

ORIGINAL RESEARCH ARTICLE

The Influence of Entrepreneurial Management on Cooperative Performance of Multipurpose Cooperatives in Davao Oriental, Philippines

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ABSTRACT

This study is grounded in entrepreneurial management theory, aimed to identify which indicators of Entrepreneurial Management - Strategic Orientation, Management Structure, Growth Orientation, and Entrepreneurial Culture significantly predict the performance of multipurpose cooperatives in Davao Oriental, Philippines. A survey method using a researcher-administered questionnaire gathered data from 200 respondents. The data were then analyzed using mean, standard deviation, Pearson correlation, and multiple regression. Results showed that entrepreneurial management attained an overall mean score of 4.05, indicating implementation across strategic orientation, management structure, growth orientation, and entrepreneurial culture. Cooperative performance likewise scored high ($M = 4.34$; $SD = 0.83$). Regression results revealed that all four indicators significantly predict cooperative performance ($R^2 = 0.85$, $p < .05$). The findings indicate that entrepreneurial management could play a crucial role in improving cooperative efficiency, organizational development, and a member-centered approach, especially by having a high level of strategic orientation and entrepreneurial culture. The findings offer practical implications for cooperative sustainability and may inform policies supporting organizational development in rural enterprises.

Keywords: *Entrepreneurial management, cooperative performance, correlational research design, multipurpose cooperatives*

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INTRODUCTION

Perceived business success is critical among the cooperatives. It keeps the viability and sustainability of cooperatives' business operations. Its sustainability enables the organization to provide and generate employment, boost food production, empower marginalized communities, and promote social cohesion and integration. This, in turn, improves members' livelihoods and reduces poverty, benefiting not only its members but also the local community and society (Ahmed and Mesfin, 2017). Cooperation serves as an effective way of solving common problems by combining collective efforts and resources (Galang et al., 2020). The sustainability of cooperatives was driven by factors such as strong member support, good management, viable business strategies, and knowledgeable board members (Ismail et al., 2019).

Cooperatives' diversified activities, which cover almost all sectors, have generated significant employment with about 279 million jobs globally, or 9.5% of total employment, and contributed substantially to the world economy (ICA and CICOPA, 2017; ICA and Euricse, 2023; Ribas et al., 2022). The presence of cooperatives increases business activities in some rural communities. However, the business environment in which most cooperatives were established is very different from today. With significant changes in the business climate, some thrive

while others fail. Some cooperatives cope with the situation, while others find that closure is the best option. In fact, in the Philippines, cooperatives have created business activities that contribute to the economic well-being of rural communities; however, approximately 38% or 33% out of 85 of registered cooperatives in all types in Davao Oriental were dissolved from the master list of registered cooperatives as of December 31, 2016 only a few continue to remain active and operating (Sarsale, 2019).

Despite its economic potential, cooperatives failed to adapt strategically to emerging market competition, both locally and globally, highlighting the need for a more dynamic, opportunity-driven approach.

Entrepreneurial Management (EM), as conceptualized by Stevenson (1983), provides a framework for organizations to behave entrepreneurially regardless of their size or resource constraints. EM is related to the capability to capture opportunities that lead to business success, necessary for the sustainability of business operations. Entrepreneurial management plays a crucial role in cooperative performance (Sofuluwe, 2020). Rashid (2018) stressed that entrepreneurial management includes the following indicators—strategic orientation emphasizes how cooperatives proactively and pursue opportunities (Donaldson, 2001); management structure defined how firms structure themselves within EM growth orientation highlights how to captures

long-term sustainability and expansion and entrepreneurial culture (Brown et al., 2001; Kreiser et al., 2011). The study by Nti (2022) demonstrated that the following indicators improved business performance.

Although there are studies in the Philippines that explore management practices, governance, and strategic activities among various cooperatives (Chungyas et al., 2022; Paradero et al., 2022; Jumawan, 2022; Galang et al., 2020), there is limited literature that has explored the field of Entrepreneurial Management (EM) and its functions in the development of cooperative performance. This study not only applies but also extends Stevenson's (1983) entrepreneurial management theory by contextualizing it within various cooperative entities that differ from traditional profit-oriented firms in governance, ownership, and decision-making structures. By situating entrepreneurial management in the cooperative setting, the study provides theoretical reinforcement that broadens EM's applicability from individualistic entrepreneurship toward collective, member-driven enterprises. Such contextualization deepens understanding of opportunity-seeking behavior and strategic adaptability within socially oriented organizations. Therefore, few empirical studies directly link entrepreneurial management practices to the performance of cooperatives in developing nations, especially in the Philippines. Thus, this study aimed to assess the status of entrepreneurial management and the performance of

multipurpose cooperatives in Davao Oriental. Specifically, it ought to determine the relationship between entrepreneurial management and cooperative performance, and to identify which dimensions of entrepreneurial management significantly predict the performance of multipurpose cooperatives.

