

DIFFUSION AND DISSEMINATION OF MANAGEMENT ACCOUNTING PRACTICES IN NEPAL

Rewan Kumar Dahal, Tribhuvan University

ABSTRACT

This study analyzed to what extent the MAPs (Management Accounting Practices) had been diffused and disseminated in the NMI (Nepalese Manufacturing Industry). The study sample was the listed NMCs (Nepalese Manufacturing Companies). It was based on survey data collected from 351 respondents from the sample companies. The study's findings noticed that, however, the NMCs preferred TMAPs (Traditional Management Accounting Practices) over MMAPs (Modern Management Accounting Practices). They are introducing the MMAPs in parallel with the TMAPs. Furthermore, the study revealed that the MAPs had a negative and significant consequence on OP (Organizational Performance) in the NMI. Managers could be distorted if the MAPs don't correspond appropriately with the business processes. Therefore, the results of this study provide the NMCs' businesses extensive bits of knowledge and heading. Future research could be replicated using different research methodologies and looking at adopting more MAPs to other organizational variables and institutional contingents.

Keywords: Manufacturing Companies, Modern Practices, Organizational Performance, Traditional Practice.

Paper Type: Research paper.

JEL Classification: M41.

INTRODUCTION

Business organizations operate in a continually changing environment portrayed by globalization, intensified market rivalry, and economic liberation of state-owned endeavors (Magd & Curry, 2003). Accounting data is crucial in this evolving trend (Kurunmaki et al., 2003). MA (Management Accounting) is a branch of accounting that generates information for managers and forms an integral part of the strategic planning process within an association (Tuan Mat & Smith, 2011). Hence, MAPs being one of the primary sources of organizational information. Scholars have focused on adopting and converging MAPs in the business field in recent decades, yet they have paid less attention to MAPs transformation (Burns & Scapens, 2000). The topographies of the present business environment influence the attributes of the MAPs utilized in enterprises. Globalization of business sectors, transnational economic alliance, synchronization of accounting practices, and other factors have contributed to convergence to a worldwide arrangement of MAPs (Granlund & Lukka, 1998). Nevertheless, the public/national culture, legislation, and history of a nation are fundamental components that lead to contrasts from different nations. As a result, MAPs appear to be profoundly agreed phenomena, constrained by verifiable contexts specific to explicit periods and locations (Baxter & Chua, 2003), necessitating observing the impact of various specific settings on MAPs (Bhimani & Langfield-Smith, 2007).

This study is carried out to examine to what extent the NMI were adopting MAPs and their transformation. The advancement of the manufacturing sector is pivotal for achieving prosperity, generating employment, promoting trade, and boosting national income growth. Nevertheless, this was not performed as desired by the NMI. Due to the many years of inadequacies in new technology, poor infrastructure, power scarcity, blocked political processes, challenging trade circumstances, global competitiveness, and economic slump, the sector has experienced uneven growth over the years (National Planning Commission, 2014). In addition, establishments of manufacturing industries in Nepal are primarily labour intensive and locally based on primary materials. The government of Nepal has embraced various approach drives and administrative measures to fortify the manufacturing industries for quite a long time. In this context, comparatively few MAPs studies are available in the LDCs (Least Developed Countries), and each new study provides a new perspective on this untapped research environment. Not only the LDCs, but developing countries can also learn from the experiences of others and use them to benchmark their growth. In this regard, the study addresses the gap in the literature by conducting a thorough analysis of the parameters related to the adoption and usage of MAPs in the NMI.

Although the manufacturing sector is the most dynamic and significant contributor to the Nepalese economy, the gross value added of the industry is expected to diminish by 2.27 percent in the financial year 2019/2020 than that of the financial year 2018/19 (Ministry of Finance, 2020). It is assessed to have a negative growth rate in gross value added of the sector because of the actions initiated to prevent and control the outbreak of COVID-19, which caused the shut-down of enterprises/businesses and upset the production, stockpiling, and supply chain network. Over the latest decade, the average yearly gross value added of the sector was 3.4 percent, and the contribution to the gross domestic product was 5.7 percent in 2018/19. In contrast, such contribution is estimated to decrease by 5.1 percent in 2019/20 (Ministry of Finance, 2020).

In these circumstances, the framework of the study was developed based on the institutional and contingency theories that spotlight on understanding the role of the developmental process/practices of MA and the job of institutions in shaping the economic behavior of the NMI. Drawing upon the theory and MA literature, the study tended to the accompanying objectives:

1. To look at the degree of adoption of MAPs in the NMI.
2. To examine in what ways the progression of MAPs occurred.
3. To observe the association between performance and changes in MAPs.

This study adds to the MA literature in LDCs in some ways. First, it looked at the degree of acceptance of MAPs, acquiring a more profound comprehension of these connected points of view. Second, it examined and featured the progression of MAPs in the NMI, considering the institutional economic theory that characterized the Nepalese circumstance. Finally, it explored some indexes of MAPs in association with OP. The remainder of the paper was coordinated as follows. Section two reviewed the MA literature and developed the study hypotheses, and section three portrayed the materials and methodologies. Section four presented the results and analysis, section five disseminated discussions and conclusion of the study, at last, limitations and future research avenues outlined in section six.

