

An Assessment on Strategic Management Practices and Financial Performance of Selected Cooperatives in the 3rd District of Cotabato Province

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ABSTRACT

The study aimed to provide data about the socio-demographic profile of the cooperative board of directors and general managers, cooperative profile, level of adoption of strategic management practices of selected cooperatives, analysis of the financial performance from 2021-2023, effects of cooperatives' profile and strategic management practices to their financial performance, and comparison between strategic management practices and financial performance based on size.

It employed descriptive-causal research design with 22 cooperatives. This study used linear regression and Welch's ANOVA to analyze the data. The study showed that all of the cooperatives practiced strategic management activities. The data also revealed that all cooperatives experienced negative and low net profit margin in 2021 and had gradually improved as the pandemic subsided. In the aspect of debt-equity ratio, most of the cooperatives became conservative while others increased reliance on debt, some were less dependent on debts, and the rest were either balanced or at higher financial risk. In return on equity, the cooperatives were either excellent or consistent but low ratios, positively stable or inconsistent with lower returns and were stable but low or negative in ratio. In current ratio, the greater majority of cooperatives were liquid and few had extremely high ratios, indicating excessive cash reserves. The strategic management practices that significantly affect the financial performance are numbers of employees, task environment, and external environment. Meanwhile, the strategic management that significantly differ according to size were external environment and monitoring and audit.

The findings indicate that while all cooperatives consistently adopted strategic management practices, their financial performance reflected the disruptive impact of the pandemic, followed by gradual recovery as conditions improved. Variations in profitability, leverage, liquidity, and return on equity reveal differing financial strategies and risk profiles, with some cooperatives demonstrating resilience while others remained constrained by low or negative returns. Overall, specific strategic management factors – particularly workforce size, task and external environments, as well as monitoring and audit mechanisms – play a critical role in shaping financial outcomes and differentiating performance across cooperative size.

Keywords: Cooperatives, Financial Performance, Strategic Management Practices, Micro-sized Cooperatives, Small-sized Cooperatives, Medium-Sized Cooperatives

INTRODUCTION

In the context of the Philippine economy, cooperatives are the gateway of the less privileged to participate in the business sector. Providing continuous education is one of the cooperative strategies to uplift the socio-economic capacity of its members to close the gaps between the poor and the rich (Castillo & Castillo, 2017). With this, cooperatives are challenged to sustain their financial capacity while utilizing effective strategies to continue

operations. Existing literature has examined the relationship between strategic management practices and financial performance, such as the study of Chungyas and Trinidad (2022), which revealed a positive relationship but was limited to seventeen (17) multi-purpose cooperatives in Ifugao Province regardless of asset size. This narrow scope highlights a research gap: most studies have concentrated on specific provinces or larger cooperatives, leaving micro, small, and medium-sized cooperatives in other regions—particularly the 3rd District of Cotabato Province—underexplored. Thus, there is insufficient evidence on how strategic management practices influence financial performance across different cooperative sizes in this area.

In 2022, Philippine cooperatives collectively gained a massive increase in net surplus with Php 26.9 billion compared to Php 16.0 billion in 2021, despite a decrease in the number of registered cooperatives from 20,467 to 20,105 (Cooperative Development Authority, 2022). This resilience during the pandemic indicates that cooperatives adapted and employed effective strategies to achieve positive outcomes. In Region 12 (SOCCSKSARGEN), there were 914 registered cooperatives with 332,385 members, which later increased to 924 cooperatives with 348,518 members in 2023 despite a decline in total numbers the previous year (Cooperative Development Authority, 2023).

This study addresses the identified gap by examining the influence of strategic management practices on the financial performance of micro, small, and medium-sized cooperatives in Cotabato's 3rd District. The findings will benefit cooperatives by providing insights into the effectiveness of their strategies, guide the Cooperative Development Authority (CDA) in evaluating cooperative proficiency, and contribute to the broader body of knowledge for future research.

Objectives

1. To describe the profile of all board-of-directors and general manager of the cooperatives.
2. To describe the profile of the cooperatives.
3. To determine the level of its strategic management practices in regards with its: (a) vision, mission, goals, and objectives; (b) analysis of external environment; (c) analysis of task (internal) environment; (d) formulation of strategies; (e) adopted strategies; and (f) performance monitoring and evaluation and analysis of internal and external audit.
4. To assess the financial performance of the cooperatives in terms of: (a) net profit margin; (b) debt-equity ratio; (c) return on equity; and (d) current ratio.
5. To examine the effect of the profile of the cooperatives and strategic management practices to the financial performance of the cooperatives.
6. To compare the strategic management practices and financial performance of the cooperatives based on size.

LITERATURE REVIEW

The Cooperative Industry in the Philippines

Cooperatives in the Philippines are autonomous, duly registered organizations formed by individuals who voluntarily unite to pursue shared interests and aspirations, equitably distributing benefits and risks in accordance with cooperative principles (Cooperative Development Authority, 2021). They are classified by function, ranging from advocacy, agrarian reform, and consumer cooperatives to financial services, housing, marketing, and multi-purpose cooperatives, among others (Cooperative Development Authority, 2021).

The Cooperative Development Authority (2021–2024) emphasizes that the primary objective of Philippine cooperatives is to enhance the quality of life of their members. This objective is operationalized through strategic goals such as providing goods and services, delivering socioeconomic benefits, promoting cooperative education, fostering economic empowerment, and building collaborative partnerships. These goals reflect a dual emphasis on both economic and social development, positioning cooperatives as vehicles for inclusive growth.

Earlier reports by the Cooperative Development Authority (2017) highlighted the resilience and growth of the cooperative sector, noting that it encompassed 14 million members across 26,600 registered entities nationwide.

Micro-cooperatives, defined by asset size below three million pesos, dominated the sector at 82.5%, while small cooperatives (₱3–15 million asset size) accounted for 10.2%, and medium to large cooperatives comprised only 7.3%. This distribution underscores the predominance of smaller cooperatives, which often face distinct challenges in sustaining financial performance compared to their larger counterparts. More recent data from Region XII (SOCCSKSARGEN) show a similar composition, with 68 registered cooperatives of varying asset sizes as of October 2024 (Cooperative Development Authority, 2024).

Comparing these findings reveals a consistent theme: while cooperatives across the Philippines demonstrate resilience and growth, particularly during periods of economic uncertainty, the sector remains heavily skewed toward micro and small cooperatives. This concentration raises questions about whether strategic management practices—often studied in the context of larger or multi-purpose cooperatives—are equally effective for smaller entities. For instance, while national-level data emphasize resilience and expansion (Cooperative Development Authority, 2017), regional data highlight fluctuations in cooperative numbers despite membership growth (Cooperative Development Authority, 2024). Taken together, these findings suggest that cooperative sustainability may depend not only on resilience but also on the adaptability of strategic management practices across different cooperative sizes.

The legislative framework further reinforces the importance of cooperatives in national development. The 1987 Philippine Constitution mandated the creation of an agency to promote cooperative viability, leading to Republic Act No. 6939, which established the CDA in 1990. Later, the Philippine Cooperative Code of 2008 (Republic Act No. 9520) reaffirmed the state's commitment to cooperative growth by granting tax exemptions and mandating allocations of net surplus for community development and education. Unlike commercial organizations, cooperatives prioritize service over profit, focusing on member empowerment, equitable contributions, and social responsibility (Cooperative Development Authority, 2017).

Synthesizing across these sources, it becomes clear that while cooperatives are structurally and legally supported to foster social justice and economic empowerment, the literature has not sufficiently examined how strategic management practices influence financial performance across different cooperative sizes and regions. Most existing studies emphasize resilience and growth in aggregate terms, but few provide nuanced insights into micro, small, and medium cooperatives—particularly in provinces like Cotabato. This gap underscores the need for localized, size-sensitive analyses to better understand cooperative sustainability.

Strategic Management Practices

The establishment of vision, mission, goals, and objectives (VMGOs) is widely recognized as fundamental to strategic management, aligning organizational direction and enhancing decision-making toward shared outcomes (Bebegal-Mirabent et al., 2021; Fitzsimmons et al., 2022; López-Morales & Ortega-Ridaura, 2016). While Edwards (2014) emphasizes the mission as defining organizational identity and the vision as outlining future aspirations, Alegre et al. (2018) and Mittal and Srihari (2021) highlight that mission statements vary in focus—some stressing operational scope, others core ideology. This contrast suggests that VMGOs are not universally standardized but rather shaped by organizational priorities, which may explain differences in their effectiveness across industries.

Similarly, Kirkpatrick (2017) argues that vision statements must be clear, challenging, and measurable to inspire organizational efforts, while Edwards (2014) stresses the importance of SMART objectives for accountability. Taken together, these perspectives indicate that while vision provides inspiration, objectives ensure execution, and their synergy is critical for strategic success.

The process of developing VMGOs has been described as structured and systematic (Bain & Company, 2024; Culek et al., 2024; Herrity, 2024; Hofstrand, 2023; LinkedIn, 2024). However, Knikker (2021) and Contreras-Pacheco et al. (2022) caution that effectiveness depends less on formulation and more on implementation and resource utilization. This comparison underscores a recurring tension in the literature: while some scholars emphasize the design of VMGOs, others stress their practical application, suggesting that organizations often struggle not with planning but with execution.

The internal environment—comprising culture, leadership, structure, and resources—has been consistently linked to performance outcomes (Aggarwal, 2023). Bacila et al. (2017) found that adaptability in organizational culture drives effectiveness, while Aggarwal (2023) emphasized leadership's role in aligning internal elements. These findings complement each other, showing that culture provides the foundation for employee behavior, while leadership ensures cohesion and productivity.

In contrast, the external environment—economic conditions, competition, and regulatory frameworks—poses continuous challenges (Aggarwal, 2023). The International Finance Corporation (2024) highlights access to technology and finance as critical for sustainability, while Malinao (2023) provides empirical evidence that external pressures directly affect business outcomes. Comparing these perspectives reveals that while internal strengths are necessary, they are insufficient without responsiveness to external dynamics, reinforcing the need for strategic adaptability (Aggarwal, 2024).

Strategy formulation integrates internal and external analyses to achieve competitive advantage. Addae-Korankye and Aryee (2021) found that effective implementation fosters organizational growth, while Ali and Qun (2019) reported mixed outcomes depending on evaluation processes. This divergence suggests that while strategy formulation is essential, its success hinges on consistent monitoring and adaptation.

