



# “Management accounting practices and organizational performance”

<b>AUTHORS</b>	Rewan Kumar Dahal 
<b>ARTICLE INFO</b>	Rewan Kumar Dahal (2022). Management accounting practices and organizational performance. <i>Problems and Perspectives in Management</i> , 20(2), 33-43. doi: <a href="https://doi.org/10.21511/ppm.20(2).2022.04">10.21511/ppm.20(2).2022.04</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/ppm.20(2).2022.04">http://dx.doi.org/10.21511/ppm.20(2).2022.04</a>
<b>RELEASED ON</b>	Wednesday, 13 April 2022
<b>RECEIVED ON</b>	Thursday, 11 November 2021
<b>ACCEPTED ON</b>	Wednesday, 30 March 2022
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>
<b>JOURNAL</b>	"Problems and Perspectives in Management"
<b>ISSN PRINT</b>	1727-7051
<b>ISSN ONLINE</b>	1810-5467
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

**63**



NUMBER OF FIGURES

**2**



NUMBER OF TABLES

**5**

© The author(s) 2022. This publication is an open access article.



**BUSINESS PERSPECTIVES**



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sumy, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 11<sup>th</sup> of November, 2021

**Accepted on:** 30<sup>th</sup> of March, 2022

**Published on:** 13<sup>th</sup> of April, 2022

© Rewan Kumar Dahal, 2022

Rewan Kumar Dahal, Ph.D. Scholar,  
Assistant Professor, Faculty of  
Management, Nepal Commerce  
Campus, Tribhuvan University, Nepal.

Rewan Kumar Dahal (Nepal)

# MANAGEMENT ACCOUNTING PRACTICES AND ORGANIZATIONAL PERFORMANCE

## Abstract

Management accounting practices (MAPs) are crucial for manufacturing firms to control diverse organizational operations and improve their organizational performance. The study aimed to analyze the scope of MAPs and their association with the organizational performance of Nepalese manufacturing firms. The outcomes relied on primary data obtained through structured survey from 223 medium to top-level employees of the selected companies. It was found that traditional management accounting practices had greater dominance ( $\beta = 0.817$ ,  $p = 0.000$ ) in the package of MAPs than contemporary management accounting practices ( $\beta = 0.707$ ,  $p = 0.000$ ) in Nepalese manufacturing firms. The extent of use of contemporary management accounting practices was marginally greater (mean = 3.757) than traditional management accounting practices (mean = 3.563). The analysis also disclosed no association of MAPs with organizational performance of Nepalese manufacturing firms. Though the study had a moderately small sample size from the manufacturing industry, future studies may examine the association between MAPs and organizational performance by taking samples of the manufacturing and service industry to ensure comparability and generalizations. The study endeavored to advance management accounting literature by presenting pragmatic evidence on the association of MAPs with organizational performance in the Nepalese scenario.

## Keywords

contemporary management accounting practices, executives, manufacturing firms, operations, traditional management accounting practices

**JEL Classification** L25, M41

## INTRODUCTION

Management accounting (MA) approaches are generally acknowledged as carrying to an organization's success. Organizations can improve their performance by carrying out MA techniques that address the challenges of competition, change, and cost (Horngren et al., 2009). In addition, MA techniques and practices are internal information platforms within organizations that provide relevant information to stakeholders to add value (Langfield-Smith, 2009). Management accounting practices (MAPs) are classified into two categories based on their development and characteristics: traditional management accounting practices (TMAPs) and contemporary management accounting practices (CMAPs). Johnson and Kaplan (1987) observed that the TMAPs were developed before the 1980s. The TMAPs are viewed as those MAPs dealing with financial measures and focusing internally in the short term (Chenhall & Langfield-Smith, 1998a; Pavlatos & Paggios, 2009). As a result, the importance of TMAPs was challenged and even believed to be lost (Johnson & Kaplan, 1987). Therefore, many new MAPs were evolved to address the shortcomings of TMAPs and take into account the demands of the evolving markets (Wu et



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.



### Conflict of interest statement:

Author(s) reported no conflict of interest

al., 2007). In this way, CMAPs are viewed as those MAPs that associate activities, operations, and processes with strategic consequences (Chenhall & Langfield-Smith, 1998b; Hyvonen, 2005). Subsequently, CMAPs can identify and reduce the cost of unproductive activities, which prompts better organizational performance (OP).

## 1. LITERATURE REVIEW

MAPs are concerned with utilizing the information to make it more straightforward for executives and facilitate business decision-making processes (Yeshmin & Hossan, 2011). Because of the rapid modifications in manufacturing technologies/innovations and the corporate environment, MAPs and their role in conveying information to support planning and corporate decisions have been re-evaluated. Kerremans et al. (1991) observed that changes in manufacturing technologies and the corporate environment have resulted in changes in cost structures as well as greater complexity and competition. Al-Omiri and Drury (2007), Angelakis et al. (2010), Cagwin and Bouwman (2002), Chenhall and Langfield-Smith (1998a), Drury and Tayles (2005), Hyvonen (2005), and Ittner et al. (2002) examined the appropriation and advantages acquired by utilizing TMAPs and CMAPs.

Chenhall and Langfield-Smith (1998a) surveyed Australian manufacturing firms intending to obtain the degree to which practices they were embraced. The findings suggested that most large corporations pursued TMAPs rather than CMAPs. Wijewardena and DeZoysa (1999) discovered that Australian manufacturing firms put more focus on cost management and control tools, such as standard costing/variance analysis and budgetary control at the manufacturing phase. At the same time, Japanese manufacturing firms focus more on cost planning and cost reduction strategies in the product planning and design phase. A similar study by Hyvonen (2005) of Finnish manufacturing firms noticed that MAPs relating to financial measures like budgetary control and product profitability analysis were more relevant in the long haul.