MATERIALS AND METHODS

Description of the study area

This research was conducted in Davao Oriental, one of the provinces of the Davao Region. Davao Oriental has the largest land area among the provinces of Region XI, covering 5,164 km². This represents 26% of the Davao Region's total land area. Compostela Valley borders the province to the west, Agusan del Sur and Surigao del Sur to the north, the Davao Gulf to the southwest, and the Philippine Sea to the east and southeast.

According to data from the Philippine Statistics Authority, Davao Oriental is home to 85 active, registered cooperatives of all types as of 2021. Thus, this research was conducted in multipurpose cooperatives operating particularly in selected municipalities, namely: Baganga, Caraga, Manay, Tarragona, Governor Generoso, San Isidro, Lupon, Banaybanay, and the lone city of the said Province, Mati City.

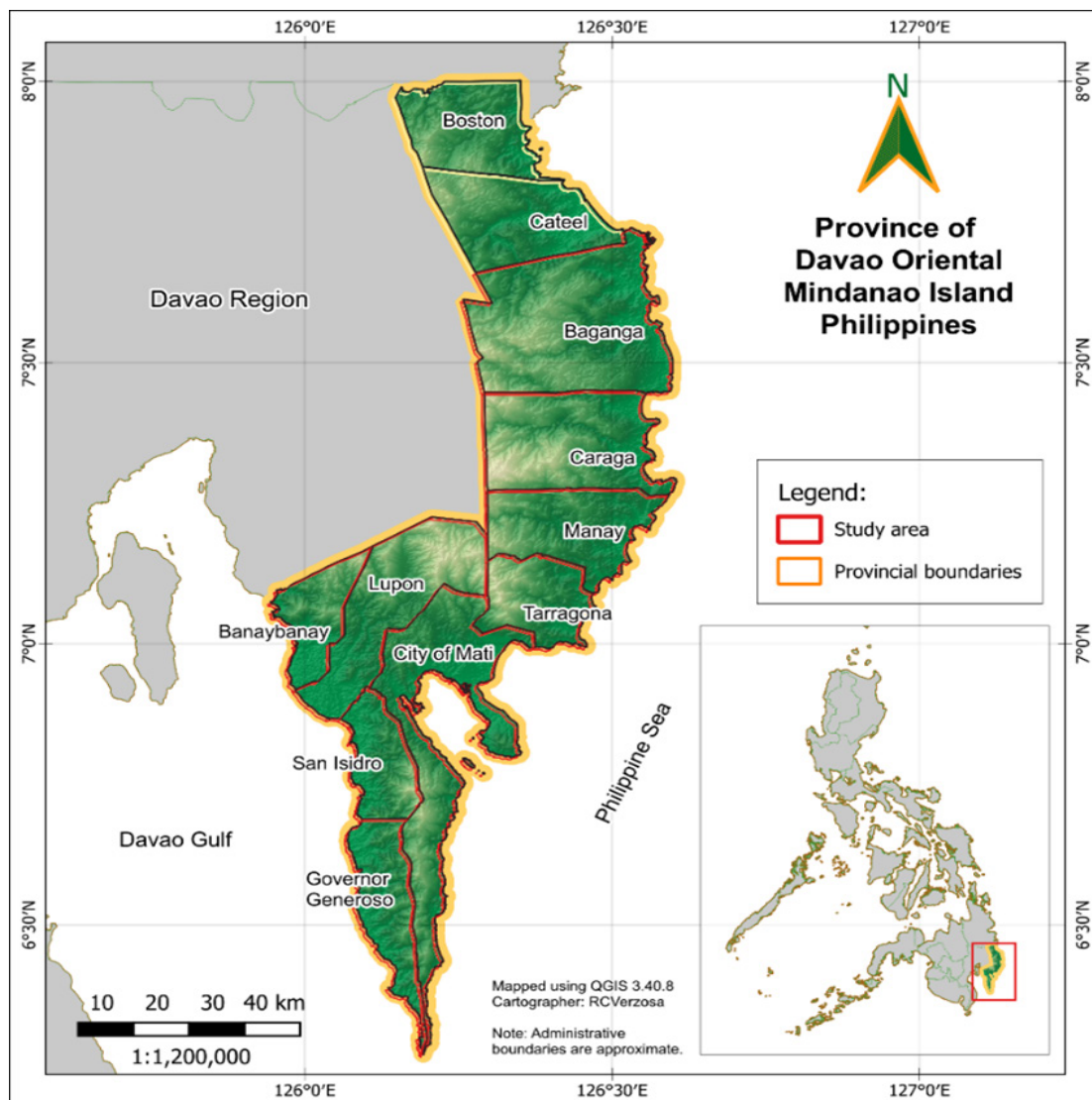


Figure 1. Map of the study area.

Data collection

The study employed a descriptive-correlational research design. This design was used to describe and measure the degree of association or relationship between two or more variables or sets of scores. Specifically, the survey method was used to provide a quantitative description of trends, attitudes, or opinions within a population by studying a sample of that population (Fowler, 2008).

The respondents of the study were members and officers of multipurpose cooperatives in Davao Oriental. According to the Cooperative Development Authority as of 2018, there were thirty (30) registered and active multipurpose cooperatives in Davao Oriental; however, only 28 multipurpose cooperatives were considered since the two cooperatives did not meet the criteria in selecting cooperatives in the study. The inclusion criteria required that cooperatives must be (1) registered under the Cooperative Development Authority (CDA), (2) officially recognized as active and operating as of 2021, and (3) classified as multipurpose cooperatives.

These organizations were chosen because they represent the most comprehensive operational scope within the province, combining agricultural production, consumer retailing, and credit and savings services. Most agri-based cooperatives trade coconut, rice, and corn, while consumer cooperatives manage local retail stores and credit services that cater to members' livelihood and production needs. This criterion ensured that the sample reflected the diversity of cooperative business engagements in Davao Oriental.

Although the data reflect 2018 cooperative operations, they remain valid for trend analysis as verified by the CDA's 2021 validation. Data were collected from June to August 2021 through field-administered questionnaires.