Finally, performance monitoring and auditing mechanisms ensure accountability and sustainability. Nguyen and Vuong (2022) and Garcia (2017) emphasize governance and risk management, while Anoo et al. (2020) and Korkmaz (2020) highlight employee motivation and efficiency. During crises such as COVID-19, strategies like customer differentiation and cost control proved vital (Huebel, 2023; Casinillo et al., 2022; Cooperative Development Authority, 2021). Synthesizing these findings shows that while monitoring enhances efficiency, auditing strengthens governance, and together they create resilience in volatile environments.

Effect of Profile and Strategic Management Practices of the Cooperative to its Financial Performance

Several studies highlight how cooperative profiles—such as age, size, and membership—interact with strategic management practices to influence financial performance. Jumawan (2022), for instance, found that the length of cooperative operation in Dipolog and Dagupan was positively associated with resilience and adaptability, as longer-established cooperatives were better able to innovate and adjust policies. This finding aligns with Makaliwe et al. (2023), who reported that cooperative age and total assets in Indonesia significantly improved profitability ratios, particularly return on assets. However, Makaliwe et al. (2023) also noted a negative effect of branch expansion, suggesting that growth in scale does not always translate into improved financial outcomes. Taken together, these studies indicate that while longevity and asset accumulation strengthen resilience and profitability, expansion strategies such as opening new branches may dilute efficiency.

In terms of operational practices, Caminade et al. (2017) emphasized that member repayment behavior strongly influences collection efficiency in a parish-based cooperative in Davao City. Their findings highlight that delinquency was largely driven by personal financial constraints, such as competing expenses and delayed salaries. This contrasts with studies like Gomera et al. (2018) and Omsa et al. (2018), which emphasize organizational-level strategic planning—formulation, implementation, evaluation, and control—as key drivers of financial performance in SMMEs and SMEs. The juxtaposition of these findings suggests that cooperative performance is shaped by both micro-level member behavior and macro-level strategic management practices, underscoring the need for integrated approaches that address both dimensions.

Strategic leadership also emerges as a critical factor. Domingo et al. (2022) found that active involvement of boards of directors in Nueva Ecija cooperatives was central to achieving organizational goals, particularly in multi-purpose and credit cooperatives. This resonates with Bosco et al. (2023), who reported that Ugandan SACCOs with established policies and procedures demonstrated stronger organizational performance, with unanimous agreement among respondents on the importance of structured governance. Comparing these findings reveals that leadership and governance structures consistently underpin successful strategy implementation across diverse cooperative contexts.

Strategic Management Practices and Financial Performance Based on Size

The relationship between cooperative size and financial performance has been consistently highlighted in the literature, though findings vary depending on context. Jumawan (2022) emphasized that management practices such as internal control, capital budgeting, compliance, and governance differ significantly across cooperative sizes in the Philippines. Micro and small cooperatives, in particular, were found to be more vulnerable due to their reliance on limited business transactions and fewer members, making them less resilient to market fluctuations. This vulnerability contrasts with medium and large cooperatives, which benefit from diversified services and stronger governance structures.

Comparable findings emerge in international contexts. Archer et al. (2020) demonstrated that larger agricultural cooperatives in the United States (2005–2014) experienced stronger financial performance, a result attributed to economies of scale. Similarly, Pokharel and Featherstone (2019) found that larger cooperatives consistently benefit from scale efficiency, enabling them to spread costs and enhance profitability. When juxtaposed with Jumawan's (2022) findings, these studies suggest a consistent pattern: cooperative size positively influences financial performance, but the mechanisms differ. In the Philippine context, size is linked to resilience and adaptability, while in the U.S. context, it is tied to economies of scale and efficiency.

Synthesizing across these studies reveals both convergence and divergence. On one hand, there is broad agreement that larger cooperatives enjoy financial advantages, whether through resilience (Jumawan, 2022) or scale efficiency (Archer et al., 2020; Pokharel & Featherstone, 2019). On the other hand, the literature diverges in explaining the challenges faced by smaller cooperatives. Jumawan (2022) highlights vulnerability due to limited membership and monotonous transactions, while Pokharel and Featherstone (2019) suggest that small cooperatives' inefficiency stems from their inability to achieve economies of scale.

Research Hypotheses

Null Hypotheses (H_0):

H_{01} : The profile of the cooperatives and strategic management practices have no significant influence to the financial performance of cooperatives.

H_{02} : The strategic management practices and financial performance of cooperatives have no significant difference according to size.

Alternative Hypotheses (H_1):

H_{a1} : The profile of the cooperatives and strategic management practices have significant influence to the financial performance of cooperatives.

H_{a2} : The strategic management practices and financial performance of cooperatives have significant difference according to size.

METHODS

Study Design

This study is quantitative in nature, and employed a descriptive-causal research design. This design described the primary data to be gathered: profile of the general manager, profile of the cooperatives, and the level of the cooperatives' strategic management practices including the secondary data profile of the board-of-directors and financial ratios of the cooperatives from 2021-2023 to show the cooperatives' financial health in connection to its strategic management practices.

The Respondents

The respondents of the study were the general managers and board of directors from selected micro, small, and medium-sized cooperatives. A total of 22 cooperatives in the 3rd District of Cotabato Province participated in the study.

Sampling Procedure

This study used complete enumeration in identifying the respondents. Among the thirty-four (34) registered micro, small, medium, and large-sized cooperatives that qualified under the criteria of five years of operation, only twenty-two (22) cooperatives (eleven micro, five small, and six medium-sized cooperatives) successfully participated. The reduced sample size was due to several factors: (1) some cooperatives declined participation, (2) others lacked available financial reports, and (3) one cooperative was inaccessible due to safety concerns in its location. Although complete enumeration was intended, the final sample represents only 64.7% of the eligible cooperatives in the district. This partial participation introduces potential non-response bias, as cooperatives unwilling or unable to provide data may differ systematically from those included—for example, in financial stability, governance transparency, or willingness to adopt strategic practices. Moreover, the exclusion of large cooperatives means that findings are limited to micro, small, and medium-sized cooperatives, restricting the ability to generalize results across all cooperative sizes. Consequently, while the study provides valuable insights into the strategic management practices of smaller cooperatives in Cotabato, caution must be exercised in extending conclusions to larger cooperatives or to other provinces where structural, cultural, or economic conditions may differ.

Research Instrument

The research instrument was a modified survey questionnaire from the study of Chungyas and Trinidad (2022) with the title “Strategic Management Practices and Business Performance of Cooperatives in Ifugao, Philippines: Basis for Strategic Planning Model”. This modified survey questionnaire has two (2) sections. The first section was used to gather the profile of the board of directors and the second section was provided for the profile of the general manager and cooperative, adopted strategic management practices, and financial performance of the cooperative. The second section was composed of four (4) parts. Part I consisted of the profile of the general manager. Part II consisted of the profile of the cooperatives. Part III consisted of six (6) subparts that deal with the level of cooperatives’ strategic management practices. This part utilized the Likert scale with a five-point scale as 1 — Not Adopted, 2 — Partially Adopted, 3 — Moderately Adopted, 4 — Often Adopted, and 5 — Highly Adopted. Part IV dealt with the financial performance of the cooperatives by indicating the selected financial ratios per year namely: net profit margin, debt- to-equity ratio, return on equity, and current ratio.

Data Gathering Procedures

This researcher adhered to the ethical considerations for research established by the University of Southern Mindanao (USM). The procedures were carried out in a way that everyone who took part in this study was safe and protected in their rights. It also ensured the accuracy and integrity of the data that were gathered and processed. Prior to conducting the study, the researcher sought an approval from the University Research Ethics Committee. After the issuance of the Exempt for Review Certificate by RECO, the researcher started collecting the data needed for the study.

The researcher gathered both primary and secondary data for the study. Primary data was gathered through a survey. Prior to data gathering, the researcher communicated first to the contact person of each cooperative of the identified locales of the study for proper coordination. The researcher personally brought the communication letter noted by her adviser to the concerned office for approval. Afterwards, the researcher also personally administered the questionnaire to the respondents. Proper introduction and clear explanation of the purpose of the study was done to ensure the collection of accurate data. Secondary sources included journals, articles, websites, books, and the list of cooperatives from the Region XII Office — Cooperative Development Authority (CDA). A list of the cooperatives was requested from the CDA to get the number of possible respondents. All data were compiled and tabulated.

Data Analysis

The primary and secondary data gathered using the modified survey questionnaire were evaluated using the descriptive-statistics such as frequency count, percentage, and mean, in terms of the profile of the board of directors, general managers, and profile of the cooperatives.

The financial performance of cooperatives will be evaluated using the mean. The level of adoption of strategic management practices of the cooperatives was interpreted using the mode with its corresponding qualitative description.

On the other hand, the secondary data with regards to their financial performance through financial ratios was gathered via the modified survey questionnaire as the cooperatives may not allow the researcher to utilize its financial statements including the profile of the board of directors.

The effect of the profile of the cooperatives and strategic management practices to the financial performance of the cooperatives utilized the linear regression analysis while the comparison of the strategic management practices and financial performance of the cooperatives according to size utilized the Welch's analysis of variance (ANOVA).

The following were the interpretation for the five-point Likert scale used in the study as these were more appropriate compared to the previous terms used on the survey questionnaire:

Legend	Qualitative Description
1	Not Adopted
2	Partially Adopted
3	Moderately Adopted
4	Often Adopted
5	Highly Adopted

Empirically, the model being tested in the regression was:

$$\gamma = \alpha + \sum \beta_1 x + \sum \beta_2 z + \varepsilon$$

Where

γ = financial performance

x = vector of cooperative characteristics

z = vector of strategic management practices

ε = error term

RESULTS AND DISCUSSIONS

Socio-demographic Profile of the Board of Directors

The Table 1.1 shows the socio-demographic profile of the board of directors which indicates that most members are in the later stages of their professional lives, with an average age of 55, and respondents themselves acknowledged the need for younger leaders to ensure continuity and innovation in cooperative governance. Gender distribution was relatively balanced (57.5% male, 42.5% female), while tribal representation was dominated by the Ilonggo group. Tenure averaged 4.65 years, shorter than the national average of 10.6 years reported for Philippine companies (BusinessWorld, 2019), and educational attainment varied, with most directors being college or high school graduates.

These findings carry important managerial implications for cooperative leaders: succession planning is necessary to address the aging leadership profile, while capacity-building programs can strengthen governance given the

varied educational backgrounds. The balanced gender distribution provides opportunities to further promote inclusivity, and tenure management can help balance continuity with renewal. As for Cooperative Development Authority, the results highlight the need to encourage youth involvement in cooperative governance, mandate standardized training for board members, and monitor diversity in leadership. In the overall sense, strengthening governance structures, promoting inclusivity, and planning for generational continuity are critical not only for sustaining cooperative operations but also for enhancing financial performance and resilience.

Table 1.1 Socio-demographic Profile of the Board of Directors.