Dugdale et al. (2005) studied MAPs in UK manufacturing firms and revealed that traditional financial-based practices were being used alongside contemporary practices like target costing, ac-

tivity-based costing, kaizen costing, etc. Bidhan (2007) observed the status of MAPs in the manufacturing firms in Bangladesh. It was remarked that CMAPs such as target costing, activity-based costing, just-in-time inventory system, process reengineering, the theory of constraint, total quality management, etc., were not practiced in private and public sector companies. However, Bidhan (2007) also discovered that practices based on financial measures like standard costing, ratio analysis, and cash flow analysis were commonly employed in Bangladeshi manufacturing firms.

Farjana and Rehana (2010) conducted a comparative study in the manufacturing and service industries focusing on the variability of MAPs in both sectors. The study found that standard costing/variance analysis, ratio analysis, cash flow analysis, cost-volume-profit analysis, and budgetary control were frequently used in management functions. Chand and Dahiya (2010) studied the importance and utilization of MAPs in the Indian small and medium-sized hospitality enterprises. The outcomes showed that MAPs had a significant effect on the various facets of business, particularly on quality improvements and cost reduction. Finally, Angelakis et al. (2010) noticed that TMAPs were utilized slightly higher than CMAPs.

Karanja et al. (2012) also conducted a study on the execution of MAPs in small and medium-sized enterprises in developing nations. They found that contemporary practices such as just-in-time inventory systems, target costing, and activity-based costing were adopted to enhance organizational productivity, innovativeness, and improved product/service pricing. Saaydah and Khatatneh (2014) likewise conducted a study on the MAPs and their apparent impact on the performance of Jordanian manufacturing firms. They observed that activity-based costing system, just-in-time inventory system, target costing, kaizen costing, and the balanced scorecard were being employed as contemporary practices.

Nor et al. (2016) analyzed the association between MAPs and the financial outcomes of the listed Malaysian firms. It was revealed that there was a significant association between the two parameters of the study. MAPs are advantageous not only for the OP but also for the organization's strategic achievement of the business (Almatrooshi et al., 2016) and provide general information that can be used to boost their OP (Fuji et al., 2019a). The use of pertinent MAPs will allow employees to concentrate more on executing differentiation strategies (Seal, 2006), such as quality, conveyance, and customer service, to meet customer loyalty and succeed in competitive strategy. The application of MAPs assists the organization in intensifying the OP. More specifically, CMAPs have been implemented to address the shortcomings of TMAPs in identifying information relating to performance measurement and management systems (Fuji et al., 2019b).

## 2. AIMS AND HYPOTHESES

MAPs are crucial, especially in the manufacturing industry, for controlling various organizational activities that improve OP. The MAPs used by Nepalese manufacturing firms (NMFs) are also divided into two categories. TMAPs represent their centrally planned economic heritage, while CMAPs reflect the need to handle day-to-day management challenges. Professionals and analysts require precise MAPs and their association to OP to generalize their use in the Nepalese scenario. However, there has been no empirical examination of the influence of MAPs on OP in MA literature. The study aimed to contribute MA literature by providing pragmatic evidence into the occurrence and efficacy of MAPs. Therefore, the

following tasks were set in light of the common presence of the MAPs:

- to observe the degree of use of MAPs in NMFs;
- to compare the extent of use of TMAPs and CMAPs in NMFs;
- to assess the relationship between MAPs and OP in NMFs.

Incorporating MAPs into the organizational system makes operational activities easier (Wahyuni & Triatmanto, 2020). MAPs empower executives to serve customers' needs better, make business decisions, navigate the corporate value chain (Dahal, 2019), and act as a catalyst for employee motivation (Bisbe et al., 2007; Laitinen, 2014). OP is regarded as a contextual variable in an organization that might associate with MAPs (Polnaya et al., 2018). If relevant MAPs are in place, OP will be enhanced (Baines & Langfield-Smith, 2003). The study's hypothesized model is depicted in Figure 1.

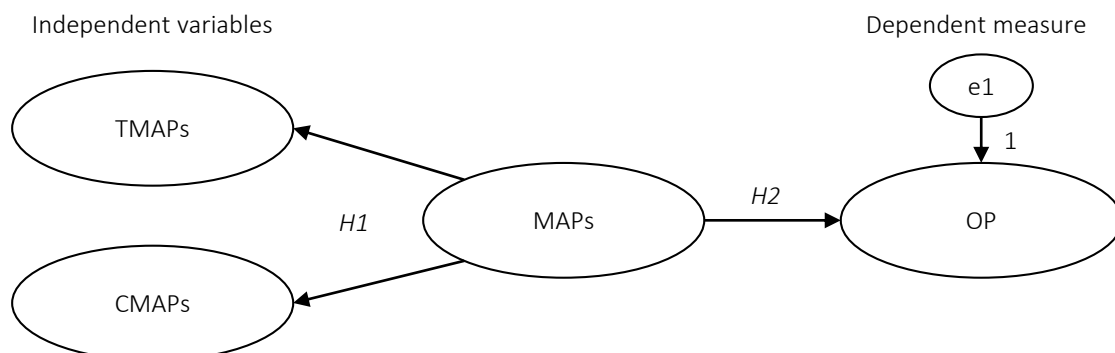
The study examined the following two hypotheses in light of the literature review and objectives:

*H1: TMAPs had a greater dominance than CMAPs in NMFs.*

*H2: MAPs have a positive and significant association with OP.*

## 3. METHODS AND DATA

The examination utilized a quantitative technique to explain the study hypotheses, and the information assortment measure utilized a perception-



**Figure 1.** The hypothesized model

al assessment to facilitate the analysis. Nineteen manufacturing firms listed on the Nepal Stock Exchange and their working representatives were considered as the study's population. Of these, the seven firms whose shares have been regularly traded in the Nepalese Share market were selected as sample firms since they have more public/investors' concerns than others. A field survey was performed on 525 middle to top-level employees of the selected firms. Seventy-five targeted respondents from each sample firm were approached to collect data from September to December 2020. The primary aim of selecting the sample firm was to ensure the firms had more pragmatic MA systems and practices. Two hundred and twenty-three respondents representing 42.5% of returned usable questionnaires utilized for the examination. Oke et al. (2012) advised that a sample size of 200 and more would be adequate in social science research, so a total of 223 replies were included in the analysis as a representative sample. Table 1 outlines the demographics of the respondents in the study.

