



Organizational Behavior on Sustainability and Operational Efficiency of MSME in Cabanatuan City: Basis for Strategic Plan

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ABSTRACT

This study aimed to examine the impact of organizational behavior on sustainability and operational efficiency among Micro, Small, and Medium Enterprises (MSMEs) in Cabanatuan City. How MSMEs can balance sustainability practices with operational efficiency, addressing the challenges they face in an evolving business landscape. The quantitative research design, using survey questionnaires distributed to 203 MSME owners and employees in Cabanatuan City.

Revealed in this study that the MSME sector in Cabanatuan City is dominated by service industries, with a majority being small enterprises. The workforce is young and well-educated, with a strong focus on training and development. Sustainability practices are widely supported, with employee awareness programs and energy conservation being the most implemented. The study also identifies challenges in balancing sustainability with operational efficiency, including limited resources, increased costs, and lack of expertise.

Findings further showed that while MSMEs in Cabanatuan City show strong potential for growth and a commitment to sustainability, they face significant challenges in resource management and knowledge gaps. Recommendations include enhancing decision-making processes, leadership development, improving communication systems, and prioritizing knowledge management to strengthen organizational behavior and integrate sustainability into operations.

This study recommends several strategies to improve organizational behavior, sustainability, and operational efficiency among MSMEs in Cabanatuan City. First, businesses should enhance decision-making processes by adopting a hybrid model that balances centralized and collaborative approaches. Clear frameworks incorporating sustainability and efficiency metrics should guide decisions, supported by feedback mechanisms to evaluate outcomes. Leadership development is also crucial, with formal training programs focusing on sustainable practices, mentorship opportunities, and competency frameworks that emphasize both operational efficiency and sustainability.

CHAPTER ONE

THE PROBLEM AND ITS BACKGROUND

A. Introduction

Micro, small and medium enterprises (MSMEs) play a critical role in the economy, particularly in cities like Cabanatuan City, where they serve as the backbone of local development. These businesses provide employment, drive innovation, and contribute significantly to economic stability. As a research topic, the study of organizational behavior within MSMEs is essential because it offers valuable insights into how these enterprises can balance sustainability and operational efficiency. The importance of this research lies in its potential to address the challenges MSMEs face, while also contributing to a deeper understanding of their pivotal role in the business landscape, as highlighted by Department of Trade and Industry (2023).

Globally, MSMEs account for over 90% of all businesses and are responsible for more than half of the global workforce, according to the International Trade Centre (2021). Despite their widespread presence, many MSMEs struggle to adapt to global trends, including the growing demand for sustainability and the pressures of digital transformation. As noted by the Organization for Economic Cooperation and Development (2022), the ability to adopt sustainable practices has become a key determination of business resilience. This research responds to these challenges by exploring how organizational behavior can help MSMEs integrate sustainability into their operations while maintaining efficiency.

This study also aligns with the United Nations Sustainable Development Goals (SDGs) particularly Goal 8, which promotes decent work and economic growth, and Goal 12, which emphasizes responsible consumption and production. According to the UN SDG Report (2022), businesses that align with these goals contribute not only to their long-term viability but also to broader social and environmental benefits. By examining MSMEs in Cabanatuan City, the research aims to explore how local businesses can contribute to these global objectives while addressing their unique operational challenges.

In the Philippines, MSMEs dominate the business landscape, comprising 99.59% of all registered enterprises, as reported by the Philippine Statistics Authority (2022). These businesses are integral to the nation's economic fabric, providing livelihoods and fostering community development. However, they face persistent issues such as limited access to funding, inadequate technological support, and difficulties in implementing sustainable practices. Cruz (2021) emphasized that these challenges are particularly pronounced in regional cities like Cabanatuan City, where resource constraints and economic fluctuations pose significant hurdles. Addressing these local concerns is vital for ensuring the continued growth and resilience of MSMEs.

The influence of organizational behavior on business performance has been widely discussed in academic literature. Robbins and Judge (2019) argue that internal dynamics, such as leadership styles, communication, and decision-making processes, significantly impact a business's ability to adapt to external challenges. For MSMEs in Cabanatuan City, these internal factors can determine their success in adopting sustainable and efficient practices. By focusing on these dynamics, this study seeks to provide practical recommendations that can help local businesses navigate the complexities of today's business environment.

While there has been significant research on sustainability and operational efficiency, much of the focus has been on large corporations. Studies specific to MSMEs, particularly in the context of the Philippines, remain limited. Santos (2020) noted a lack of literature exploring how organizational behavior impacts MSME performance in achieving sustainable operations. This research aims to fill this gap by providing a localized analysis of MSMEs in Cabanatuan City and their approaches to sustainability and efficiency.

The objective of this research include identifying the behavior factors within organizations that influence sustainability and operational efficiency, analyzing the challenges faced by MSMEs, and proposing strategies to address these challenges. Mintzberg (2020) emphasized that aligning organizational behavior with strategic goals is essential for businesses to thrive in competitive environments. By achieving these objectives, the study intends to provide actionable insights that MSME owners and policymakers can utilize to strengthen the sector.

Ultimately, this research aims to contribute to the development of a more sustainable and efficient MSME sector in Cabanatuan City. The insights gained from this study are expected to benefit not only the businesses themselves but also policymakers and support groups who are seeking to create a more inclusive and resilient economy.

B. Literature Review

This section presents the related literature and studies that provide a foundation for the conceptualization of the study.

- **Organizational Behavior in MSMEs.** Organizational behavior encompasses the study of human dynamics within enterprises and their influence on business outcomes. For MSMEs, this is particularly crucial as their smaller size often creates more direct relationships between leadership, employees, and overall organizational performance. According to Robbins and Judge (2019), organizational behavior components such as leadership, motivation, and team dynamics significantly influence employee productivity and innovation, which are key drivers of competitiveness in MSMEs.

Leadership styles also shape how organization adapt to external challenges. Transformational leadership, for instance, has been linked to higher employee engagement and innovation in MSMEs (Bass & Riggio, 2006). Meanwhile, Mintzberg (2020) emphasized that participatory decision-making encourages ownership among employees, which is essential for achieving operational goals.

However, Santos (2020) highlighted that MSMEs in developing countries, including the Philippines, often lack formal organizational structure, which makes the implementation of effective organizational behavior practices more challenging. This gap underscores the need for targeted interventions and research to strengthen organizational frameworks in small businesses.

- **Sustainability Practices in MSMEs.** Sustainability is increasingly becoming a business demand due to the growing pressure from stakeholders and regulatory bodies. According to the World Business Council for Sustainable Development (2021), integrating sustainable practices enhances an enterprise's resilience and reputation. This is particularly relevant for MSMEs, which are more vulnerable to economic and environmental disruptions.

In the Philippines, sustainable practices are gradually being integrated into MSME operations. Cruz (2021) observed that MSMEs are adopting waste reduction measures and energy-efficient technologies to lower costs and minimize their environmental impact. However, barriers such as limited financial resources, lack of expertise, and inadequate support systems hinder the widespread adoption of sustainability practices among small enterprises.

Studies also reveal a strong correlation between sustainability and long-term profitability. The United Nations Global Compact (2020) reported that businesses that align with sustainable development goals (SDGs) often see improved operational efficiency and customer loyalty. In particular, SDG 12, which emphasizes responsible consumption and production, is directly relevant to MSMEs aiming to reduce resource wastage.

- **Organizational Efficiency in MSMEs.** Operational efficiency involves optimizing resources, streamlining processes, and enhancing productivity to achieve business objectives. For MSMEs, operational efficiency is crucial as they operate under tighter budgets and limited resources compared to larger corporations. According to Taylor 2021, technology adoption, such as Enterprise Resource Planning (ERP) systems and Customer Relationship Management (CRM) software, has significantly improved operational efficiency in MSMEs.

Locally, MSMEs in the Philippines have adopted cost-effective solutions such as community-based collaborations and shared resources to overcome financial constraints (Cruz, 2021). However, the cost of technological advancements often limits their accessibility for smaller enterprises. A report by the Department of Trade and Industry (2022) suggests that government-supported programs aimed at providing subsidies for digital transformation could bridge this gap.

- **Balancing Sustainability and Operational Efficiency.** The challenge of integrating sustainability without compromising operational efficiency is a persistent issue for MSMEs. According to the OECD (2022), small enterprises often perceive sustainability initiatives as cost-prohibitive despite their long-term benefits. However, evidence suggests that aligning sustainability with operational goals can lead to significant improvements in overall performance.

In a study by Eccles et al. (2014), businesses that incorporated sustainable practices into their core operations experienced better financial performance and lower risks compared to those that did not. Similarly, Mintzberg (2020) argued that clear strategic alignment between sustainability and operational efficiency enables businesses to achieve competitive advantage, even in resource-constrained environments.

Despite the growing interest in sustainability and operational efficiency, research study specifically addressing MSMEs, particularly in the context of the Philippines, remains limited. Studies by Santos (2020) and Cruz (2021) point to a lack of empirical data on how organizational behavior influences the ability of MSMEs to balance these objectives. This research aims to fill this gap by focusing on MSMEs in Cabanatuan City, exploring their unique challenges and opportunities in achieving sustainability and efficiency.

Likewise, more knowledgeable entrepreneurs and business leaders tend to rely on cognitive evaluations and informed decision-making when adopting sustainability practices, while less experienced counterparts often rely on external recommendations and industry trends (Fu & Elliott, 2013). Furthermore, brand awareness and consumer familiarity, as highlighted by Huang and Sariğöllü (2014), also play significant roles in driving the adoption of innovative practices within MSMEs.

C. Conceptual Framework

This study is anchored on the Systems Theory of Organizational Behavior and the Triple Bottom Line (TBL) Framework, which provide a strong basis for examining the relationship between organizational behavior, sustainability, and operational efficiency in MSMEs. The Systems Theory emphasizes that organization operate as interconnected systems, where changes in one aspect influence the entire structure (Kast & Rosenzweig, 1972). For MSMEs, this theory highlights the importance of internal

dynamics, such as leadership styles, employee engagement, and training programs, in shaping their ability to respond to external challenges and achieve operational goals. (Robins & Judge, 2019).