REVIEW OF LITERATURE

Classification of MAPs

MAPs depend on quantitative and qualitative data. The quantitative approach underlines the abstract idea of the social world and endeavors to comprehend it mainly from the actor's point of view, as seen through those studied. In contrast, the qualitative approach seems to recommend making progress (Hoque, 1991). Based on the development and/or features, MAPs are described as TMAPs and MMAPs. Such practices under the respective group were presented in Table 1 as described by various scholars (Ajibolade, 2013; Ashfaq et al., 2014; Baines & Langfield-Smith, 2003; Chenhall & Langfield-Smith, 1998; Dahal, 2021; Farjana & Rehana, 2010; Ferreira, 2002; Johnson & Kaplan, 1987; Tuan Mat & Smith, 2011; etc.)

TMAPS:	MMAPS:
CFA (Cash Flow Analysis)	JIT (Jit Inventory System)
RA (Ratio Analysis)	ABC (Activity Base Costing)
SC & VA (Standard Costing & Variance Analysis)	SCM (Supply Chain Management)
AC & VC (Absorption & Variable Costing)	TQM (Total Quality Management)
BA (Break-Even Analysis)	ERP (Enterprise Resource Planning)
BC (Budgetary Control)	LCC (Life Cycle Costing)
CB (Capital Budgeting)	EC (Environmental Costing)
CBA (Cost Benefit Analysis)	BM (Benchmarking)
PC (Product Costing)	CP (Customer Profitability)
	BSC (Balanced Scorecard)

The TMATs are confined in gathering the data needs of associations since they are short-term focused, internally and financially oriented (Chenhall & Langfield-Smith, 1998), and were set up before the 1980s (Johnson & Kaplan, 1987). On the other hand, the MMAPs offer potential advantages to associations, including upgraded viability, competitiveness, enhanced quality, and an enriched client focus (Joshi et al., 2011). They are believed to have strategic ramifications for the business sequence and services (Hyvonen, 2005).

Adoption of MAPs

The business environment of NMI has transformed with increased competitiveness and sophisticated manufacturing technologies. The NMCs have pressure to provide more effective and dynamic data for decision-making and efficiently managing resources. This can be accomplished by embracing fruitful MAPs since they prioritize quality, quickness, competitiveness, cost-adequacy, and customer loyalty (Abdel-Maksoud et al., 2012). MA system provides exceptional data to help managers make informed economic decisions and encourage users to make an organizational transformation (Horngren, 1995). It is viewed as pertinent for the current dynamic business environment (Chenhall & Langfield-Smith, 1999). Inability to depend on appropriate accounting data may subsidize ineffective resource management and a progressive decline in OP. Integration of TMAPs with MMAPs could bring a more powerful MA framework (Omar et al., 2004).

Chenhall & Langfield-Smith (1998) have shown that most large Australian companies have embraced a range of MAPs that highlight non-monetary data relating to MMAPs. Bidhan (2007) revealed that monetary-based TMATs like RA, SC/VA, and CFA were frequently employed in Bangladeshi public and private sector manufacturing undertakings. The

study, Farjana & Rehana (2010) showed that the TMATs like RA, BC, BA, SC & VA, and CFA were used frequently in managerial functions in the manufacturing enterprises of Bangladesh. Lee & Yang (2011) indicated that transformation in MAPs as material for management decision-making can progress OP. MAPs that start from planning, controlling, and decision-making contribute to accomplishing organizational goals (Wahyuni & Triatmanto, 2020). Further evidence might result from this study:

H₁: The NMCs have significantly adopted and disseminated MAPs.

H₂: The NMCs have introduced MMAPs in parallel with TMAPs.

H₃: The NMCs have increasingly used MMAPs in parallel with TMAPs.

Changes in an association's current circumstance impose new applications on the MA framework, including the need to roll out appropriate improvements to ensure viability. The practicality of utilizing the MA framework as a stage of change can be clarified by analyzing to what extent the association encourages the transitory limit required to address various progressive practices (Chenhall & Euske, 2007). Burns et al. (1999) contended that adjustments of MAPs are not limited to new frameworks (substitution of the current framework); changes can make MA stand out (outcome or operational alteration).

H₄: The NMCs have gradually replacing/modifying the TMAPs with the MMAPs.