**Table 1.** Overview of respondents' demographics

Details	Number	Percentage
<b>Types of Products</b>		
Beverage Processing-1	37	16.6
Beverage Processing-2	31	13.9
Alcoholic Beverage	29	13.0
Cement and Allied Products	32	14.3
Sugar and Industrial Sprit	30	13.5
Metal Containers and Packaging	33	14.8
Consumer Products	31	13.9
Total	223	100.0
<b>Position</b>		
Board Member	8	3.6
Managerial Level	38	17.0
Officer Level	74	33.2
Assistant Level	103	46.2
Total	223	100.0
<b>Gender</b>		
Female	103	46.2
Male	120	53.8
Total	223	100.0

MAPs and OP measures were the latent measures of the study. All the observed variables for the latent measures were drawn from the review of past studies, and a standardized questionnaire was developed as a survey tool. Different types of MAPs (TMAPs and CMAPs) were placed randomly in the survey tool. The tool consisted of 29 survey

items. A 5-point Likert scale was given to quantify the degree of how advantageous the MAPs were found, varying from 1 = not advantageous to 5 = highly advantageous.

The traditional practices were related to improving the existing processes, manufacturing system, financial-based performance measures, planning for budgeting and control, etc. This study focuses on ten TMAPs variables (i.e., VAR\_5, variable and absorption costing; VAR\_6, differential costing; VAR\_7, standard costing/variance analysis; VAR\_10, cost-benefit analysis; VAR\_12, segment reporting; VAR\_13, theory of constraint; VAR\_17, break-even analysis; VAR\_18, capital budgeting; VAR\_19, inter-firm comparison; and VAR\_20, budgetary control). The measuring variables' standardized regression weights were obtained using confirmatory factor analysis (CFA) within TMAPs construct. Following Hair et al. (2006), the variable loading 0.50 and more were considered for analysis. Out of them, three variables (VAR\_5, VAR\_6, and VAR\_19) were deleted from TMAPs since they had lower factor loading values than the acceptable value of 0.50. The package of TMAPs, which included seven test variables, produced satisfactory model fit indices: CMIN/DF (Normed Chi-Square) = 1.035; RMSEA (Root Mean Square Error of Approximation) = 0.013; PCLOSE (RMSEA associated p-value) = 0.829; AGFI (Adjusted Goodness of Fit Index) = 0.965; CFI (Comparative Fit Index) = 0.999; NFI (Normed Fit Index) NFI = 0.959; and TLI (Tucker-Lewis Index) = 0.998 with the variance being 41.1%.

The contemporary practices covered a combination of practices like quality systems, strategic analysis, information for decision making, team-based performance, non-financial and balanced performance analysis. Fourteen CMAPs variables (i.e., VAR\_8, activity-based costing; VAR\_9, activity-based management; VAR\_11, enterprise resources planning; VAR\_14, target costing; VAR\_15, just-in-time inventory system; VAR\_16, process reengineering; VAR\_21, total quality management; VAR\_22, environmental costing; VAR\_23, supply chain management; VAR\_24, life cycle costing; VAR\_25, benchmarking; VAR\_26, customer profitability; VAR\_27, responsibility accounting; and VAR\_28, balanced scorecard) were

**Table 2.** Reliability indicators

Constructs	Cronbach's alpha		Average Inter-Item Correlation Coefficient		No. of items
	Study value	Reference range	Study value	Reference range	
TMAPs	0.782	≥ 0.7 (Nunnally, 1993)	0.347	0.15 to 0.50 (Clark & Watson, 1995)	7
CMAPs	0.872		0.498		5
OP	0.861		0.485		5
Total no. of retained observed variables					17

**Table 3.** Validity indicators

Constructs	Composite Reliability		Average Variance Extracted	
	Study value	Reference range	Study value	Reference range
TMAPs	0.826	≥ 0.7 (Fornell & Larcker, 1981)	0.411	≥ 0.4 (Bagozzi & Baumgartner, 1994)
CMAPs	0.876		0.591	
OP	0.856		0.557	

taken into consideration. Nine variables (VAR\_9, VAR\_14, VAR\_16, VAR\_21, VAR\_22, VAR\_23, VAR\_26, VAR\_27, and VAR\_28) were deleted from CMAPs since they had lower factor loading values than the recommended value of 0.50. The package of CMAPs, which included five test variables, produced satisfactory model fit indices: CMIN/DF = 0.280; RMSEA = 0.001; PCLOSE = 0.976; AGFI = 0.992; CFI = 0.998; NFI = 0.991; and TLI = 1.000 with the variance being 59.1%.

The efficacy of an organization also governs the suitable association between MAPs and OP measures (Langfield-Smith, 1997). Furthermore, OP measures have been incorporated as a reliant variable, giving descriptions to the specific attributes of the MAPs; for example – they were perceived useful, advantageous, and satisfactory. The respondents were posed five inquiries to rate the company's performance associated with MAPs, using a 5-point scale from 1 = significantly lower to 5 = significantly higher. Five OP variables (i.e., VAR\_29, sales growth; VAR\_30, profit growth; VAR\_31, cost reduction; VAR\_32, operational processes; and VAR\_33, operational efficiency) were taken into consideration. All the variables had a higher factor loading value than 0.50 and were retained in the analysis. The OP construct produced a satisfactory model fit indices: CMIN/DF = 1.548; RMSEA = 0.050; PCLOSE = 0.406; AGFI = 0.958; CFI = 0.997; NFI = 0.993; and TLI = 0.991 with the variance being 55.7%.