There were 200 respondents from the registered multipurpose cooperatives in the province recognized by CDA. The 200 respondents comprised cooperative members and officers, 60% female and 40% male, mostly aged 30–50 years. About 70% had been members for over five years, and 55% held managerial or officer positions. Based on the list, a complete enumeration was used to select the cooperatives, and a purposive sampling technique was also used to select the respondents for the study. Data gathering was conducted by trained research assistants with backgrounds in agribusiness and cooperative studies, under the supervision of the principal researcher and in coordination with CDA personnel to ensure data accuracy and reliability.

To ensure instrument reliability and internal consistency, the Cronbach's alpha values were computed for each indicator before complete administration. An adapted survey questionnaire was used, based on the work of numerous authors whose research aligned with the variables being studied. The questions for entrepreneurial management were anchored in Rashid's (2018) study, and cooperative performance was adapted from the Cooperative Development Authority (CDA). The survey questionnaire used to collect data underwent reliability and content validity testing. The first pilot test was conducted on 30 members of a cooperative other than a multipurpose. The respondents of the pilot test were not part of the official 200 respondents of the study. The pilot testing was conducted to ensure that the questionnaire items accurately address the research questions. Also, this was conducted to test whether the questionnaire is comprehensible and appropriate and whether the questions are well-defined, clearly understood and presented consistently. The first part of the survey questionnaire addresses the entrepreneurial management of multipurpose cooperatives in Davao Oriental. It consists of four indicators: strategic orientation, management structure, growth orientation, and

entrepreneurial culture. The second part of the questionnaire focused on cooperative performance.

The Cronbach alpha of the items, particularly those below 0.70, includes financial management (0.54), promotion (0.47), place (0.35), productivity (0.17), delivery (0.53), and human resources (0.66). These low coefficients led the researcher to combine and delete some items within these constructs. Hence, the 107 items/statements in the old questionnaire were reduced to 97 after the first pilot test. The second pilot test was then conducted with the same respondents to assess the reliability of the merged items/statements. After the second pilot test, the questionnaire now has 87 items, with Cronbach's alpha of 0.83 for entrepreneurial management and 0.87 for cooperative performance. The entrepreneurial and organizational management have already proven reliable in pilot testing 1. Thus, all the items were retained. These constructs were no longer included in the second pilot testing. The value of reliability increases as some items/statements in the questionnaire were deleted or merged. Deleted statements were unclear to respondents and may have led to biased responses. Hence, the reliability test results showed that the final questionnaire, revised based on the pilot test results, was consistent.