Institutional and contingency theories have predominantly informed earlier studies looking at the elements impacting the adoption of MAPs. The institutional approach dedicated to the impact of coercive, mimetic, and normative pressures (Brandau et al., 2012; Ma & Tayles, 2009), whereas contingency theory concentrated on the effect of contextual elements, including the impact of organizational design/structure for coordinated data (Chenhall & Morris, 1986). Therefore, MAPs are not a uniform occurrence. The general business environmental (external) and organizational structure (internal) have impacted the progressions and advancement of MAPs. Concurrence, technology, corporate design, and strategies are potential factors for such progressions (Shields, 1997). These drivers of progress likewise delineate the different roles that the shift can cause. Globalization has transformed the business environment of NMCs as well. It has not just compelled LEs (Large-sized Enterprises) to change, but the impact on SMEs (Small and Medium-sized Enterprises) has constrained them to contend not simply among themselves yet in addition with the LEs (Tuan Mat & Smith, 2011). As a result, LEs with prominent capital and resources are more inclined to employ MAPs (Bogale, 2013). Researchers (like Siska, 2016; Cadez & Guilding, 2008) have tracked down a positive connection between the firm's size with the adoption of different MAPs.

H₅: The adoption and dissemination of MAPs in LEs have more significant than the SMEs in the NMCs.

MAPs and Performance

OP is regarded as a specific component in an association that may have a connotation with MAPs. It reflects whether an association has succeeded or not in running and maintaining its business (Triatmanto et al., 2019). MAPs are more successful and productive in dealing with high market rivalry (Baines & Langfield-Smith, 2003; Hoque et al., 2001). Strategies employed as a dynamic apparatus utilizing MAPs ought to be intended for upgraded OP, and the

incorporation of MAPs into corporate strategies aids in the management of operational exercises (Wahyuni & Triatmanto, 2020). Earlier studies (like Baines & Langfield-Smith, 2003; Bisbe et al., 2007; Laitinen, 2014) revealed that appropriate MAPs in an association functioned as an impetus to propel the representatives. Baines and Langfield-Smith (2003) recommended that if a more noteworthy dependence accompanies MA change on accounting data, it might further improve OP. Therefore, MAPs that can run well will enhance OP (Wahyuni & Triatmanto, 2020).

H₆: MAPs have positively and significantly improved OP in the NMCs.

Adoption of changes in MAPs is a new phenomenon in MA literature. Earlier studies have shown that the changes in MAPs can improve OP. As indicated by the findings of the studies led by Jermias & Gani, 2005; Tuan Mat et al., 2016; Waweru & Uliana, 2016, changes in MAPs by manufacturing enterprises influence the organization's both financial and non-financial performance.

H₇: Changes in MAPs have positively related to an improved OP in the NMCs.

MATERIALS AND METHOD

Population and Sample

The NMI and their employees comprised the examination's populace. From this, the sample companies were the operative and listed MCs (Manufacturing Companies). According to the information accessible on the NEPSE's (Nepal Stock Exchange) website, as of 30 April 2021, 19 companies were classified as manufacturing and processing sub-sector. Out of them, Gorakhkali Rubber Udyod was not operative since 2012. Therefore, 18 listed MCs were the sample companies of the study, as presented in Table 2.

S.no	Symbol	Name of the Company	Products/Business
1	AVUL	Arun Vanaspati Udhyog Ltd.	Multi-products
2	UNL	Unilever Nepal Ltd.	Multi-products
3	BNL	Bottlers Nepal (Balaju) Ltd.	Beverage Processing
4	BNT	Bottlers Nepal (Terai) Ltd.	Beverage Processing
5	HDL	Himalayan Distillery Ltd.	Alcoholic Beverage
6	BSL	Birat Shoe Ltd.	Clothing & Accessories
7	FHL	Fleur Himalayan Ltd.	Health Care Products/Multi-products
8	HBTL	Harisiddhi Brick & Tiles Ltd.	Bricks & Tiles
9	NKUL	Nepal Khadya Udhyog Ltd.	Food & Beverage
10	NVGL	Nepal Vanaspati Ghee Udhyog Ltd.	Refined Oil & Ghee
11	NLOL	Nepal Lube Oil Ltd.	Oil & Energy
12	SBPPL	Shree Bhrikuti Pulp And Paper Ltd.	Paper & Pulp
13	SRSML	Shree Ram Sugar Mills Ltd.	Sugar & Industrial products
14	SHIVM	Shivam Cement Ltd.	Cement & Allied Products
15	BSML	Butwal Spinning Mills Ltd.	Industrial Service
16	JSML	Jyoti Sinning Mills Ltd.	Industrial Service
17	NBBUL	Nepal Bitumin & Barrel Udhyog Ltd.	Industrial Service
18	RJML	Raghupati Jute Mills Ltd.	Industrial Service

Because most of the NMCs did not have a separate MA unit, working representatives of the sample companies who volunteered to participate in the study were counted as respondents.