VARIABLES	FREQUENCY (N=120)	PERCENTAGE (%)	MEAN
Age			
31 — 35	4	3.33	55
36 — 40	4	3.33	
41 — 45	14	11.67	
46 — 50	20	16.67	
51 — 55	20	16.67	
56 — 60	24	20.00	
61 — 65	18	15.00	
66 — 70	9	7.50	
71 — 75	6	5.00	
76 — 80	1	0.83	
Sex			
Female	69	57.50	
Male	51	42.50	
Tribe			
Ilonggo	53	44.17	
Ilocano	37	30.83	
Cebuano	13	10.83	
Maguindanaon	7	5.83	
Iranon	5	4.17	
Kankanaey Igorot	4	3.33	
Kapampangan	1	0.83	

Position			
Chairperson	22	18.33	
Vice-Chairperson	22	18.33	
BOD-Member 1	22	18.33	
BOD-Member 2	22	18.33	
BOD-Member 3	20	16.67	
BOD-Member 4	7	5.83	
BOD-Member 5	5	4.17	
Number of Years as BOD			
Below 1 year	6	5.00	4.65
1 — 5	79	65.83	
6 — 10	23	19.17	
11 — 15	11	9.17	
16 — 20	1	0.83	
Educational Attainment			
Elementary Level	1	0.83	
High School Level	16	13.33	
High School Graduate	26	21.67	
Senior High School Graduate	1	0.83	
College Level	24	20.00	
College Graduate	34	28.33	
Master's Degree	6	5.00	
Doctoral Units	1	0.83	
Doctoral Degree	7	5.83	
Doctor of Medicine	4	3.33	

Socio-demographic profile of the General Managers/Managers

The socio-demographic profile of the general managers is presented in Table 1.2 which shows that most are in their mid-50s, with ages ranging from 42 to 72 and a mean of 56. This mirrors the board of directors' profile, reinforcing concerns about an aging leadership base and the limited involvement of younger generations, who were noted as less interested in continuing the cooperative legacy. Female managers slightly outnumber males

(54.5% versus 45.5%), indicating progress toward gender inclusivity. Tribal representation was led by the Ilonggo group (40.91%), while other tribes were represented only minimally. Tenure averaged 6.71 years, with nearly half serving between one and five years, suggesting moderate experience but limited long-term continuity. Educational attainment varied, with most managers being college graduates (31.82%) or high school level (18.18%). Professional development was evident, as managers frequently attended seminars, particularly on Cooperative Management and Good Governance (22.09%) and Fundamentals of Cooperative (19.77%).

These results carry clear managerial implications for cooperative leaders to work on such as succession planning must be prioritized to address the aging leadership profile and declining youth participation. Expanding training and capacity-building programs is essential to strengthen governance and financial management, especially for managers with lower educational attainment. The relatively balanced gender distribution provides an opportunity to further empower women in leadership roles, while the uneven tribal representation highlights the need to promote inclusivity across communities. Moreover, for policymakers, particularly the Cooperative Development Authority, these findings suggest the importance of institutionalizing standardized training for cooperative managers, creating initiatives that encourage youth involvement, and monitoring diversity in leadership composition.

Table 1.2 Socio-demographic profile of the General Managers/Managers.

Variables	Frequency (N=120)	Percentage (%)	Mean
Age			
41 — 45	3	13.64	56
46 — 50	3	13.64	
51 — 55	6	27.27	
56 — 60	1	4.55	
61 — 65	3	13.64	
66 — 70	4	18.18	
71 — 75	2	9.09	
Sex			
Female	12	54.50	
Male	10	45.50	
Tribe			
Ilonggo	9	40.91	
Ilocano	5	22.73	
Cebuano	3	13.64	
Maguindanaon	1	4.55	
Iranon	1	4.55	
Kankanaey Igorot	1	4.55	
Igorot	1	4.55	

Kapampangan	1	4.55	
Number of Years as BOD			
Below 1 year	1	4.55	6.71
1 — 5	10	45.45	
6 — 10	6	27.27	
11 — 15	4	18.18	
21 — 25	1	4.55	
Educational Attainment			
High School Level	4	18.18	
High School Graduate	3	13.64	
College Level	3	13.64	
College Graduate	7	31.82	
Master's Degree	1	4.55	
Doctoral Units	1	4.55	
Doctoral Degree	2	9.09	
Vocational Degree Graduate	1	4.55	
Seminars Attended			
Cooperative Management and Good Governance	19	24.36	
Fundamentals of Cooperative	17	21.79	
Financial Management	10	12.82	
Strategic Planning and Management Practices	3	3.85	
Policy Formulation	3	3.85	
Risk Management	3	3.85	
Basic Cooperative Course	2	2.56	
Bookkeeping for Non-Accountant	2	2.56	
Internal Control	2	2.56	
Accounting for Non-Accountant	1	1.28	
Training Course of the Operation & Maintenance of Rice Marketing	1	1.28	
Strategic Business Planning an Budget Workshop	1	1.28	
Cooperative Eskwela	1	1.28	

Roles and Function	1	1.28	
Cooperative Composed of Spiritual Capital	1	1.28	
Cooperative Leadership and Values	1	1.28	
Mandatory Training for Micro Cooperatives	1	1.28	
Training on Rice In-bed Production	1	1.28	
Food Halal Awareness Training	1	1.28	
Business Continuity Management	1	1.28	
Agribusiness Investment Evaluation and Decision Training	1	1.28	
Technical Driving Training Skill	1	1.28	
Basic Accounting for Non-Accountant	1	1.28	
How to Conduct Cooperative Meetings	1	1.28	
Credit Management	1	1.28	
National Tripartite Conference	1	1.28	
Conflict Management	1	1.28	
Management Training	1	1.28	
Organizational/Enterprise Management	1	1.28	

Profile of the Cooperatives

The cooperative profile highlights diversity in size, type, and services offered. Kabacan and M'lang accounted for the largest share of respondents (36.36% each), while Tulunan had only one cooperative due to the five-year operation requirement. Asset sizes varied, with eleven micro, five small, and six medium cooperatives, and multi-purpose cooperatives dominated in type (12), followed by credit (7), marketing (2), and service (1). Services ranged from agricultural inputs and credit facilities to specialized activities such as water distribution, health services, and small-scale manufacturing. Most cooperatives operated a single branch, with an average of 23.7 years in existence, reflecting resilience but also challenges in sustaining operations. Employment levels were modest, averaging 11 employees, while active membership averaged 134. Among the 11 cooperatives offering credit services, loan collection efficiency was low (35.27%) and delinquency rates were high (28.36%), confirming Gaviti's (2022) assertion that efficiency is best when ratios approach 100%.

Such managerial implications suggest that cooperative leaders must recognize that organizational scale and must provide tailored strategies such as micro and small cooperatives should prioritize financial discipline, strengthen loan collection systems, and engage members more actively, while medium cooperatives can leverage broader resources to diversify services and expand sustainably. The wide range of products and services presents opportunities for innovation, but leaders must ensure diversification is strategically managed to avoid inefficiencies. This implies as well that the Cooperative Development Authority may provide essential differentiated support programs as smaller cooperatives need targeted training in governance and financial management, while medium cooperatives benefit from assistance in scaling operations and accessing wider markets. Moreover, close monitoring of loan collection efficiency and delinquency rates is critical to safeguard cooperative stability and member trust, consistent with Gaviti's (2022) emphasis on efficient credit management.

Table 2. Profile of the Cooperatives

Variables	Frequency (N=22)			Percentage (%)	Mean
	Micro	Small	Medium		
Municipality					
Kabacan	4	2	2	36.36	
M'lang	6	1	1	36.36	
Matalam	0	1	2	13.34	
Carmen	1	1	0	9.09	
Tulunan	0	0	1	4.55	
Cooperative Type					
Multi-purpose	4	5	3	54.55	
Credit	6	0	1	31.82	
Marketing	1	0	1	9.09	
Service	0	0	1	4.55	
Products and Services					
Loan/Lending/ Microfinancing	6	3	2	16.18	
Drying Services (Solar or Mechanical)	3	2	2	10.29	
Rice Milling	3	2	2	10.29	
Sari-sari Store	2	3	2	10.29	
Farm Machinery Services	2	1	2	7.35	
Marketing (Certified Seeds, Palay, etc.)	0	2	2	5.88	
Harvesting Services	1	1	0	2.94	
Certified Seeds (Corn or Palay)	1	1	0	2.94	
Hauling	0	1	0	2.94	
Pre- and Post- Harvest Services	0	2	0	2.94	
Deposit (Savings or Time)	0	0	2	2.94	
Trucking	0	1	1	2.94	
Agricultural Inputs and Fertilizers	0	2	0	2.94	
Banana Chips Production	1	0	0	1.47	

Corn Shelling Services	1	0	0	1.47	
Ihaw-ihaw	1	0	0	1.47	
Bucayo Processing	1	0	0	1.47	
Buying and Selling of Palay	1	0	0	1.47	
Buying and Selling of All Agri- Products	0	1	0	1.47	
Virgin Coconut Oil Service	0	1	0	1.47	
Water Distribution	0	1	0	1.47	
Agri-Supply Store	0	1	0	1.47	
Health Services	0	0	1	1.47	
Potable Water System	0	0	1	1.47	
Hollow Block Manufacturing	0	0	1	1.47	
Irrigation System	0	0	1	1.47	
Number of Branches					
1	11	5	6	100	
Length of Operation					
5 — 10	2	0	0	9.09	23.7
11 — 15	4	2	0	27.27	
16 — 20	2	0	0	9.09	
21 — 25	1	0	1	9.09	
26 — 30	0	0	2	9.09	
31 — 35	1	2	3	27.27	
41 — 45	1	0	0	4.55	
51 — 55	0	1	0	4.55	
Number of Employees					
0	3	0	0	13.64	11
1 — 5	6	2	1	40.91	
6 — 10	0	2	3	22.73	
11 — 15	0	1	0	4.55	

21 – 25	1	0	1	9.09	
26 – 30	1	0	0	4.55	
86 – 90	0	0	1	4.55	
Number of Active Members					
15-50	8	0	1	40.91	134
51 – 100	2	2	1	22.73	
101 – 150	1	0	0	4.55	
151 – 200	0	1	2	13.64	
201 – 250	0	2	0	9.09	
551 – 600	0	0	2	9.09	
Loan Collection Efficiency					
N/A	5	2	4		35.27%
0%	1	0	0		
20 – 25%	0	1	0		
26 – 30%	1	0	0		
56 – 60%	1	1	0		
86 – 90%	1	0	0		
91 – 95%	1	0	1		
96 – 100%	1	1	1		
Loan Delinquency Rate					
N/A	5	2	4		28.36%
0%	1	1	1		
5 – 10%	1	0	1		
11 – 15%	1	0	0		
36 – 40%	1	1	0		
66 – 70%	1	0	0		
76 – 80%	0	1	0		

Level of Adoption of Strategic Management Practices

Table 3 reveals the level of adoption of strategic management practices of the cooperatives in terms of VMGOs (vision, mission, goals and objectives), external environment, internal environment, formulation of strategies, adopted strategies, and monitoring/audit by finding the mode of each practice.

