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Management Control System and Organizational Performance of Manufacturing Firms in Kailali District

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Abstract

This study examines the relationship between management control systems and the organizational performance of manufacturing firms in Kailali District. Management control system (MCS) is a crucial tool for strategic planning, budgeting, decision-making and internal auditing for the enhancement of organizational performance. The study looks into the effects of these tools on organizational performance. The study evaluates the significance of MCS components using descriptive statistics, correlation analysis and multiple regression using primary data from 20 manufacturing organizations. The results show that internal audits, strategic planning and decision-making have positively and significantly affected organizational performance. However, budget control has a positive relationship but insignificant effect on organizational performance. Among all the management control system dimensions strategic planning has been found most important dimension to affect the organizational performance of manufacturing firms. The findings of the study will be useful to the managers of manufacturing firms for the implementation of management control dimensions. The study added an area of comparison regarding the management control system.

Keywords: Strategic planning, budget control, business performance, internal audit

Introduction

Understanding the complexities and dynamism of the business world is crucial for competitive success, as it encompasses all essential variables and elements. If Management Control System (MCS) is properly developed and structured, it can be viewed as a sustained competitive advantage for the organization and become very important for decision-making (Barney, 1991). MCS

is a management tool that facilitates planning, budgeting, analysis, evaluation and assessment of financial and accounting data. This information is important for making informed decisions (Davila & Foster, 2005). ‘‘Management control is the process by which managers influence other members of the organization to implement the organization’s strategies’’ (Anthony, 2007, p. 6). The tool used by management to monitor and regulate an organization’s operations is called the management control system. Strategic planning, budget control, decision-making, internal audit, etc. are the general tools in the organizational systems of manufacturing firms. Analysis of the relationship between a company’s performance and its use of management control systems (MCS) is becoming more popular (Bisbe & Otley, 2004). By providing vital tools for planning, budgeting, analyzing, measuring and evaluating data for informed decision-making, MCS implementation greatly improves business performance (Cosenza & Noto, 2015; Dávila & Foster, 2005; Duhan, 2007).

Manufacturing businesses in Nepal encompass a diverse range of industries as categorized by the Nepal Association of Manufacturers. These include textiles, tobacco, plastics, rubber, timber goods, healthcare equipment, furniture food and beverage processing, and chemicals (Nepal Association of Manufacturers, 2023). The manufacturing sector in Nepal holds significant potential for both large-scale industries and innovative small-scale enterprises. Recognizing its importance, the government has committed to fostering investment in manufacturing to accelerate industrialization and economic growth (Ministry of Industry, Commerce and Supplies, 2022). Key areas of investment include fast-moving consumer goods, apparel, cement, and pharmaceuticals, which contribute substantially to both employment and GDP (Nepal Rastra Bank, 2023).

Nepal’s garment industry has witnessed significant growth over the past decade, driven by factors such as affordable labor, supportive government policies, expanding domestic markets, export opportunities, and attractive investor incentives (Nepal Rastra Bank, 2023; Ministry of Industry, Commerce, and Supplies, 2022). Similarly, manufacturing businesses in the Kailali District consist of firms registered with the Kailali Chamber of Commerce and Industry. These enterprises span various industries, including agro-industries, metal and furniture production, garment manufacturing, brick and tile industries, ice cream production, and concrete-related industries (Kailali Chamber of Commerce and Industry, 2023).

The manufacturing sector is a key pillar of Nepal’s economy, contributing significantly to employment generation and GDP. Manufacturing activities are vital for the structural transformation of the economy, helping reduce reliance on agriculture and enhancing industrial output (Nepal Rastra Bank, 2023). In the

Kailali district, where industrial activity is gradually expanding, manufacturing firms contribute to regional economic growth and help balance the rural-urban development divide (Ministry of Industry, Commerce and Supplies, 2022).

The Government of Nepal has introduced policies like the Industrial Enterprises Act 2020, offering tax exemptions, customs duty rebates, and simplified registration procedures to encourage investment in the manufacturing sector (Government of Nepal, 2020). Additionally, the Prime Minister's Employment Program and concessional loans aim to alleviate capital shortages for small and medium enterprises, including those in the Kailali district (MoF, 2023).

Despite its importance, the manufacturing sector in Nepal, particularly in regions like Kailali, faces challenges such as inadequate infrastructure, unreliable electricity supply, and bureaucratic inefficiencies (Asian Development Bank, 2022). Furthermore, political instability and frequent policy changes hinder long-term planning and investment (World Bank, 2023). Local firms also struggle with limited access to skilled labor and advanced technology, which affects their competitiveness.

The manufacturing industry is a vital component of any economy, playing a crucial role in driving economic growth and development (Nepal Rastra Bank, 2023). Within this sector, management control systems (MCS) serve as an indispensable tool for monitoring operations and enhancing organizational performance (Anthony & Govindarajan, 2007). Despite substantial investments in MCS by manufacturing firms, the relationship between MCS implementation and firm performance remains insufficiently understood, particularly in developing economies (Ministry of Industry, Commerce and Supplies, 2022). This research aims to analyze the impact of MCS on the organizational performance of manufacturing firms in Kailali District. A management control system (MCS) is a crucial tool for monitoring and improving organizational performance in manufacturing companies, as well as for facilitating the achievement of organizational goals (Anthony & Govindarajan, 2007). However, poor MCS practices in Nepal often result in lengthy decision-making processes, which significantly hinder the efficiency of manufacturing firms (Ministry of Industry, Commerce and Supplies, 2022).

