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Green Marketing Orientations Toward Sustainability of Manufacturing Firms in Region XII: A Sequential Explanatory Design

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Abstract

Sustainability is becoming an increasingly important topic for the present generation to address and prevent adverse consequences in the future. Studies report that this will become a key issue for the business community as economic, social, and environmental challenges grow. The purpose of this research was to establish which of the three dimensions of green marketing orientation (GMO)—strategic GMO, tactical GMO, and internal GMO—had the strongest influence on sustainability. The survey was conducted among 157 manufacturing firms in Region XII that produce food, beverages, wood, and agricultural products. Upon conducting multiple regression analysis on the quantitative data, 13 managers and business owners of manufacturing firms were chosen for further validation of the findings through in-depth interviews and focus group discussions. The study revealed that tactical GMO is the only and strongest predictor of sustainability. The thematic analysis of the qualitative data revealed essential themes that generally validate the identified influence and its particulars. The findings of this study offer valuable insights for policymakers and manufacturers to guide actions toward sustainability. Keywords: Green marketing orientations, sustainability, multiple regression analysis, manufacturing firms

CHAPTER I

INTRODUCTION

The word "sustainability" elucidates the future development and fundamentals for long-time survival of society, business, and the planet (Tseng and Shang, 2021). According to Johnstone and Lindh (2018), sustainability is the most crucial issue that this generation must concentrate on in order to prevent adverse consequences in the future. The Agenda 2030 of United Nations (UN) also place an emphasis on sustainable development in economic, social, and environmental dimensions as these play a significant role globally (United Nations, 2015).

The problematic situation of global sustainability is triggered by social problems and environmental degradation (Nagendra, et al., 2018). The study of Porter and Kramer (2018) and Amoako et.al (2021) revealed that business activities have contributed and recognized as significant contributors to environmental issues through carbon emissions, water contamination, and air pollution. This puts pressure to manufacturing firms to become more conscious and carry out their social obligations on the usage of resources that are taken from the society and the environment (Saavedra Garcia, 2022).

In the Philippines, the Department of Trade and Industry is committed to promoting sustainable consumption and production among local businesses to address the existing social and environmental issues in the country as it supports to UN’s Sustainable Development Goals (Manila Bulletin, 2022). Elkington (2018) suggest that sustainability can be achieved by businesses if they consider the Triple Bottom Line (TBL), or the three pillars of sustainability such as economic performance, the social performance, and the environmental performance.

The study of Sarkar et al. (2021) posited that adopting the green business concept serves as a viable strategy to address current environmental conditions. This approach entails the integration of environmental and social considerations into business practices, while ensuring

economic growth and development. One significant portion associated to green business is green marketing through a green product, price, promotion, and placement (Hasan et al., 2019). To have a holistic green marketing orientation, it must embody three dimensions like strategic green marketing orientation, tactical green marketing orientation, and internal green marketing orientation, as suggested by Papedas, et. al. (2017).

This study investigates the influence of green marketing orientations toward sustainability, adopting Elkington's TBL. Several studies have been explored on the influence of green marketing on firms' performance but are too limited on the influence of the pillars of sustainability in terms of economic, social, and environmental aspects (Chandran, 2021; Demessie, 2023; Mahmoud, 2018). Thus, it is imperative to examine the influence of green marketing orientations on the three pillars of sustainability since it cannot be assumed that a business or organization is sustainable without considering its economic, social, and environmental performance (Elkington, 2018).

Related Literature

The review discusses the green marketing orientations and its three dimensions, sustainability through triple bottom line, strategic green marketing orientation on sustainability, internal green marketing orientation on sustainability, internal green marketing orientation on sustainability, experiences of participants in green marketing, and issues on sustainability.

Green Marketing Orientations

Lazer (1969) first used the term "green marketing" to describe a societal component of marketing that deals with the depletion of environmental resources, the negative effects of conventional marketing on the environment, and the greening of many conventional marketing techniques. According to Kumar (2016), green marketing provides managers with clear guidance for effective marketing department behavior to establish an organization's eco-orientation and for their green marketing decisions that demonstrate their environmental goals, dedication, respect,

and concern for natural resources. Further, these address the key marketing mix issues of production, promotion, selling activities, and distribution, as well as other significant issues like branding and positioning. Thevanes and Weerasinghe (2018) also highlighted on their study that green marketing can be regarded as a sustainable marketing approach that contributes to economic, social, and environmental performance, hence fostering organizational sustainability.

The study of Papadas, et al. (2017) highlighted that green marketing is a crucial component of any sustainable company strategy. Businesses that seek to improve their performance must implement green marketing strategies. The study creates a scale to measure the all-encompassing nature of green marketing. This describes the concept of green marketing orientation, which includes three significant dimensions: *strategic green marketing orientation*, *tactical internal green marketing orientation*, and *internal green marketing orientation*. This green marketing category is a crucial component of a green marketing strategy since it signifies the top management's dedication and long-term investment in environmental actions. Further, in the 21st century, researchers (e.g., Chamorro et al., 2009; Leonidou and Leonidou, 2011; Papadas et al., 2017) consider these dimensions as three pillars and central tenets of green marketing orientation.