The results on the level of adoption of strategic management practices show that cooperatives across all sizes consistently prioritize their vision, mission, goals, and objectives (VMGOs), with regular planning sessions conducted at least once a month. This reflects their commitment to clarity of purpose and competitive positioning, consistent with Knikker’s (2021) view that well-defined VMGOs strengthen organizational identity. In examining the external environment, micro and small cooperatives often considered political, economic, and technological factors but placed greater emphasis on social, legal, and environmental aspects. Medium cooperatives, however, demonstrated stronger adoption across all external environment strategies, reflecting their broader exposure and capacity. Internally, all cooperatives highly valued member needs and culture, while employee insights and systems were often considered, supporting Aggarwal’s (2023) claim that effective internal management fosters a conducive workplace.

Table 3. Level of Adoption of Strategic Management Practices.

Variables	Mode	Qualitative Description
VMGOs		
Mission	5	Highly Adopted
Vision	5	Highly Adopted
Goals & Objectives	5	Highly Adopted
Regular Planning	5	Highly Adopted
External Environment		
Social	5	Highly Adopted
Legal	5	Highly Adopted
Environmental	5	Highly Adopted
Political	4	Often Adopted
Economic	4	Often Adopted
Technological	4	Often Adopted
Internal Environment		
Member's Needs	5	Highly Adopted
Culture	5	Highly Adopted
Employee's Insights	4	Often Adopted
Systems & Procedures	4	Often Adopted
Formulation of Strategies		

BOD & Management	5	Highly Adopted
BOD, Mngt, & Gen. Assembly	5	Highly Adopted
From Gen. Assembly to BOD	5	Highly Adopted
BOD only	4	Often Adopted
Adopted Strategies		
Customer Differentiation	4	Often Adopted
Cost Control Policy	4	Often Adopted
Customer Service Policy	4	Often Adopted
Advertisements	4	Often Adopted
Pricing Differentiation	2	Partially Adopted
Monitoring/Audit		
Regular Performance Monitoring	5	Highly Adopted
External Audit	5	Highly Adopted
Internal Audit	5	Highly Adopted

Legend: 1 – Not Adopted; 2 – Partially Adopted, 3 – Moderately Adopted; 4 – Often Adopted; 5 – Highly Adopted

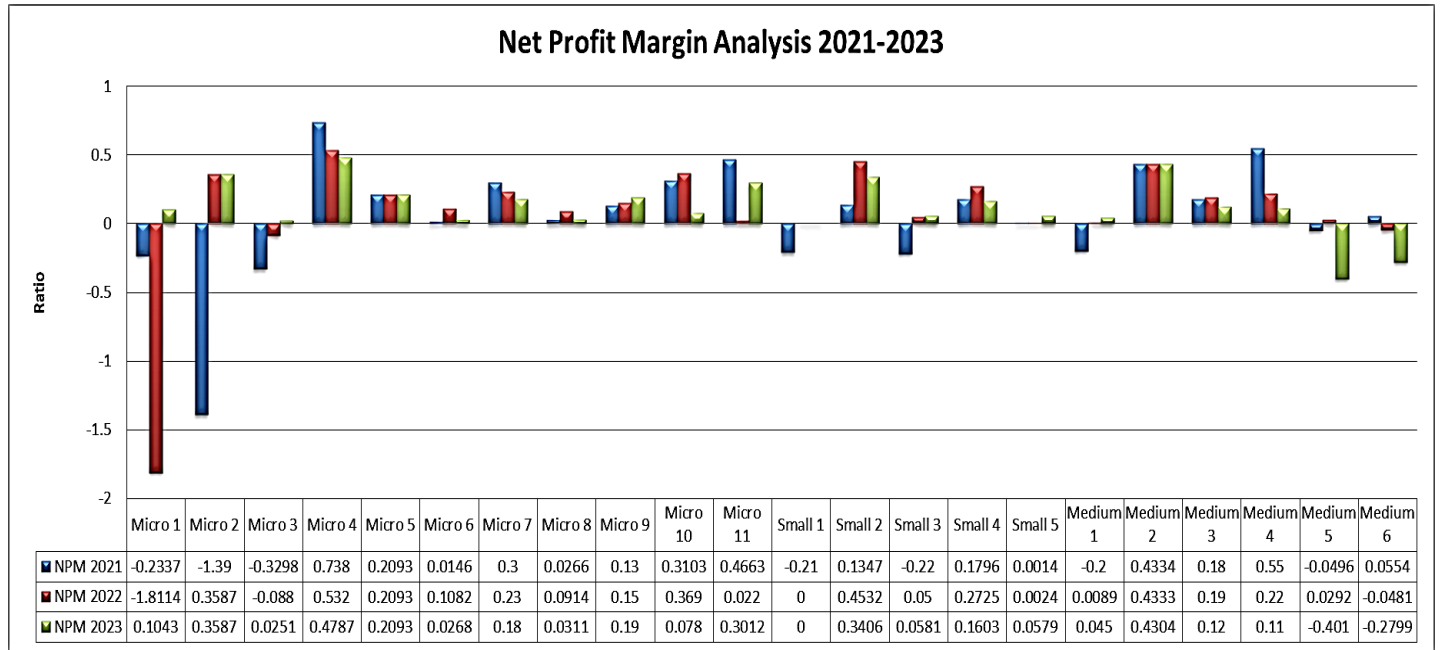
Strategic formulation practices revealed inclusivity, with strategies commonly developed jointly by boards and management, while centralized decision-making within boards was only moderately adopted, echoing George’s (2017) observation that bureaucratic leadership can enhance control but may limit participation. In terms of adopted strategies, micro and small cooperatives focused on customer differentiation, cost control, and service policies, while medium cooperatives adopted similar approaches but avoided price differentiation, aligning with their values. Finally, monitoring and audit practices were highly adopted across all cooperatives, with regular performance reviews and both internal and external audits, supporting Nguyen and Vuong’s (2022) findings that systematic monitoring improves organizational performance.

The findings underscore the importance of strengthening inclusivity in strategy formulation of cooperative leaders while balancing centralized control to ensure both participation and efficiency. Micro and small cooperatives should invest more in technological adoption and marketing strategies to expand competitiveness beyond local markets, while medium cooperatives must sustain their broader networks without compromising values. Regular monitoring and audits should be institutionalized as a standard practice to maintain accountability and performance. For policymakers—especially the Cooperative Development Authority—support should be more tailored rather than one-size-fits-all. Smaller cooperatives would greatly benefit from hands-on training in digital tools and marketing, helping them build confidence and reach wider markets. Meanwhile, medium-sized cooperatives are better served by initiatives that strengthen their ability to diversify strategies and adapt to changing conditions. Alongside these, promoting inclusive governance and requiring regular audits can help ensure long-term stability and accountability across the sector. Aligning strategic practices with cooperative size and capacity, while reinforcing governance and monitoring systems, is essential for leaders and policymakers to ensure resilience and long-term financial performance.

Analysis of the Financial Performance of the Cooperatives

Figures 1 to 4 show the analysis of the financial performance of the cooperatives from 2021 to 2023 through their financial ratios: net profit margin, debt-equity ratio, return on equity, and current ratio.

Figure 1. Analysis of the net profit margin of the cooperatives.



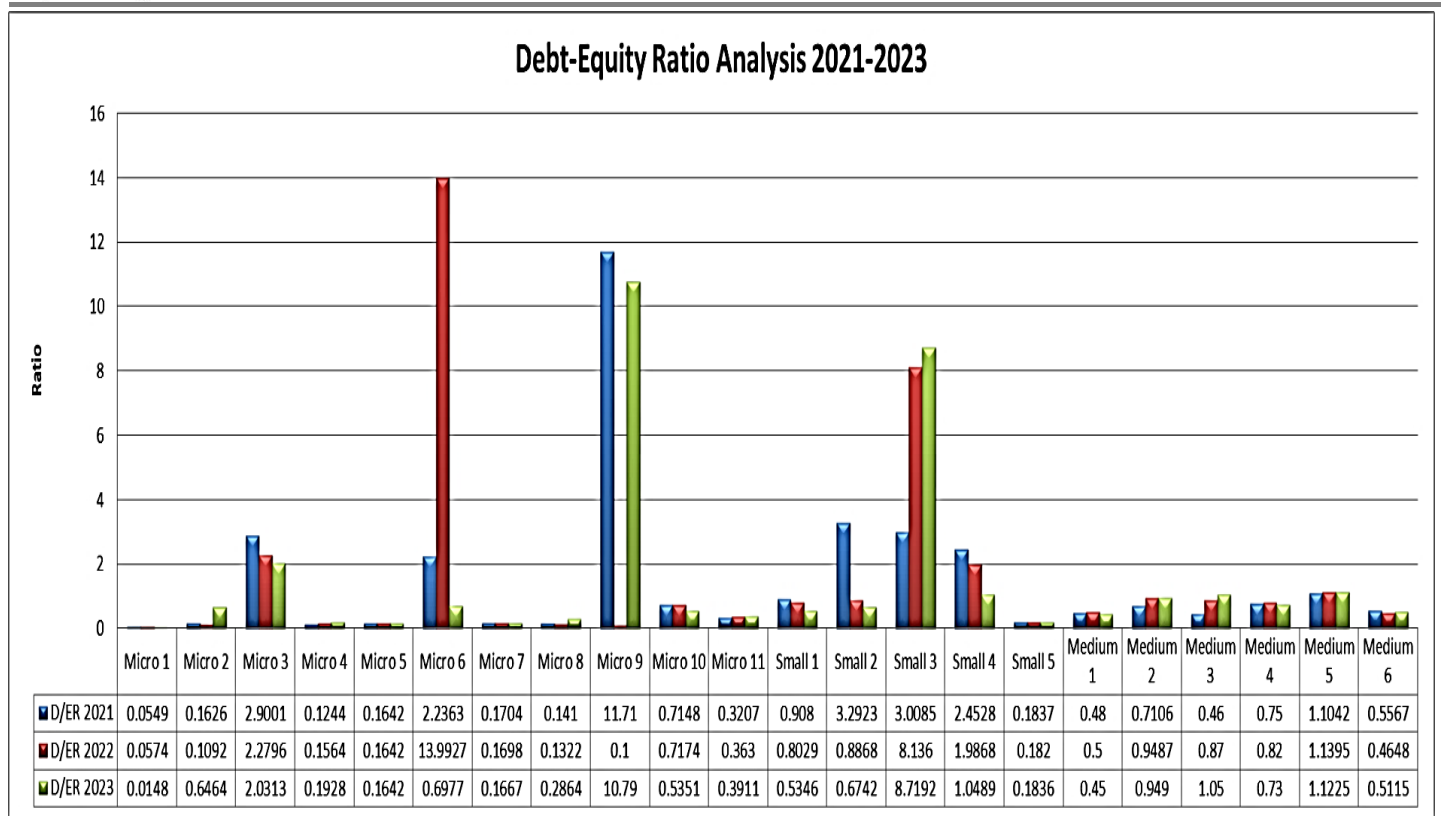
Legend: 0.10 – Standard level; 0.20 – Healthy level

In Figure 1, it shows that micro-sized cooperatives recorded low and negative net profit margins in 2021, though many recovered to standard or healthy levels in 2022 and 2023. Small cooperatives also experienced negative margins in 2021 but showed improvement in subsequent years, indicating resilience and revenue growth. Medium cooperatives, however, displayed a gradual decline in profitability across the three years, suggesting sustained challenges in revenue generation. Overall, the cooperatives accumulated low income during this period, consistent with Apriani et al. (2023), who found that the pandemic severely disrupted cooperative operations, leading to revenue declines and capital depletion.