The Triple Bottom Line Framework complements this perspective by focusing on the need for businesses to balance three critical dimensions: economic viability, environmental sustainability, and social responsibility (Elkington, 1994). It suggests that long-term success requires integrating these dimensions into the core operations of MSMEs. This framework is particularly relevant to this study, as it aligns with the global push for sustainable business practices, such as reducing environmental impacts, ensuring employee welfare, and maintaining economic competitiveness (OECD, 2022 and UN SDG Report, 2022).

The conceptual framework integrates these theories to analyze how organizational behavior factors – including leadership, employee motivation, and training – affect the sustainability and operational efficiency of MSMEs. It also considers the challenges faced by these enterprises, such as financial constraints, lack of technical expertise, and market competition, which can hinder their efforts to balance the sustainability and efficiency (Cruz, 2021 and Santos, 2020).



Fig 1: Research Paradigm

This study hypothesizes that organizational behavior serves as a critical driver for aligning sustainability and operational efficiency. By understanding how these elements interact, the research aims to develop a strategic planning framework tailored for MSMEs in Cabanatuan City. This framework will provide actionable strategies to address their unique challenges, enhance their operational capabilities, and promote sustainable practices. The ultimate goal is to contribute to the long-term resilience and competitiveness of MSMEs in the local business landscape.

D. Statement of the Problem

Generally, this study described, assessed, and analyzed the organizational behavior of MSMEs in Cabanatuan City, focusing on its impact on sustainability and operational efficiency. The findings serve as the basis for developing a strategic planning framework aimed at improving both sustainability practices and operational performance within these businesses.

Specifically, the objectives of this study are as follows:

➤ *What are the business characteristics of the MSMEs in Cabanatuan City? In terms of:*

- Type of business
- Business size
- Years of Operation
- Revenue
- Market Reach

➤ *What is the demographic and professional profile of the owners and employees of MSMEs in Cabanatuan City?*

- *Owners*

- ✓ Age
- ✓ Gender
- ✓ Educational attainment
- ✓ Business experience

- *Employees*

- ✓ Age
- ✓ Gender
- ✓ Years of experience
- ✓ Employment status

- *Training and Development for both Owners and Employees*

- ✓ Training program attended
- ✓ Frequency of training
- ✓ Investment in training
- ✓ Impact of training

- Which aspects of the organizational behavior of MSMEs affect sustainability?
- How does organizational behavior impact the operational efficiency of MSMEs?
- What challenges do MSMEs face when trying to balance sustainability with operational efficiency?
- Based on the findings of the study, what strategic planning framework can be developed for MSMEs in Cabanatuan City to enhance both sustainability and operational efficiency?

E. Scope and Delimitations

This study focused on assessing the impact of organizational behavior on the sustainability and operational efficiency of MSMEs in Cabanatuan City. Specifically, the study examined the relationship between characteristics, such as business size, revenue, years of operation, and market reach, and the organizational practices of MSMEs. It also investigated the demographic and professional profiles of owners and employees, including their training and development practices, which were identified as key factors in promoting sustainability and operational efficiency (Smith & Wesson, 2020).

This research was delimited to MSMEs located within Cabanatuan City, excluding businesses in other regions or cities. Data gathering for the study was exclusively conducted through online survey distributed via Google Forms. This method was chosen to ensure the efficient and convenient collection of data. However, some participants faced challenges with internet access and technical issues, which limit the overall response rate. As a result, the final sample size was smaller than initially planned, which may affect the overall findings to the entire MSME population in Cabanatuan City (Lopez & Garcia, 2020).

This study was also limited by its reliance on self-reported data from business owners and employees, which could have resulted to biases. The accuracy of the responses was contingent on the participant's willingness to disclose sensitive business information, particularly regarding financial performance and operational challenges (Davis, 2020). Additionally, the study did not fully capture the influence of external economic factors, such as market fluctuations and inflation, which could have impacted the operational efficiency of MSMEs during the study period (Nguyen, 2021).

Lastly, the study only used digital platforms for data collection, which may have limited deeper insights that could have been obtained through in-person interactions.

F. Significance of the Study

➤ *The findings of this study may be beneficial to the following sectors:*

- **Department of Trade and Industry (DTI).** This study may provide insights into how MSMEs in Cabanatuan City manage sustainability and operational efficiency, helping DTI to design targeted programs and policies to support MSME growth and operational improvements.
- **Local Government Unit (LGU).** This study may help LGUs understand the challenges MSMEs face, enabling them to develop policies and local initiatives that promote business sustainability, growth, and efficiency.

- **Micro, Small, and Medium Enterprises.** This study may benefit MSMEs by improving their organizational behavior practices, adopting better management strategies, and using the proposed strategic planning framework to enhance sustainability and operational efficiency.
- **Business Owners and Employees.** This study may provide valuable insights to business owners and employees on improving work conditions and organizational practices, contributing to greater productivity, job satisfaction, and business success.
- **Investors and Entrepreneurs.** Investors and entrepreneurs may use the findings of this study to assess the potential risks and opportunities in the MSME market, helping them make informed decisions about entering or investing in the sector.
- **Nueva Ecija University of Science and Technology (NEUST).** This study may contribute to academic research on organizational behavior and MSME sustainability, offering a foundation for future studies in these areas.
- **Future Researchers.** This study's outcomes may serve as a stepping stone for future studies, offering a framework to explore further aspects of MSME operations and can develop a more comprehensive understanding of the factors influencing MSME growth and sustainability.

G. Definition of Terms

➤ *To facilitate better understanding, the following key terms were defined conceptually or operationally:*

- **Business Characteristics.** It refers to specific attributes of a business and influence how the business operates and competes in the market.
- **Employee Experience.** It refers to the cumulative experience of employees throughout their time at an organization.
- **Market Reach.** It refers to the business's ability to expand its customer base.
- **Medium enterprises.** It identified to be medium by the DTI if they have P15,000,001 to P100,000,000 in assets and consists of 100 to 199 employees.
- **Micro enterprises.** It identified to be micro by the DTI if they have P3,000,000 or less in assets and consists of 1 to 9 employees.
- **Micro, Small, and Medium Enterprises (MSMEs).** It plays a significant role in the Philippine economy due to their impact on employment, income, overall economic development.
- **Micro enterprises.** It identified to be micro by the DTI if they have P3,000,000 or less in assets and consists of 1 to 9 employees.
- **Operational Efficiency.** It is the relationship between an organization's output and input, that when healthy, helps businesses cut down on unnecessary costs while increasing revenue.
- **Organizational Behavior.** It refers to how individuals and groups behave within an organization.
- **Revenue.** It is the total amount of income generated by the sale of goods and services.
- **Small enterprises.** It identified to be small by the DTI if they have P3,000,001 to P15,000,000 in assets and consists of 10 to 99 employees.
- **Strategic Planning Framework.** A framework used by organizations to define their strategy or direction.
- **Sustainability.** It refers to a company's strategy to reduce negative environmental impact resulting from their operations.
- **Systems Theory of Organizational Behavior.** It is a framework that views and organization as a collection of interrelated subsystems that work together to form a whole.
- **Training and Development.** It is a process of improving the skills and knowledge of employees and business owners. It includes formal and informal training programs designed to enhance job performance and overall business success.
- **Triple Bottom Line (TBL).** It is a sustainability framework that measure a business's success in three key areas: profit, people, and the planet.

CHAPTER TWO METHODOLOGY

A. Research Design

The research design is similar to a blueprint that contains all of the methodologies and techniques that the researcher will employ to arrange the different components of the study in the most systematic and logical manner so that the problem is handled appropriately (Khanday, 2023). Asenahabi (2019), further explained that a research design must be appropriately selected according to the needs of the study to achieve the research objective in the most valid way. He added that the importance of a research design is to translate the research problem into data for analysis related to producing answers to research questions in the most efficient manner. There are many possible research designs - quantitative research design is adopted in this study. Quantitative research design is commonly used in the natural and social sciences field as it defined as the process of collecting data with the intention to find patterns and averages, draw predictions, and/or generalize results from a larger population (Bhandari, 2023).

Using quantitative research design is applied since the present study is designed to describe the views, opinions, and perspective of the research respondents. The collected data and information from the sample population will then be used to also answer the research question. This research design will help in making the study efficient in a sense that a certain technique can be used to rapidly get the large population data.

B. Locale of the Study

This study was conducted in Cabanatuan City, Nueva Ecija. The respondents of the study were the entrepreneurs and proprietors doing business in Cabanatuan City, Nueva Ecija. The total MSMEs population in the mentioned research local is 4,578 based on the 2023 List of Establishments by the Philippine Statistics Authority. Those numbers constitute 18.11% of the Nueva Ecija's total MSMEs.



Fig 2: Map of Nueva ECIJA

C. Population and Sampling Procedure

The respondents of the study were the entrepreneurs and proprietors doing business in Cabanatuan City, Nueva Ecija. The total MSMEs population in the mentioned research local is 4,578 based on the 2023 List of Establishments by the Philippine Statistics Authority. Those numbers constitute 18.11% of the Nueva Ecija’s total MSMEs.

The researchers will employ probability sampling in choosing respondents of this study. A probability sampling is simply explained by McCombes (2023) is done through random selection of respondents that is aimed to help the researcher to draw strong understanding or statistical inferences about a larger group. This only mean that each member of the population has a known, non-zero chance of being selected as component of the sample size. Doing this ensures that the total sample size actually represent the larger population and that results are reliable, valid, and with a known level of confidence (Hassan, 2024).