These delays frequently lead to extended project completion timelines, sometimes spanning years beyond the scheduled completion date. Consequently, manufacturing firms experience higher production costs, a decline in market share and goodwill, and a demotivated workforce due to the absence of timely incentives (Nepal Rastra Bank, 2023). This research seeks to address these challenges by examining the impact of MCS on organizational performance in the context of Nepal's manufacturing firms.

Kailali District provides a unique and significant context for this study due to its evolving industrial landscape and strategic location as a gateway to the far western region of Nepal. The district hosts diverse manufacturing firms, including agro-industries, garment factories, and brick and tile manufacturers, which are registered with the Kailali Chamber of Commerce and Industry (Kailali Chamber of Commerce and Industry, 2023). Moreover, Kailali's proximity to the Indian border facilitates trade and export opportunities, making it an important industrial hub in the region (World Bank, 2022). Despite its industrial potential, the district faces challenges such as inadequate infrastructure, frequent power outages, and inconsistent policy support, which exacerbate inefficiencies in MCS implementation (Asian Development Bank, 2022).

Numerous research studies have examined management control system (MCS) practices in the manufacturing and banking sectors of Nepal and other countries. However, there is a noticeable lack of studies specifically focusing on the relationship between MCS and organizational performance in the context of Kailali District (Ministry of Industry, Commerce and Supplies, 2022; Nepal Rastra Bank, 2023). To address this gap, this study analyze the impact of MCS on the organizational performance of manufacturing firms in Kailali District, contributing valuable insights to both academic research and practical applications in the region.

The objective of this study is to investigate the practice of management control systems and assess their impact on the organizational performance of manufacturing firms in Kailali district. To achieve this, the following research questions were explored:

1. Do the manufacturing firms of Kailali district practise a management control system?
2. How does management control system impact the organizational performance of manufacturing firms in Kailali district?

Literature Review

The study of the literature on MCS and organizational performance in manufacturing firms looks at several research that show how MCS improves business outcomes, especially in situations that are competitive and dynamic. Researchers have explored how MCS influences decision-making and enhances performance in various organizational settings. This section covered a review of theoretical and empirical studies, research gap, and conceptual framework.

Theoretical Perspectives on Management Control System

Management Control Systems (MCS) are crucial for achieving organizational

goals by aligning employee behavior with the strategic objectives of the organization. Several theoretical perspectives provide a framework for understanding the role and impact of MCS on organizational performance.

Contingency Theory

The contingency theory posits that the effectiveness of MCS depends on the fit between the system and the organization's context, including its size, strategy, technology, and environment (Otley, 1980). This perspective highlights that no single MCS design is universally effective; instead, it must be adapted to suit specific organizational and environmental conditions. For instance, manufacturing firms in Kailali District may require tailored MCS designs to address local challenges such as limited infrastructure and skilled labor shortages.

Agency Theory

Agency theory addresses the principal-agent relationship, emphasizing the need for MCS to mitigate conflicts of interest and ensure goal alignment between managers (agents) and owners (principals) (Jensen & Meckling, 1976). MCS plays a vital role in reducing information asymmetry and monitoring managerial actions, which is particularly relevant for manufacturing firms facing accountability challenges in decentralized operations.

Resource-Based View (RBV) Theory

The resource-based view suggests that MCS is a strategic resource that can provide a competitive advantage by optimizing the use of organizational resources and capabilities (Barney, 1991). By effectively deploying MCS, manufacturing firms in Kailali can enhance resource efficiency, reduce waste, and improve operational performance.

Levers of Control Framework

Simons' (1995) levers of control framework classified MCS into four categories: belief systems, boundary systems, diagnostic control systems, and interactive control systems. This framework emphasizes the dynamic interplay between these levers, allowing organizations to simultaneously drive innovation and manage risk. Manufacturing firms in rapidly evolving markets, like those in Kailali, may benefit from leveraging this framework to balance flexibility with control.

Institutional Theory

Institutional theory focuses on the influence of external pressures—such as regulations, societal norms, and market expectations—on MCS design and implementation (DiMaggio & Powell, 1983). For manufacturing firms in Kailali,

institutional factors such as government policies, local competition, and trade regulations significantly shape MCS practices.

These theoretical perspectives provide a robust foundation for analyzing the impact of MCS on the organizational performance of manufacturing firms in the Kailali District.

Management Control System in Different Sectors

Management Control Systems (MCS) have been extensively studied in the context of various industries to understand their impact on organizational performance. These systems encompass strategies, tools, and techniques that organizations use to ensure that their activities align with the set objectives and goals (Anthony & Govindarajan, 2007). This section reviews the application of MCS across different sectors to provide a comparative framework and establish its relevance to the manufacturing firms in the Kailali district.