As recommended by Podsakoff et al. (2003), the analysis tested the Harman single-factor test to determine the predominance and magnitude of

the CMB (common method bias). From the 17 retained observed variables, the Harman single-factor had a variance of 49.1%, below the 50% edge value as suggested by Cho and Lee (2012). The MAPs were drawn from earlier studies to intensify the overview's reliability. Therefore, they had been tested previously. Fourteen questionnaires, two from each sample company, were pilot tested with the senior managerial personnel who have the best knowledge of MAPs and OP. Suggestions and feedback from the pilot testing were incorporated into the final questionnaire; therefore, the survey instrument was more reliable and coherent with the study's goal.

Further, Cronbach's alpha ( $\alpha$ ) and average inter-item correlation coefficient ( $r$ ) were figured to assess the constructs' statistical reliability. Similarly, composite reliability (CR) and average variance extracted (AVE) were drawn to validate convergent validity. Tables 2 and 3 present the computed reliability and validity indicators values.

The reliability and validity statistics (as demonstrated in Tables 2 and 3) satisfied the suggested threshold values. Hence, the tested and latent variables were reliable and valid for further examination.

## 4. RESULTS

This examination was the employees' perceptual evaluation of whether there was a relationship between MAPs and OP in the NMFs. As per the respondents' demographic information

**Table 4.** Descriptive statistics of the study constructs (N = 223)

Constructs	OP	TMAPs	CMAPs	Mean	St. Deviation	Theoretical Range	Actual Range
1. OP	1.000			3.853	0.576	1-5	2.40–5.00
2. TMAPs	-0.11 (0.870)	1.000		3.563	0.553	1-5	2.14–4.57
3. CMAPs	-0.030 (0.659)	0.822** (0.000)	1.000	3.757	0.625	1-5	2.60–5.00

Note: \*\*Correlation is significant at the 0.01 level (2-tailed).

**Table 5.** The extent of use of specific MAPs

MAPs		Non-users (1)	Use to a small extent (2-3)	Use of great extent (4-5)	Mean
<b>TMAPs</b>					
VAR_7	Standard Costing/Variance Analysis	0 (0.00%)	46 (20.63%)	177 (79.37%)	4.16
VAR_10	Cost-Benefit Analysis	5 (2.24%)	111 (49.78%)	107 (47.98%)	3.36
VAR_12	Segment Reporting	31 (13.90%)	161 (72.20%)	31 (13.90%)	2.56
VAR_13	Theory of Constraint	0 (0.00%)	125 (56.05%)	98 (43.95%)	3.37
VAR_17	Break-even Analysis	0 (0.00%)	99 (44.40%)	124 (55.60%)	3.67
VAR_18	Capital Budgeting	0 (0.00%)	51 (22.87%)	172 (77.13%)	3.96
VAR_20	Budgetary Control	2 (0.90%)	70 (31.40%)	151 (67.70%)	3.85
Average		2.43%	42.47%	55.10%	3.68
<b>CMAPs</b>					
VAR_8	Activity Based Costing	0 (0.00%)	82 (36.77%)	141 (63.23%)	3.74
VAR_11	Enterprise Resource Planning	0 (0.00%)	104 (46.64%)	119 (53.36%)	3.59
VAR_15	JIT Inventory System	0 (0.00%)	89 (39.91%)	134 (60.09%)	3.76
VAR_24	Life Cycle Costing	0 (0.00%)	58 (20.63%)	165 (74.00%)	4.02
VAR_25	Benchmarking	0 (0.00%)	99 (44.40%)	124 (55.60%)	3.67
Average		00.00%	38.74%	61.26%	3.76

outlined in Table 1, nearly 54.0% hold at least an officer or/and above position in their companies. In addition, 53.8% of males and 46.2% of females participated in the study. Seventy-five survey questionnaires were distributed equally to each sample company. The usable responses were in the range of 39.7% (i.e., 29 responses) to 49.3% (i.e., 37 responses) from each firm. Accordingly, the descriptive insights of the 17 retained variables used in measuring three constructs and the extent of specific MAPs are reported in Tables 4 and 5.

Table 4 showed that the level of use of CMAPs (mean = 3.757) was slightly more significant than the TMAPs (mean = 3.563). Table 5 displayed a more thorough insight into the utilization of the TMAPs and CMAPs. The degree of utilization was divided into three classes, ‘non-users’ (reaction point of 1 on the 5-point Likert type scale); “utilize to a small degree” (reaction points 2 and 3), and “utilize to a great degree”

(reaction points 4 and 5). The higher average utilization of a great degree of CMAPs (61.26%) than the average utilization of a great degree of TMAPs (55.10%) indicated that CMAPs are getting more attention in the Nepalese scenario. Despite having more attention from practitioners, the TMAPs had a dominance ( $\beta = 0.817$ ,  $p = 0.000$ ) in the package of MAPs than the CMAPs ( $\beta = 0.707$ ,  $p = 0.000$ ) in the NMFs, as presented in Figure 2, hence H1 was supported.

The association between the degree of utilization of the TMAPs and CMAPs with OP was assessed through SEM (structural equation modelling). The outcomes demonstrated the model (CMIN/DF = 2.100; RMSEA = 0.070; PCLOSE = 0.004; AGFI = 0.867; CFI = 0.927; NFI = 0.875; and TLI = 0.917) fitted well with the data. In contrast with the stated hypothesis, there was no significant and positive association between MAPs with OP ( $\beta = -0.026$ ,  $p = 0.750$ ), hence H2 was not upheld.