Data analysis

The statistical tools used to analyze the collected data included descriptive statistics, such as mean and standard deviation, to assess the status of entrepreneurial management and the performance of multipurpose cooperatives in Davao Oriental. The Pearson Product-Moment Correlation was used to analyze the established relationship between indicators of entrepreneurial management and cooperative performance. Multiple regression analysis was employed to determine which indicator of entrepreneurial management best influences cooperative performance. This statistic allows simultaneous examination of indicators to identify individual contributions to a dependent variable (Hair et al., 2019).

Whereas Field (2018) and Tabachnick and Fidell (2019) state that regression analysis can be used with non-probability samples provided that assumptions such as normality, linearity, independence, and homoscedasticity are satisfied. Moreover, multiple studies confirm that multiple regression remains reliable and valid, even with moderate deviations from assumptions, when sample sizes are sufficient, and the data meet linearity requirements (Williams et al., 2013). Consequently, the analysis was methodologically appropriate for determining how entrepreneurial management dimensions predict cooperative performance.

RESULTS

Status of entrepreneurial management of multipurpose cooperative

The status of entrepreneurial management and cooperative performance was revealed through descriptive statistics (Table 1). In the table, the standard deviation is below 1.0, which is typical for a 5-point likert scale. It indicates the consistency and homogeneity of responses among the 180 respondents to the multipurpose cooperatives in Davao Oriental. Entrepreneurial management attained a 4.05 overall mean score, and this variable was rated highly by the respondents, indicating that, in general, the concept of entrepreneurial management, strategic orientation, management structure, growth orientation, and entrepreneurial culture are implemented in their cooperatives.

The high overall score suggests that most cooperatives have adopted entrepreneurial principles across multiple dimensions,

though variation in indicator scores indicates differences in emphasis and capacity cooperatives.

Table 1. Status of entrepreneurial management of multipurpose cooperative (2021).

Latent variables/ Observed variables	Mean	Standard Deviation	Descriptive level
Entrepreneurial management	4.05	0.75	High
Strategic orientation	4.50	0.80	High
Management structure	3.50	0.86	Average
Growth orientation	4.20	0.96	High
Entrepreneurial culture	4.00	0.95	High

Status of performance of multipurpose cooperatives

Descriptive statistics were used to reveal the status of multipurpose cooperative performance, as shown in table 2. In the table, the standard deviation is below 1.0, which is typical for a 5-point Likert Scale, indicating consistency and homogeneity of responses among the 180 cooperative members in Davao Oriental.

Based on the study's results, cooperative performance exhibits a high descriptive level, with an overall standard deviation of 0.83 and a total mean score of 4.34. It conveys that the multipurpose cooperative's performance was evident. For

this variable, all indicators of cooperative performance had standard deviations ranging from 0.83 to 1.00 and mean scores ranging from 4.18 to 4.48, indicating a high level of descriptive detail.

While all performance indicators are rated high, the lowest score in Financial Management highlights a specific operational gap, potentially linked to limited access to trained bookkeepers or financial systems in smaller rural cooperatives. Conversely, the highest score in human resource management may reflect strong community ties, loyalty, and volunteerism typical of rural cooperative culture in Davao Oriental.

Table 2. Status of performance among multipurpose cooperative (2021).

Latent variables/ Observed variables	Mean	Standard Deviation	Descriptive level
Cooperative performance	4.34	0.83	High
Organizational management	4.30	0.83	High
Financial management	4.18	0.85	High
Marketing management	4.28	1.00	High
Operation Management	4.45	0.91	High
Human resource management	4.48	0.93	High

Influence of entrepreneurial management on cooperative performance

The quantitative data in table 3 showed the correlation between indicators of entrepreneurial management and cooperative performance. Correlation is necessary as a prelude to regression, which will determine the influence within the study. The result showed that the four indicators of entrepreneurial management, strategic orientation, management structure, growth orientation, and entrepreneurial culture, were strongly

correlated with cooperative performance, with Pearson correlation coefficient values ranging from 0.59 to 0.88. Subsequently, all indicators of the independent variable are statistically significant ($p=0.00$; $p<.05$). The critical relationship between entrepreneurial Management and cooperative performance supports the use of regression analysis. The strong correlation coefficients suggest that improving any of these entrepreneurial management aspects will likely produce a measurable boost in cooperative performance, though the strength of influence varies by indicator.