Management Control System in Manufacturing Firms

Manufacturing firms often rely heavily on MCS to optimize operations, improve productivity, and ensure quality standards. Chenhall (2003) emphasized that the use of MCS in manufacturing focuses on process control, cost management, and efficiency. The integration of MCS in manufacturing allows firms to monitor production lines, manage inventory levels, and ensure adherence to budgetary constraints. Further, innovative MCS approaches, such as Just-in-Time (JIT) and Total Quality Management (TQM), have proven effective in enhancing organizational performance (Kaplan & Norton, 1996).

Management Control System in Service Sectors

In contrast to manufacturing, the service industry utilizes MCS to manage intangible outputs and customer interactions. Simons (1995) highlighted that service firms often adopt interactive control systems to foster innovation and adaptability. For example, in the hospitality industry, MCS is used to track customer satisfaction and employee performance, leading to improved service delivery and client retention (Merchant & Van der Stede, 2007). Rijal (2006) studied about the use of MCS in Nepalese commercial banks. After studying, the researcher concluded that banks use MCS ideas by comparing actual performances with targets. Upadhyay (2021) examined MCS in Nepal's banking sector, discovered that the mechanisms were appropriately designed and put into practice. All of these research point to the possibility that MCS can greatly enhance organizational performance when used effectively.

Management Control System in Healthcare

Healthcare organizations apply MCS to maintain compliance with regulations and improve patient care. Abernethy and Stoelwinder (1995) argued that MCS in healthcare focuses on cost containment, quality improvement, and operational efficiency. Balanced Scorecard frameworks have been particularly effective in aligning healthcare activities with strategic objectives, ensuring a balance between financial and non-financial metrics.

Management Control System in Non-profit Organizations

Non-profit organizations use MCS to manage scarce resources effectively and achieve their mission objectives. According to Ebrahim (2005), MCS in this sector often includes donor reporting, impact measurement, and resource allocation. The focus on accountability and transparency makes MCS critical for sustaining donor trust and organizational credibility.

The diverse applications of MCS across sectors highlight its adaptability and importance in enhancing organizational performance. While manufacturing firms prioritize efficiency and cost control, service industries and healthcare sectors emphasize customer satisfaction and compliance. This review underscores the need for tailored MCS strategies to address the unique challenges of each sector, providing a foundation for analyzing their impact on manufacturing firms in the Kailali district.

Impact of Management Control System on Organizational Performance

The relationship between Management Control Systems (MCS) and organizational performance has been a subject of extensive research in the fields of accounting, management, and organizational studies. Effective MCS practices are instrumental in aligning organizational objectives, optimizing resource utilization, and achieving strategic goals (Anthony & Govindarajan, 2007). This section reviews the empirical and theoretical literature on the impact of MCS on organizational performance, particularly in manufacturing settings.

MCS have been shown to have a significant impact on financial performance through cost control, budgetary alignment, and performance measurement. Kaplan and Norton (1996) highlighted the importance of frameworks like the Balanced Scorecard, which integrate financial and non-financial measures to provide a comprehensive view of performance. In manufacturing firms, this approach has been linked to improved profitability and operational efficiency.

Chenhall (2003) argued that contingency-based MCS designs, which align control systems with specific organizational contexts, enhance operational outcomes such as quality, productivity, and flexibility. For instance, the adoption of Total

Quality Management (TQM) as part of MCS has been associated with reduced defect rates and enhanced production capabilities. Strategic performance encompasses long-term objectives such as market position, innovation, and sustainability. Simons (1995) emphasized the role of interactive control systems in fostering strategic alignment and adaptability in dynamic environments. By promoting dialogue and feedback, MCS can help organizations navigate market uncertainties and achieve competitive advantages.

Several studies have examined the mediating factors that influence the effectiveness of MCS on organizational performance. Organizational culture, leadership style, and environmental uncertainty are among the factors identified as critical mediators (Merchant & Van der Stede, 2007). For example, a participative leadership style has been found to enhance the effectiveness of MCS by encouraging employee engagement and innovation (Abernethy & Brownell, 1999).

Empirical research in manufacturing firms has consistently demonstrated the positive impact of MCS on performance metrics. A study by Henri (2006) found that diagnostic and interactive control systems significantly improved performance by facilitating strategic decision-making and operational efficiency. Similarly, Otley (1999) argued that the design and implementation of MCS should align with the firm's strategic priorities to maximize performance outcomes. Durendez et al. (2016) indicated that although family businesses employ MCS at a lower rate than non-family organizations, MCS has a favorable impact on business success. Traunt (2017) examined the MCS organization and their effect on performance using data from Italian firms.The findings showed that businesses with modern management tools at their disposal for managing and tracking intellectual capital, along with systems for incentive and assessment, were able to achieve better and more consistent performance.