According to Papadas, et al. (2017) *Strategic green marketing orientation (SGMO)* as the first-dimension deals with the organization’s long-term efforts and strategies that focusing on combining the essential environmental matters in strategic marketing decisions. Added to this, this dimension also focuses on the external environmental stakeholders. The significant orientations belong to this dimension are: setting environmental standards on selecting business suppliers and other partners; targeting environmentally-conscious market; investing in low-carbon machineries for production and daily operation process; making efforts to use sources from renewable energy for their products and services; conducting research and development (R&D) for identifying the needs and production of environmentally safe products and services;

and joining environmental business activities. Shi and Yang (2018) claim that starting and managing green actions, identifying the target market, and choosing how to promote green actions are all part of strategic green marketing implementation. At this dimension, green marketing entails analyzing the development of the green market to addressing its demands and challenges, and assessing consumer purchasing patterns for green products (Gazquez-Abad, 2011).

Tactical green marketing orientation (TGMO) deals with the organization's short-term activities that convert the traditional marketing mix to a green action. This category includes product and service-related decisions to minimize the environmental footprint such as utilizing recycled and reusable materials; using e-commerce since it is more environmentally friendly platform; utilizing digital communication tools to promote products and services; shifting to paperless strategy in the procurement process; and absorbing the additional costs associated with environmental products and services (Papadas, et al. 2017). According to this approach, measures are taken to transform the standard marketing mix into a green marketing mix (Vishnoi, 2015). The tactical aspect of green marketing must therefore address the marketing mix.

Lastly, *internal green marketing orientation* (IGMO) includes implementing environmental ideals throughout the business in order to establish a larger organizational green culture (Papadas & Avlonitis, 2014). The actions involved in this dimension are employee training to spread environmental awareness inside the organization and organizational involvement in environmental leadership events. Thus, employees are encouraged to develop the knowledge and skills necessary to implement effective environmental initiatives by disseminating information and fostering an environmental culture across the organization as a whole (McDonagh & Prothero, 2014).

Sustainability Through Triple Bottom Line (TBL)

The increasing emphasis on sustainability among organizations can be attributed to various factors, including climate change and the growing demands from regulations and society for higher environmental and social accountability. Mollenkamp (2023) defined sustainability as the ability to consistently support or uphold an activity or operation over time. He added that in order to achieve sustainability, a company must preserve natural resources, support a healthy community and workforce, and generate sufficient revenues to continue operations over a long period of time. Several academic works measure the sustainability of an organization using the Triple Bottom Line or the sustainability framework that was first coined in 1994 by John Elkington. This was designed to examine the business's economic, social, and environmental impact. According to Elkington (2018), achieving sustainability goals cannot solely be judged in terms of profit and loss. The sustainability industry's track record in terms of achieving those goals has been notably mixed. It must also be measured in terms of the welfare of billions of people and the health of the planet as a whole.

Sustainability has its three (3) pillars, or TBL, namely, profit, people, and planet. The first pillar is profit, or economic performance, this pillar centers around the preservation of natural resources that serve as essential inputs for economic activity, encompassing both renewable and exhaustible inputs. Second is the people or social performance, which pertains to the societal impacts of economic systems. This category encompasses endeavors aimed at eliminating poverty and hunger, as well as addressing issues of inequality. Lastly, the environmental performance or the planet, the focus lies on the essential life support systems, such as the atmosphere or soil, which necessitate maintenance in order to enable economic output or sustain human life (Mollenkamp, 2023).

Several studies used this framework to evaluate the sustainability of different kinds of organizations and industries. In the study of Huang and Badurdeen (2017), which evaluated the sustainability of manufacturing firms through the integration of product and process metrics.

Consequently, they found that TBL is relevant in providing a significant result to their study; it helps them understand the three aspects of sustainability that are significant in the evaluation of sustainable manufacturing performance. This claim was also reaffirmed by the study of Ahmad and Wong (2018), who stated that it is crucial to consider the TBL perspective in the assessment of the sustainability of the manufacturing industry.

The study conducted by Thevanes and Weerasinghe (2018) utilized the Triple Bottom Line (TBL) framework to examine and assess the sustainability of companies. The study emphasized the importance of corporations taking into account the three components of sustainability, often known as the TBL, in a balanced manner when assessing sustainability. Moreover, they asserted that these dimensions hold significant importance for both the natural environment and other enterprises. The study of Zanin et al. (2020) also considers the three pillars of sustainability in determining the level of sustainability of dairy farm in Brazil. The study conducted by the researchers emphasized that the use TBL framework would enable the company to have a more comprehensive and equitable comprehension of the actual performance of various enterprises and industries.

Thus, Elkington's TBL is a relevant approach for measuring the business's sustainability (Laosirihongthong et al. 2020). This was frequently utilized to evaluate the relationship between sustainability practices (Anvari & Tukay, 2017), increase competitive advantage, and measure business performance (Ansari & Kant, 2017). Unfortunately, integrating this framework to determine business sustainability through green marketing orientations still lacks attention and further study. Elkington (2018) encourages research scholars and businesses to track and manage the economic (economic efficiency and business income), social (quality of life, and safety and services for citizens), and environmental dimensions (availability and quality of environmental resources) in order to evaluate business sustainability (Beattie, 2021).