Table 3. Correlation between indicators of entrepreneurial management and cooperative performance (2021).

Indicators paired with cooperative performance	r	p-value	Interpretation
Strategic orientation	.88	.00	Significant
Management structure	.59	.00	Significant
Growth orientation	.79	.00	Significant
Entrepreneurial culture	.83	.00	Significant

Table 4 presents the results of the regression analysis of the influence of indicators of entrepreneurial management on cooperative performance. The data show that all indicators of entrepreneurial management, in their singular capacities, were significant influencers of cooperative performance (p -value = 0.00; $p<.05$). Further, the beta coefficient indicates that for every unit increase in strategic orientation, cooperative performance rises by 0.46. Also, each unit increase in the

management structure is associated with a 0.07 increase in collaborative performance. Likewise, every unit increase in growth orientation may lead to a 0.19 increase in cooperative performance.

The model's high R^2 value (.85) indicates that entrepreneurial management explains most of the variance in cooperative performance, a robust predictive relationship in organizational research. This finding reinforces the centrality

of strategic planning, adaptability, and innovation in sustaining cooperative success in rural economies. While Management Structure has the smallest coefficient, it remains significant, suggesting that governance and procedural frameworks

continue to contribute to performance, particularly by ensuring compliance with CDA requirements and maintaining organizational legitimacy.

Table 4. Predictors of cooperative performance (2021).

Influencers	Standard coefficient beta	p-value	t	Interpretation
Strategic orientation	.46	.00	9.15	Significant
Management structure	.07	.00	1.99	Significant
Growth orientation	.19	.00	4.18	Significant
Entrepreneurial culture	.32	.00	6.95	Significant
$r^2 = .85$				
$F = 285.09$				
$p = .00$				

DISCUSSIONS

Strategic orientation

This indicator had the highest category mean of 4.50 among the four indicators of entrepreneurial management, indicating a high level. Hence, the concept of entrepreneurial management was implemented. This implies that the cooperatives define their strategies by taking advantage of opportunities and leveraging existing internal resources (Chungyas et al., 2022; Cagas et al., 2023). Also, cooperatives pursue opportunities they perceive as valuable as their fundamental task, which means their business strategies are significantly influenced by the resources they have.

This strong result may be linked to CDA-led strategic planning seminars and the growing exposure of local cooperatives to market opportunities beyond their immediate municipalities, such as selling products in Davao City or engaging in agritourism.

This finding is supported by Chan et al. (2016), who concluded that business information systems and strategic orientation are associated with effectiveness and business performance. It also reinforces the Entrepreneurial Management Theory (Brown et al., 2001), which views entrepreneurial management as a proactive approach grounded in opportunity-seeking and risk-taking.

Moreover, strategic orientation is an indicator of innovation, proactivity, and risk-taking, which are crucial to the institution's growth and performance (Fairoz, 2010). The results of this research reinforce the notion that the demeanor of strategic decision-makers with a proactive approach, high autonomy, and a willingness to take risks mediates the performance of organizations. Regarding the responses, it is worth noting that cooperatives adopt these attributes, especially risk-taking, as a part of their strategic initiative. This complies with Alvarez-Torres et al. (2019), who highlighted that the dimension of taking risks bravely is a critical aspect in exploring the effects of entrepreneurial orientation on performance.

In the Davao Oriental context, risk-taking could mean diversifying into non-traditional products such as coco sugar, processed fruits, or community-based tourism ventures that require upfront investment but open new income streams.

Management structure

It refers to the authority, communication, and decision-making processes within an organization; it determines how entrepreneurial behavior is facilitated and how resources are

efficiently managed (Brown et al., 2001; Kreiser et al., 2011). Cooperatives need to have a sound management structure that ensures effective coordination among the board, management, and members. Maintaining a clear yet adaptable management framework ultimately enhances cooperative performance (Chungyas et al., 2022). This indicator had the lowest category mean of 3.50, which was rated as average, indicating that the entire concept of entrepreneurial management was implemented to a medium extent. Of the four statements under this indicator, one had a mean score of 2.08, indicating that the cooperatives do not favour loose or informal control, even when they depend on informal relations.