Specifically, the selection of respondents utilized the simple random sampling. This approach is the simplest of all probability sampling techniques because it only requires one random selection and minimal prior population knowledge. Since this sample is randomly selected, any research conducted on it should have high internal and external validity and be less susceptible to research biases like selection and sampling bias (Thomas, 2023). This sampling procedure was selected because of its convenience and uncomplicated nature that can be easily understood by both researchers and respondents. Moreover, computation of sample size was done using online calculator – raosoft.com

Table 1: Sample size using Raosoft Calculator

Population and Sample Size	
Cabanatuan City, Nueva Ecija	4,578
Sample size	256

D. Research Instrument

In order to answer the problem stipulated in this research, data was gathered from respondents using survey questionnaires which is defined as a document containing set of questions or prompts designed to collect relevant information from a respondent (Bhat, 2023). There will be structured questions with pre-determined and close-ended responses that respondents can choose from. Survey questionnaires is best for large population where interview is impractical and can provide data for easy statistical analysis needed for drawing objectives conclusions and/or recommendations (McLeod, 2023).

E. Data Gathering Procedure

The researchers collected primary data by employing survey questionnaires to entrepreneurs of Cabanatuan City, Nueva Ecija. The research instrument shall undergo evaluation to ensure that the content is strictly related to measuring the perspective of the said respondents to the extent of business sustainability of MSMEs in Cabanatuan City. The survey was interpreted via google forms and sent out to business establishments via their social media pages.

F. Data Analysis

The responses of the respondents to the survey questionnaire were meticulously tallied, tabulated and organized. The data presented, analyzed, and interpreted with the use of weighted mean, frequency counts, percentage, and ranking system.

G. Percentage

$$\% = F/n \times 100\%$$

Where:

% = Percentage

F = Number of Respondents

N = total number of respondents

H. Average Weighted Mean

$$AWM = \frac{4F+3F+2F+1F}{n}$$

Where:

F = Stands for number of frequencies for the corresponding scale

N = total number of respondents

I. Ethical Considerations

➤ *Informed Consent and Participation Risks that may affect the autonomy and well-being of participants. To address issues:*

- Provide Clear Information
- Secure Informed Consent

- Allow Withdrawal

➤ *Data Privacy and Confidentiality concerns that may jeopardize the privacy and security of participant information. To address issues:*

- Secure Data Storage
- Restrict Access
- Safely Dispose of Data

➤ *Ethical Conduct and Integrity concerns about conducting the research with honesty, transparency, and integrity. To address issues:*

- Report Findings Honestly
- Acknowledge Contributions

**CHAPTER THREE
PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA**

This chapter presents the findings from the survey conducted among MSMEs in Cabanatuan City, analyzing the relationship between organizational behavior, sustainability practices, and operational efficiency. The data is interpreted in light of the research questions outlined in the statement of the problem.

A. Business Characteristics of MSMEs in Cabanatuan City

The business characteristic of MSME in Cabanatuan City is discussed in terms of type of business, business size, years of operation, revenue and market reach.

➤ *Type of Business*

The table 2 is the distribution of respondents based on their type of business.

Table 2: Type of Business

Type of Business	Frequency	Percentage
Manufacturing	25	12%
Retail	39	19%
Service	89	44%
Wholesale	47	23%
Other	3	2%
Total	203	100%

The service sector dominates the MSME landscape in Cabanatuan City representing nearly half (44%) of all surveyed businesses, which aligns with the national trend of a growing service economy. This indicates a strong service-oriented business environment in Cabanatuan City. This is followed by wholesale businesses at 23% (47 establishments) and retail at 19% (39 businesses). Manufacturing comprises 12% (25 businesses), while other unspecified business types make up the remaining 1% (3 businesses). The combined retail and wholesale sectors account for 42% of all businesses, indicating a strong trading presence in the local economy.

➤ *Business Size*

The table 3 shows the distribution of businesses in Cabanatuan City according to its size.

Table 3: Business Size

Business Size	Frequency	Percentage
Small enterprises (10-99 employees)	125	62%
Micro enterprises (1-9 employees)	51	25%
Medium enterprises (100-199 employees)	27	13%
Total	203	100%

The data show that small enterprises dominate the MSME landscape in Cabanatuan City, representing nearly 62% of the surveyed businesses. Micro enterprises form the second-largest group which is 25%, while medium-sized businesses constitute the smallest segment of the sample 13%

The prevalence of small businesses indicates a potential for significant impact through improved organizational behavior and sustainability practices, as these firms often have more flexibility to implement changes. The relatively low percentage of medium enterprises (13%) indicates potential growth barriers in scaling up operations. Small enterprises, being the majority, likely represent the primary employment generators in the local economy. The combined presence of small and medium enterprises (75%) suggests significant formal employment opportunities in the city.

➤ *Years of Operation*

The distribution of the respondents based on the number of years of their business is illustrated in Table 4.

Table 4: Years of Operation

Years of Operation	Frequency	Percentage
less than 1 year	43	21%
1-5 years	81	40%
6-10 years	49	24%
More than 10 years	30	15%
Total	203	100%

The data imply that 40% (81 businesses) have been operating for 1-5 years, representing the largest segment, while 21% (43 businesses) are in their first year of operation and combined 61% of MSMEs are relatively young businesses under 5 years old. The high percentage (61%) of businesses under 5 years suggests a dynamic entrepreneurial environment. The relatively low percentage (15%) of businesses over 10 years old might indicate challenges in long-term sustainability. The mix of new and established businesses suggests a need for strategies that can support both startup sustainability and long-term operational efficiency.

➤ *Revenue*

Table 5: Revenue

Revenue	Frequency	Percentage
Less than ₱3,000,000	61	30%
₱3,000,001 - ₱15,000,000	81	40%
₱15,000,001 - ₱100,000,000	27	13%
More than ₱100,000,000	34	17%
Total	203	100%

The data imply that 40% of businesses (81 respondents) reported revenue between ₱3,000,001 - ₱15,000,000, representing the largest segment and indicates a sustainable middle market. The 17% generating over ₱100M demonstrates long-term sustainability potential. The 30% below ₱3M may need organizational behavior interventions for sustainability. The revenue distribution indicates that most MSMEs in Cabanatuan City are operating at the lower to middle income brackets, highlighting the importance of efficient resource management and sustainable practices for growth.

➤ *Market Reach*

Table 6: Market Reach

Market Reach	Frequency	Percentage
Local	34	17%
Regional	61	30%
National	88	43%
International	20	10%
Total	203	100%

As shown in table 43% (88 businesses) operate at the national level, showing strong domestic market penetration, 30% (61 businesses) have regional reach, 17% (34 businesses) serve local markets and 10% (20 businesses) have achieved international market presence.

The significant national market reach of MSMEs in Cabanatuan City suggests potential for growth and the need for sustainable practices to maintain competitiveness.

B. Demographic and Professional Profile of Respondents

This section presents the respondents' demographic and professional characteristics, including age, gender, educational attainment, and work experience. These details provide an overview of the participants and help identify how personal and professional factors influence their perspectives and behaviors.

➤ *Age*

Table 7: Age

Age	Frequency	Percentage
Below 25 years	81	40%
26-35 years	95	47%
36-45 years	20	10%
46-60 years	7	3%
Total	203	100%

The table 7 imply that a strong presence of young entrepreneurs with 47% fall within 26-35 years (95 respondents) and 40% are below 25 years (81 respondents) are young business leaders. Only 10% are between 36-45 years (20 respondents) and 3% are in the 46-60 age bracket (7 respondents).

➤ Gender Distribution

Table 8: Gender Distribution

Gender	Frequency	Percentage
Male	122	60%
Female	81	40%
Total	203	100%

The table 8 shown that males dominate the MSME leadership at 60% (122 respondents), while females comprise 40% (81 respondents) of the total 203 respondents.

➤ Educational Attainment

Table 9: Educational Attainment

Educational Attainment	Frequency	Percentage
Elementary level	-	-
High School Level	10	-
Vocational/TVET	10	-
College level	122	60%
Master's or equivalent	47	23%
Doctoral or equivalent	14	7%
Other levels	-	0%
Total	203	90%

The educational attainment data for MSME leaders in Cabanatuan City shown that College level education leads at 60% (122 respondents), master’s degree holders represent 23% (47 respondents) and doctoral degree holders comprise 7% (14 respondents). The business leader in Cabanatuan City shown that with strong theoretical knowledge base and has the capacity for strategic thinking. These educational profiles imply that a well-educated MSME leadership base in Cabanatuan City, potentially contributing to better organizational behavior and operational efficiency outcomes.