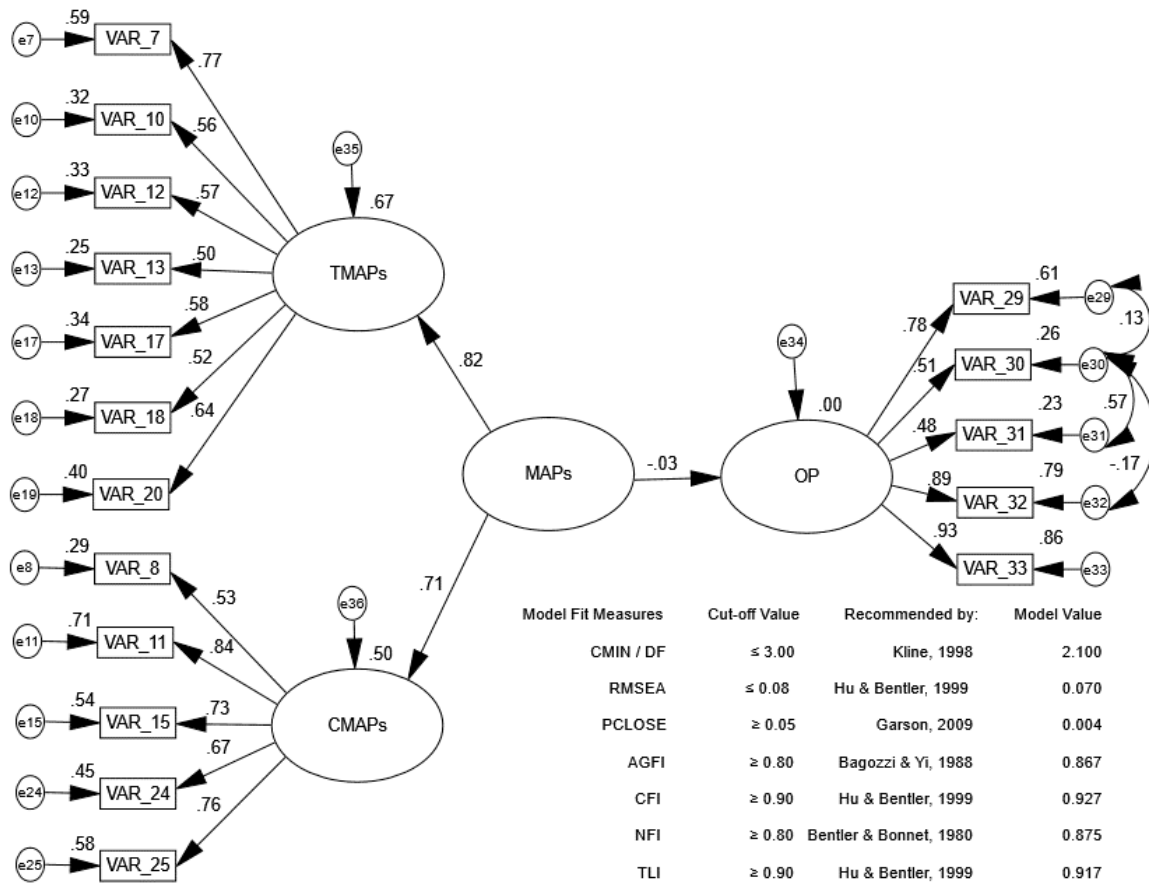


Figure 2. Model of the study

## 5. DISCUSSIONS

The first and second objectives of the study were to inspect and analyze the degree of utilization of MAPs in the Nepalese manufacturing sector. The uses of TMAPs like standard costing/variance analysis (79.37%), capital budgeting (77.13%), budgetary control (67.70%), and break-even analysis (55.60%) were more popular and had a great extent of use. Such a result was also consistent with Angelakis et al. (2010), Chand and Dahiya (2010), Chenhall and Langfield-Smith (1998a), Sulaiman et al. (2005), and Yalcin (2012), who reported higher usage of such practices. A plausible clarification of the increased use of such TMAPs may be ascribed to the organization’s lack of knowledge and/or experience in CMAPs (Lapsley & Oldfield, 1999; Sulaiman et al., 2005). Another potential explanation may be accredited to organizations’ long-term connotation with TMAPs (Joshi, 2001). The use of TMAPs has been regarded to oblige organizations’ capacity to embark on transition (Lapsley & Oldfield, 1999).

On the other hand, the study found that all the retained CMAPs were getting more attention in the NMFs. The CMAPs had more than 50% of a great extent of use (53.36%–74.00%). The general use of a great extent of CMAPs (61.26%) was higher than the TMAPs (55.10%). The utilization of CMAPs is related to implementing measures to encourage the option of substantial value-added accomplishments and/or the cancellation of non-value-added accomplishments (Ittner et al., 2002). Such accomplishments can enable organizations to accept suitable changes in their processes, systems, conveyances, and markets (Maiga & Jacobs, 2004; Sarkis, 2001). Subsequently, CMAPs may assist organizations in tracking costs in a viable manner (Chenhall & Langfield-Smith, 1998b) and progress the productivity and profitability of their operations (Ashworth et al., 2009).

The final objective of the analysis was to quantify the relationship between MAPs with OP. The study found that MAPs were not substantially associated with the OP in NMFs. Although the degree of



usage of CMAPs package was gaining more attention, such practices were not significantly associated with OP. Such findings were also consistent with earlier studies like Holmes et al. (2006) and Lapsley (2009). The studies pointed out that the emphasis on the usage of MAPs did not uphold managers seeking to progress OP. Specifically, the aggregated measure of performance utilized can mask the compromises between different performance measurement dimensions. Subsequently, as Modell (2012) suggested, future studies can additionally examine the associations by exploring the connection between MAPs and different performance measurement aspects that recognize the conflicting requests/demands of stakeholders.