Data Collection Instrument

A structured questionnaire was conceived to collect data on MAPs dissemination and its impact on OP in the NMCs. The questionnaire had 31 questions and was divided into four sections. Section I presented seven multi-dimensional questions that intended to seek general information of the organizations covered by questions 1-4 (included: name of the company, industry classification, type of product, and the company size) and about the respondents covered by questions 5-7 (include about: position, academic qualification, and gender). Section II perused the diffusion of TMAPs in the organization over the past three years and covered by questions 8-16 (included: RA, CFA, SC & VA, AC & VC, BA, BC, CB, CBA, and PC). Section III sought the adoption of MMAPs over the latest three years and captured by questions 17-26 (included: JIT, ABC, SCM, TQM, ERP, LCC, EC, BM, CP, and BSC). The final section looked for data on changes in performance due to MAPs over the same period. It contained five measuring items of financial and operational performance covered by questions 27-31 (included: sales growth, profit growth, reduce cost, operational processes, and operational efficiency). The study variable questions confined in the sections II-IV were structured in a five-point Likert scale ranging from "significantly less" to "significantly more".

Data Collection and the Respondents' Profile

The data for this study had been acquired using the survey instrument designed for the examination via field survey. From February to April 2021, thirty targeted respondents per sample company were approached to collect data. Altogether, 351 correctly filled-up responses were obtained. The demographic and general characteristics of the sample companies and the respondents were outlined in Table 3.

No of the respondents		%	No of the respondents		%
Industry classification of the respondents:			Respondents position:		
Industrial service business	75	21.4	Offices and executives	181	51.6
General business (multi-products)	54	15.4	Assistants	170	48.4
Beverage processing	41	11.6	Academic qualification:		
Food and beverage	40	11.4	Graduates and more	201	57.3
Bricks and tiles	29	8.2	Undergraduates	150	42.7
Clothing and accessories	23	6.6	Respondent's sex:		
Paper and pulp products	23	6.6	Male	189	53.8
Cement and its allied products	22	6.3	Female	162	46.2
Sugar and industrial products	18	5.1	Company size:		
Oil and energy	13	3.7	Small & medium-sized (Based on no of employees ≤ 150)	72	20.5
Alcoholic beverage	13	3.7	Large-sized (Based on no of employees ≥ 151)	279	79.5
Type of product:					
Consumer product	169	48.1			
Industrial product	120	34.2			
Both	62	17.7			
Total of each section	351	100.0	Total of each section	351	100.0

Reliability of the Data

The study had 24 study variables within three constructs. Cronbach's alpha (α) was used to evaluate the reliability of the variables. The analysis indicated that four variables, namely AC & VC, BC, CB, and CBA, under TMAPs construct, and three variables, namely LCC, BM, and BSC under MMAPs construct, required to delete because of greater alpha levels, as shown in Table 4 if the items deleted. None of the items were found to delete from OP constructs. Therefore, reliability statistics promoted 17 test variables within three constructs for further analysis.

Constructs	Before, if the item deleted		After, if the item deleted	
	Cronbach's alpha	No of items	Cronbach's alpha	No of items
TMAPs	0.863	9	0.883	5
MMAPs	0.840	10	0.848	7
OP	0.945	5	0.945	5
Total no of test items under study variables		24		17

RESULTS AND ANALYSIS

The study evaluated the employees' perceptions of the adoption, dissemination, and advantages of MAPs in the NMI. Table 5 showed the descriptive data for each MAPs test variable, including mean, standard deviation, and the correlation matrix.

TMAPs Variables									
Variables	Mean	St. Dev.	A	CFA	SC/VA	BA	PC		
RA	4.01	0.741	.000	-	-	-	-	-	-
CFA	4.25	0.710	.530**	1.000	-	-	-	-	-
SC & VA	4.16	0.740	.525**	0.514**	1.000	-	-	-	-
BA	3.95	0.864	.657**	0.594**	0.603**	1.000	-	-	-
PC	3.63	0.821	.638**	0.603**	0.673**	0.666**	1.000	-	-
MMAPs Variables									
Variables	Mean	St. Dev.	ITS	ABC	SCM	TQM	ERP	EC	CP
JITS	3.29	1.081	.000	-	-	-	-	-	-
ABC	3.19	1.255	.407**	1.000	-	-	-	-	-
SCM	2.97	1.234	.418**	0.436**	1.000	-	-	-	-
TQM	3.33	1.246	.448**	0.427**	0.419**	1.000	-	-	-
ERP	3.01	1.207	.558**	0.457**	0.474**	0.417**	1.000	-	-
EC	3.09	1.253	.353**	0.402**	0.497**	0.465**	0.462**	1.000	-
CP	2.92	1.239	.333**	0.394**	0.821**	0.335**	0.387**	0.422**	1.000

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

The descriptive statistics (presented in Table 5) showed that all the items average were approximately three or above in a 5-point Likert scale. The maximum standard deviation ratios were under a 2:1 threshold, as indicated by (Julious, 2005). The association of items at level 0.01 was likewise positive and significant (two-tailed). These data have demonstrated that the proportion of information on the construct to be examined was nearly identical for each category.