➤ *Years of Work Experience*

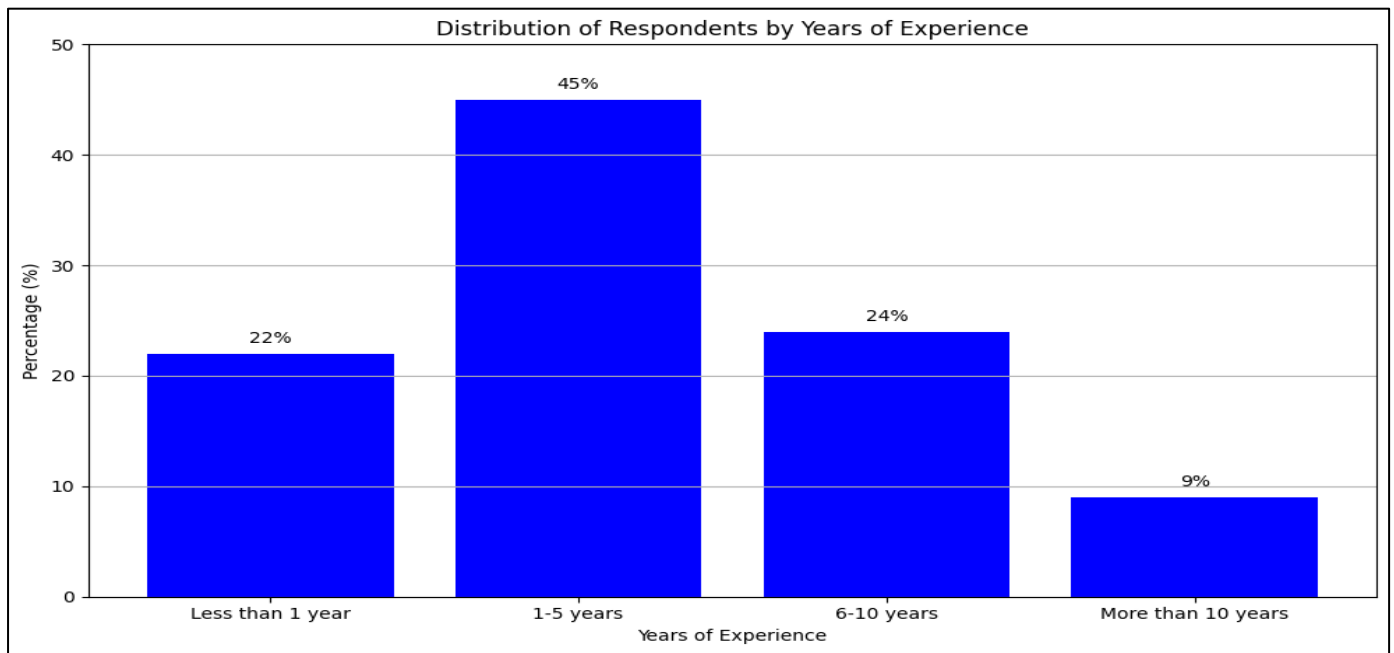


Fig 3: Years of Work Experience

The years of experience data for MSME leaders in Cabanatuan City show that 45% have 1-5 years of experience (majority group). This shows that most participants are in the early to mid-stages of their careers, likely contributing fresh perspectives and energy to the study. The data indicates that the majority of respondents (67%) have between 1–10 years of professional experience, primarily captures the views of early and mid-career professionals. This could influence the study’s findings, as perspectives might lean toward those still developing their careers rather than highly experienced veterans. The representation of less experienced respondents (22%) also highlights the importance of understanding the needs and challenges faced by those new to their fields.

➤ *Training and Development*

The training and development highlights the training attended of the respondents, the types of training, frequency of training, and their investment budget for these trainings which also analyse the impact to their organization.

- *Training Program Participation*

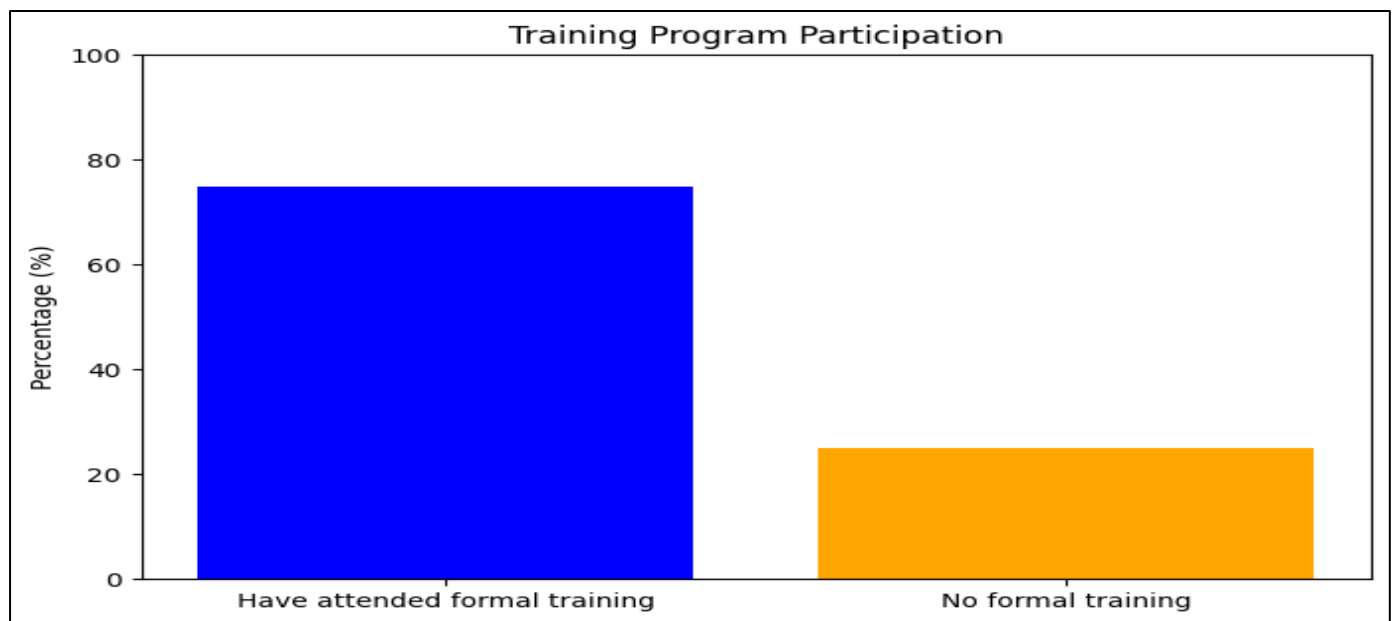


Fig 4: Program Participation

This bar graph clearly shows the comparison between those who have attended formal training and those who have not. 75% (152) of respondents have attended formal training programs. This indicates that a significant majority of the sample has participated in structured educational or professional development activities. 25% (51) of respondents have not attended any formal training. This group may rely on self-learning, on-the-job training, or other informal methods of skill development. The data shows a strong trend toward formal training participation and its potential importance.

• *Types of Training*

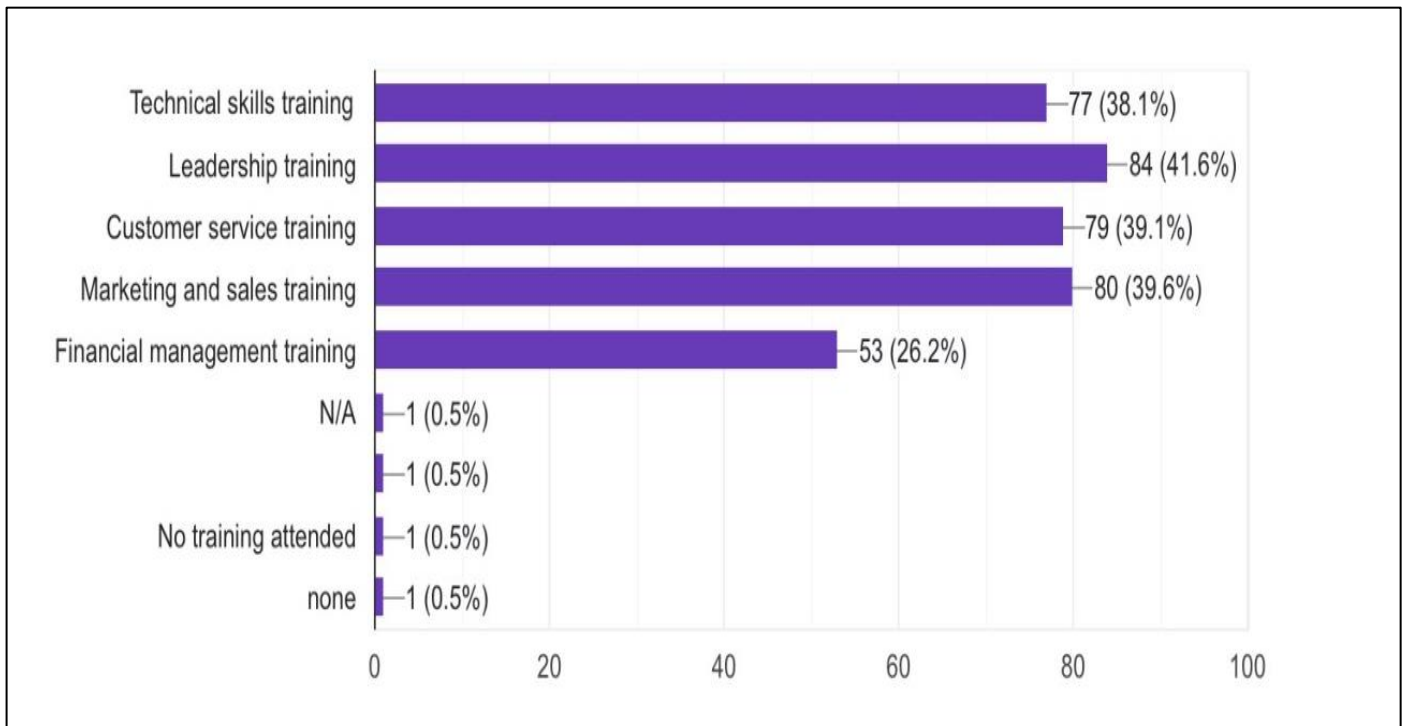


Fig 5: Type of Training

The data illustrate the distribution of respondents across various types of training programs, highlighting their professional development priorities. It shows that majority of the businesses in Cabanatuan City which is 65% (132 out of 203 respondents) prioritize the leadership training, 45% (91 respondents) in technical skills training, 40% (81 respondents) Customer service training, 35% (71 respondents) Financial management, 30% (61 respondents) in Marketing and sales. Leadership training programs can enhance employee engagement and help create leaders who can effectively lead teams. This, in turn, creates a positive work culture, encouraging more employees to learn on the job and work towards acquiring leadership roles.

• *Frequency of Training*

Table 10: Frequency of Training

Frequency of Training	Percentage	No. of Respondents	Assigned Value	Weighted Value
Quarterly	30%	61	4	244
Twice a year	25%	51	2	102
Once a year	20%	41	1	41
Rarely	25%	50	0	0
	100%	203	7	387
Average weighted mean:	$\frac{387}{203} = 1.91$			

Table 10 show a significant majority of businesses (75% or 153 respondents) conduct training at least once a year, with 30% opting for quarterly training sessions. This indicates a strong commitment to ongoing professional development among most businesses in Cabanatuan City. The preference for quarterly training (30% of respondents) suggests that these businesses recognize the importance of frequent skill updates and continuous learning. Quarterly training can help employees stay current with rapidly changing industry trends and technologies. 25% of respondents indicated that they rarely conduct training. This could be due to various factors such as limited resources, time constraints, or a lack of awareness about the benefits of regular training.