Malmi and Brown (2008) and Modell (2012) suggested that the package of MAPs positively and

significantly affect OP rather than specific practices in isolation. More precisely, CMAPs are appeared to have a job in stimulating OP. Despite the low usage rates of CMAPs in practice, there is vast scope for expanding the utilization. This can be accomplished in various ways. For example, on-the-job training for the employees could be promoted. Through such training, employees will get familiar with the presence and system of CMAPs since employees have a significant role in embracing novel thoughts (Iverson et al., 1996). Cooperation with experts and exchange affiliations is another medium for upgrading their familiarity with CMAPs (Midgley et al., 1992). Notwithstanding employees' activities, organizational culture also assumes a fundamental part in the execution of CMAPs (Schneider et al., 1996; Rompho, 2018).

---

## CONCLUSION

The study aimed to assess how NMFs used MAPs, compare them, and determine their relationship with OP. The assessment was the employees' perceptual evaluation regarding the concerns. The degree of use of MAPs on a five-point Likert scale (mean = 3.620 and standard deviation = 0.568) was great in NMFs. When the level of use of the two sets of MAPs was compared, CMAPs (mean = 3.757) were slightly higher than TMAPs (mean = 3.563). The findings indicated that Nepalese enterprises are progressively embracing CMAPs since the average utilization rate of CMAPs (61.26%) was greater than the average utilization rate of TMAPs (55.10%). Such findings will positively impact organizational effectiveness if CMAPs are employed as part of the overall organizational strategy. While analyzing the association of MAPs to OP, overall MAPs had no significant association with OP ( $\beta = -0.026$ ,  $p = 0.750$ ) in NMFs though they are gradually adopting CMAPs. Hence, this study was distinct from earlier studies because it examined the association of MAPs with OP in the diffusion of TMAPs and CMAPs in the Nepalese scenario and discussed the combinations of such practices.

NMFs have been seen to rely on both practices to adapt to critical changes in the business environment. The fundamental function of MAPs was to provide relevant information to aid managers in making sound decisions. Inadequate information provision might add to ineffective resource management and performance degradation. Changes to MAPs must be staged to accommodate changes in the business environment. Accordingly, the adaptation of MAPs should be context-dependent. Appropriate MAPs customized to support business operations will result in competitive advantages and more remarkable performance. This is because effective MAPs enable working representatives to concentrate more effectively on differentiation needs, which can help maintain and improve consumer expectations, particularly quality and usefulness.

Despite the study's importance, there were some shortcomings. First, the sampling design limited its relevance to the Nepal Stock Exchange companies. It was a subjective assessment based on a standardized questionnaire. Self-rating to indicate how useful the MAPs could have caused confusion and discord among participants. The analysis did not propose a precise sequencing of MAPs deployment that may provide the greatest value. The findings raise several questions worth exploring further. Future research may use a case study or longitudinal design to assess the MAPs and OP relationship. These studies

could also look at more detailed OP proportions representing specific performance goals. Finally, the study urges professionals to consider MAPs while improving performance and changing organizational structures and practices. As part of the existing MA literature, the study attempted to provide empirical evidence on how MAPs work in manufacturing organizations. The findings would help industrial firms assess the usefulness of specific MAPs.

## AUTHOR CONTRIBUTIONS

Conceptualization: Rewan Kumar Dahal.  
 Data curation: Rewan Kumar Dahal.  
 Formal analysis: Rewan Kumar Dahal.  
 Investigation: Rewan Kumar Dahal.  
 Methodology: Rewan Kumar Dahal.  
 Project administration: Rewan Kumar Dahal.  
 Software: Rewan Kumar Dahal.  
 Supervision: Rewan Kumar Dahal.  
 Validation: Rewan Kumar Dahal.  
 Visualization: Rewan Kumar Dahal.  
 Writing – original draft: Rewan Kumar Dahal.  
 Writing – review & editing: Rewan Kumar Dahal.

## REFERENCES

- Almatrooshi, B., Singh, S., & Farouk, S. (2016). Determinants of organizational performance: A proposed framework. *International Journal of Productivity and Performance Management*, 65(6), 844-859. <https://doi.org/10.1108/IJPPM-02-2016-0038>
- Al-Omiri, M., & Drury, C. (2007). A survey of factors influencing the choice of product costing in UK organizations. *Management Accounting Research*, 18(4), 399-424. <https://doi.org/10.1016/j.mar.2007.02.002>
- Angelakis, G., Theriou, N., & Floropoulos, I. (2010). Adoption and benefits of management accounting practices: Evidence from Greece and Finland. *Advances in Accounting Incorporating Advances in International Accounting*, 26(1), 78-96. <https://doi.org/10.1016/j.adiac.2010.02.003>
- Ashworth, R., Boyne, G., & Delbridge, R. (2009). Escape from the iron cage? Organizational change and isomorphic pressures in the public sector. *Journal of Public Administration Research and Theory*, 19(1), 165-187. <https://doi.org/10.1093/jopart/mum038>
- Bagozzi, R., & Baumgartner, H. (1994). The evaluation of structural equation models and hypothesis testing. In R. Bagozzi (Ed.), *Principles of Marketing Research* (pp. 386-422). Cambridge: Blackwell.
- Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <https://doi.org/10.1007/BF02723327>
- Bagozzi, R. P., & Baumgartner, H. (1994). The evaluation of structural equation models and hypothesis testing. In R. P. Bagozzi (Ed.), *Principles of Marketing Research* (pp. 386-422). Cambridge: Blackwell.
- Baines, A., & Langfield-Smith, K. (2003). Antecedents to management accounting change: A structural equation approach. *Accounting, Organizations and Society*, 28(7-8), 675-698. [https://doi.org/10.1016/S0361-3682\(02\)00102-2](https://doi.org/10.1016/S0361-3682(02)00102-2)
- Bentler, P., & Bonnet, D. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606. <https://doi.org/10.1037/0033-2909.88.3.588>
- Bidhan, C. (2007). Application of management accounting techniques in decision making in the manufacturing business firms in Bangladesh. *The Cost and Management*, 35(1), 5-18.
- Bisbe, J., Batista-Foguet, J., & Chenhall, R. (2007). Defining management accounting constructs: A methodological note on the risks of conceptual misspecification. *Accounting, Organizations and Society*, 32(7-8), 789-820. <https://doi.org/10.1016/j.aos.2006.09.010>
- Cagwin, D., & Bouwan, J. (2002). The association between activity-based costing and improvement in financial performance. *Management Accounting Research*, 13(1), 1-39. <https://doi.org/10.1006/mare.2001.0175>
- Chand, M., & Dahiya, A. (2010). Application of management accounting techniques in Indian small and medium hospitality enterprises: An empirical study. *International Journal of Entrepreneurship and Small Business*, 11(1), 25-41.