The results emphasize the significance of strengthening financial risk management and establish contingency plans of cooperative leaders to withstand external shocks such as pandemics. Micro and small cooperatives should continue building resilience by diversifying income sources and improving cost control, while medium cooperatives need to reassess their strategies to reverse declining profitability. Regular monitoring of financial ratios, particularly net profit margin and debt-equity levels, is essential to guide decision-making and maintain financial health. Cooperative Development Authority may set necessary targeted interventions such as training programs in financial management, support for diversification, and mechanisms to improve access to capital can help cooperatives recover and sustain operations.

In Figure 2, the analysis of debt-equity ratios (DER) from 2021 to 2023 shows varied approaches among cooperatives. Micro-sized cooperatives displayed mixed patterns, with some gradually reducing debt reliance and favoring equity funding, while others incurred extremely high DER values, exposing them to greater financial risks. Small cooperatives demonstrated progressive improvement, becoming less dependent on debt, though a few still carried high leverage that increased their vulnerability. Medium cooperatives consistently maintained lower DERs, indicating stability and limited reliance on external borrowing. Overall, cooperatives showed gradual improvement in DER as the pandemic subsided, reflecting more prudent use of credit and conservative leverage strategies. As noted by The Investopedia Team (2024), maintaining DER below 2.0 is generally advisable to balance growth and risk.

Figure 2. Analysis of the debt-equity ratio of the cooperatives.



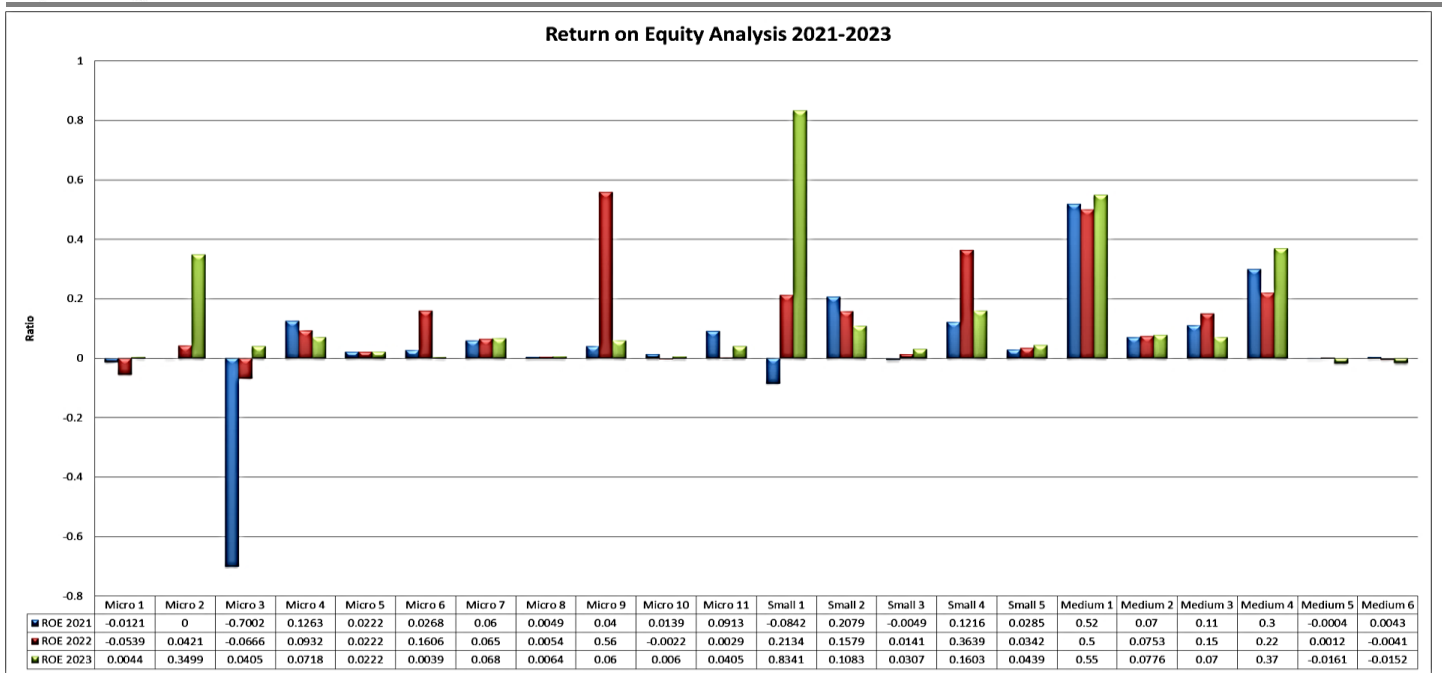
Legend: Maximum of 2.0 – Good level

The data implies that cooperative leaders must closely monitor leverage levels to avoid excessive debt that could compromise financial stability. Micro and small cooperatives, in particular, should strengthen financial planning and adopt stricter debt management policies to reduce exposure to risk. Medium cooperatives, while relatively stable, should continue balancing equity and debt to sustain growth without overextending resources. As for policymakers, especially the Cooperative Development Authority, tailored interventions are needed: training programs on debt management, guidelines on optimal leverage, and monitoring mechanisms to ensure cooperatives maintain healthy DER levels.

Industry standards suggest that an acceptable return on equity (ROE) ranges between 0.10 and 0.20 (Furhmann, 2024; Fernando, 2024). As shown in Figure 3, micro-sized cooperatives reported negative and low ROE values, indicating that their net income was consistently lower than expenses relative to equity funding. Although subsequent fluctuations suggest early signs of recovery in operations and production, the volatility highlights their financial vulnerability. Small-sized cooperatives also demonstrated inconsistency in ROE growth. While their ratios were positive, the returns remained low, reflecting limited revenue generation in proportion to equity. Medium-sized cooperatives, by contrast, exhibited relatively greater stability in the last three years, though they too experienced fluctuations. A particular issue was raised by one medium-sized cooperative, which reported that donated agricultural machinery from the Department of Agriculture was easily damaged. This situation resulted in lower or negative income despite higher equity values, as repair costs were prohibitive and disposal options were limited.

These findings carry important managerial implications for cooperative leaders and policymakers. Sustained negative or low ROE threatens long-term viability, making it essential to strengthen financial monitoring systems that can detect early signs of distress and guide corrective measures. Cooperative leaders must also prioritize capacity-building initiatives to enhance managerial efficiency, operational productivity, and financial literacy, particularly among micro- and small-sized cooperatives. For policy-making, should ensure that donated equipment is durable, appropriate for local conditions, and supported by training and maintenance programs to prevent costly inefficiencies. Furthermore, government agencies and cooperative federations should design

Figure 3. Analysis of the return on equity of the cooperatives.

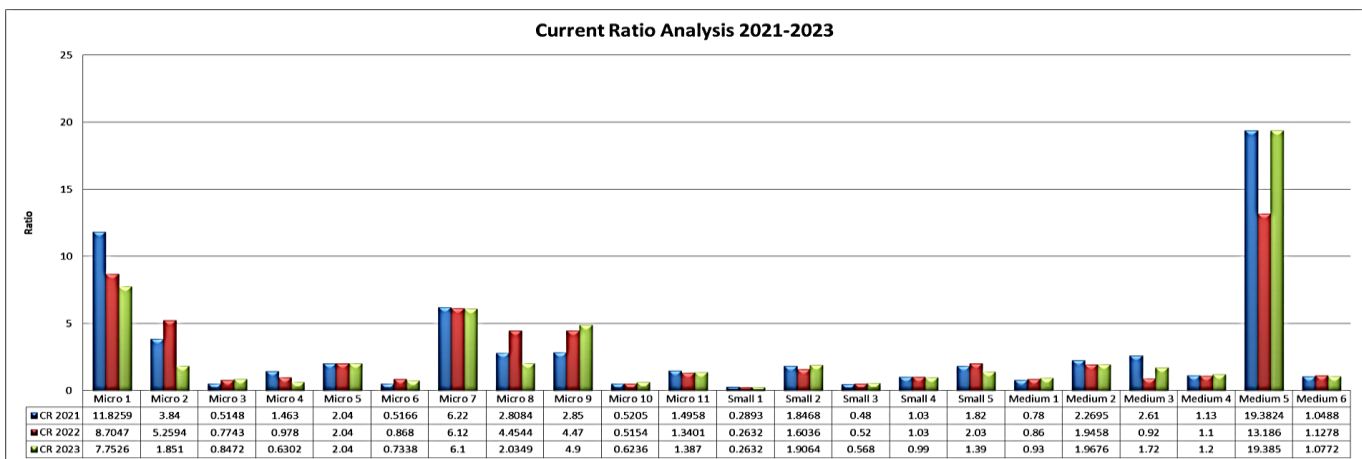


Legend: 0.10 – Standard level; 0.20 – Healthy level

support mechanisms—such as subsidized repair services, shared equipment facilities, or technical assistance—to reduce the burden of asset management on individual cooperatives. By addressing these managerial and policy concerns, cooperatives can move toward achieving industry-acceptable ROE levels, thereby strengthening their sustainability and enhancing their contribution to rural economic development.