The average weighted mean of 1.91 suggests that, on average, businesses in Cabanatuan City conduct training slightly less than twice a year. This indicates a tendency towards bi-annual training sessions, reflecting a commitment to regular professional development while also highlighting that there is room for improvement in increasing training frequency.

• *Investment in Training*

Table 11: Investment in Training

Investment in Training	Frequency	Percentage
Less than Php10,000	84	41%
Php10,001- Php50,000	87	43%
Php50,001-Php100,000	1	0%
More than Php100,000	31	15%
Total	203	100%

The majority of respondents (84 or 41%) invest less than Php 10,000 in training. This suggests that most businesses are operating with limited budgets for employee development. Only 1 respondent (0%) reported investing between Php 50,001 and Php 100,000, indicating that very few organizations are willing to allocate significant funds for training in this range. The category of investments exceeding Php 100,000 accounts for 15% of respondents (31 businesses), showing that while there are some organizations making substantial investments in training, they are not the majority. The data reveals a clear trend where most businesses favor lower-cost training options. The data suggest that many businesses invest less in training, likely due to limited budgets, a focus on short-term needs, or a lack of awareness about the long-term benefits of higher investment. Businesses spending less than Php10,000 may struggle to build the skills needed for growth and competitiveness. To address this, they could explore additional funding or adjust budgets to prioritize training. Higher investments in training can lead to better employee performance and retention, helping organizations stay competitive in a fast-changing market.

• *Impact of Training*

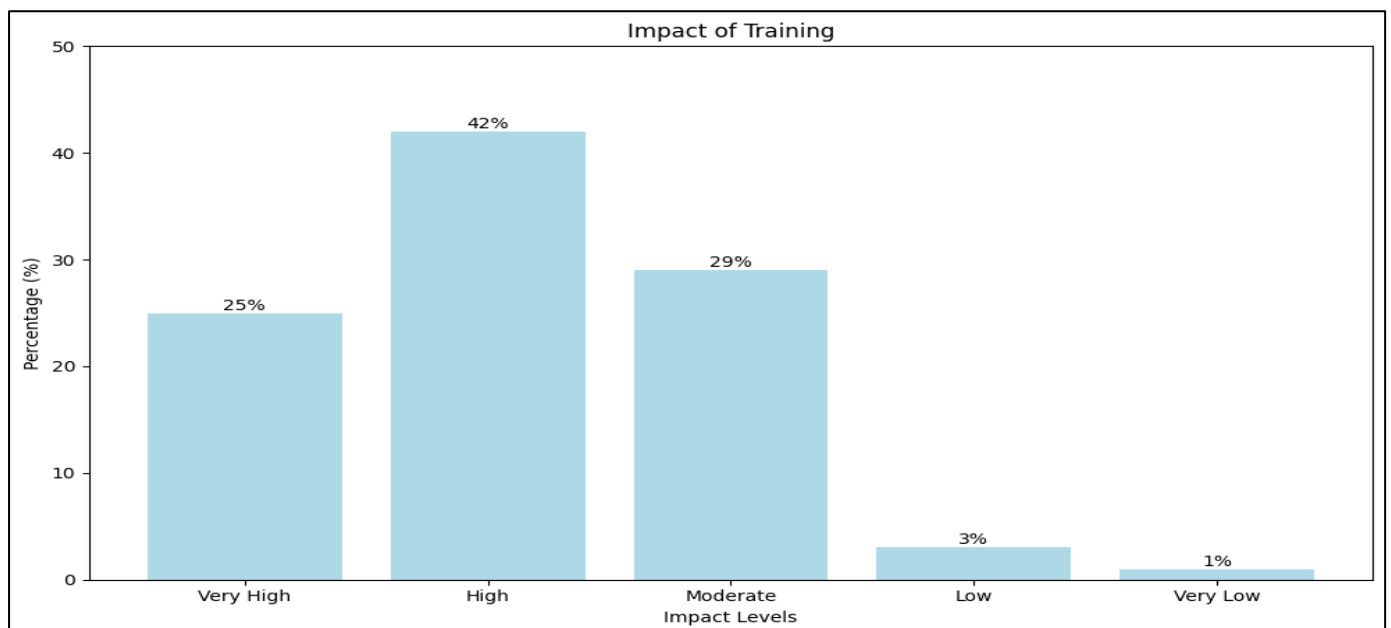


Fig 6: Impact of Training

Table 12: Impact of Training

Impact of Training	Percentage	No. of Respondents	Assigned Value	Weighted Value
Very High	25%	50	4	200
High	42%	85	3	255
Moderate	29%	59	2	118
Low	3%	7	1	7
Very Low	1%	2	0	0
	100%	203	10	580
Average weighted mean:		$\frac{580}{203} = 2.86$		

The average weighted mean of 2.86 shows that businesses generally see their training programs as moderately to highly effective. This means they recognize some benefits but still have room to improve and get more out of their training efforts, indicating a positive overall perception of training effectiveness among businesses. Only a small percentage of respondents reported a Low (3%, or 7 businesses) or Very Low (1%, or 2 businesses) impact from their training initiatives. This shows that very few organizations feel that their training efforts are ineffective. It suggests that a few organizations may need to re-evaluate their training strategies to address specific gaps in effectiveness.

C. Organizational Behavior and Sustainability Practices

This evaluates how much employees and organizations agree with and support the adoption of sustainable practices. It reflects the level of alignment between organizational values and sustainability goals. It discuss the sustainability practices implementation, agreement with sustainable practices, key contributing factors and challenges in implementing sustainability Initiatives.

➤ *Sustainability Practices Implementation*

Sustainability Practices Implementation using frequency count analysis. This method allows us to understand how often different sustainability practices implemented among the surveyed businesses.

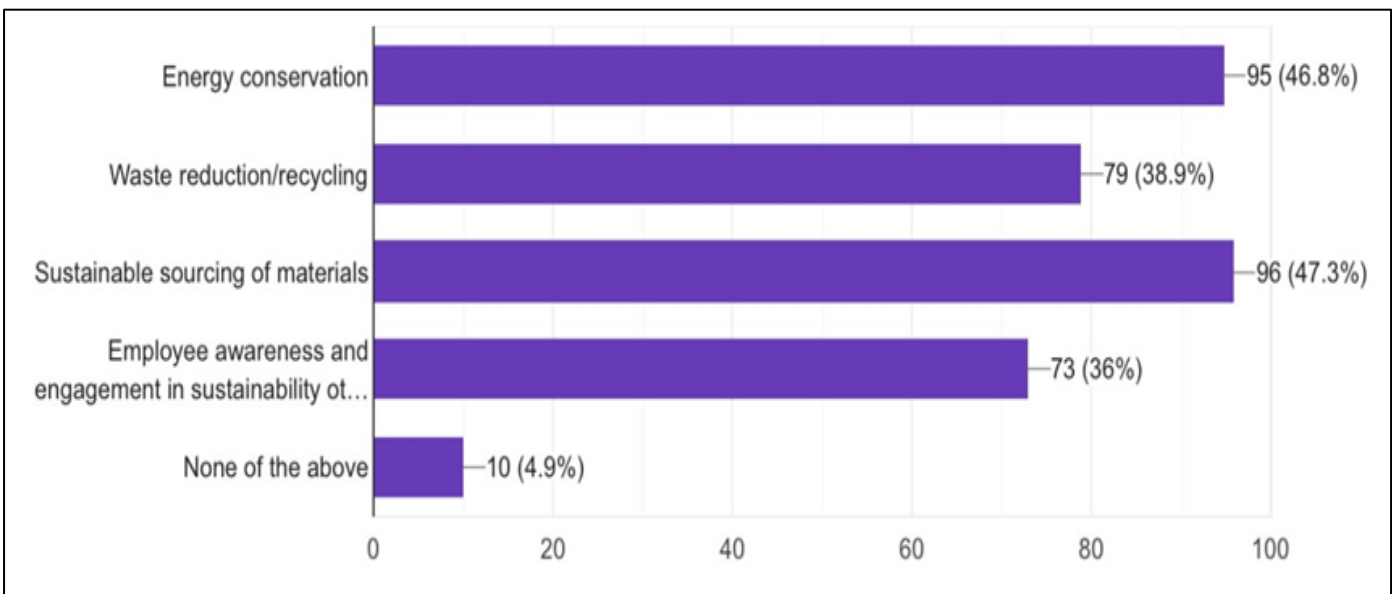


Fig 7: Sustainability Practices Implementation

The figure 7 show that 132 out of 203 respondents of MSMEs in Cabanatuan City with strong focus on educating employees about sustainability and 122 of respondents include the practice of energy conservation. 112 respondents are practicing the waste reduction and 91 out of 203 respondents in MSME in Cabanatuan City are implementing the least common practices. The survey shows a strong commitment to sustainability, with 45% of businesses implementing all four practices. Internal practices, like employee awareness (65%) and energy conservation (60%), are the most common, likely because they are easier to implement or provide quick benefits. However, there is room to grow, especially in sustainable sourcing (45%). The close adoption rates (45%–

65%) suggest businesses are taking a balanced approach by implementing multiple sustainability practices rather than focusing on just one. The high adoption of employee awareness programs shows that businesses understand the importance of involving their workforce in sustainability efforts. Energy conservation and waste reduction are also widely implemented, likely because they offer cost-saving benefits. However, sustainable sourcing has the lowest adoption rate, which may reflect challenges in transforming supply chains or finding affordable sustainable options. Overall, while businesses show strong engagement in sustainability, there is still room for improvement, particularly in areas with lower adoption rates.