14. Chenhall, R., & Langfield-Smith, K. (1998a). Adoption and benefits of management accounting practices: An Australian study. *Management Accounting Research*, 9(1), 1-19. <http://dx.doi.org/10.1006/mare.1997.0060>
15. Chenhall, R., & Langfield-Smith, K. (1998b). The relationship between strategic priorities, management techniques, and management accounting: An empirical investigation using a systems approach. *Accounting, Organizations and Society*, 23(3), 243-264. [https://doi.org/10.1016/S0361-3682\(97\)00024-X](https://doi.org/10.1016/S0361-3682(97)00024-X)
16. Cho, Y., & Lee, J. (2012). Performance management and trust in supervisors. *Review of Public Personnel Administration*, 32(3), 236-259. <https://doi.org/10.1177/0734371X11421496>
17. Clark, L., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. *Psychological Assessment*, 7(3), 309-319.
18. Dahal, R. (2019). Changing role of management accounting in the 21st century. *Review Public Administration and Management*, 7(2), 1-8.
19. Drury, C., & Tayles, M. (2005). Explicating the design of overhead absorption procedures in UK organizations. *British Accounting Review*, 37(1), 47-84. <https://doi.org/10.1016/j.bar.2004.08.003>
20. Dugdale, D., Jones, C., & Green, S. (2005). *Contemporary management accounting practices in UK manufacturing* (7 p.). London: Elsevier-CIMA.
21. Farjana, Y., & Rehana, F. (2010). Management accounting practices: A comparative analysis of manufacturing and service industries. *Journal of Centre for Socioeconomic Research*, 4(1), 131-141.
22. Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
23. Fuzi, N., Habidin, N., Janudin, S., & Ong, S. (2019a). Critical success factors of environmental management accounting practices: Findings from Malaysian manufacturing industry. *Measuring Business Excellence*, 23(1), 1-14. <https://doi.org/10.1108/MBE-03-2018-0015>
24. Fuzi, N., Habidin, N., Janudin, S., & Ong, S. (2019b). Environmental management accounting practices, environmental management system and environmental performance for the Malaysian manufacturing industry. *Measuring Business Excellence*, 18(1), 120-136. Retrieved from [https://econpapers.repec.org/article/idsijbexc/v\\_3a18\\_3ay\\_3a2019\\_3ai\\_3a1\\_3ap\\_3a120-136.htm](https://econpapers.repec.org/article/idsijbexc/v_3a18_3ay_3a2019_3ai_3a1_3ap_3a120-136.htm)
25. Garson, G. (2009). *Structural equation modeling*. Statistical Associates Publishing.
26. Hair, J., Black, W., Babin, B., Anderson R., & Tatham R. (2006). *Multivariate data analysis*. New Jersey: Prentice-Hall, Pearson Education, Inc.
27. Holmes, J., Pineres, S., & Kiel, L. (2006). Reforming government agencies internationally: Is there a role for the balanced scorecard? *International Journal of Public Administration*, 29(12), 1125-1145. <https://doi.org/10.1080/01900690600854803>
28. Horngren, C., Datar, S., Foster, G., Rajan, M., & Ittner, C. (2009). *Cost accounting: A managerial emphasis*. New Jersey: Prentice Hall.
29. Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
30. Hyvonen, J. (2005). Adoption and benefits of management accounting systems: Evidence from Finland and Australia. *Advances in International Accounting*, 18, 97-120. [https://doi.org/10.1016/S0897-3660\(05\)18005-2](https://doi.org/10.1016/S0897-3660(05)18005-2)
31. Ittner, C., Lanen, W., & Larcker, D. (2002). The association between activity-based costing and manufacturing performance. *Journal of Accounting Research*, 40(3), 711-726. Retrieved from <https://www.jstor.org/stable/3542270>
32. Iverson, R., McLeod, C., & Erwin, P. (1996). The role of employee commitment and trust in service relationships. *Marketing Intelligence & Planning*, 14(3), 36-44. <https://doi.org/10.1108/02634509610117348>
33. Johnson, H., & Kaplan, R. (1987). *Relevance lost - The rise and fall of management accounting*. Boston, MA: Harvard Business School Press.
34. Joshi, P. (2001). The international diffusion of new management accounting practices: The case of India. *Journal of International Accounting, Auditing, and Taxation*, 10(1), 85-109. [https://doi.org/10.1016/S1061-9518\(01\)00037-4](https://doi.org/10.1016/S1061-9518(01)00037-4)
35. Karanja, J., Mwangi, E., & Nyaanga, P. (2012). *Adoption of Modern Management Accounting Techniques in Small and Medium (SMEs) in Developing Countries: A case Study of SMEs in Kenya* (15 p.). Kenya: St Paul's University.
36. Kerremans, M., Theunisse, H., & Overloop, G. (1991). Impact of automation on cost accounting. *Accounting and Business Research*, 21(82), 147-155. <https://doi.org/10.1080/00014788.1991.9729827>
37. Kline, R. (1998). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
38. Laitinen, E. (2014). Influence of cost accounting change on performance of manufacturing firms. *Advances in Accounting*, 30(1), 230-240. <https://doi.org/10.1016/j.adiac.2014.03.003>
39. Langfield-Smith, K. (1997). Management control systems and strategy: A critical review. *Accounting, Organizations and Society*, 22(2), 207-232. [https://doi.org/10.1016/S0361-3682\(95\)00040-2](https://doi.org/10.1016/S0361-3682(95)00040-2)