The analysis of current ratios from 2021 to 2023 as presented in Figure 4 reveals varying levels of liquidity across cooperative sizes. Several micro cooperatives maintained healthy ratios, with current assets double or triple their liabilities, indicating strong capacity to meet short-term obligations. However, some recorded extremely high ratios, suggesting underutilized cash resources, while others had very low ratios, reflecting insufficient funds for continued operations. Small cooperatives generally maintained just enough liquidity to cover obligations, leaving limited reserves for future periods. Medium cooperatives showed weaker liquidity, with low current ratios that signaled difficulty in sustaining cash flow, though a few had excess funds that were not converted into productive investments. As WallStreetPrep (2024) notes, an optimal current ratio falls between 1.5 and 3.0, with values below 1.0 considered risky and values above 3.0 potentially inefficient.

Figure 4. Analysis of the current ratio of the cooperatives.



Legend: 0.05 – Low level; 1.50-3.00 – Healthy level; Above 3.00 – Inefficient

The findings imply that cooperative leaders must balance liquidity management by ensuring adequate funds to meet obligations while avoiding excessive idle assets. Micro cooperatives with very high ratios should reallocate surplus cash into productive investments, while those with low ratios must strengthen cash flow planning to avoid operational disruptions. Small cooperatives need to build stronger reserves to support continuity, and medium cooperatives should prioritize improving liquidity through better debt management and income diversification. Meanwhile, for the Cooperative Development Authority, capacity-building programs on financial planning and liquidity management are essential. Monitoring mechanisms should also be reinforced to identify cooperatives at risk of insolvency or inefficiency, ensuring timely interventions as it provides structured support and oversight to promote financial stability across cooperative sizes.

Effect of Profile of the Cooperatives and Strategic Management Practices to its Financial Performance Based on Financial Ratios

The regression analysis shown in Table 4 revealed significant relationships between cooperative profiles, strategic management practices, and financial performance. In terms of cooperative profile, the number of employees showed a positive effect on return on equity (ROE), with a coefficient of 0.0062, SE = 0.0019, and p-value = 0.01. This indicates that each additional employee contributes to higher ROE, consistent with Hosain and Saif (2019), who found that workforce expansion enhances profitability in banking institutions. Conversely, internal environment practices had a negative effect on ROE, with a coefficient of -0.1766, SE = 0.0821, and p-value = 0.05, suggesting that increased internal expenditures reduce profitability. This aligns with Akinleye (2022), who observed that excessive internal spending can erode returns. External environment practices also showed a negative effect on the debt-equity ratio (DER), with a coefficient of -4.0788, SE = 1.9211, and p-value = 0.05, indicating that greater consideration of external factors reduces borrowing capacity. Ayas et al. (2020) similarly noted that climate vulnerability and external risks limit debt financing, pushing organizations toward more conservative financial strategies.

Table 4. Effect of profile of the cooperatives and strategic management practices to its financial performance based on financial ratios.

Variables	Net Profit Margin		Debt-Equity Ratio		Return on Equity		Current Ratio	
	Coeff.	SE (p-value)	Coeff.	SE (p-value)	Coeff.	SE (p-value)	Coeff.	SE (p-value)
Profile of Cooperatives								
Number of Products	-0.0278	0.0459 ^{ns} (0.5997)	-0.4204	0.3787 ^{ns} (0.2958)	0.0163	0.0152 ^{ns} (0.3121)	-0.4368	0.4191 ^{ns} (0.3245)
Number of Branches	0.2364	0.3966 ^{ns} (0.5659)	-2.1925	3.2732 ^{ns} (0.5199)	0.0243	0.1318 ^{ns} (0.8576)	-0.4674	3.6215 ^{ns} (0.9001)
Length of Operation	0.0063	0.0072 ^{ns} (0.4047)	-0.0241	0.0597 ^{ns} (0.6597)	-0.0028	0.0024 ^{ns} (0.2739)	-0.0353	0.0660 ^{ns} (0.6061)
Number of Employees	-0.0005	0.0043 ^{ns} (0.9037)	-0.0562	0.0354 ^{ns} (0.1462)	0.0062	0.0014 ^{***} (0.0018)	-0.0418	0.0391 ^{ns} (0.3135)
Number of Active Members	-0.0005	0.0006 ^{ns} (0.4759)	0.0022	0.0051 ^{ns} (0.6705)	-0.0000	0.0002 ^{ns} (0.9832)	0.0022	0.0057 ^{ns} (0.7021)
Strategic Management Practices								
VMGOs	0.1797	0.1872 ^{ns} (0.3622)	0.5354	0.5453 ^{ns} (0.7369)	0.0024	0.0622 ^{ns} (0.9698)	-1.2205	1.7097 ^{ns} (0.4934)
External Environment	0.0283	0.2133 ^{ns} (0.8974)	-4.0788	1.7607 ^{**} (0.0457)	0.0380	0.0709 ^{ns} (0.6047)	0.9050	1.9481 ^{ns} (0.6533)
Internal Environment	0.0448	0.1811 ^{ns} (0.8103)	0.5326	1.4948 ^{ns} (0.7298)	-0.1766	0.0602 ^{**} (0.0166)	-0.4221	1.6538 ^{ns} (0.8043)
Formulation of Strategies	-0.0923	0.0942 ^{ns} (0.3525)	0.2365	0.7772 ^{ns} (0.7679)	-0.0055	0.0313 ^{ns} (0.8652)	-0.8949	0.8599 ^{ns} (0.3251)
Adopted Strategies	-0.4164	0.2144 ^{ns} (0.0840)	-0.1091	1.7692 ^{ns} (0.9522)	-0.0512	0.0712 ^{ns} (0.4906)	1.5585	1.9575 ^{ns} (0.4464)
Monitoring/Audit	0.1235	0.2292 ^{ns} (0.6032)	-1.6976	1.8914 ^{ns} (0.3928)	0.0835	0.0761 ^{ns} (0.3012)	0.4850	2.0927 ^{ns} (0.8219)
R²	0.4184		0.4578		0.8198		0.3152	
Adjusted R²					0.5995			
F	0.5885		0.6908		3.7218		0.3765	
p-value	0.7988		0.7227		0.0292		0.9352	

Note: *** = significant at 0.01; ** = significant at 0.05; ns = not significant.

The data explicitly indicates that for cooperative leaders, workforce expansion should be strategically pursued, ensuring that hiring translates into productivity gains and improved ROE. Internal expenditures must be carefully managed, with investments directed toward areas that yield measurable financial benefits rather than inflating costs. Leaders must also adopt cautious debt strategies, recognizing that external challenges—such as market volatility or climate risks—can constrain borrowing and necessitate conservative financial planning. The findings highlight to the Cooperative Development Authority the need to provide guidance on optimal staffing, cost management, and debt utilization. Training programs should emphasize efficient resource allocation, while monitoring mechanisms can help cooperatives avoid excessive internal spending or risky borrowing practices.

Comparison between the Strategic Management Practices and Financial Performance of the Cooperatives Based on Size

The ANOVA results shown in Table 5 revealed significant differences among micro, small, and medium-sized cooperatives in terms of strategic management practices, specifically in the areas of external environment and monitoring/audit. This indicates that cooperatives vary in how they respond to external factors and in the way they evaluate their operations, reflecting differences in size, products, and services. Astuti et al. (2019) supports this finding, noting that larger firms are more likely to engage in environmental practices and require timely monitoring to sustain performance. However, no significant difference was found in financial performance across cooperative sizes, suggesting that growth and profitability are not determined by size alone but by the effectiveness of strategy execution.

The data imply that for cooperative leaders, the results highlight the importance of tailoring external environment strategies to organizational capacity. Micro and small cooperatives must strengthen their responsiveness to political, economic, and technological changes, while medium cooperatives should continue leveraging broader networks to integrate environmental practices more effectively. Monitoring and audit systems must be institutionalized across all cooperative sizes to ensure accountability and operational efficiency.

Table 5. Comparison between the strategic management and financial performance of the cooperatives based on size.

Variables	Micro	Mean Small	Medium	F	p-value
Strategic Management Practices					
VMGOs	4.2955	4.3000	4.7000	0.7976	0.4803 ^{ns}
External Environment	4.2576	4.3333	4.7667	4.6742	0.0410 ^{**}
Task (Internal) Environment	4.5000	4.1500	4.6000	1.6522	0.2457 ^{ns}
Formulation of Strategies	3.5909	4.1000	3.7000	0.5819	0.5777 ^{ns}
Adopted Strategies	3.9455	3.7600	3.9200	0.1982	0.8237 ^{ns}
Monitoring/Audit	4.4242	4.6000	4.9333	5.1925	0.0314 ^{**}
Financial Performance					
Net Profit Margin	0.0726	0.0854	0.1499	0.1739	0.8428 ^{ns}
Debt-Equity Ratio	1.6018	2.2000	0.6834	1.4258	0.2972 ^{ns}
Return on Equity	0.0356	0.1486	0.1999	2.1501	0.1839 ^{ns}
Current Ratio	2.9854	1.0687	1.3791	2.2104	0.1552 ^{ns}

Note: *** = significant at 0.01; ** = significant at 0.05; ns = not significant.

CONCLUSION

Overall, the findings reveal that the majority of cooperatives, regardless of size, demonstrate a high level of adoption of key strategic management practices, particularly in terms of vision, mission, goals and objectives (VMGOs), as well as in their consideration of internal and external environments, strategy formulation, and

monitoring and audit mechanisms. This suggests that cooperatives consistently rely on these fundamental practices to guide decision-making and achieve their organizational goals over time. However, the results also indicate that many of these strategies are only moderately or “often” adopted, reflecting variability in their implementation—particularly in relation to the promotion of diverse products and services across different target markets.

In relation to financial performance, the analysis shows that net profit margins remain generally low, especially among micro cooperatives. This condition can be attributed to the economic disruptions brought about by the pandemic, during which business operations and transactions were significantly constrained. Conversely, the debt-to-equity ratio is, in general, at a manageable level, indicating that cooperatives are able to utilize external financing to support their financial requirements. Nonetheless, a number of micro and small cooperatives exhibit disproportionately high debt levels, placing them at greater financial risk. Furthermore, return on equity (ROE) remains below the commonly accepted benchmark, suggesting limited efficiency in generating returns from equity investments. On a positive note, the current ratio indicates that cooperatives are generally capable of meeting their short-term obligations.

With respect to cooperative profile, the number of employees is found to have a significant influence on return on equity, implying that human resources play a critical role in driving income generation and optimizing the use of equity. This highlights the importance of workforce capacity as a key determinant of organizational performance. Moreover, internal environmental factors—including resource acquisition and utilization, organizational culture, role clarity, and adherence to systems and procedures—significantly affect ROE, underscoring their importance in sustaining operations within a dynamic and competitive environment.