Experiences of Manufacturing Firms in Green Marketing

Green marketing is a strategic approach employed by businesses to promote and sell products that are perceived to have minimal negative impact on the environment. This marketing strategy aims to meet the growing consumer demand for environmentally friendly products and services by emphasizing the eco-friendly attributes of their offerings, companies seek to differentiate themselves from competitors and appeal to environmentally conscious consumers (Thilagaraj, 2016). With that, the increasing number of customers that prioritize ecologically friendly items presents a potential opportunity for businesses that are contemplating green marketing strategies (Papadas et al., 2019).

Though green marketing opens new opportunities to most of the businesses, some businesses are facing many struggles on adopting and practicing green marketing even in developing countries (Wang et al., 2019). Manufacturing companies in India face challenges such as a lack of technical expertise to manufacture green products and ineffective legislation enforcement by the government (Mehraj & Qureshi, 2021). Inadequate customer awareness, a lack of consumer environmental commitment, and a lack of experienced employees are additional barriers to selling green products. Moreover, Ahuja (2018) found out that in some countries, like India, green marketing is still a new concept. He cited that it is one of the major challenges facing businesses that produce green products. For him, consumers are not aware of its importance, causing hesitation to purchase environmentally friendly products. As a result, these issues caused some businesses who are practicing green action to worry about its impact on profitability. Added to this, the lack of standardization is also the struggle of some firms; it was found out that there is no proper authority responsible for approving the products considering their safety to the end users and environment.

In a study conducted by Agustini et al. (2021) on green marketing practices and issues of selected firms in Indonesia and Philippines they said that the companies identified potential marketing opportunities for their products based on a high potential for future growth and a

projected significant increase in demand. Indonesian firms encountered various challenges pertaining to product development, regulatory compliance, and consumer behavior. Conversely, the cloth firm encountered difficulties primarily in the domain of promotion, as it continued to grapple with a lack of acceptance. The primary obstacle faced by the herbal drinks company was ensuring compliance with regulatory requirements in order to uphold environmentally friendly practices. The Indonesian government bestows this accolade upon manufacturing enterprises that demonstrate adherence to environmental regulations.

Furthermore, the Filipino company specializing in natural home furnishings asserted that it has consistently maintained a positive track record devoid of any adverse incidents. This occurred in spite of consumers displaying minimal concern for environmental and societal welfare, as well as a lack of support from Local Government Units (LG Us) in promoting local market purchases and educating consumers on green consumerism. The primary obstacle encountered in the marketing of the products pertained to the absence of green certification in the Philippines, which remain (Agustini et al. ,2021).

Moreover, with the recent trends in fashion industry the textile manufacturers also considered a shift from the traditional practices to green trend. According to Stall-Meadows and Davey (2013) textile manufacturers actively seek novel avenues to appeal to both their current and potential customer segments, and one such avenue is the adoption of green or environmental marketing strategies. Environmental marketing claims encompass the advertising and promotion of clothing products that are manufactured using materials or processes that are deemed environmentally friendly.

Therefore, considering the environmental challenges with which numerous nations are struggling today, empirical studies suggest that green marketing is a strategic concept that businesses must utilize to minimize its unfavorable impact and improve their business performance. Added to this, related studies present different factors and categories that signify

green marketing practices, but the common thing about them is that all of these are integrated into the marketing mix. Further, green marketing practices must contribute to the sustainability of the business, and this can be measured through the consideration of three (3) pillars of sustainability, such as economic performance, social performance, and environmental performance. Thus, these three pillars must be consistent and in a balanced manner to be sustainable (Rogers and Hudson, 2011).

Manufacturing Firms' Issues with Sustainability

In light of the ongoing degradation of the environment, governments worldwide have expedited the implementation of infrastructure development projects. Simultaneously, there has been a noticeable enhancement in the environmental consciousness among individuals across nations. Given the prevailing circumstances, it becomes imperative for enterprises to embark upon an exploration of a sustainable development trajectory (Chen & Fang, 2019).

The study of Thorisdottir and Johannsdottir (2019) cited on their study that issues stemming from corporate entities encompass a range of concerns, such as violations of human rights, instances of abuse, challenges related to waste management, as well as broader social and economic issues. They added that manufacturing firm in the fashion and textiles sector has faced criticism for its perceived lack of accountability in addressing sustainability concerns, particularly in relation to climate change and the excessive consumption of natural resources, which can be attributed to its production and marketing practices. Moreover, the process of cotton manufacture necessitates a substantial quantity of water, with a consumption of more than 19,000 liters of water for the production of a single pair of jeans and a T-shirt. The lack of clean water in certain regions of the world renders this matter of considerable importance.

Luthra and Mangla (2018) conducted a study that brought attention to a comprehensive list of eighteen (18) issues and challenges pertaining to industry 4.0 activities aimed at promoting sustainability in emerging economies. The concept of Industry 4.0 encompasses a commercial

framework that concurrently fosters sustainability among global industries. The paper identifies four primary elements including difficulties, namely organizational challenges, legal and ethical issues, strategic challenges, and technology challenges. The aforementioned issues and challenges hold considerable importance in attaining industry sustainability across economic, social, and environmental domains. Organizational obstacles encompass several financial and management issues faced by organizations, including budgetary limits, limited management support, and insufficient focus on innovation and technology acquisition. The realm of legal and ethical concerns encompasses various aspects, such as security, profiling, complexity, coordination, collaboration, and legal matters. The strategic challenges dimension encompasses various issues, including the absence of governmental supporting and regulations that promote sustainable practices and the transition from conventional factories to factories of the future (Kagermann, 2015; Zhu et al., 2018). The last aspect encompasses the unclear economic advantages of digital investments that effectively contribute to the promotion of sustainability. The last issue pertains to technological hurdles, namely including the absence of global standards and data-sharing protocols within the context of establishing smart manufacturing systems. This issue is compounded by the inadequate integration of technology platforms and a poor standard of current data.