Ahmad and Mohamed (2018) provided a resource-based view on MCS, concluding that firms in developing countries can achieve a sustained competitive advantage by effectively utilizing MCS in conjunction with tangible and intangible resources. Wall (2021) investigated the relationship between MCS and strategic management in family-owned businesses in Thailand and came to the conclusion that MCS and strategic management had a favorable impact on performance, particularly in family-run enterprises.

While many studies have explored the role of MCS in manufacturing firms, most of this research is concentrated in developed economies. For instance, Chenhall (2003) focused on contingency-based MCS designs in well-established industrial contexts, but the findings may not be fully applicable to firms in developing regions with different socio-economic conditions. Similarly, Kaplan and Norton (1996)

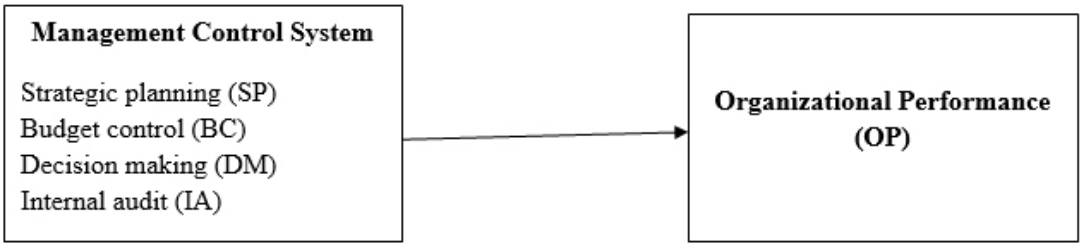
developed the Balanced Scorecard framework in advanced economies, leaving questions about its relevance in resource-constrained environments like Kailali District.

Existing research often generalizes findings across diverse regions, neglecting the unique challenges faced by specific geographic areas. Studies by Abernethy and Stoelwinder (1995) and Simons (1995) do not account for the localized factors that influence the effectiveness of MCS, such as cultural dynamics, infrastructure limitations, and regulatory environments in areas like Kailali District. This gap is particularly evident in the South Asian context, where the interaction between MCS and organizational performance remains underexplored.

The study examined the relationship between the Management Control System and Organizational Performance in a Kailali District manufacturing firm, highlighting the causal relationship between independent and dependent variables and the significant association between these factors. In the conceptual framework, the independent variable is the Management control system (i.e. Strategic planning, budget control, decision making, and internal audit) and the dependent variable organizational performance is taken from the literature review.

Figure 1

Conceptual Framework



(Durendez et al., 2016)

From the conceptual framework it has been conceptualized that strategic planning, budget control, decision-making, internal audit, and organizational performance.

Strategic Planning

Strategic planning is a system that assists firms in setting goals, tracking progress, and identifying key factors that influence their performance (Kaplan & Norton, 1996). Analytical tools such as SWOT analysis and gap analysis enable organizations to select optimal strategies for improvement (Simons, 1995). The process typically results in a strategic plan comprising clear mission and vision

statements, timelines, quarterly targets, monitoring mechanisms, and an allocation of responsibilities to specific departments (Anthony & Govindarajan, 2007).

Budget Control

Budgetary control refers to the process of creating financial plans for a firm's estimated activities and managing actions to execute these plans (Anthony & Govindarajan, 2007). Its objectives include establishing processes for estimating revenues and expenses, communicating these plans with management, and serving as a foundation for effective revenue and cost control (Merchant & Van der Stede, 2007). Budgetary control offers several advantages to businesses, such as defining roles, setting operational objectives, and establishing quantitative targets.

Decision Making

Decision-making is a future-oriented process that involves planning, anticipating outcomes, and evaluating alternatives before selecting the best course of action (Simon, 1977). It requires swift decisions on critical matters such as product mix, production techniques, equipment procurement, discontinuing product lines, and pricing strategies. As a fundamental aspect of management, decision-making facilitates both operational efficiency and strategic development (Anthony & Govindarajan, 2007).

Internal Audit

A company's internal audit department is responsible for conducting objective evaluations of its processes, organizational structures, and systems. Its primary role is to provide senior leaders with unbiased information about the organization's risks, control environment, operational efficiency, and compliance with legal and regulatory requirements (Institute of Internal Auditors, 2020). Oversight of the internal audit function is typically carried out by the CEO or Board of Directors through the Audit Committee, ensuring accountability and alignment with organizational goals (Anthony & Govindarajan, 2007).

Organizational Performance

Indicators based on managers' assessments of their company's competitive situation are often used to evaluate organizational performance (Smith & Jones, 2020). In the absence of intangible assets and with a delay between survey data and accounting information, accounting data is utilized in these evaluations (Johnson et al., 2019). Performance, in this context, refers to the outcomes of an organization's activities over time (Williams, 2022). Forecasting the impact of Management Control Systems (MCS) on organizational performance is challenging. However, if the implementation of MCS generates useful information for coordination and learning,

a positive relationship between performance and MCS implementation is expected (Greenwood & Turner, 2020).

Research Hypothesis

The research objective is to examine the determination of the management control system and organizational performance of manufacturing firms of Kailali District.The following research hypotheses are developed:

H1: The manufacturing firms of Kailali district are familiar with the management control system.