➤ *Agreement with Sustainable Practices*

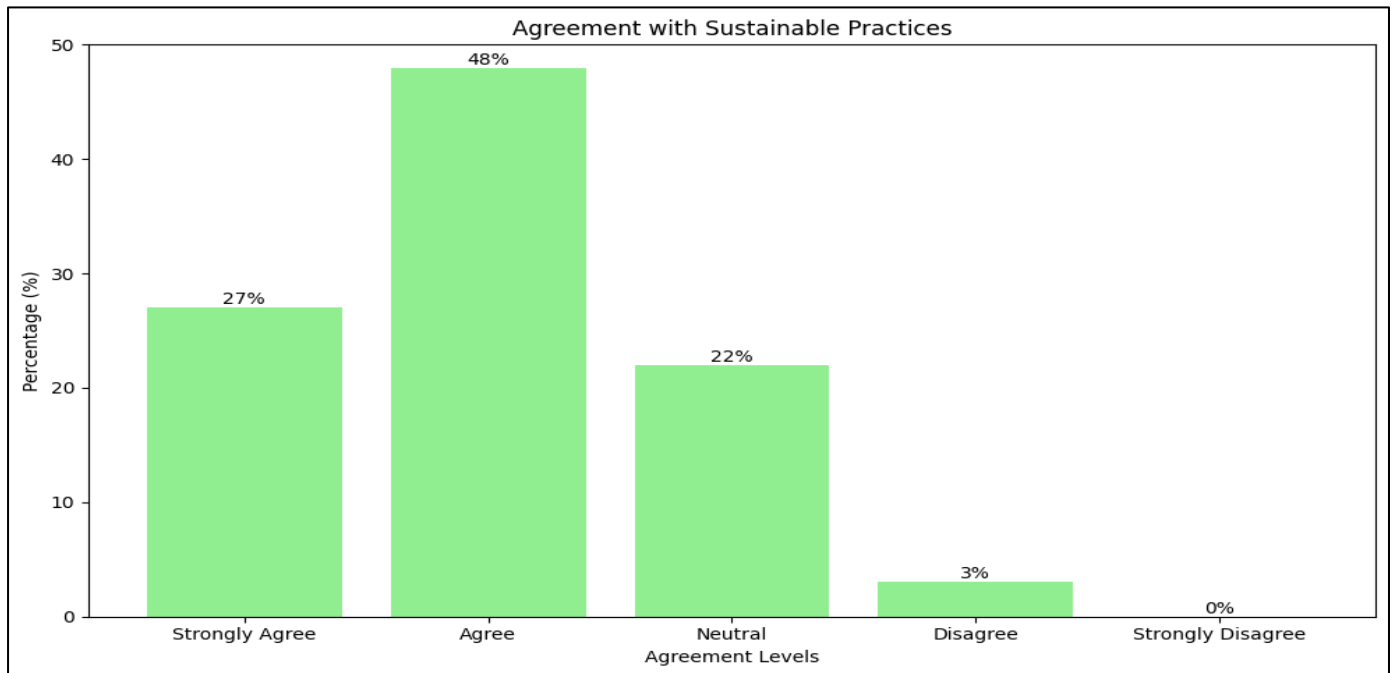


Fig 8: Agreement with Sustainable Practices

Table 13: Agreement with Sustainable Practices

Agreement with Sustainable Practices	Percentage	No. of Respondents	Assigned Value	Weighted Value
Stongly agree	27%	54	5	270
Agree	48%	98	4	392
Neutral	22%	44	3	132
Disagree	3%	6	2	12
Strongly disagree	0%	1	1	1
	100%	203	15	807
Average weighted mean:	$\frac{807}{203} = 3.98$			

The average weighted mean of 3.98 indicates a strong overall agreement with sustainable practices. This value is very close to 4, which represents "Agree" on our scale. The high level of agreement provides a solid foundation for implementing sustainable practices. With very few respondents disagreeing, there's likely to be little resistance to sustainability initiatives.

➤ *Key Contributing Factors*

Table 14: Key Contributing Factors

Key Contributing Factors	Frequency	Percentage
Leadership style	152	75%
Employee engagement	142	70%
Teamwork and collaboration	132	65%
Ethical decision-making	122	60%
Innovation and creativity	112	55%
<i>*multiple reponses; n= 203</i>		

This data represents a multiple-choice question where respondents could select multiple options. Leadership style is considered the most important factor, with 75% of respondents (152 out of 203) selecting this option. Employee engagement with 70% of respondents (142 out of 203) identifying it as a key factor. The high emphasis on leadership and employee engagement suggests that MSMEs recognize the importance of human factors in driving sustainability initiatives. Teamwork and collaboration is the third most selected factor, chosen by 65% of respondents (132 out of 203). Ethical decision-making is considered important by 60% of respondents (122 out of 203). Innovation and creativity, while still significant, is the least selected factor among the options, chosen by 55% of respondents (112 out of 203). The average percentage across all factors is 65%, meaning that, on average, about two-thirds of respondents consider each factor important. This shows that businesses generally place a high value on organizational behavior and sustainability practices.

➤ *Challenges in Implementing Sustainability Initiatives*

Table 15: Challenges in Implementing Sustainability Initiatives

Challenges	Rank
Limited knowledge or expertise	1
Employee resistance	2
Lack of funding	3
High Costs	4

These challenges highlight the need for education, financial support, and change management strategies to enhance sustainability practices among MSMEs in Cabanatuan City. The limited knowledge or expertise which is the rank 1 is the most frequently cited challenge 97 out of 203 respondents identifying it. It shows that there's a significant skills gap or lack of understanding about sustainability practices and indicates a need for more education and training programs focused on sustainability. The rank 2 is employee resistance which 89 out of 203 respondents facing this challenge. It shows that there might be cultural or attitudinal barriers to implementing sustainability practices. It cannot be successful if the employees are not following this practice. It suggests the need for change management strategies and better communication about the benefits of sustainability. Lack of funding the rank 3, 81 respondents cited this as a challenge. It shows that financial constraints are a significant barrier to implementing sustainability practices. It suggests that organizations may need to explore innovative funding models or prioritize sustainability in their budgeting processes. High Costs is the rank 4 which is surprisingly has the lowest rank with only 50 out of 203 respondents identifying it as a challenge. The low percentage might indicate that while costs are a concern, they're not perceived as the primary barrier to sustainability implementation. The discrepancy between this and "lack of funding" suggests that respondents distinguish between ongoing funding needs and initial implementation costs. This ranking shows the most significant challenges faced by businesses, with limited knowledge or expertise being the top barrier to implementing sustainability practices.

D. Organizational Behavior and Operational Efficiency

The organizational behavior and operational efficiency will discuss the impact, key factors affecting operational efficiency, decision-making processes, and primary operational challenges.

➤ *Impact Assessment*

Table 16: Impact Assessment

Impact of Organizational Behavior on Operational Efficiency	Percentage	No. of Respondents	Assigned Value	Weighted Value
Very high impact:	25%	51	4	204
High impact:	45%	91	3	273
Moderate impact	20%	41	2	82
Low impact	10%	20	1	20
	100%	203	10	579
Average weighted mean:	$\frac{579}{203} = 2.85$			

The majority of MSMEs in Cabanatuan City recognize the significant influence of organizational behavior on their operational efficiency, underscoring the importance of this research. The average weighted mean of 2.85 indicates that the overall impact of Organizational Behavior on Operational Efficiency is between "High" and "Moderate", leaning more towards "High". The weighted mean of 2.85, being closer to 3 ("High impact") than 2 ("Moderate impact"), reinforces the overall positive perception of the impact. Organizations should consider prioritizing initiatives that improve Organizational Behavior, as these are likely to have a positive impact on Operational Efficiency.

➤ *Key Factors Affecting Operational Efficiency*

Table 17: Key Factors Affecting Operational Efficiency

Key Factors	Rank
Decision-making	1
Leadership	2
Communication	3
Employee motivation	4
Adaptability to change	5

The ranking system shown in table 17 that decision-making is the most important factor for organizational success, followed by leadership, which is key to guiding the organization. Communication comes third, highlighting its role in ensuring smooth operations. Employee motivation ranks fourth, showing it's important but slightly less critical than the top three. Finally, adaptability to change ranks fifth, indicating it's still important but considered less crucial in this context. These factors align closely with the organizational behavior aspects contributing to sustainability, suggesting a strong interrelation between sustainability practices and operational efficiency.

➤ *Decision-Making Processes*

Table 18: Decision-Making Processes

Decision-Making Structure	Frequency	Percentage
Centralized	112	55%
Colaborative	61	30%
Decentralized	30	15%
Total	203	100%

Most organizations (55%) prefer centralized decision-making, where decisions are made at the top, indicating a strong hierarchy. About 30% use collaborative decision-making, valuing shared input from others. The least common approach is decentralized decision-making, with only 15% allowing more autonomy in decision-making. This shows that fewer organizations delegate decision-making authority. The centralized decision-making may impact the adoption and implementation of sustainability practices and efficiency measures.

➤ *Primary Operational Challenges*

Table 19: Primary Operational Challenges

Primary Operational Challenges	Rank
Limited resources	1
Lack of skilled workforce	2
Inefficient processes	3
Poor communication	4
Others	5

The table 19 shows that limited resources is the most significant operational challenge, indicating that organizations struggle the most with resource constraints and need better management and allocation. The second challenge is the lack of a skilled workforce, highlighting the importance of human capital and pointing to gaps in training and recruitment. Inefficient processes rank third, suggesting that organizations need to optimize their workflows and improve process management. Poor communication ranks fourth, seen as less critical than resource and workforce issues but still indicating the need for better coordination. Lastly, other challenges are ranked fifth, suggesting that the top four categories cover the main operational issues.