According to Chen and Yang (2019), achieving sustainable development by the year 2030 necessitates the implementation of environmentally sustainable marketing initiatives by all organizations. Additionally, corporations must adopt sustainable practices in order to align with this objective. According to Mukonza and Swarts (2020), sustainability can be considered a dependent variable of green marketing due to its emphasis on executing marketing operations in a manner that safeguards the environment.

However, the contemporary global landscape is confronted with a pressing issues pertaining to sustainability, stemming from a confluence of factors including economic turmoil,

energy scarcity, environmental contamination, and the release of greenhouse gases that contribute to the phenomenon of global warming. The allocation of limited resources in a manner that is both economically efficient and environmentally sustainable is a pressing concern, given the boundless nature of human needs. In order to ensure the long-term viability of the human species, it is imperative to implement green marketing practices within society (Thilagaraj, 2016).

The development and production of environmentally sustainable products or services play a crucial role in mitigating the environmental consequences of industrial operations and promoting the adoption of cleaner production methods. Nevertheless, the escalating global apprehensions regarding environmental sustainability and climate change are compelling all corporations to confront the task of incorporating environmental considerations into their business strategy and operations. This challenge encompasses various functional areas within companies, such as research and development, design, manufacturing, and marketing (Dangelico & Vocalelli, 2017).

In a study conducted by Venkatesh et al., (2017), in each company's sustainability report, unethical supplier practices and philanthropy concerns were detailed. As reported, strict monitoring on unethical practices is the result of institutional mechanisms, whereas firms' efforts to legitimize their relationship with stakeholders affect the suppliers' charitable activities.

Another issues were discussed in the paper of Delai and Takahashi (2013) in their study on Brazilian retailers, wherein they examined a range of ethical issues that have implications for the social sustainability of supply chains. These issues encompass safety, health, human rights, corruption and bribery, job creation, consumer health and safety, respect for customer privacy, and ethical labeling. The existing body of literature highlights several key social sustainability themes, including diversity, safety and health, talent retention, human rights, ethical issues, and job creation. Nevertheless, there is a greater variety of subthemes and activities among the firms,

and their approaches to addressing these issues in their actions vary. Despite the existence of a growing body of literature on the practices of social sustainability among retailers, this field of knowledge is still in its early stages and requires additional investigation, particularly in emerging economies.

In connection with the enduring obstacles of diminishing profit margins, fluctuations in raw material expenses, variations in production capacity, and disruptions in the supply chain, the industry is currently contending with an additional array of concerns focused on the concept of sustainability. As per the U.S. Environmental Protection Agency, sustainable manufacturing refers to the production of manufactured goods using economically viable methods that aim to minimize adverse environmental effects and preserve energy and natural resources (Burstein, 2022).

The Influence of Green Marketing Orientation on Sustainability

Strategic Green Marketing Orientation on Sustainability

The study of Vaitone and Skackauskiene (2019) reveals that efforts in strategic green marketing orientations contribute to firms' sustainability and development by focusing on strengthening the relationship with customers that are environmentally conscious. Through this, it will increase the firms' profitability and gain competitive advantage. Added to this, Suresh (2014) also claims that this strategic dimension will enhance the brand reputation through organizational environmental initiatives.

Adopting green practices on production can contribute on sustainability by enhancing economic performance in a way that it cut costs and boost profits through strategic green actions (Wymer and Polonsky's, 2015). They further cited that organizations that do not adhere to green standards are subject to strict regulations in several nations. As a result of the environmental harm and their irresponsible business practices are subject to pay penalties to the government. As

a result, this may lead to damage to the company's reputation, perhaps causing adverse effects on its financial performance.

According to Mass's (2016) study, the investigation of company environmental performance reveals a significant avenue for achieving sustainability by means of social performance. Due to the prevailing environmental issues encountered across nations, customers have become increasingly discerning in their purchasing decisions, prioritizing the acquisition of ecologically friendly products. This was their way to minimize the negative impact of their purchasing activities on the environment and the society in which they lived. On this account, the environmental orientation is generally covered under Corporate Social Responsibility (CSR), along with the many different categories of societal challenges. Hameed et al. (2022) added that companies that are engaging in green strategies can be positioned as socially responsible organizations since they advocate CSR through going green. Thus, green marketing is widely recognized as a significant corporate social responsibility (CSR) endeavor because to its dual advantages for both the firm and society (Thevanes & Weerasinghe, 2018).

Consumers' purchasing choices directly influence environmental issues. To be accountable and responsible for the environment, they are particular when it comes to purchasing and paying more for green products (Mattijssen et al., 2018). Furthermore, the study suggests that most consumers prefer environmentally friendly home products with benefits such as safety for use around children, no hazardous components, no chemical contaminants, and no strong emissions over packaging that can be reused or that has not been tested on animals (Ottman et al., 2006). Considering this, businesses must concentrate on producing green products like hybrid vehicles, environmentally friendly paint, organic foods, energy-efficient electronics, recycled materials, and eco-friendly cleaning products in order to entice environmentally conscious consumers (Paco et al., 2014).