H2: There is a significant relationship between the management control system and the organizational performance of manufacturing firmsinthe Kailali district.

Methods and Procedures

This study applied the quantitative research approach. Under this approach, descriptive and causal research design is used. The objective of this study is to examine the management control system techniques that are currently in use and how they affect organizational performance. A study surveyed 64 manufacturing firms registered in the Kailali Chamber of Commerce and Industry until 2080, with twenty manufacturing firms selected as samples using convenience sampling. A questionnaire was distributed to 40 managers and account officers and all respondents responded.

The research employs primary data obtained via a structured questionnaire survey, including demographic data and a 5-point Likert scale, in order to compile significant information. The survey questionnaire includes three sections: demographics, management control system factors, and organizational performance. The study collected data on management control systems through strategic planning, budget control, decision-making, and internal audit, with participants rating each item on a 5-point Likert scaleranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

The analysis of the data was done with SPSS version 25. Cronbach's alpha was used in a reliability test. The sample characteristics were described using descriptive statistics such as frequency, percentage, mean, and standard deviation. The study evaluated the impact of management control systems on organizational performance using Pearson correlation and linear regression analysis (Johnson, 2021; Lee & Park, 2020).

Model

$$\hat{Y}_i = \alpha + \beta_1 SP_i + \beta_2 BC_i + \beta_3 DM_i + \beta_4 IA_i + e_i$$

Where,

$\hat{Y}$=Dependent Variable (Organizational Performance)

α =Constant

SP_i= Strategic planning (SP)

BC_i= Budget control (BC)

DM_i = Decision making (DM)

IA_i= Internal audit (IA)

$e_{i=}$ error term

β= (Beta value) Coefficient of slop of regression line

Results

This section presents the empirical results and analysis of all the collected information is attempted according to the objectives and hypothesis framed earlier.

Table 1

Descriptive Analysis of Demographic Information

Classifying the Respondents according to Gender		
Gender	Frequency	Valid Percent
Male	28	70
Female	12	30
Total	40	100
Classifying the Respondents according to Age		
Age Group	Frequency	Valid Percent
Below 23	5	12.50
24-29	11	27.50
30-34	11	27.50
35 & above	13	32.50
Total	40	100
Classifying the Respondents according to Educational Qualification		
Level of Education	Frequency	Valid Percent

Below SLC/SEE	3	7.50
+2 Level	12	30
Bachelors	14	35
Masters & above	11	27.50
Total	40	100
Years of Experience of the Respondents		
Work Experience	Frequency	Valid Percent
Less than 2 years	13	32.50
2 – 5 years	12	30.00
More than 5 years	15	37.50
Total	40	100

Source: Computed from the primary survey

Table 1 indicates that of the 40 respondents surveyed for this study, the majority, 28 (70%), are male, while the remaining 12 (30%) are female. This suggests that most of the participants who provided input for the study were male employees from the firms.

There are 12.5 percent of respondents are under 23 years, 27.5 percent fall within 24-29 age group, another 27.5 percent are in the 30-34 age range, and 32.5 percent are aged 35 and above. The results indicate that most respondents in the manufacturing company are 35 years of age or older.

Out of the 40 respondents, 35 percent of respondents hold bachelor's degrees, followed by 30 percent with a + 2 level degree, 27.50 percent with a Master's degree, and 7.5 percent with a lower level.

There are 32.50 percent of respondents have less than 2 years of experience, 30 percent have 2-5 years, and 37.50 percent have more than 5 years, with those with more than 5 years having the largest group.

Table 2

Mean Ranking for the Most Important Management Control System Dimension

Factors	N	Mean	SD	Rank
Strategic planning	40	3.3437	.38267	I

Budget control	40	3.2300	.38310	II
Decision making	40	3.1625	.45132	III
Internal audit	40	3.1375	.45626	IV

Source: Computed from the primary survey

Table 2 presents the mean ranking of management control system (MCS) factors as evaluated by employees of a manufacturing firm in the Kailali district. The study shows that the mean values lie between 3.1375 and 3.3437, with standard deviations between 0.38267 and 0.45626. Among the MCS factors, strategic planning holds the highest rank with a mean of 3.3437, followed by budget control (3.23), decision-making (3.1625), and internal audit (3.1375).

Table 3

Correlation between Management Control System Dimension and Organizational Performance

		Organizational Performance
Strategic Planning	Pearson Correlation	0.600
Budget Control	Pearson Correlation	0.765
Decision Making	Pearson Correlation	0.617
Internal Audit	Pearson Correlation	0.754
Organizational Performance	Pearson Correlation	1

Source: Computed from the primary survey:

Table 3 presents the correlations between the management control system dimension and organizational performance, using four variables to assess the relationship. The table indicates that the correlation values for strategic planning, budget control, decision-making, and internal audit with organizational performance are 0.600, 0.765, 0.617, and 0.754, respectively. This suggests a moderate positive relationship between management control practices and the organizational performance of the manufacturing firm in the Kailali district.