Mean values of TMAPs variables in the range of 3.63 to 4.25 (with an average of 4.000) and MMAPs variables in the range of 2.92 to 3.29 (with an average of 3.114) indicated that the sample companies had a similar level of adoption and dissemination both types of MAPs. Similarly, as per the results presented in Table 6, significant overall MAPs were 54.87 %, moderate users were 36.65 % and non-users were 8.48 %, with a mean of 3.484 and standard deviation 0.580. Such statistics supported the H1 of the study.

		Significantly less (1)	Moderate (2-3)	Significantly more (4-5)	Mean	
TMAPs:						
1.	RA	0 (0.00 %)	91 (25.93 %)	260 (74.07 %)		
2.	CFA	0 (0.00 %)	55 (15.67 %)	296 (84.33 %)		
3.	SC & VA	0 (0.00 %)	72 (20.51 %)	279 (79.49 %)		
4.	BA	0 (0.00 %)	118 (33.62 %)	233 (66.38 %)		
5.	PC	0 (0.00 %)	159 (45.30 %)	192 (54.70 %)		
Average		0.00 %	28.21 %	71.79 %	4.000	.641
MMAPs:						
1.	JITS	31 (8.83 %)	164 (46.73 %)	156 (44.44 %)		
2.	ABC	56 (15.95 %)	127 (36.18 %)	168 (47.87 %)		
3.	SCM	55 (15.67 %)	166 (47.29 %)	130 (37.04 %)		
4.	TQM	42 (11.96 %)	129 (36.75 %)	180 (51.29 %)		
5.	ERP	55 (15.67 %)	158 (45.01 %)	138 (39.32 %)		
6.	EC	60 (17.10 %)	138 (39.32 %)	153 (43.58 %)		
7.	CP	58 (16.52 %)	167 (47.58 %)	126 (35.90 %)		
Average		14.53 %	42.69 %	42.78 %	3.114	.881
Overall MAPs (average) 8.48 %			36.65 %	54.87 %	3.484	.580

Table 6 revealed the insights of adoption and dissemination of TMAPs and MMAPs. A 5-point Likert type scale, the degree of adoption and dissemination was divided into three classes, '*significantly less*' (response point 1); '*moderate*' (response points 2 and 3), and '*significantly more*' (response points 4 and 5). The results showed that the NMCs were adopting and diffusing the TMAPs significantly (with the average use rate of 71.79 %), and the non-users of the TMAPs were not found. In parallel with TMAPs, the companies were also introducing the MMAPs. The statistics showed that the significant users of MMAPs were 42.78 %, the moderate users were 42.69 %, and non-users were 14.53 %. In addition, the moderate use rate of MMAPs (42.69 %) was more significant than TMAPs (28.21 %) indicated that the NMCs were increasingly applying the MMAPs in parallel with TMAPs. Such results supported the H2 and H3 of the study. Similarly, the NMCs employed a higher number of MMAPs (seven techniques/practices) than TMAPs (five techniques/practices) indicated that the NMI has gradually replacing/modifying the TMAPs with MMAPs and supported the H4 of the study.

Variables	Mean	SD	Levene's test for equality of variance		Levene's test for equality of means	
			F-value	Sig.	t-value	Sig.
Overall MAPs			4.934	0.027	4.525	0.000
Small and medium-sized enterprises	.725	0.484	-	-	-	-
Large-sized enterprises	.421	0.588	-	-	-	-
TMAPs			0.698	0.404	0.206	0.837

Small and medium-sized enterprises	4.014	0.620	-	-	-	-
Large-sized enterprises	3.996	0.647	-	-	-	-
MMAPs			23.814	0.000	5.560	0.000
Small and medium-sized enterprises	3.518	0.621	-	-	-	-
Large-sized enterprises	3.011	0.908	-	-	-	-

In contrast with the stated H5, results in Table 7 showed that SMEs were better adapting and disseminating the MAPs ($t = 4.525$, $p = 0.000$) guided by the Levene's test of unequal variances ($F = 4.954$, $\text{Sig.} = 0.027$) at 5 % level of significance that also led to better adoption and dissemination of MMAPs ($t = 4.525$, $p = 0.000$) guided by the Levene's test of unequal variances ($F = 23.814$, $\text{Sig.} = 0.000$) than the LEs. With respect to TMAPs, Levene's test ($F = 0.698$, $\text{Sig.} = 0.404$) indicated the equal variances. Therefore, the adoption and dissemination of TMAPs between the SMEs and LEs were not significantly different ($t = 0.206$, $p = 0.837$). All the results didn't support H5.

Constructs	Mean	SD	MAPs	TMAPs	MMAPs	OP	Theoretical Range	Actual Range
MAPs	.484	.580	.000				1-5	2.08 – 4.83
TMAPs	.000	.641	465** (0.000)	1.000			1-5	2.80 – 5.00
MMAPs	.114	.881	.888** (0.000)	0.005(0.9 18)	1.000		1-5	1.29 – 5.00
OP	.973	.675	0.208** (0.000)	0.142** (0.008)	0.160** (0.003)	.000	1-5	2.00 – 5.00

Table 8 demonstrated the outcomes of descriptive statistics and Pearson's correlation coefficient between MAPs and OP. In contrast to the stated H7, MAPs had negative and significant consequence on OP ($r = -0.208$, $p < 0.01$). With respect to specific MAPs, TMAPs had slightly lower negative effect ($r = -0.142$, $p < 0.01$) than MMAPs ($r = -0.160$, $p < 0.01$) on OP. Such outcomes indicated that changes in MAPs also had a negative and significant influence on OP. Hence, H6 and H7 were also not supported.