In addition, the external environment is shown to have a significant impact on the debt management practices of cooperatives. Changes in political, economic, social, technological, legal, and environmental conditions influence their capacity and decision to secure financing from banks and other lending institutions, either facilitating or constraining access to external funds.

Finally, the comparative analysis based on cooperative size reveals that significant differences exist in terms of external environmental responsiveness and monitoring and audit practices. However, no significant differences are observed in financial performance across different sizes of cooperatives. This suggests that financial success is not inherently determined by organizational size, but rather by the extent to which cooperatives effectively adapt to external changes and continuously evaluate their performance through robust internal and external audit mechanisms.

RECOMMENDATIONS

Based on the gathered and analyzed data, the researcher proposes the following recommendations to enhance and broaden the strategic practices of cooperatives. First, cooperatives are encouraged to institutionalize succession planning by establishing an appropriate age range for members of the Board of Directors (BOD). This recommendation is grounded in the finding that the average age of current BOD members is approaching seniority, which respondents themselves identified as a concern. Second, cooperatives should maximize the potential of their existing human resources, particularly cooperative scholar-graduates, by encouraging them to render service within the organization for a designated period as a form of reciprocity. This approach does not undermine the experience or authority of senior BOD members; rather, it promotes intergenerational collaboration. By allowing younger members to actively participate, cooperatives can adapt to an increasingly dynamic business environment characterized by emerging technologies and innovative practices. At the same time, senior members can serve as mentors, ensuring continuity of institutional knowledge. Providing structured training for younger members will further enable them to integrate fresh, contemporary ideas while safeguarding the long-term sustainability of the cooperatives.

In terms of the internal environment and its relationship to return on equity (ROE), cooperatives are advised to adopt strategic financial management practices to improve equity utilization. These include conducting regular financial reviews to identify inefficiencies and opportunities, and undertaking budget realignment to prioritize

high-yield investments and necessary cost reductions, particularly in light of low accumulated ROE. Additionally, asset optimization should be pursued through efficient asset management, disposal of underutilized resources, or refinancing—especially considering the presence of damaged machinery that requires repair or liquidation.

Moreover, cooperatives are encouraged to diversify their operations to expand revenue streams, leveraging their existing specialized products and services as competitive advantages. Capacity-building initiatives focused on financial management should also be strengthened to equip board members and staff with innovative strategies for financial leverage. Alongside these efforts, robust risk management mechanisms must be implemented to support sustainable development.

Given the observed variability in debt-equity ratios, cooperatives must also exercise prudent debt management. Recommended strategies include debt restructuring to negotiate more favorable repayment terms, equity financing through the issuance of shares or attraction of investors, and the utilization of crowdfunding platforms to generate capital from members and community stakeholders.

For the Cooperative Development Authority (CDA), it is recommended to integrate digital mapping tools, such as Google Maps, to accurately document the locations of cooperatives. This initiative would greatly facilitate future research activities, as locating cooperatives in unfamiliar areas proved to be a significant challenge during data collection.

Furthermore, it is strongly recommended that the CDA provide more comprehensive strategic interventions. These may include capacity-building programs, mentorship initiatives that pair developing cooperatives with high-performing ones, and consultancy services offering expert guidance in financial planning, asset valuation, and liability management. In terms of regulatory support, simplifying reporting requirements may help cooperatives comply more consistently with financial reporting standards.

Financial assistance mechanisms should also be strengthened through the provision of grants, subsidies, and low-interest loans to support capacity development, infrastructure, and innovation. To address technical challenges, the development of user-friendly financial analysis tools and risk assessment frameworks is recommended. Enhancing inter-cooperative collaboration can also foster knowledge sharing and the adoption of best practices, while partnerships with the private sector, academic institutions, and international organizations may open broader market opportunities—particularly for cooperatives with competitive agricultural products.

In the area of education and awareness, targeted training programs should be conducted to strengthen the financial oversight capabilities of board members, incorporating case studies of successful cooperatives. Lastly, a robust monitoring and evaluation system should be established through the development of key performance indicators (KPIs), supported by continuous monitoring and auditing processes to provide cooperatives with clearer insights into their financial standing.

For future researchers, it is recommended to further explore the prevailing challenges faced by cooperatives, particularly in relation to leadership and governance. Subsequent studies may examine the performance of boards of directors and managers in achieving organizational goals, as well as investigate best practices across marketing, organizational, technical or production, and financial domains.

REFERENCES

1. Addae-Koranbye, A. & Aryee, B.A. (2021). The relationship between strategic management practices and the growth of small and medium enterprises (SMEs) in Ghana. *Business: Theory & Practice*, 22(1), 222-230. <https://doi.org/10.3846/btp.2021.12549>
2. Ali, M. & Qun, W. (2019). Strategic management practices and performance of SMEs in Bangladesh. *International Journal of Advanced Research*, 7(1), 69-78. DOI: 10.21474/IJAR01/8298
3. Aggarwal, C. (2023). Difference between internal and external business environment. *Shiksha Online*. Info Edge (India) Ltd. <https://www.shiksha.com/online-courses/articles/difference-between-internal-and-external-business-environment/>

4. Aggarwal, C. (2023). Strategy formulation: Meaning and process. Shiksha Online. Info Edge (India) Ltd. <https://www.shiksha.com/online- courses/articles/strategy-formulation-meaning-and-process/>
5. Aggarwal, C. (2024). Difference between internal and external business environment. Info Edge (India) Ltd. <https://www.shiksha.com/online- courses/articles/difference-between-internal-and-external-business- environment/>
6. Akinleye M.J (2022). Internal environmental cost and financial performance of selected listed firms in Nigeria. *Fuoye Journal of Accounting and Management*, 5(2), 95-114.
7. <https://fjam.fuoye.edu.ng/index.php/fjam/article/download/106/72/>
8. Alegre, I., Berbegal-Mirabent, J., Guerrero, A., & Mas-Machuca, M. (2018). The real mission of the mission statement: A systematic review of the literature. *Journal of Management and Organization*, 24(4), 456-473. <https://doi.org/10.1017/jmo.2017.82>
9. Anos, J. M. M., Dinauanao, A. M., Etcuban, J. O., Ferrater-Gimena, J. A. O., Macugay, P. J. D. R., & Velita, L. V. (2020). Financial management of micro, small, and medium enterprises in Cebu, Philippines. *International Journal of Small Business and Entrepreneurship Research*, 8(1), 53-76. DOI: 10.37745/ejsber.vol8.no.1p53-76.2020
10. Apriani, R., Arafat, M. R., Putra, P. S., & Taun. (2023). Efforts to save cooperatives during the Covid-19 pandemic to support the transformation of cooperatives for a sustainable economy. *Advances in Economics, Business and Management Research*. The Author(s), 4(2), 358-367. DOI: 10.2991/978-94-6463-154-8_31
11. Archer, D. W., Featherstone, A. M., & Pokharel, K. P. (2020). The impact of size and specialization on the financial performance of agricultural cooperatives. *Journal of Co-operative Organization and Management*, 8(2), 100-108. <https://doi.org/10.1016/j.jcom.2020.100108>
12. Astuti, R., Cahyo, E. N., Faradisi, R. J., Maulana, H., & Umam, K., (2019). Environmental aspects of micro, small, and medium enterprises (MSMEs). *European Alliance for Innovation*. DOI: 10.4108/eai.13-2-2019.2286196
13. Ayas, S., Kling, G., Murinde, V., & Volz, U., (2020). The impact of climate vulnerability on firms' cost of capital and access to finance. Elsevier, Ltd., 1-35. <https://doi.org/10.1016/j.worlddev.2020.105131>
14. Bacila, M. L., Halmaghi, E.E., & Iancu, D. (2017). The organization's internal environment and its importance in the organization's development. *International Conference. Knowledge-Based Organization*, 23(1), 378-381. doi: 10.1515/kbo-2017-0062
15. Bain and Company (2024). Purpose, mission, and vision statements. <https://www.bain.com/insights/management-tools-mission-and-vision-statements/#:~:text=Typically%2C%20senior%20leaders%20will%20write,and%20support%20throughout%20the%20organization>
16. Berbegal-Mirabent, J., Mas-Machuca, M., & Guix, P. (2021). Impact of mission statement components on social enterprises' performance. *Review of Managerial Science*, 15(3), 705-724. <https://doi.org/10.1007/s11846-019-00355-2>
17. Bosco, T. J., David, K. J., & Moses, A. (2023). Strategic management and organizational performance: A case of Lyamujungu SACCO, Kabale District, Uganda. *International Journal of Islamic Business and Management Review*, 3(1), 50-60. <https://doi.org/10.54099/ijbmr.v3i1.625>
18. Browne, S., Sharkey-Scott, P., Mangematin, V., Lawlor, K., & Cuddihy, L. (2014). Adapting a book to make a film: How strategy is adapted through professional practices of marketing middle managers. *Journal of Marketing Management*, 30(9-10), 949-973. <http://dx.doi.org/10.1080/0267257X.2014933867>
19. Caminade, L. L., Corpuz, D. B., & Tongo, P. A. (2017). Factors affecting the collection efficiency of Ma-a parish multi-purpose cooperative: Basis for policy formulation. *International Journal of Business and Economic Affairs*, 2(4), 240-252. DOI: 10.24088/IJBEA-2017-24003
20. Casinillo, L. F., Paradero, A. L., & Tabinas, M. I. C. (2022). Business strategies of micro, small, and medium enterprises in response to the Covid-19 pandemic. *Innovative Technology and Management Journal*, 5(1), 24-37. <https://journal.evsu.edu.ph/index.php/itmj/article/view/315>
21. Castillo, E., & Castillo, M. (2017). Cooperatives in the socio-economic development of the Philippines. Cooperative Development Authority. Retrieved March 30, 2024 from https://cda.gov.ph/wp-content/uploads/2021/01/2017-07-21-Paper_Adms_Eloy.pdf