E. Balancing Sustainability and Operational Efficiency

Balancing sustainability and operational efficiency is important for businesses that want to be environmentally responsible while staying efficient and profitable. This means adopting sustainable practices without sacrificing the profitability of the business. The MSME in Cabanatuan City will identify the effect of sustainability in operational efficiency and its challenges.

➤ *Effect of Sustainability to Operational Efficiency*

Table 20: Effect of Sustainability to Operational Efficiency

Effect of Sustainability to Operational Efficiency	Percentage	No. of Respondents	Assigned Value	Weighted Value
Significantly improves	36%	74	5	370
Somewhat improves	46%	93	4	372
No impact	11%	23	3	69
Somewhat reduces	6%	12	2	24
Significantly reduces	0%	1	1	1
	100%	203	15	836
Average weighted mean:	$\frac{836}{203} = 4.12$			

The table 20 show the average weighted mean of 4.12 indicates a strong positive effect of sustainability on operational efficiency, with most respondents feeling that sustainability "somewhat improves" and even "significantly improves" efficiency. A total of 82% of respondents (167 out of 203) report some level of improvement, while only 6% say efficiency has decreased. 11% perceive no impact, and almost no respondents (just one) reported a significant reduction. These results suggest that sustainability practices generally have a positive effect on operational efficiency, with most organizations benefiting from their sustainability efforts.

➤ *Challenges in Balancing Sustainability and Operational Efficiency*

Table 21: Challenges in Balancing Sustainability and Operational Efficiency

Challenges in Balancing Sustainability and Operational Efficiency	Rank
Limited time and resources	1
Increased operational costs	2
Lack of knowledge on sustainable practices	3
Resistance from employees	4

The table 21 show that limited time and resources (rank 1) is the most significant challenge, indicating that organizations struggle the most with allocating enough resources to sustainability initiatives. This highlights the need for better resource management and prioritization. Increased operational costs (rank 2) is the second challenge, reflecting concerns about the financial burden of implementing sustainable practices and the economic impact on the organization. Lack of knowledge on sustainable practices (rank 3) ranks third, showing a significant knowledge gap in sustainability, which calls for investment in training and education programs. Resistance from employees (rank 4), while ranked the lowest, still represents a significant challenge, pointing to potential cultural barriers and the need for better change management and employee engagement. Organizations should focus on improving resource allocation and time management. Investing in training and education programs is important, and change management strategies should be developed to address employee resistance. This ranking system helps organizations prioritize challenges and address them in order of significance to balance sustainability with operational efficiency.

F. Strategic Planning and Future Focus

Strategic planning and future focus involves how MSME in Cabanatuan City approach long-term goals and decision-making processes. This includes how often they engage in strategic planning, whether they prioritize sustainability, operational efficiency, or both, and how they focus on improving their strategic initiatives.

➤ *Engagement of Companies in Strategic Planning for Long Term Goals*

Table 22: Engagement of Companies in Strategic Planning

Planning Frequency	Frequency	Percentage
Regular planning	142	70%
Occasional planning	41	20%
No formal planning	20	10%
Total	203	100%

The data shows a strong commitment to strategic planning among MSME in Cabanatuan City. 70% of MSME in Cabanatuan City (142 respondents) engage in regular strategic planning, reflecting a mature approach to management and an understanding of the importance of setting long-term goals. 20% (41 businesses) conduct occasional planning, showing that while these organizations recognize the value of planning, they may lack the resources or consistency to do it regularly. 10% (20 businesses) do not have formal planning, but this small percentage suggests that most MSME in Cabanatuan City understand the importance of strategic planning. Regular engagement in strategic planning is essential for businesses to adapt to changing markets and stay competitive. Organization that focus on sustainability in their strategies aim to create long-term value while minimizing environmental impact.

➤ *Including the Sustainability and Operational Efficiency in Strategic Planning*

Table 23: Including the Sustainability and Operational Efficiency in Strategic Planning

Including the Sustainability and Operational Efficiency in Strategic Planning	Frequency	Percentage
Both sustainability and efficiency	110	54%
Only sustainability	47	23%
Only operational efficiency	42	21%
Neither is included	4	2%
Total	203	100%

The table shows that 54% of organizations (110 respondents) incorporating both sustainability and operational efficiency in their strategic planning. This reflects a mature understanding that these two aspects can work together and support each other. 23% (47 respondents) focus solely on sustainability, while 21% (42 respondents) prioritize operational efficiency, with a combined 44% of organizations focusing on just one of these areas. Only 2% (4 respondents) do not include either sustainability or operational efficiency in their planning, indicating that most organizations recognize the importance of at least one of these elements. While many businesses understand the value of combining both factors, there is still room for improvement, especially among the 44% that focus on just one aspect.

➤ *Areas for Strategic Improvements*

Table 24: Areas for Strategic Improvements

Strategic Focus Area	Rank
Operational efficiency	1
Sustainability integration	2
Employee development	3
Market expansion	4

The Table 24 show that operational efficiency (rank 1) is the top priority for improvement, as organizations focus on streamlining operations and optimizing existing processes and resources. Sustainability integration (rank 2) is the second highest priority, reflecting a growing recognition of the importance of sustainability and a commitment to long-term sustainable practices. Employee development (rank 3) ranks third, emphasizing the need to enhance workforce capabilities and invest in human capital. Market expansion (rank 4) is the lowest-ranked priority, suggesting that organizations are focusing more on strengthening their internal operations before pursuing external growth opportunities. These findings indicate a growing recognition among MSMEs in Cabanatuan City of the importance of integrating sustainability and operational efficiency into their strategic planning. Those that prioritize operational efficiency aim to streamline processes, reduce costs, and improve productivity. Many organizations now combine both, recognizing that sustainability and operational efficiency can complement each other, driving long-term growth while maintaining profitability. Improving strategic planning often involves refining processes, setting clear goals, and regularly evaluating progress. Organizations should focus on aligning their long-term objectives with both sustainability goals and operational efficiency to stay competitive and resilient in the future.

CHAPTER FOUR

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

This chapter presents the summary of findings based on the interpretations and analysis made on the Organizational Behavior on Sustainability and Operational Efficiency of MSME in Cabanatuan City. Conclusion and recommendations were provided based on the data.

A. Summary of Findings

The following findings were derived based on the presentation, analysis and interpretation of data:

B. Business Characteristic of MSMEs in Cabanatuan City

The MSME sector in Cabanatuan City is dominated by the service sector (44%), followed by wholesale (23%) and retail (19%). Small enterprises make up the majority (62%), with micro (25%) and medium enterprises (13%) also present. Most MSMEs are young, with 61% under 5 years old, and only 15% have been operating for over 10 years, reflecting a dynamic yet challenging business environment. In terms of revenue, 40% earn between ₱3,000,001 and ₱15,000,000, while 17% generate over ₱100M. Market reach shows that 43% operate nationally, 30% regionally, and 17% locally, with 10% having an international presence. These findings indicate a growing sector with strong potential for expansion, though many businesses face sustainability challenges.

C. Demographic and Professional Profile of the Owners and Employees of MSMEs in Cabanatuan City

The demographic profile of MSMEs in Cabanatuan City reveals a predominantly young workforce, with 87% of entrepreneurs under 35 years old. The sector is male-dominated, with 60% male and 40% female representation. Education levels are high, with 60% holding college degrees, 23% with a master's degree, and 7% holding a doctoral degree. In terms of experience, 45% have 1-5 years of experience, and 67% have between 1-10 years of experience.

Regarding training and development, 75% of entrepreneurs have participated in formal training programs, while 25% rely on informal learning methods. Leadership training is the most prioritized area, with 65% of respondents seeking it, followed by technical skills (45%), customer service (40%), financial management (35%), and marketing and sales (30%). On average, MSMEs conduct training 1.91 times per year, with 75% offering training at least annually and 30% opting for quarterly sessions. When it comes to investment, 41% spend less than ₱10,000, while 15% invest over ₱100,000, indicating a trend toward lower-cost options. The overall effectiveness of training programs is moderate to high, with an average weighted mean of 2.86, and only 4% reporting low or very low impact. This data highlights a well-educated, young workforce that participates regularly in training, though increased investment in training could improve its effectiveness.

D. Aspect of the Organizational Behavior of MSMEs in Cabanatuan City that Affects the Sustainability

Sustainability practices are strongly supported among MSMEs in Cabanatuan City, with employee awareness programs (65%) and energy conservation (60%) being the most commonly implemented practices. Waste reduction follows at 55%, while sustainable sourcing is the least adopted at 45%. The average weighted mean of 3.98 indicates strong agreement with sustainability initiatives, with minimal resistance. Key factors driving implementation include leadership style (75%), employee engagement (70%), and effective communication (65%). However, challenges persist, including limited knowledge and expertise (97 respondents), employee resistance (89 respondents), lack of funding (81 respondents), and high costs (50 respondents). These findings highlight the commitment to sustainability, but also point to the need for better knowledge, resources, and overcoming resistance to ensure successful implementation.

E. Impact of Organizational Behavior to the Operational Efficiency of MSMEs in Cabanatuan City

The impact of organizational behavior on operational efficiency is generally positive, with an average weighted mean of 2.85, indicating a high to moderate effect. Key factors influencing efficiency include decision-making (Rank 1), leadership (Rank 2), communication (Rank 3), employee motivation (Rank 4), and adaptability to change (Rank 5). In terms of decision-making processes, centralized decision-making is most common (55%), followed by collaborative (30%) and decentralized approaches (15%). Primary operational challenges identified include limited resources, a lack of skilled workforce, inefficient processes, and poor communication. These findings highlight the significant role of organizational behavior in efficiency, with decision-making and leadership being particularly crucial, while also emphasizing challenges in resources and workforce management.