40. Langfield-Smith, K. (2009). *Management accounting: Information for creating and managing value*. Sydney: McGraw-Hill Higher Education.
41. Lapsley, I. (2009). New public management: The cruellest invention of the human spirit? *Abacus*, 45(1), 1-21. <https://doi.org/10.1111/j.1467-6281.2009.00275.x>
42. Lapsley, I., & Oldfield, R. (1999). The past is the future: Constructing public sector accountants. *Pacific Accounting Review*, 11(1/2), 137-147. <https://doi.org/10.1108/eb037935>
43. Maiga, A., & Jacobs, F. (2004). The association between benchmarking and organizational performance: An empirical investigation. *Managerial Finance*, 30(8), 13-33. <https://doi.org/10.1108/03074350410769209>
44. Malmi, T., & Brown, D. (2008). Management control systems as a package – Opportunities, challenges, and research directions. *Management Accounting Research*, 19(4), 287-300. <https://doi.org/10.1016/j.mar.2008.09.003>
45. Midgley, D., Morrison, P., & Roberts, J. (1992). The effect of network structure in industrial diffusion processes. *Research Policy*, 21(6), 533-552. [https://doi.org/10.1016/0048-7333\(92\)90009-S](https://doi.org/10.1016/0048-7333(92)90009-S)
46. Modell, S. (2012). The politics of the balanced scorecard. *Journal of Accounting and Organizational Change*, 8(4), 475-489. <https://doi.org/10.1108/18325911211273482>
47. Nor, N., Bahari, N., Adnan, N., Kamal, S., & Ali, I. (2016). The effects of environmental disclosure on financial performance in Malaysia. *Procedia Economics and Finance*, 35(1), 117-126. [https://doi.org/10.1016/S2212-5671\(16\)00016-2](https://doi.org/10.1016/S2212-5671(16)00016-2)
48. Nunnally, J. (1993). *Psychometric theory* (3<sup>rd</sup> ed.). New York: McGraw-Hill.
49. Oke, A., Ogunsami, D., & Ogunlana, S. (2012). Establishing a common ground for the use of structural equation modeling for construction-related research studies. *Construction Economics and Building*, 12(3), 89-94.
50. Pavlatos, O., & Paggios, I. (2009). Management accounting practices in the Greek hospitality industry. *Managerial Auditing Journal*, 24(1), 81-98. <https://doi.org/10.1108/02686900910919910>
51. Podsakoff, P., MacKenzie, C., Lee, J.-Y., & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
52. Polnaya, I., Nirwanto, N., & Triatmanto, B. (2018). The evaluation of lecturer performance through soft skills, organizational culture, and compensation on the Private University of Ambon. *Academy of Strategic Management Journal*, 17(2), 1-9.
53. Rompho, N. (2018). Operational performance measures for startups. *Measuring Business Excellence*, 22(1), 31-41. <https://doi.org/10.1108/MBE-06-2017-0028>
54. Saaydah, M., & Khatatneh, W. (2014). The level of adoption of some recent cost management tools and the perceived effect on the performance of Jordan manufacturing companies. *Global Review of Accounting and Finance*, 5(1), 52-75.
55. Sarkis, J. (2001). Benchmarking for agility. *Benchmarking: An International Journal*, 8(2), 88-107. <https://doi.org/10.1108/14635770110389816>
56. Schneider, B., Brief, A., & Guzzo, R. (1996). Creating a climate and culture for sustainable organizational change. *Organizational Dynamics*, 24(4), 7-19. [https://doi.org/10.1016/S0090-2616\(96\)90010-8](https://doi.org/10.1016/S0090-2616(96)90010-8)
57. Seal, W. (2006). Management accounting and corporate governance: An institutional interpretation of the agency problem. *Management Accounting Research*, 17(4), 389-408. <https://doi.org/10.1016/j.mar.2006.05.001>
58. Sulaiman, M., Ahmad, N., & Alwi, N. (2005). Management accounting practices in selected Asian countries: A review of the literature. *Managerial Auditing Journal*, 19(4), 493-508.
59. Wahyuni, N., & Triatmanto, B. (2020). The effect of the organizational change on company performance mediated by changes in management accounting practices. *Accounting*, 6, 581-588. <http://dx.doi.org/10.5267/j.ac.2020.4.002>
60. Wijewardena, H., & DeZoysa, A. (1999). Comparative analysis of management accounting practices in Australia and Japan: An empirical investigation. *International Journal of Accounting*, 34(1), 49-70. [https://doi.org/10.1016/S0020-7063\(99\)80003-X](https://doi.org/10.1016/S0020-7063(99)80003-X)
61. Wu, J., Boateng, A., & Drury, C. (2007). An analysis of the adoption, perceived benefits, and expected future emphasis of western management accounting practices in Chinese SOEs and JVs. *The International Journal of Accounting*, 42(2), 171-185.
62. Yalcin, S. (2012). Adoption and benefits of management accounting practices: An intercountry comparison. *Accounting in Europe*, 9(1), 95-110. <https://doi.org/10.1080/17449480.2012.664394>
63. Yeshmin, F., & Hossain, M. (2011). Significance of management accounting techniques in decision-making: An empirical study on manufacturing organizations in Bangladesh. *World Journal of Social Sciences*, 1(1), 148-164.