Table 4

Coefficients of Cronbach's Alpha

Variables	No of items	Cronbach's Alpha
Strategic Planning (SP)	4	0.741
Budget Control (BC)	5	0.735
Decision Making (DM)	4	0.816
Internal Audit (IA)	4	0.789

Organizational Performance (OP)	4	0.878
Overall	5	0.865

Source: Computed from the primary survey

The reliability test was conducted to assess the consistency of responses in the management control system tools questionnaire. The Cronbach's alpha coefficient (α) for strategic planning, budget control, decision making, internal audit, and organizational performance are 0.741, 0.735, 0.816, 0.789, and 0.878, respectively, all exceeding the 0.7 threshold. The overall Cronbach's alpha is 0.865. Since all alpha values are above 70 percent, the scale is considered satisfactory and reliable (Nunnaly, 1978). This suggests that the instruments of the management control system are essential.

Hypothesis 1

H1: The manufacturing firms of Kailali district are familiar with the management control system.

Table 5

One Sample T-test

Management Control System Dimension	N	Mean	SD	t-value	p value
Strategic planning	40	3.3437	.38267	55.264	<0.00**
Budget control	40	3.2300	.38310	53.323	<0.00**
Decision making	40	3.1625	.45132	44.318	<0.00**
Internal audit	40	3.1375	.45626	43.491	<0.00**

Source: Computed from the primary survey

** Represents a 5% level of significance

Table 5 presents the management control system practices among manufacturing firms in Kailali district. The table shows that the mean values lie between3.1375 and 3.3437, with standard deviations between 0.38267 and 0.45626. Since all mean values exceed the test average of 3, this indicates that the manufacturing firms have an adequate level of management control system practices.

A one-sample t-test was conducted to evaluate these practices. The results show that for all management control system factors, the p-values are less than 0.05. It means that the rejection of the null hypothesis and the acceptance of the alternative hypothesis at a 5 percent significance level. This implies that manufacturing firms in the Kailali district are familiar with management control systems. Hence, the

study confirms that management control system practices are used among the manufacturing firms in the Kailali district.

Hypothesis 2

H2: There is a significant relationship between the management control system and the organizational performance of manufacturing firmsinthe Kailali district.

Table 6

Multiple Regression Analysis between the MCS Dimensions and Organizational Performance

R	R Square	F value	p-value
0.875	0.765	28.528	0.00**

Source: Computed from the primary survey

***Representsa 5%levelofsignificance*

A multiple regression analysis was conducted to examine the relationship between the dependent variable (organizational performance) and the four independent variables (strategic planning, budget control, decision-making, and internal audit). As shown in Table 6, the multiple correlation coefficient is 0.875, indicating the strength of the relationship between the actual and predicted values. The predicted values are derived as a linear combination of organizational performance and the overall MCS dimensions. The results show that the p-values are less than 0.05 (i.e. 0.000). It means that the null hypothesis is rejected and the acceptance of the alternative hypothesis at a 5 percent significance level. This implies the relationship between the management control system and the organizational performance of manufacturing firms in Kailali district.

The coefficient of determination (R-squared) measures how well the independent variables explain the variation in the dependent variable. In this case, the R-squared value is 0.765, indicating that 76.5 percent of the variation in organizational performance is explained by the independent variables—strategic planning, budget control, decision-making, and internal audit. The remaining 23.5 percent is attributed to other factors. The overall regression model is significant at the 5 percent level (with a p-value of less than 0.05, specifically 0.000), confirming the model's reliability.

Table 7

Coefficients of MCS Dimensions and Organizational Performance

	Unstandardized Coefficients		Standardized Coefficients	t value	p value
	B	Std. Error	Beta		
(Constant)	0.241	0.366		0.660	0.514
Strategic planning (SP_i)	0.263	0.108	0.234	2.440	0.020
Budget control (BC_i)	0.262	0.151	0.234	1.735	0.092
Decision making (DM_i)	0.274	0.092	0.288	2.986	0.005
Internal audit (IA_i)	0.336	0.117	0.356	2.881	0.007

Source: Computed from the primary survey

***Representsa 5 % level of significance*

Table 7 shows that the coefficient of strategic planning (SP_i) is 0.263, indicating the partial effect of strategic planning while holding organizational performance constant. The positive sign of the coefficient suggests that the effect is positive, meaning the adjustment score increases by 0.263 for every unit increase in strategic planning. At the 5 percent significance level, the relationship is statistically significant ($p = 0.020 < 0.05$).

Maintaining constant organizational performance, the partial impact on budget control is shown by the coefficient of budget control (BCi), which is at 0.262. At the 5 percent level of significance, the association appears insignificant ($p=0.092 > 0.05$), since the projected positive sign suggests that the effect is positive and that the adjustment score would increase by 0.262 for every unit increase in budget control.

The coefficient of decision-making (DMi) is 0.274, showing its partial effect while keeping organizational performance constant. The positive sign means that the effect is positive. For every unit increase in decision-making, the adjustment score increases by 0.274.

At the 5 percent level, the association is statistically significant ($p = 0.005 < 0.05$).