Thus, green strategies are highly encouraged because they help businesses achieve their financial objectives (Miroshnychenko et al., 2017). It minimizes marketing costs, helps them gain a competitive edge by enhancing their social and environmental reputations, and increases profitability by increasing prices for green products and services. Furthermore, adopting green marketing helps businesses avoid any penalties for damaging and having a negative impact on the environment. These punishments include monetary penalties that may affect the business's financial performance and/or possibly harm the brand reputation.

Tactical Green Marketing Orientation on Sustainability

Utilizing e-marketing strategies such as social media marketing, e-mail marketing, content marketing, and other digital marketing strategies contributes to mitigating the ecological footprint of businesses. Unlike some traditional marketing strategies, they add more waste, such as paper, plastic, and polythene, that may harm the environment, resulting in floods and pollution. E-marketing also helps to improve the company's favorable environmental reputation by reducing transportation expenses associated with marketing. Beyond this, businesses have to develop and apply a number of modern green marketing practices and strategies to demonstrate their commitment to the environment and achieve a competitive edge (Thevanes and Weerasinghe, 2018).

When it comes to utilizing green marketing, costs incurred by the company for activities like packaging and disposal for environmental compliance that were necessary to change the production process will have an additional impact on the pricing (Agustini et al., 2021). According to Sudhalakshmi and Chinnadorai (2014), the green price was considered as one of the most difficult aspects of green marketing. This facet considers the environment while labelling product price. The cost of environmental and social expenses has been added to the price of green products, that is why they are often more expensive than their conventional counterparts. The main obstacle preventing customers from buying green products. As a result, this will influence the profitability

of the firms since prices are for this product will be the primary considerations of the customers (Weisstein et al., 2014).

Utilizing innovative, environmentally friendly marketing strategies like social media marketing, affiliate marketing, direct marketing, digital marketing, and content marketing, a company can promote its products and services. Compared to traditional ones, these marketing tactics have been considered as effective and efficient in the digital age. Ninety-one percent (91%) of consumers own a mobile phone, according to a global market research and technology company (Global Web Index, 2022). Therefore, businesses must think about utilizing these platforms to connect with their target market and advertise their products and services. These platforms also benefit to the financial performance of every business because these are inexpensive, minimize down on advertising expenses, and are simple to use. Thus, by consuming less paper, plastic, and fuel, these promotional trends help the company's bottom line while simultaneously having a beneficial impact on the environment.

Thevanes and Weerasinghe (2018) claimed that green marketing contributes to enhancing the economic performance of the firm, considering the strict and proper implementation of "eco-marketing" orientation and by positioning their products and services in the developing green consumer segment. It was found that green marketing offers benefits and advantages to the firm, such as brand reputation, better income, and a competitive edge. Numerous big corporations, such as IKEA, Coca-Cola, and Apple, are practicing green marketing to enhance the environmental management system of their firms to improve economic and environmental performance. These companies are known worldwide for their indispensable contribution to the environment through their green marketing practices. In return, they build a strong brand reputation that attracts a larger market, which significantly influences their profitability.

The study of Vaitone and Skackauskiene (2019) also exposed that this dimension is critical in contributing to sustainability particularly in environment by reducing harmful impact of

businesses production through lowering resource use, reducing greenhouse gas emission, and decrease pollution in general. These orientations will not just contribute to the firms' sustainability but also on the improvement of natural ecosystem.

The study of Ghodeswar and Kumar (2014) recommends that the interaction of all elements of a product system with the environment must be the primary focus of green marketing in consumer goods companies. Additionally, they should embody their dedication to environmental protection by reducing waste, preventing pollution, and conserving energy. Furthermore, they might create rules and regulations that encourage the use of environmentally friendly manufacturing techniques from raw materials to finished goods without compromising the products' quality

According to the research by Dangelico and Vocalelli (2017), environmental sustainability is a crucial consideration in the design, development, and promotion of new products, not merely a trend. The report emphasized a few green marketing strategies that companies should use that promote environmental sustainability. It suggests that packaging be crucial in reducing the environmental impact. Additionally, ecolabels are frequently incorporated into packaging, which is the same as a marketing tool. This only indicates that companies should pay attention to adopting or establishing ecologically friendly packaging that makes use of eco-friendly materials and/or minimize the amount of material needed. The internet, for example, is viewed as a means for reaching green consumers most efficiently in today's technologies. This implies that companies should always look into the possible advantages that arise from the use of new technology for green marketing, while also being conscious of how really sustainable this action is from a life cycle perspective.

Internal Green Marketing Orientation on Sustainability

Businesses are becoming more aware of the dangers of global warming and polluting the planet. Top management are becoming more mindful that companies must treat climate change

risks with the same level of importance as more conventional commercial risks like protests or competition because of mounting pressure from investors, customers, and NGOs (Olynec, 2019). That's why some companies form environmental committees for implementing internal audits in order to track their environmental performance (Papadas et al., 2019). Just like companies that produce food and beverages, they are particular in the spotlight for their involvement in increasing the amount of plastic garbage that resulted to environmental threats. In order to respond on these environmental issues, Thevanes and Arulrajah (2018) suggest that businesses are highly required to improve their environmental practices such as green initiatives to reduce their unfavorable environmental impact as well as spreading the positive environmental impact.