Conversely, the rest of the statements recorded an average mean score, indicating that cooperatives are highly rigid in their approach to management, adhering to a uniform method and in formal channels and procedures. Moreover, there is strong encouragement to adapt to changing conditions, with little emphasis on the cooperatives' prior practices. This finding aligns with the research of Rydehell et al. (2019), which indicates that both the organization's management structure and strategic posture have a positive, influential effect on the organization. This rigidity may stem from the need to strictly comply with CDA regulations and audit requirements, which, while ensuring accountability, can slow down decision-making and limit rapid adaptation to market changes.

Governance and management structure are also crucial to the performance and success of cooperatives. An established organizational structure with a General Assembly, managers, and employees enables effective decision-making and policy adoption (Rahmi et al., 2024). According to (Ishak et al., 2020) the core of efficient and effective cooperative management lies in aligning with members' expectations. Furthermore, management quality, member involvement, staff support, and working conditions are the main contributing factors of the cooperation performance (Darma, 2020). Cooperative governance can be divided into board character, policy compliance, management techniques, and social capital (Jamaluddin et al., 2023). Effective cooperatives focus on cooperative learning, character development, and an open approach to financial activities (Rahmi et al., 2024). Nonetheless, the connection between cooperation and performance is neither clear nor conclusive, with conflicting results in the citation body of evidence (Jamaluddin et al., 2023).

Thus, it justifies the use of the Contingency Theory of Management, which holds that there is simply no right way to manage or organize a structure. Instead, the best plan of action depends on internal and external circumstances (Donaldson, 2001). Formalized forms in the case of the multipurpose

cooperative may enhance procedural uniformity and accountability, but must remain flexible to changing member demand and fluctuating operating conditions.

For instance, cooperatives located in typhoon-prone municipalities like Baganga may need flexible decision-making processes to quickly adjust operations after disasters—something a rigid structure could delay.

Growth orientation

The indicator's category mean is 4.20, with a standard deviation of 0.96, indicating a high level of implementation of the concept of entrepreneurial management in multipurpose cooperatives. The result showed that the top objective of cooperatives is growth, while they work to achieve their short-term goals and develop their potential for long-term survival. The cooperatives' intention to grow as large and quickly as possible was widely known throughout the organization (Hindle, 2010).

This could be linked to the Cooperative Development Authority (CDA) asset-size classification, which encourages cooperatives to grow their membership and capital base to qualify for larger-scale projects and access additional funding or training programs.

An addition to the knowledge can be based on the cooperative existing under the patronage of the Cooperative and SME Office of North Sumatra Province. Therein, human resource policies, such as recruitment and selection systems, placement systems, and programmed development systems, have been put in place to support the expansion of such an institution (Yuslem et al., 2022).

The results confirm the relevance of the growth orientation as a central entrepreneurial ability. It is the growth-oriented culture of cooperatives, reinforced by human capital development and strategic anticipatory thinking, that, when supported by the entrepreneurial management theory, can play a key role in improving adaptive capacity and long-run organizational performance. The growth here is not accidental but a consequence of policy choices, structural alignment, and the exploitation of opportunities. However, rapid growth without corresponding improvements in financial management capacity could contribute to the lower financial management performance score observed.

Entrepreneurial culture

This indicator had a category mean of 4.0, indicating a high level of implementation of the concept of entrepreneurial management in the cooperative. The cooperative finds it easy to identify numerous promising ideas that leverage all its resources, which can be turned into profitable products and services. The new product and service ideas emerged from changes in the cooperatives' environment. This result supports Hindle's (2010) claim that the individual entrepreneur lives, works, and is subject to the broader context of their community, their society, and global forces, including the economy. In the local setting, this may be reflected in cooperatives shifting product lines after climate shocks, adopting new crops such as cacao or dragon fruit, or adopting eco-friendly packaging to appeal to urban markets.

Entrepreneurial culture is crucial to determining organizational performance and maintaining a competitive edge. When cooperatives adopt an entrepreneurial attitude, they can easily generate positive ideas and convert available resources into outputs that respond to market demand and yield gains (Guzmán et al., 2020). Additionally, one can achieve

economically viable outcomes or even preserve traditional morals and ethics when these align with entrepreneurial practices (Nordstrom et al., 2020).