DISCUSSION AND CONCLUSION

The study's goal was to examine how widely the MAPs were adopted and disseminated in the NMI. To address the first objective, the study revealed that the average usage scores of 3.484 (with $SD = 0.580$) at a 5-point Likert scale indicated that the NMI was significantly adopting and disseminating the MAPs. In addition, the study found the non-users of 0.00 % & 8.48 %, the moderate users of 28.21 % & 36.65 %, and the significant users of 71.79% & 54.87 % the specific group of TMAPs and MMAPs, respectively. The adoption of TMAPs (mean = 4.000) was greater than the MMAPs (mean = 3.114). The results indicated that the NMI is introducing the MMAPs in parallel with the TMAPs. Such finding was similar to various previous studies (like Dick-Forde et al., 2007; Duh et al., 2009; Joshi, 2001; Sulaiman et al., 2004) that the manufacturing companies still had a preference for TMAPs over MMAPs. The studies were not only revealed the preference but also exposed the use of MMAPs in parallel with the TMAPs.

To discourse the second objective, the study noticed that the convergence of MAPs in the NMI. The convergence could be related, in particular, to changes in the competitiveness and production technologies in the business environment. The government of Nepal promoted the business of SMEs by providing various incentives, for instance, tax and financial incentives, so they are seen as living in a 'comfort zone'. In contrast to Tuan Mat & Smith's (2011) findings, the study observed that the level of adoption and dissemination of MAPs in SMEs was more significant than those in LEs. In addition, the level of adoption and dissemination of TMAPs were insignificant ($t = 0.206$, $p = 0.837$) and of MMAPs were significant ($t = 5.560$, $p = 0.000$) in those enterprises. Because of the advent of new technologies and changes in production costs structure, MAPs must be tailored to satisfy contemporary market demands. The MMAPs like TQM, ABC, JITs, EC, ERP, SCM, CP, etc., have significant implications for MAPs since the TMAPs cannot effectively support managers to oversee organizational resources and recognize the relevant costs (Askarany & Smith, 2008). A significant application of MMAPs evidenced the way of progression of MAPs in the NMI.

To report the third objective, there was grounded observed evidence for an association between MAPs and OP. Baines & Langfield-Smit (2003) noticed that companies with a more noteworthy dependence on MMAPs improved their OP. Ittner & Larcker (1995), Mia & Clarke (1999), Sim & Killough (1998) correspondingly tracked down a positive association between MAPs and OP. Conversely, with such, this study revealed that the MAPs had a negative and significant impact on OP ($r = -0.208$, $p < 0.01$) in the NMI. Chenhall & Langfield-Smith (1998) studied the acceptance and advantages of MAPs in Australia. The authors revealed that most manufacturing enterprises intended to adopt MMAPs in the future, particularly ABC, TQM, and BM. Abdel-Kader & Luther (2006) noticed a pattern indicating augmented utilization of cost of quality, non-monetary measures, and examining the strengths and weaknesses of rivals in the MAPs. The study findings directed that integration with strategic measurements and non-monetary performance activities through MAPs would become more significant in the future.

The increased awareness of TMAPs' shortcomings has prompted a review of multi-dimensional performance measurement procedures. One of the significant developments was the incorporation of non-financial performance measures in the OP measurement system. The scope of MA has moved toward the measure several dimensions of organizational perspectives and perceive the board issues identifying with consumers, markets, rivals, choices, processes and activities, and so forth. MAPs cover strategic aspects of the dynamic interaction, which empower the organization to utilize resources internally and externally. Pertinent MAPs in the business receive new structures that reflect the competitiveness of market forces and employ different methodologies that aggregate strategic, operational, and financial information to make management decisions and OP more productive. The outcomes of this study can improve corporate performance if MAPs are used as a part of an overall organizational strategy.

It has been found that both TMAPs (mean = 4.000 and SD = 0.641) and MMAPs (mean = 3.114 and SD = 0.881) seemed to be similarly crucial since the NMI relied on both practices to cope with significant changes in the contemporary business environment. It has been addressed whether MMAPs should be used to complement or substitute for TMAPs. The findings showed the NMI has gradually introducing MMAPs (since 42.69 % adopting moderately and 42.78 % adopting significantly more) in addition to TMAPs and modifying the use of the TMAPs. Such results provided evidence that MMAPs and TMAPs should be used both to complement and substitute for each other. The business environment has evolved and is regularly changing. It is critical to select appropriate MAPs, ensuring an effective MA system that can coordinate

business activities, provide valuable data for executives to make various decisions, and enhance OP. If the MAPs do not precisely coincide with business activities, the executives may have been provided inaccurate data, putting the OP at risk. Therefore, the study's findings offer helpful comprehensions and valuable guidelines to the stakeholders dealing with changes in MAPs in their organizations.