When it comes to health and safety, consumers improve these needs by eradicating ailments brought on by highly hazardous and chemically added artificial foods and fast foods, they increase their demand for these green products. In this view, one of the goals of going green is to influence consumers to purchase eco-friendly goods and to foster the habit of taking part in actions like product reuse and refilling to uphold ethical and moral commitments (Paco et al., 2014). Thus, by improving the health and safety of their customers, organizations can strengthen their CSR efforts.

According to Shabbir et al. (2018), companies that exhibit a high level of social responsibility can boost their customers' loyalty and brand image. That is why businesses must focus on their social impact by producing valuable goods that satisfy the needs of their consumers and society at large. Furthermore, aside from producing green products and services, they must ensure that their business operations must not interfere with or harm the society in which they operate.

Researchers and business leaders call on organizations to fulfill their social obligations, but this can only be done by integrating sustainability with ethical business practices like green initiatives (Geels et al., 2015). Thus, to improve the social performance of every business, they

have a pivotal role in societal marketing practices like this, such as evaluating the needs, wants, and expectations of the target market and delivering the desired satisfactions more effectively and efficiently than rivals, while also protecting and improving the welfare of customers and society (Kotler et al., 2005).

Thus, this dimension of green marketing orientations is crucial for businesses that aim to achieve sustainability since it focuses on internal green activities such as boosting the employees to be more environmentally friendly and organizing committees and presentations that encourage prudent green practices not just in their production but also in their daily business operations (Papadas et al., 2019).

Theoretical Framework

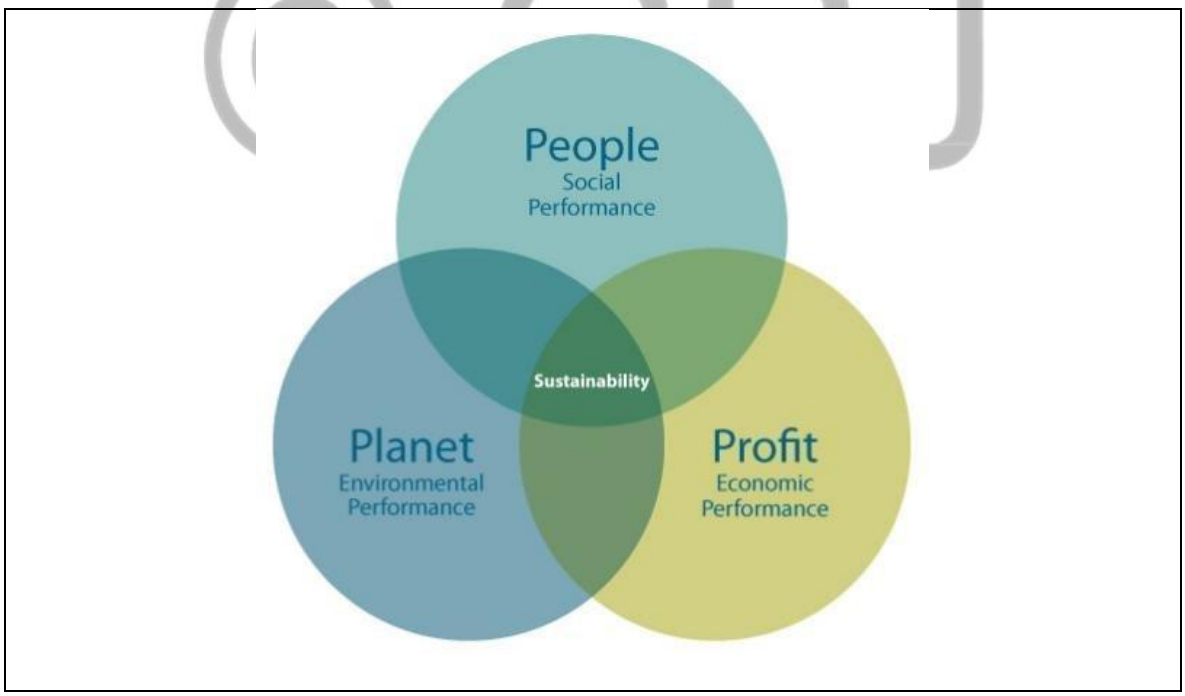

Figure 1: John Elkington's Triple Bottom Line (TBL) Theory

Triple Bottom Line Theory

This study utilized the Triple Bottom Line theory of Elkington (1997) in measuring and analyzing the firm's performance and success using economic (profit), social (people), and

environmental (planet) aspects (Goel, 2010). This is referred to as the practical framework of sustainability (Rogers and Hudson, 2011). Figure 1 shows the TBL agenda emphasizing the organization's economic performance, social performance, and environmental performance in a consistent and balanced manner.