Moreover, the culture of entrepreneurship contributes to achieving sustainable competitive advantage by fostering continuous new product development and enhancing an organization's adaptability amid technological turbulence (Pratono, 2021). The strategic value of an entrepreneurial culture in cooperative and other organizations, as indicated by these findings, is to make organizations more responsive to environmental change, more innovative, and more long-term viable and prosperous. Given the resource constraints typical of rural cooperatives, this culture also supports frugal innovation—finding cost-effective ways to deliver value without heavy capital investment. The exclusion of the indicator Resource Orientation is theoretically justified under Stevenson's (1983) Entrepreneurial Management Framework, which conceptualizes entrepreneurship as an opportunity-based process rather than one defined by resource ownership or control. According to Brown et al. (2001), entrepreneurial management focuses on how organizations behave entrepreneurially in pursuing opportunities despite resource limitations. Hence, the four retained dimensions—strategic orientation, management structure, growth orientation, and entrepreneurial culture—adequately capture the dynamic, opportunity-driven nature of entrepreneurial management. The removal of Resource Orientation, therefore, does not diminish theoretical completeness but instead aligns the construct with Stevenson's original opportunity-based conceptualization.

Organizational management

This indicator of cooperative performance has a category mean of 4.30, indicating a high rating and suggesting that cooperative performance is evident. This indicator was further categorized into leadership, members, structure, system, and mechanics. All these categories were rated highly by the respondents. This result recognizes that the functions, duties, and responsibilities of officers are well-defined within the cooperative, as demonstrated by their management chart. Multipurpose cooperatives held meetings, including general assembly meetings attended by members, which will support their claims that officers and members are performing their duties to maintain good standing. Members participate in mandatory training, especially those sponsored by other government offices. The high rating here may also be attributed to strong member cohesion in rural areas, where cooperative membership is not just economic but social, making it easier to mobilize participation in governance activities.

The result supports the findings of Franken and Cook (2013), emphasizing that cooperatives may benefit from having relatively larger boards to perform representational and legitimizing democratic functions and depend upon patron-members for competitive performance.

Financial management

This indicator obtained the lowest category mean of 4.18 among the indicators of cooperative performance. The descriptive level for this indicator is high, indicating that cooperative performance is evident in their multipurpose cooperative. The cooperatives' financial condition is measured by liquidity, solvency, and stability ratios. In contrast, financial performance is measured by return on assets, return on equity, return on investment, and the internal rate of return. This indicates that financial management is a relative weakness

among multipurpose cooperatives, suggesting a need for capacity-building in financial literacy and systems.

This result aligns with the study by Shamsuddin et al. (2018), which found that financial ratios provide significant information on financing activities, operating costs, and business stability, depending on the information users need. Financial performance measurement, such as profitability ratios, coherently describes the objectives of firms in the long run and reflects an aggregate view of purely financial performance.

Strengthening financial literacy and bookkeeping capacity in these cooperatives could directly address this gap and enhance sustainability.

Marketing management

This indicator had a category mean of 4.28, indicating that cooperative performance is evident in multipurpose cooperatives. Tangible commodities and the provision of services are the cooperative's main business activities, which include retailing goods. To promote their products, cooperatives employed traditional advertising strategies, while benchmarking was used to set prices. The needs and demands of consumers are the starting point for marketing activities, which pave the way for sharing products and transactions based on product demand. Cooperatives are also established to satisfy the common needs of people. These results align with previous studies, which found that the product has all the necessary components to deliver a service that generates value for customers.

In the Davao Oriental context, marketing is often limited to local markets and traditional methods such as community announcements, posters, and word of mouth. While effective in tight-knit communities, this limits outreach to broader regional or online markets.

Generally, the study's results indicate that the principles of marketing management in cooperatives were evident. Hence, experience and evidence show that cooperatives enable farmers, grassroots people, and less fortunate people to achieve economies of scale, greater bargaining power, and the capacity to invest at more stages of the value chain, including storage, processing, marketing, and distribution (Puri and Sujarittanonta, 2016).

This suggests that expanding to digital marketing platforms and inter-cooperative trade fairs could further amplify market reach.