F. Challenges of MSMEs in Cabanatuan City When Trying to Balance the Sustainability with Operational Efficiency

Sustainability practices significantly enhance operational efficiency, with a weighted mean of 4.12 indicating a strong positive effect. The majority of respondents (82%) reported improved efficiency, while only 6% noted a decrease, and 11% observed no impact. Despite this positive outcome, MSMEs in Cabanatuan City face notable challenges in balancing sustainability with operational efficiency. The primary barrier is limited time and resources, highlighting difficulties in resource allocation. Increased operational costs rank second, reflecting the financial burden and economic concerns associated with sustainable practices. A lack of knowledge on sustainable practices is the third major challenge, emphasizing the need for targeted training and education. Employee resistance also poses a significant obstacle, pointing to cultural barriers and the necessity for effective change

management. Addressing these challenges through better resource management, cost-effective strategies, knowledge development, and change management can help organizations successfully integrate sustainability and operational efficiency.

G. Basis for Strategic Planning for MSMEs in Cabanatuan City to Enhance the Sustainability and Operational Efficiency.

The strategic planning practices of MSMEs in Cabanatuan City reveal a strong commitment to enhancing sustainability and operational efficiency. A significant majority (70%) of businesses regularly engage in strategic planning, while 20% plan occasionally and only 10% lack formal planning processes. Over half (54%) of the organizations integrate both sustainability and operational efficiency into their plans, while 23% focus solely on sustainability, 21% prioritize operational efficiency, and just 2% consider neither. Operational efficiency ranks as the top strategic improvement priority, followed by sustainability integration, employee development, and market expansion. These findings suggest that MSMEs prioritize strengthening internal operations and sustainability practices before pursuing growth opportunities, highlighting the need for improved integration of strategic goals to maximize long-term success.

➤ *Conclusions*

Based on the findings, the following conclusions were drawn:

The study shows that MSMEs in Cabanatuan City have a strong potential for growth, supported by a young and well-educated workforce and a commitment to sustainability and efficiency. The service industry leads the sector, with small businesses making up the majority, offering great opportunities for expansion. Strengths include high education and training levels among business leaders, a focus on sustainability practices like employee awareness and energy conservation, and a positive impact of sustainability on efficiency (weighted mean: 4.12). Additionally, 70% of businesses engage in regular strategic planning, showing readiness for long-term goals.

Despite these strengths, challenges remain. These include limited resources, gaps in knowledge about sustainable practices, centralized decision-making (55%), and balancing sustainability with operational costs. To overcome these, MSMEs should improve sustainability expertise, adopt more inclusive decision-making, invest in employee development, and manage resources more effectively. Leadership and decision-making play key roles in improving efficiency and offer a clear direction for enhancing operations and sustainability practices.

➤ *Limitations of the Study*

This study had limitations in data collection procedure as survey form was sent via digital platform of establishments. Survey forms were distributed to establishment with digital platforms; hence, the researchers acknowledge the potential limitation on reaching MSMEs with inactive or no digital platform available. The researchers acknowledged that few respondents are occupied during the period of distribution making the data collection challenging.

Regarding organizational practices, the researchers acknowledged the potential limitations in the accuracy of the data collected due to few of MSME establishments do not practice formal guidelines and/or training procedures. Consequently, some respondents opted not to disclose their financial data to protect sensitive and confidential information.

➤ *Recommendations*

Based on the findings and conclusion presented, the following were recommended:

This study recommends several strategies to improve organizational behavior, sustainability, and operational efficiency among MSMEs in Cabanatuan City. First, businesses should enhance decision-making processes by adopting a hybrid model that balances centralized and collaborative approaches. Clear frameworks incorporating sustainability and efficiency metrics should guide decisions, supported by feedback mechanisms to evaluate outcomes. Leadership development is also crucial, with formal training programs focusing on sustainable practices, mentorship opportunities, and competency frameworks that emphasize both operational efficiency and sustainability.

Improving communication systems is another key area. MSMEs in Cabanatuan City should establish structured channels for sustainability initiatives, hold regular forums for sharing best practices, and measure the effectiveness of internal communication. To boost employee motivation and engagement, businesses can design incentive programs that reward achievements in efficiency and sustainability, provide clear career development paths, and conduct regular training on sustainable practices.

Building adaptability and promoting innovation are essential for long-term growth. Organizations should implement change management frameworks, create innovation hubs for developing sustainable solutions, and regularly review and improve operational processes. Resource management must align with sustainability goals through balanced allocation models, sustainability scorecards, and partnerships with experts. Finally, MSMEs in Cabanatuan City should prioritize knowledge management by offering comprehensive training programs, facilitating knowledge-sharing across businesses, and collaborating with educational institutions to support continuous learning. By focusing on these areas, MSMEs can strengthen their organizational behavior, integrate sustainability into their operations, and enhance overall efficiency, ensuring growth and sustainability in a competitive market.

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APPENDICES

APPENDIX A RESEARCH INSTRUMENTS

ORGANIZATIONAL BEHAVIOR ON SUSTAINABILITY AND OPERATIONAL EFFICIENCY OF MSME IN CABANATUAN CITY: BASIS FOR STRATEGIC PLAN (Survey Questionnaire for MSMEs Owners and Employees)

RESPONDENT INFORMATION

Directions: Please click the bullet.

Position in the company:

- Owner
- Manager
- Key Employee

A. PART I. BUSINESS CHARACTERISTICS OF MSMEs

Directions: Please click bullet that corresponds to your chosen answer. For items with more than one choice, please click as many answer as you can.

1. What type of business do you operate/belong?
 - Manufacturing
 - Retail
 - Service
 - Wholesale
 - Other (please specify) _____
2. How many employees does the business have?
 - Micro (1-9 employees)
 - Small (10-99 employees)
 - Medium (100-199 employees)
3. How many years has the business been in operation?
 - Less than 1 year
 - 1-5 years
 - 6-10 years
 - More than 10 years
4. What is the estimated annual revenue of the business?
 - Less than ₱3,000,000
 - ₱3,000,001 - ₱15,000,000
 - ₱15,000,001 - ₱100,000,000
 - More than ₱100,000,000
5. What is the market reach of the business?
 - Local (within Cabanatuan City)
 - Regional (within Nueva Ecija)
 - National
 - International

B. PART II. PROFILE OF THE RESPONDENTS

6. What is your age?
 - Below 25 years
 - 26-35 years
 - 36-45 years
 - 46-60 years
 - Above 60 years

7. What is your gender?
- Male
 - Female
8. What is your highest educational attainment?
- Elementary level
 - High School level
 - Vocational/TVET
 - College level
 - Master's or equivalent level
 - Doctoral or equivalent level
 - No response
9. How many years of work experience do you have in your current role?
- Less than 1 year
 - 1-5 years
 - 6-10 years
 - More than 10 years

C. PART III. TRAINING AND DEVELOPMENT

10. Have you attended any formal training or seminars related to business management?
- Yes
 - No

**If Yes, please answer number 11-14*

11. What type of training programs have you attended? (Select all that apply)
- Technical skills training
 - Leadership training
 - Customer service training
 - Marketing and sales training
 - Financial management training
 - Others (please specify) _____
12. How frequently does the company provide training programs?
- Quarterly
 - Twice a year
 - Once a year
 - Rarely
 - Never
13. How much does your company invest in training?
- Less than P10,000
 - P10,001 – P50,000
 - P50,001 – P100,000
 - More than P100,000
14. How would you rate the impact of training on your professional performance?
- Very high
 - High
 - Moderate
 - Low
 - Very Low

D. PART IV. ORGANIZATIONAL BEHAVIOR AND SUSTAINABILITY

15. Which sustainability practices are actively implemented by your company? (Select all that apply)
- Energy conservation
 - Waste reduction/recycling

- Sustainable sourcing of materials
- Employee awareness and engagement in sustainability others
- None of the above

16. How do you agree that your company encourages sustainable practices?

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

17. Which of the following organizational behavior aspects contribute to your business's sustainability efforts? (Check all that apply)

- Leadership style
- Employee engagement
- Ethical decision-making
- Teamwork and collaboration
- Innovation and creativity
- Others (please specify) _____

18. What are the biggest challenges your business faces in implementing sustainability initiatives? (Select all that apply)

- Lack of funding
- Limited knowledge or expertise
- Employee resistance
- High costs
- Others (please specify) _____

E. PART V. ORGANIZATIONAL BEHAVIOR AND OPERATIONAL EFFICIENCY

19. How would you rate the impact of your company's organizational behavior on operational efficiency?

- Very high
- High
- Moderate
- Low
- Very low

20. Which organizational behavior factors most impact your company's operational efficiency? (Select all that apply)

- Leadership
- Communication
- Decision-making
- Employee motivation
- Adaptability to change
- Others (please specify) _____

21. How would you describe the decision-making process in your company?

- Centralized (*owners or top management make most decisions*)
- Decentralized (*decision-making is shared with managers and employees*)
- Collaborative (*input from all levels is considered in decision-making*)

22. What are the primary operational challenges your business faces? (Select all that apply)

- Limited resources
- Inefficient processes
- Lack of skilled workforce
- Poor communication
- Others (please specify) _____

F. PART VI. BALANCING SUSTAINABILITY AND OPERATIONAL EFFICIENCY

23. To what extent does focusing on sustainability affect your operational efficiency?

- Significantly improves
- Somewhat improves
- No impact
- Somewhat reduces
- Significantly reduces

24. What challenges do you face in balancing sustainability and operational efficiency? (Select all that apply)

- Lack of knowledge on sustainable practices
- Increased operational costs
- Limited time and resources
- Resistance from employees
- Others (please specify) _____

G. PART VII. STRATEGIC PLANNING

25. How often does your company engage in strategic planning for long-term goals?

- Regularly (*annually*)
- Occasionally (*every few years*)
- Rarely
- Never

26. Does your company's strategic plan include specific goals for sustainability and operational efficiency?

- Yes, both sustainability and efficiency are included
- Only sustainability is included
- Only operational efficiency is included
- Neither is included

27. Which of the following areas would you like to focus on for strategic improvements? (Select all that apply)

- Enhancing sustainability
- Improving operational efficiency
- Employee training and development
- Expanding market reach
- Other (please specify) _____