LIMITATIONS AND FUTURE RESEARCH AVENUES

Like any other research, certain limitations were imposed on this examination. First of all, the sample might not be entirely representative of the manufacturing industry populace in Nepal. Given the moderately restricted sample size, the study conclusions couldn't be generalized without significant caution. The survey featured a few structured questionnaires and some MAPs accounts. Only the use and importance were examined, with no regard for the reasons for it. Furthermore, the data were taken at some point in time rather than longitudinally. Thus, the examination could not take the time impact of performance changes in MAPs into consideration. Future studies could replicate by adopting alternative research approaches and examine the adoption of MAPs regarding different organizational contingent and institutional perspectives (like type, culture, size, topography, etc.)

The study of MAPs is extremely rare in Nepal, which piques researchers' curiosity in contributing to this field. It will broaden the area of future research, allowing practitioners to develop practical answers to the concerns raised in the study. Therefore, the primary contribution of this study is to extend the knowledge about the diffusion of MAPs and MA change by analyzing a different cultural environment. The survey results suggested a global tendency towards convergence in the designs and conceptions of the MA system. The study included a limited number of MAPs based on previous research; however, future studies could consist of more practices. Therefore, there is a need for further research on MAPs that can provide insight into a company's quality management too. Slow or non-adoption of MAPs, in particular, may suggest that the company's leadership does not respect or promote innovative methods.

REFERENCES

- Abdel-Kader, M., & Luther, R. (2006). Management accounting practices in the British food and drinks industry. *British Food Journal*, 108(5), 336-357.
- Abdel-Maksoud, A., Abdallah, W., & Youssef, M. (2012). An empirical study of the influence of intensity of competition on the deployment of contemporary management accounting practices and managerial techniques in Egyptian firms. *Journal of Economic and Administrative Sciences*.
- Ajibolade, S.O. (2013). Management Accounting Systems Design and Company Performance in Nigerian Manufacturing Companies. A contingency theory perspective. *British Journal of Arts and Social Sciences*, 14(2), 228-244.
- Ashfaq, K., Younas, S., Usman, M., & Hanif, Z. (2014). Traditional vs. contemporary management accounting practices and its role and usage across business life cycle stages: Evidence from Pakistani financial sector. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 4(4), 104-125.
- Askarany, D., & Smith, M. (2008). Diffusion of innovation and business size: a longitudinal study of PACIA. *Managerial Auditing Journal*.
- Baines, A., & Langfield-Smith, K. (2003). Antecedents to management accounting change: a structural equation approach. *Accounting, Organizations and Society*, 28(7-8), 675-698.
- Baxter, J., & Chua, W.F. (2003). Alternative management accounting research—whence and whither. *Accounting, Organizations and Society*, 28(2-3), 97-126.