The coefficient of internal audit (IAi) is 0.336, indicating its partial effect while keeping organizational performance constant. The positive value suggests a favorable impact, with the adjustment score increasing by 0.336 for each unit rise in internal audit. Furthermore, At the 5 percent level, the relationship is statistically significant ($p = 0.007 < 0.05$).

The study concludes that MCS and organizational performance have a significant favorable association. Additionally, it demonstrates that the organizational performance of manufacturing firms in the Kailali district will improve with the maximum use of MCS dimension.

Discussion

This study fills a gap in the management control system and organizational performance among the manufacturing firms in Kailali district. The results of this study revealed that MCS is practiced in manufacturing firmsinthe Kailali district. The result of multiple regression analysis depicted that the relationship between only three factors (Strategic planning, decision making, and internal audit) of MCS and organizational performance is significant, but the association of another factor (budget control) of MCS and organizational performance is insignificant.

The result is positively consistent with Rijal (2006), study revealed that commercial banks are implementing the concept of management control systems (MCS) by setting performance targets for both branches and individual employees. These targets are compared with actual performance, with branch targets typically measured in terms of the number of clients, deposit amounts, and lending activities. Management control systems (MCS) are found to have a positive correlation with the design of performance measurement systems and the overall performance of small and medium enterprise (SME) hotels in Malaysia (Jamil and Mohamed, 2013). The result aligns with Upadhyay (2021), who found that all commercial banks have sufficiently developed and implemented mechanisms of management control systems (MCS). The result is comparable to Wall's (2021) findings, which show that family businesses' performance is positively and considerably impacted by their strategic management and management control system. There must be an important connection between performance measurement and MCS since performance is typically understood as achieving corporate goals (Siska, 2015).Ahmad and Mohamed (2018) found that management control systems (MCS) with a focus on planning control can aid in conserving resources through efficient utilization, while also contributing to the achievement of both short-term goals and strategic initiatives. This is consistent with the findings of the present study. Durendez et al. (2016) investigated the impact of family influence on the extent of management control systems (MCS) usage and its relationship with performance. Their study found that family businesses tend to use fewer MCS compared to non-family firms and that MCS usage positively affects business performance. These findings are consistent with the results of the present research. The results of this investigation do not differ from those of earlier studies on the relationship between organizational performance and management control systems.

Conclusion

The present study aimed to assess management control systems and organizational performance using a self-administered questionnaire with a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Respondents indicated their level of agreement or disagreement with the statements. The mean scores for all statements were above 3, indicating that employees in the firms have a strong understanding of the management control system. The study concludes that the manufacturing firms of Kailali district havepractices of MCS through strategic planning, budget control, decision making, and internal audit.The R-squared value of the regression model is 76.5 percent, indicating that a 1 percent change in management control system tools affects organizational performance by 76.5 percent. The study concludes that management control systems have a significant impact on the organizational performance of manufacturing firms in the Kailali district.

The study concludes that the four independent variables—strategic planning, budget control, decision making, and internal audit—have a strong and positive impact on organizational performance. Therefore, each unit increase in these independent variables will positively affect organizational performance among manufacturing firms in the Kailali district. Finally, it can be concluded that manufacturing firms in the Kailali district are in the early stages of adopting modern management control system tools. Therefore, to enhance overall performance, these companies should focus on implementing new management control system practices.

Manufacturing organizations should implement a management control system (MCS) to enhance overall performance. MCS provides key ideas, guidelines, and strategies for management functions. Implementing effective strategies with social, ecological, and economic visions is crucial for achieving perceived performance. Further research will focus on a larger sample size and variables, as the current study only covers twenty manufacturing firms in the Kailali district. Future studies may explore commercial banks, development banks, and trading industries. Future research could explore demographic changes, response to management control systems, relationships between control systems and demographics, impact on investors, and predictability of corporate social responsibility (CSR). This could be a new topic for future researchers.

References

Abernethy, M. A., & Brownell, P. (1999). The role of budgets in organizations facing strategic change: An exploratory study. *Accounting, Organizations and Society*, *24*(3), 189-204.

Abernethy, M. A., & Stoelwinder, J. U. (1995). The role of professional control in the management of complex organizations. *Accounting, Organizations and*