Operations management

This indicator, which was rated high, had a category mean of 4.45, indicating that cooperative performance is evident in multipurpose cooperatives. Under this indicator were key dimensions such as quality, productivity, cost control, and delivery. These dimensions are crucial for ensuring that operations meet both internal performance standards and external customer expectations. The high rating suggests that cooperatives prioritize operational excellence, maintain strong relationships with suppliers and members, and ensure that internal processes are structured and responsive.

The high score here may also be due to agricultural cooperatives' reliance on seasonal production schedules, which naturally require careful planning, coordination, and resource allocation to ensure timely deliveries.

Corroborating this, Wuryani and Harti (2020) found that adopting Standard Operating Management (SOM) and Standard Operating Procedures (SOPs) in cooperatives results in better

performance. The study of the Sarinah cooperative found that SOM, encompassing institutional, business, and financial management, together with SOPs for savings and loan operations, enhances transparency, accountability, and uniformity in service delivery. Cooperative managers are provided with specific guidelines for operating their businesses in everyday practice. This tool increases professionalism and internal control within a business, as well as facilitates strategic decision-making and reporting in such a model, using annual members' meetings, among others.

Moreover, the integration of SOM and SOP reinforces the value of aligning operational systems with strategic goals, a principle consistent with Contingency Theory. This theory posits that the effectiveness of control systems, such as operational procedures, depends on their fit with organizational strategy and environmental conditions (Fisher, 1995; Kaplan and Norton, 2001). For Davao Oriental cooperatives, aligning operational frameworks with disaster preparedness plans could be critical given the province's vulnerability to typhoons.

Therefore, cooperatives that embed structured operational frameworks within their organizational practices are better equipped to sustain quality, manage costs, and improve responsiveness across their service areas.

Human resource management

This indicator had the highest category mean (4.48) among cooperative performance indicators, indicating a high level. This suggests that cooperatives value their workforce and have systems in place to manage, motivate, and retain members and staff effectively. In rural cooperatives, this strength may stem from close interpersonal relationships, mutual trust, and shared community identity, which foster loyalty and voluntary contributions to cooperative tasks.

This strong HR performance may also be influenced by regular training programs facilitated by CDA, LGUs, or partner NGOs. Such programs enhance skills while reinforcing cooperative values, thereby improving service delivery and member satisfaction. Maintaining this high HR performance will require not just training, but succession planning to ensure younger members are ready to assume leadership roles in the future.

The findings align with the objectives, validating that entrepreneurial competencies significantly influence cooperative financial performance.

In summary, the study highlights that entrepreneurial management, particularly in strategic orientation, growth, and entrepreneurial culture, plays a pivotal role in enhancing cooperative performance. While formal management structures need greater adaptability, adopting structured operational systems, such as SOMs and SOPs, strengthens internal controls and strategic alignment. Collectively, these elements equip cooperatives to be more resilient, opportunity-driven, and performance-oriented in a dynamic environment.

CONCLUSION

Based on the study's findings, the following conclusions were presented. Regarding the combined status of entrepreneurial management, the study's quantitative results revealed high descriptive-level ratings. This indicates that the concepts of entrepreneurial management were implemented in the multipurpose cooperative. The cooperative's growth orientation yielded the highest mean score, indicating that

the cooperatives define their strategies by taking advantage of opportunities when resources are available. The cooperatives pursue opportunities they perceive as valuable as their fundamental task, meaning their business strategies are significantly influenced by the resources they have. The high ratings across all indicators of cooperative performance indicated that multipurpose cooperatives performed well, as expressed by the members and officers who served as respondents in the study. Also, the members revealed desirable experiences and practices of cooperative members. Although this variable had a high descriptive level, Financial Management, as an indicator, had the lowest mean. Therefore, the findings can inform the Cooperative Development Authority (CDA) and Local Government Unit (LGU) initiatives to strengthen entrepreneurial culture and adaptability among cooperatives.

Nonetheless, future capacity-building initiatives should focus on strengthening management structures and sustaining a strong entrepreneurial culture, particularly in small-and medium-sized cooperatives.

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AUTHOR CONTRIBUTIONS

J. A. N: Lead author, conceptualizes, analyzes, conducts, interprets, and writes most of the manuscript. A. D: Co-author, interprets and contributes to some part of the manuscript.

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DECLARATION

Informed consent statement

This study was conducted in accordance with ethical research standards. Informed consent was obtained from all participants, and data confidentiality was strictly maintained.

Conflict of interest

The authors declared no conflict of interest.

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