This theory will present the influence of the green marketing orientation towards sustainability in terms of economic performance, social performance, and environmental performance.

a. Economic Performance (Profit)

This is the economic impact that business has on society. It is the income and expenditure, taxation, business conditions, work, and company diversity factors. Economic performance deals with creating real economic value that is enjoyed by society and the public at large. With the green marketing orientation of manufacturing firms, this will determine if they have a good economic performance that contributes to sustainability.

b. Social Performance (People)

This is the business impact on internal and external stakeholders, particularly employees and the community. A business that has a good social performance addresses the well-being and benefits of the people in which it operates. This performance also deals with fair trade practices, a safe workplace, ethical standards, charitable contributions, and positive contributions to community living standards. This will determine if the green marketing orientation of manufacturing firms in Region XII has a good social performance.

c. Environmental Performance (Planet)

This is all about environmental stewardship. For every business to have good environmental performance, the green marketing orientations of manufacturing firms should enhance and contribute to the natural order and reduce the environmental impact in a holistic way that is not just economical but also easy to execute and adopt. This also includes the

utilization of environmentally friendly materials, control of energy and water consumption, and reducing waste in landfills. Business organizations should also make significant contributions, such as minimizing packaging waste and understanding the entire environmental cost of manufacturing, from raw material harvesting to end-user disposal.

Conceptual Framework

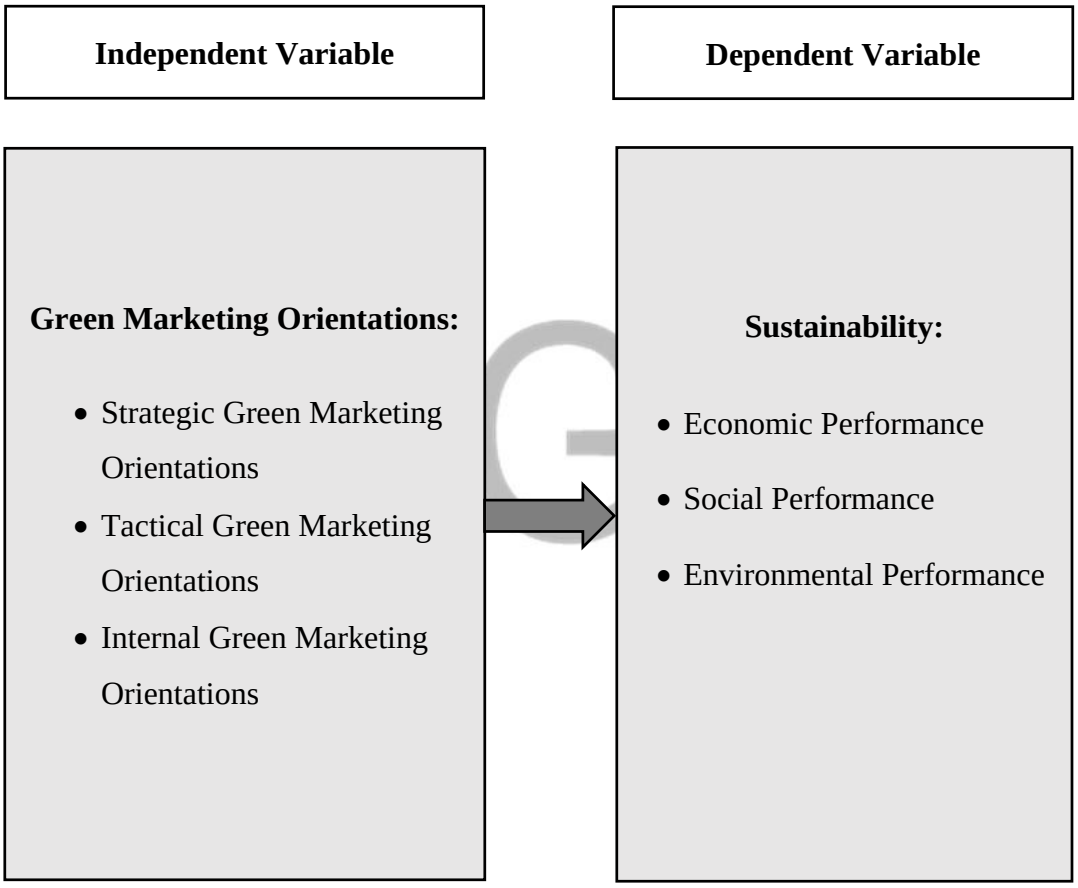

Figure 2: Schematic Diagram of the Conceptual Framework

Statement of the Problem

Generally, this paper aims to investigate the influence of green marketing orientation on sustainability. Specifically, the study aims to answer the following:

1. What is the extent of green marketing orientations in terms of strategic, tactical, and internal green marketing orientation of manufacturing firms in Region XII?
2. What is the extent of sustainability in terms of economic performance, social performance, and environmental performance of Manufacturing Firms in Region XII?
3. Which of these three green marketing orientation indicators highly influences sustainability?
4. What are the lived experiences of the participants regarding green marketing orientations?
5. What are the sustainability issues of manufacturing firms in Region XII?
6. How do qualitative results explain the quantitative results?

Significance of the Study

This study will provide relevant knowledge and practical inputs to the following:

Business Owners. The study is necessary for the business to determine their contribution towards the protection of the environment through green marketing orientations. This will develop their knowledge and encourage them to go green. This will also serve as a blueprint for organizations to adapt environmentally friendly business approaches and standard adherence to achieve sustainable development. It will also promote and intensify economic, social, and environmental sustainability in their products and services and help them be recognized as good corporate citizens.