22. Chungyas, J. I., & Trinidad, F. L. (2022). Strategic management practices and business performance of cooperatives in Ifugao, Philippines: Basis for strategic planning model. *International Journal of Management & Entrepreneurship Research*, 4(2), 84-104. DOI: 10.51594/ijmer.v4i2.293
23. Contreras-Pacheco, O. E., Parra, A. P., & Pinzón, M. V. (2022). Mission, vision, and value appropriation: A correlational analysis. *Article of Science and Technological Research, Cuadernos de Administración (Universidad del Valle)*, 38(74), e2111955, 2022. <https://doi.org/10.25100/cdea.v38i74.11955>
24. Cooperative Development Authority. (2017). Against repeal of cooperative tax privilege. Retrieved November 25, 2024 from <https://cda.gov.ph/updates/against-repeal-of-cooperative-tax-privilege/#:~:text=Articles%2060%20and%2061%20of,consequently%2C%20in%20nation%2Dbuilding.>
25. Cooperative Development Authority. (2021). Effect of Covid-19 among cooperatives. Retrieved April 11, 2024 from https://cda.gov.ph/wp-content/uploads/2021/01/Survey_Results-Illustration.pdf
26. Cooperative Development Authority. (2021). Frequently asked questions. Retrieved May 29, 2024 from <https://cda.gov.ph/frequently-asked-questions/>
27. Cooperative Development Authority. (2021). Service-bylaws. <https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://cda.gov.ph/wp-content/uploads/2021/01/SERVICE-BYLAWS.pdf&ved=2ahUKEwiAlKaYIbSGAxU8xjgGHVJVCfgQFnoECBIQBg&usq=A0vVaw3DKL0xlep0gXKHTJiK2fjQ>
28. Cooperative Development Authority. (2021-2024). Frequently asked questions. Retrieved November 25, 2024 from <https://cda.gov.ph/frequently-asked-questions/#:~:text=A%20cooperative%20is%20an%20autonomous,their%20products%20and%20service%20and>
29. Cooperative Development Authority. (2022). Showcasing feats conquering limits: Annual report 2022. Retrieved May 30, 2024 from https://cda.gov.ph/publication_category/annual-report/
30. Cooperative Development Authority. (2023). Annual report 2021. Retrieved May 9, 2024 from <https://cda.gov.ph/wp-content/uploads/2023/03/Annual-Report-v10-Interactive-2.pdf>
31. Cooperative Development Authority (2024). List of accredited cooperatives. Retrieved November 25, 2024 from <https://cda.gov.ph/region-12/list-of-accredited-cooperatives/>
32. Culek, C., Mitchell, M., & Kappen, J. (2024). How to write mission, vision and values statements – 100 examples to help guide you through process. *Baton-Global*. <https://www.batonglobal.com/post/how-to-write-mission-vision-and-values-statements-with-examples#:~:text=Summary,and%20impactful%20core%20commitments%20here>
33. Domingo, A. V., Mina, J. C., & Quijano, M. F. T. (2022). Management practices of cooperatives in Nueva Ecija: A basis for sustainable development program. *Open Access Library Journal*, 9:e8515 <https://doi.org/10.4236/oalib.1108515>
34. Edwards, J. (2014). Chapter 2: Leading strategically: Vision, mission, and goals. *Mastering Strategic Management — 1st Canadian Edition*. <https://opentextbc.ca/strategicmanagement/chapter/vision-mission-and-goals/>
35. Fernando, J. (2024). Return on equity (ROE) calculation and what it means. *Investopedia*. <https://www.investopedia.com/terms/r/returnonequity.asp>
36. Fernando, J. (2024). Current ratio explained with formula and examples. *Investopedia*. <https://www.investopedia.com/terms/c/currentratio.asp>
37. Fitzsimmons, A. B., Qin, Y. S., & Heffron, E. R. (2022). Purpose vs mission vs vision: persuasive appeals and components in corporate statements. *Journal of Communication Management*, 26(2), 207-219. <https://doi.org/10.1108/JCOM-09-2021-0108>
38. Fuhmann, R. (2024). How to calculate return on equity (ROE). *Investopedia*. Retrieved December 21, 2024 from <https://www.investopedia.com/ask/answers/070914/how-do-you-calculate-return-equity-roe.asp>
39. Garcia, R. C. (2017). Profitability and efficiency evaluation of the financial management of a socio-economic intervention. *Management and Marketing. Challenge for the Knowledge Society*, 12(2), 316-333. DOI 10.1515/mmcks-2017-0019
40. Gaviti (2022). What is collector efficiency. Retrieved November 26, 2024 from <https://gaviti.com/glossary/collector-efficiency/>

41. George, B. (2017). Does strategic planning „work“ in public organizations? Insights from Flemish municipalities. *Public Money & Management*, 37, 527-530. <https://doi.org/10.1080/09540962.2017.1372116>
42. Gomera, S., Chinyamurindi, W. T., & Mishi, S. (2018). Relationship between strategic planning and financial performance: The case of small, micro- and medium-scale businesses in the Buffalo City Metropolitan. *South African Journal of Economic and Management Sciences*, 21(1), 1-9. <https://dx.doi.org/10.4102/sajems.v21i1.1634>
43. Herrity, J. (2024). How to write vision and mission statements. Indeed. <https://www.indeed.com/career-advice/career-development/how-to-write-vision-and-mission-statement>
44. Hofstrand, D. (2023). Vision and mission statements – a roadmap of where you want to go and how to get there. Iowa State University. <https://www.extension.iastate.edu/agdm/wholefarm/html/c5-09.html#:~:text=Mission%20is%20a%20general%20statement,timelines%20for%20achieving%20the%20goal>
45. Huebel, M. (2023). What is strategy?: Definition, components & examples explained. Consulterce Ltd. <https://consulterce.com/business-strategy/>
46. Indeed Editorial Team. (2023). What are customer service policies? (Definition and tips). <https://uk.indeed.com/career-advice/career-development/customer-service-policies>
47. International Finance Corporation. (2024). What is the external business environment?. <https://www.ifcbeyondthebalancesheet.org/about-the-toolkit/strategy/external-business-environment>
48. Jumawan, A. R. (2022). Management practices of cooperatives: Roadmap towards improved performance and sustainability. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(7), 1257-1266. <https://dx.doi.org/10.11594/ijmaber.03.07.05>
49. Kenkel, P. (2019). Cooperatives: Managing a cooperative. Extension Foundation. <https://cooperatives.extension.org/>
50. Kenton, W. (2022). Cost control: How businesses use it to increase profits. Investopedia. <https://www.investopedia.com/terms/c/cost-control.asp>
51. Kirkpatrick, S. A. (2017). Understanding the role of vision, mission, and values in the HPT model. *Performance Improvement*, 49(2), 46-47. <https://doi.org/10.1002/pfi.21689>
52. Knikker, J. (2021). How to win work: The architect's guide to business development and marketing. (1st Edition). London. RIBA Publishing.
53. Korkmaz, G. (2020). The moderating effect of internal audit in strategic planning implementation success. *Istanbul Management Journal*, 88, 57-84. <http://doi.org/10.26650/imj.2020.88.0003>
54. LinkedIn (2024). What are the best practices for developing a strategic mission and vision. Retrieved January 20, 2025 from <https://www.linkedin.com/advice/0/what-best-tools-methods-developing-strategic#:~:text=Best%20Practices%20for%20Developing%20a%20Strategic%20Mission%20and%20Vision%20Stakeholder,in%20the%20mission%20and%20vision>
55. Linton, I. (2024). How does the external audit affect other components of the strategic management process. *Chron*. Retrieved April 12, 2024 from <https://smallbusiness.chron.com/external-audit-affect-other-components-strategicmanagement-process-33621.html>
56. López-Morales, J. S., & Ortega-Ridaura, I. (2016). International Strategy of the 500 Largest Firms in Latin America: An Analysis from its Mission and Vision. *Problems and Perspectives in Management*, 14(3), 634-641. [https://doi.org/10.21511/ppm.14\(3-3\).2016.06](https://doi.org/10.21511/ppm.14(3-3).2016.06)
57. Makaliwe, W. A., Murad, K. N., Simamora, D. H., & Zahra, E. M. (2023). Factors affecting the financial performance of credit union in Indonesia. *Indonesian Journal of Multidisciplinary Science*, 2(4), 2365-2376. DOI: 10.55324/ijoms.v2i4.414
58. Malinao, C. W. M. (2023). Spill the tea: Current conditions and external factors affecting enTEApreneurs in Lagawe, Ifugao, Philippines. *Journal of Community Development Research (Humanities and Social Sciences)*, 16(3), 35-54. <https://doi.org/10.14456/jcdr-hs.2023.24>
59. McQuerrey, L. (2024) Why customer differentiation is important. *Chron*. Retrieved May 9, 2024 from <https://smallbusiness.chron.com/customer-differentiation-important-61474.html>

60. Mittal, V., & Srihari, S. (2021). The inspirational executive: Strategy planning through mission, vision, and values. In V. Mittal, S. Sridhar (Eds.), *Focus: How to plan strategy and improve execution to achieve growth*, 47-49. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-70720-0_4
61. Nguyen, L. T., & Vuong, T. D. N. (2022). The key strategies for measuring employee performance in companies: A systematic review. *Sustainability* 2022, 14(21), 14017. <https://doi.org/10.3390/su142114017>
62. Omsa, S., Ridwan, M., & Jayadi, M. (2018). The effect of strategic management practices on SME performances in Makasar, Indonesia. *American Journal of Theoretical and Applied Business*, 3(4), 71-80. DOI 10.11648/j.ajtab.20170304.12
63. Pearce, J. A., & Robinson, R. B. (2007). *Strategic management: Strategy formulation and implementation*. (10th Edition). New York. McGraw- Hill/Irwin.
64. Pokharel, K. P., & Featherstone, A. M. (2019). Estimating multiproduct and product-specific scale economies for agricultural cooperatives. *Agricultural Economics*, 50(3), 279-289. DOI: 10.1111/agec.12483
65. Sahoo, C. K. (2023). What is advertising and its different types. LinkedIn. Retrieved May 30, 2024 from <https://www.linkedin.com/pulse/what-advertising-its-different-types-chandan-kumar-sahoo-d1fvc>
66. Spacey, J. (2023). 30 examples of price differentiation. Simplicable. <https://simplicable.com/en/price-differentiation>
67. Team Asana (2024). Goals vs. objectives: A project manager's breakdown. Asana, Inc. <https://asana.com/resources/goal-vs-objective>
68. Thanh, H. T. P. (2024). Role of external audit for cooperative management in Vietnam. *International Research Journal of Economics and Management Studies*, 3(1), 355-361. DOI: 10.56472/25835238/IRJEMS-V3I1P141
69. The Institute of Internal Auditors (2021). Developing the internal audit strategic plan. <https://www.theiia.org/en/content/guidance/recommended/supplemental/practice-guides/developing-the-internal-audit-strategic-plan/>
70. The Investopedia Team (2024). What is a good debt-to-equity ratio and why it matters. Investopedia. <https://www.investopedia.com/ask/answers/040915/what-considered-good-net-debttoequity-ratio.asp>
71. Vipond, T. (2024). Profit margin. Corporate Finance Institute. <https://corporatefinanceinstitute.com/resources/accounting/profit-margin/>
72. Wall Street Prep (2024). Current ratio: What is current ratio?. <https://www.wallstreetprep.com/knowledge/current-ratio/>