.45	< 0.001	Supported

Significant at a 5% Level

➤ Discussion

The results support H1, indicating that adopting MMAT has a positive impact on the perception that Nepalese commercial banks are performing. These findings are consistent with earlier research indicating that MMATs improve both financial metrics (profitability, ROA, and ROE) and nonfinancial indicators (customer satisfaction, service quality, and innovation) (Kaplan & Norton, 1996; Banker, Chang & Pizzini, 2004; Chenhall, 2003).

This means that Nepalese banks should train their managers and utilize MMAT tools in their decision-making processes to ensure that performance improvements are sustained. As these results are consistent with international findings (Cadez & Guilding, 2008), they further confirm that MMATs are crucial not only for large corporations but also for banks in developing economies aiming for competitive advantage.

V. CONCLUSION AND IMPLICATIONS

➤ Conclusion

The findings of this study support earlier international research and show that MMATs are important for measuring success in today's competitive and changing business environment. In practice, MMATs have helped banks improve profit, return on equity (ROE), and return on assets (ROA). They also raised customer satisfaction, encouraged product innovation, and improved service quality. This research focused on how MMATs affect the performance of commercial banks in Nepal. The results, based on structural equation modeling, reveal that MMATs improve both financial and non-financial outcomes. Overall, the evidence indicates that MMATs are valuable strategic tools that strengthen efficiency, competitiveness, and decision-making in banks, offering more benefits than traditional accounting techniques.

➤ Implications

The findings of this study carry important implications for managers, policymakers, and researchers. For bank managers, the results show that using MMATs can increase profits and improve customer satisfaction, making them important for long-term success. To achieve this, banks should provide staff training and invest in systems that use MMAT tools like Balanced Scorecard, Benchmarking, and Customer Profitability Analysis. The study also suggests that policymakers and regulators should promote modern accounting practices in the banking sector by setting clear rules and offering professional training programs. From a research perspective, the findings prove that MMATs work well in a developing country like Nepal and support contingency theory, which highlights the need to adapt

management practices to the business environment. Overall, the study strongly recommends wider use of MMATs to improve the performance of Nepalese commercial banks.

REFERENCES

- [1]. Adhikari, P. (2012). Management accounting practices in South Asia. *Journal of Accounting in Emerging Economies*, 2(3), 231–247. <https://doi.org/10.1108/20421161211270586>
- [2]. Ansari, S., & Bell, J. (1997). *Target costing: The next frontier in strategic cost management*. McGraw-Hill.
- [3]. Banker, R. D., Chang, H., & Pizzini, M. J. (2004). The balanced scorecard: Judgmental effects of performance measures linked to strategy. *The Accounting Review*, 79(1), 1–23. <https://doi.org/10.2308/accr.2004.79.1.1>
- [4]. Bessis, J. (2015). *Risk management in banking* (4th ed.). Wiley.
- [5]. Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, Organizations and Society*, 33(7–8), 836–863. <https://doi.org/10.1016/j.aos.2008.01.003>
- [6]. Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28(2–3), 127–168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7)
- [7]. Chenhall, R. H., & Langfield-Smith, K. (1998). Adoption and benefits of management accounting practices: An Australian study. *Management Accounting Research*, 9(1), 1–19. <https://doi.org/10.1006/mare.1997.0060>
- [8]. Cooper, R., & Kaplan, R. S. (1988). Measure costs right: Make the right decisions. *Harvard Business Review*, 66(5), 96–103.
- [9]. Cooper, R., & Slagmulder, R. (1997). *Target costing and value engineering*. Productivity Press.
- [10]. Dahal, B., Joshi, R., et al. (2024). [Full bibliographic details to be updated once available].
- [11]. Farouk, S., Cherian, J., Sial, M. S., Hwang, J., & Ahmed, A. (2016). Exploring the role of corporate social responsibility in enhancing firm performance: A case study of management practices. *Sustainability*, 8(2), 1–14. <https://doi.org/10.3390/su8020173>
- [12]. Guilding, C., & McManus, L. (2002). The incidence, perceived merit and antecedents of customer accounting: An exploratory note. *Accounting, Organizations and Society*, 27(1–2), 45–59. [https://doi.org/10.1016/S0361-3682\(01\)00030-7](https://doi.org/10.1016/S0361-3682(01)00030-7)

- [13]. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- [14]. Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research*, 12(1), 1–17. <https://doi.org/10.2308/jmar.2000.12.1.1>
- [15]. Hossain, S. (2021). Management accounting practices and organizational performance: Evidence from emerging economies. *International Journal of Accounting Research*, 9(2), 112–124.
- [16]. Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- [17]. Ittner, C. D., & Larcker, D. F. (1998). Innovations in performance measurement: Trends and research implications. *Journal of Management Accounting Research*, 10(1), 205–238.
- [18]. Kaplan, R. S., & Anderson, S. R. (2007). *Time-driven activity-based costing: A simpler and more powerful path to higher profits*. Harvard Business Press.
- [19]. Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action*. Harvard Business School Press.
- [20]. Kartal Demirgunes, B., & Gulbahar Ucler, E. (2015). The effect of ROA and ROE indicators on firm value: Evidence from Turkey. *Journal of Business and Economic Policy*, 2(3), 21–29.
- [21]. Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- [22]. Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- [23]. Ryan, H. E., & Trahan, E. A. (2007). Corporate financial control mechanisms and firm performance: The case of value-based management. *Journal of Business Finance & Accounting*, 34(1–2), 111–138. <https://doi.org/10.1111/j.1468-5957.2006.00656.x>
- [24]. Saimum Hossain. (2021). The impact of management accounting techniques on profitability and performance in developing countries. *Journal of Accounting and Finance in Emerging Economies*, 7(1), 85–97.
- [25]. Shrestha, R. (2020). Adoption of management accounting techniques in Nepalese enterprises. *Nepalese Journal of Management*, 7(1), 55–70.
- [26]. Simons, R. (1995). *Levers of control: How managers use innovative control systems to drive strategic renewal*. Harvard Business School Press.
- [27]. Tiffany, E., & Sufiyati, L. (2023). Profitability analysis and its influence on financial performance. *International Journal of Economics and Business Management*, 11(2), 44–52.
- [28]. Zhang, Y., & Morris, J. (2014). High-performance work systems and organizational performance: Testing the mediation role of employee outcomes using evidence from PR China. *The International Journal of Human Resource Management*, 25(1), 68–90. <https://doi.org/10.1080/09585192.2013.781524>