- Bhimani, A., & Langfield-Smith, K. (2007). Structure, formality and the importance of financial and non-financial information in strategy development and implementation. *Management Accounting Research*, 18(1), 3-31.
- Bidhan, C.M. (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.M., & 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.
- Bogale, E. (2013). Advanced management accounting techniques in manufacturing firms in Ethiopia. *Research Journal of Finance and Accounting*, 4(16), 9-18.
- Brandau, M., Eendenich, C., Trapp, R., & Hoffjan, A. (2012). Institutional drivers of conformity – evidence for management accounting from Brazil and Germany. *International Business Review*, 22(2), 466-479.
- Burns, J., & Scapens, R.W. (2000). Conceptualizing management accounting change: an institutional framework. *Management Accounting Research*, 11(1), 3-25.
- Burns, J., Ezzamel, M., & Scapens, R.W. (1999). Management accounting change in the UK. *Management Accounting*, 77(3), 28-30.
- 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.
- Chenhall, R.H., & Euske, K.J. (2007). The role of management control systems in planned organizational change: An analysis of two organizations. *Accounting, Organizations and Society*, 32(7-8), 601-637.
- Chenhall, R.H., & Morris, D. (1986). The impact of structure, environment, and interdependence on the perceived usefulness of management accounting systems. *Accounting Review*, 16-35.
- Chenhall, R.H., & Langfield-Smith, K. (1998). Adoption and benefits of management accounting practices: an Australian study. *Management Accounting Research*, 9(1), 1-19.
- Chenhall, R.H., & Langfield-Smith, K.I.M. (1999). The implementation of innovative management accounting systems. *Australian Accounting Review*, 9(19), 37-46.
- Dahal, R.K. (2021). Traditional vs contemporary management accounting techniques in the Nepalese manufacturing companies. *Journal of Management Information and Decision Sciences*, 24(5), 1-14.
- Dick-Forde, E., Burnett, J., & Devonish, D. (2007). A preliminary survey of management accounting practices in Barbados. *Journal of Eastern Caribbean Studies Cumulative Index*, 32(2), 50–72.
- Duh, R.R., Xiao, J.Z., & Chow, C.W. (2009). Chinese firms' use of management accounting and controls: facilitators, impediments, and performance effects. *Journal of International Accounting Research*, 8(1), 1-30.
- Farjana, Y., & Rehana, F. (2010). Management accounting practices: A comparative analysis of manufacturing and service industries. *Journal of Centre for Socio-Economic Research*, 4(1), 131-141.
- Granlund, M., & Lukka, K. (1998). Towards increasing business orientation: Finnish management accountants in a changing cultural context. *Management Accounting Research*, 9(2), 185-211.
- Hoque, Z.A.K.M. (1991). Researching management accounting practice: The debate about quantitative and qualitative research. *Dha a University Journal of Business Studies*, 12(2), 19-32.
- Hoque, Z., Mia, L., & Alam, M. (2001). Market competition, computer-aided manufacturing and use of multiple performance measures: an empirical study. *The British Accounting Review*, 33(1), 23-45.
- Horngren, C.T. (1995). Management accounting: this century and beyond. *Management Accounting Research*, 6(3), 281-286.
- Hyvönen, J. (2005). Adoption and benefits of management accounting systems: evidence from Finland and Australia. *Advances in International Accounting*, 18, 97-120.
- Ittner, C.D., & Larcker, D.F. (1995). Total quality management and the choice of information and reward systems. *Journal of Accounting Research*, 33, 1-34.
- Jermias, J., & Gani, L. (2005). Ownership structure, contingent-fit, and business-unit performance: A research model and empirical evidence. *The International Journal of Accounting*, 40(1), 65-85.
- Johnson, T.H., & Kaplan, R.S. (1987). Relevance lost: the rise and fall of management accounting.
- Joshi, P.L. (2001). The international diffusion of new management accounting practices: the case of India. *Journal of International Accounting, Auditing and Taxation*, 10(1), 85-109.
- Joshi, P.L., Bremser, W.G., Deshmukh, A., & Kumar, R. (2011). Diffusion of management accounting practices in gulf cooperation council countries. *Accounting Perspectives*, 10(1), 23-53.
- Julious, S.A. (2005). Why do we use pooled variance analysis of variance?. *Pharmaceutical Statistics*, 4(1), 3-5.
- Kurunmaki, L., Lapsley, I., & Melia, K. (2003). Accountingization v. legitimation: a comparative study of the use of accounting information in intensive care. *Management Accounting Research*, 14(2), 112-139.

- Laitinen, E.K. (2014). Influence of cost accounting change on performance of manufacturing firms. *Advances in Accounting*, 30(1), 230-240.
- Lee, C.L., & Yang, H. (2011). Organization structure, competition and performance measurement systems and their joint effects on performance. *Management Accounting Research*, 22(2), 84-104.
- Ma, Y., & Tayles, M. (2009). On the emergence of strategic management accounting: an institutional perspective. *Accounting and Business Research*, 39(5), 473-495.
- Magd, H., & Curry, A. (2003). Benchmarking: achieving best value in public-sector organisations. *Benchmarking: An International Journal*.
- Ministry of Finance. (2020). Economic Survey 2019/20. Kathmandu, Nepal: Government of Nepal.
- National Planning Commission. (2014). Development of manufacturing industries in Nepal current state and future challenges. Kathmandu, Nepal: Government of Nepal Central Bureau of Statistics.
- Omar, N., Abd-Rahman, I.K., & Sulaiman, S. (2004). Management accounting in Malaysia-Has relevance been lost. *Accountants Today*, November, 26-28.
- Shields, M.D. (1997). Research in management accounting by North Americans in the 1990s. *Journal of Management Accounting Research*, 9, 3-62.
- Sim, K.L., & Killough, L.N. (1998). The performance effects of complementarities between manufacturing practices and management accounting systems. *Journal of Management Accounting Research*, 10, 325.
- Šiška, L. (2016). The contingency factors affecting management accounting in Czech companies. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64(4), 1383-1392.
- Sulaiman, M., Nik Ahmad, N.N., & Alwi, N. (2004). Management accounting practices in selected Asian countries. *Managerial Auditing Journal*, 19(4), 493-508.
- Triatmanto, B., Wahyuni, N., & Respati, H. (2019). Continual human resources empowerment through human capital and commitment for the organizational performance in hospitality industry. *Quality Accesses to Success*, 20(173), 84-91.
- Tuanmat, T.Z., & Smith, M. (2011). Changes in management accounting practices in Malaysia. *Asian Review of Accounting*.
- Waweru, N.M., & Uliana, E. (2005). Predictors of management accounting change in South Africa: Evidence from five retail companies. *South African Journal of Accounting Research*, 19(1), 37-71.
- 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.