Society, *20*(1), 1-17.
Ahmad, N. A., & Mohamed, R. (2018). Management control system and firm performance: Resource-based view. *Journal of Business and Management*, 1, 1-8.
Anthony, R. N., & Govindrajan, V. (2007). *Management control systems*. McGraw Hill Education.
Asian Development Bank. (2022). *Infrastructure and industrial development in South Asia: Challenges and opportunities*. Manila, Philippines.
Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99-120.
Bin-Nashwan, S. A., & Obid, M. M. (2017). A review of literature in management control system, business strategy, and firm's performance. *International Journal of Management Research & Review*, *7*(2), 99-112
Bisbe, J., & Otley, D. (2004). The effects of the interactive use of management control systems on product innovation. *Accounting, Organizations and Society, 29*(8), 709-737.
Brown, A., & Taylor, M. (2021). Competitive advantage and organizational success: A relative perspective. *Business Strategy Review, 45*(3), 157-170.
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.
Cosenz, F., & Noto, L. (2015). Combining system dynamics modeling and management control systems to support strategic learning processes in SMEs: A dynamic performance management approach. *Journal of Management Control, 26*(2-3), 225-248.
Davia, A. F. (2005). Management accounting systems adoption decisions: Evidence and performance implications from early- stage/startup companies. *Accounting Review, 80*(4), 1039-1068.
Duhan, S. (2007). A capabilities based toolkit for strategic information systems planning in SMEs. *International Journal of information Management, 27*, 352-367.
Durendez, A., Palomo, D. R., Lema, D.G., & Soto, J.D. (2016). Management control systems and performance in small and medium family firms. *European Journal of Family Business*, 6, 10-20.
Ebrahim, A. (2005). Accountability myopia: Losing sight of organizational learning. *Nonprofit and Voluntary Sector Quarterly*, *34*(1), 56-87.
Government of Nepal. (2020). *Industrial Enterprises Act 2020*. Kathmandu, Nepal.
Ministry of Finance (MoF). (2023). *Economic survey 2022/23*. Kathmandu, Nepal.
Greenwood, R., & Turner, C. (2020). Management control systems and organizational performance: An empirical analysis. *Journal of Organizational Behavior, 41*(2), 220-235.
Henri, J.-F. (2006). Management control systems and strategy: A resource-based

perspective. *Accounting, Organizations and Society*, *31*(6), 529-558.
Institute of Internal Auditors. (2020). *International professional practices framework (IPPF)*. The IIA Research Foundation.
Jamil, C. Z. M., & Mahamed, R. (2013). The effects of management control system on performance management system at small medium hotel in Malaysia. *International Journal of Trade, Economics and Finance*, *4*(4), 202-208.
Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
Johnson, M. (2021). Evaluating the impact of management control systems on organizational performance. *Journal of Business Research, 58*(2), 204-215.
Johnson, P., Smith, R., & Williams, L. (2019). The role of accounting information in management decision-making. *Financial Insights, 36*(4), 88-100.
Kailali Chamber of Commerce and Industry. (2023). *Membership directory and industry overview*. Kailali, Nepal.
Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action*. Harvard Business Press.
Kariuki, G. D. (2010). Ethical dimensions in responsible professionalism and accounting procedures in Kenya: a critical analysis of theory and practice. *Research Journal of Finance and Accounting, 3*(2), 58-69.
Lee, S., & Park, Y. (2020). Using statistical methods to analyze the effectiveness of management control systems. *International Journal of Management, 42*(1), 112-126.
Macintosh, N.B., & Daft R.L. (1987). Management control systems and departmental interdependencies: An empirical study. *Accounting Organization and Society,12*(1), 49-61.
Merchant, K. A., & Van der Stede, W. A. (2007). *Management control systems: Performance measurement, evaluation and incentives*. Pearson Education.
Ministry of Industry, Commerce and Supplies. (2022). *Industrial development policy and progress review*. Kathmandu, Nepal.
Nepal Association of Manufacturers. (2023). *Industry profiles and membership overview*. Kathmandu, Nepal.
Nepal Rastra Bank. (2023). *Annual conomic Report 2023*. Kathmandu, Nepal.
Otley, D. (1999). Performance management: A framework for management control systems research. *Management Accounting Research*, *10*(4), 363-382.
Otley, D. T. (1980). The contingency theory of management accounting: Achievement and prognosis. *Accounting, Organizations and Society*, *5*(4), 413–428.
Rijal, S. (2006). Application of management control system in Nepalese commercial banks. *The Journal of Nepalese Business Studies*, *3*(1), 92-99.
Simons, R. (1995). *Levers of control: How managers use innovative control systems to drive strategic renewal*. Harvard Business School Press.

Siska, L. (2015). The concept of management control system and its relation to performance measurement. *Procedia Economics and Finance*, *25*, 141-147.
Smith, J., & Jones, T. (2020). Competitive positioning and organizational performance. *Strategic Management Journal, 48*(6), 1234-1250.
Theriou, N., Maditinos, D., & Theriou, G.N. (2017). Management control system and strategy: A resource-based perspective. Evidence from Greece. *International Journal of Business and Economic Sciences Applied Research, 10*(2), 35-47.
Truant, E. (2017). Management control systems, organization and impact on performances: Evidences from Italy. *Corporate Ownership & Control, 14*(2), 250-257.
Upadhyay, J.P. (2021). Management control system in banking sector of Nepal. *Journal of Business and Management, 23*(1), 52-64.
Wall, W. P. (2021). Strategic management and evaluation of the performance of family firms using management control system. *Transnational Corporations Review*, 1-16.
Williams, K. (2022). Understanding organizational performance through management control systems. *International Journal of Business and Management, 40*(5), 99-114.
World Bank. (2022). *Nepal trade and competitiveness report 2022*. Washington, DC.
World Bank. (2023). *Nepal country report: economic update 2023*. Washington, DC.