Marketing Managers. The study will give them an understanding of the opportunities and challenges of green marketing. This knowledge will allow them to develop their product design and create marketing strategies that promote eco-friendly purchasing.

Consumers. The study will increase awareness and create consciousness among consumers about the importance of sustainability and the environmental impact of their purchasing decisions and actions. This will encourage them to raise their environmental concerns and to be socially responsible by choosing green products and services as part of their daily lives.

Policymakers. The study is necessary for policymakers to develop plans and public policy to ensure every business and community to invest in green marketing and take strict action against businesses that cause a detrimental impact on the environment. Furthermore, the present study is relevant to the government in developing environmental programs through environmental education throughout the nation.

Academe. The result of the study would give them valuable insights about green marketing and its significant contribution to business and market. These will be used in crafting the syllabus and intervention to business and management students.

Future Researchers. The study will be a useful reference for researchers who plan to consider green marketing orientations and sustainability in terms of economic and social and environmental aspects as part of their academic work. The results of this study will be useful to future researchers in considering other variables not mentioned in this study.

Definition of Terms

This section defines the terminologies applied for further understanding of the study:

Green marketing orientations- It refers to the extent to which a manufacturing firm in Region XII engages in strategic, tactical, and internal processes and activities which holistically aim at creating, communicating, and delivering products and or services with the minimal environmental impact (Papadas, et al., 2017).

Strategic green marketing orientation- The extent to which manufacturing firms in Region XII integrate the environmental imperative in strategic marketing decisions (Papadas, et al., 2017).

Tactical green marketing orientation- The extent to which manufacturing firms in Region XII embody environmental values in tactical marketing decisions (Papadas, et al., 2017).

Internal green marketing orientation- The extent of assimilation of corporate environmental values by all internal stakeholders of manufacturing firm in Region XII (Papadas, et al., 2017).

Manufacturing Firms- This refers to the firms that engage in the extraction, development, assembly, conversion, production of food, textiles, woods, papers, chemicals, and plastics which are actively operating in Region XII.

Sustainability- This is the ability of the manufacturing firms to achieve and maintain sustainable development through the Triple Bottom Line (TBL) or the three pillars, which are economic performance (profit), social performance (people), and environmental performance (planet) (Elkington, 2018). Furthermore, it requires orientations and practices that satisfies the needs of the present without compromising the ability of the future generation to meet their own demands.

Economic performance- This performance ensures the economic efficiency and income of manufacturing firms with the green marketing orientations. To be sustainable, a manufacturing firm must be profitable (Beattie, 2021).

Social performance- This performance ensures the quality of life, safety, and services for people with the green marketing orientation. To be sustainable, a manufacturing firm should have the support and approval of its internal and external stakeholders, the community in which it runs, as well as being a good neighbor and community member on a local and global scale (Beattie, 2021).

Environmental performance- This performance ensures that natural resources are available and of high quality with the green marketing. To be sustainable, manufacturing firms must concentrate on lowering their carbon footprints, packaging waste, water usage, and overall negative environmental impact (Beattie, 2021).

CHAPTER II

METHODS

This chapter outlines the methodologies employed in the study, which are the research design, locale of the study, respondents, sampling technique, instrumentation, data gathering procedure, ethical considerations, validity and reliability, data analysis, and limitations of the study.

Research Design

Sequential Explanatory Design was used to gain an in-depth understanding and employ an objective analysis of the green marketing orientation as well as the sustainability of manufacturing firms in Region XII. Figure 3 shows the schematic diagram of the design employed in this study.

In phase 1, the quantitative data was collected and analyzed through a survey questionnaire to determine the level of green marketing orientation and sustainability. In phase 2, the qualitative data was also collected through in-depth interview (IDI) and focus group discusiion (FGD) to determine the standpoints and lived experience of the participants, and the issues they encounter with sustainability. In this phase, the collected qualitative data was analyzed to explain and support the results of the quantitative data. These are equally considered, initiated, and independently analyzed before being interpreted together (Creswell & Creswell, 2018). Thus, this provides an in-depth understanding of how green marketing orientations influence the sustainability of manufacturing firms.

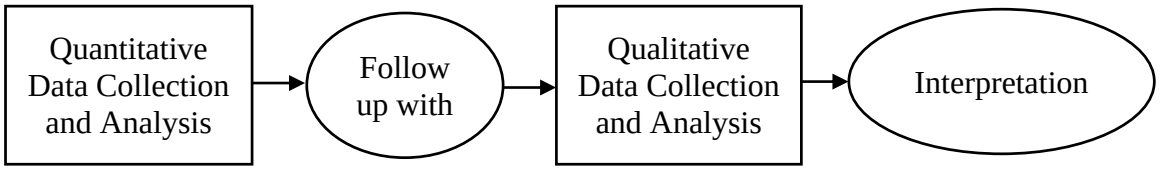

Figure 3: Schematic diagram of Sequential Explanatory Research Design (Cresswell and Plano-Clark, 2011)

Locale of the Study

The study was conducted at the selected manufacturing firms that are actively operating in Region XII (map shown in Figure 4). Specifically, they are in key cities where several manufacturing firms are in General Santos City, Kidapawan City, Koronadal City, and Tacurong City. Thus, they are engaged in the production of food and beverage, wood, and agricultural products.

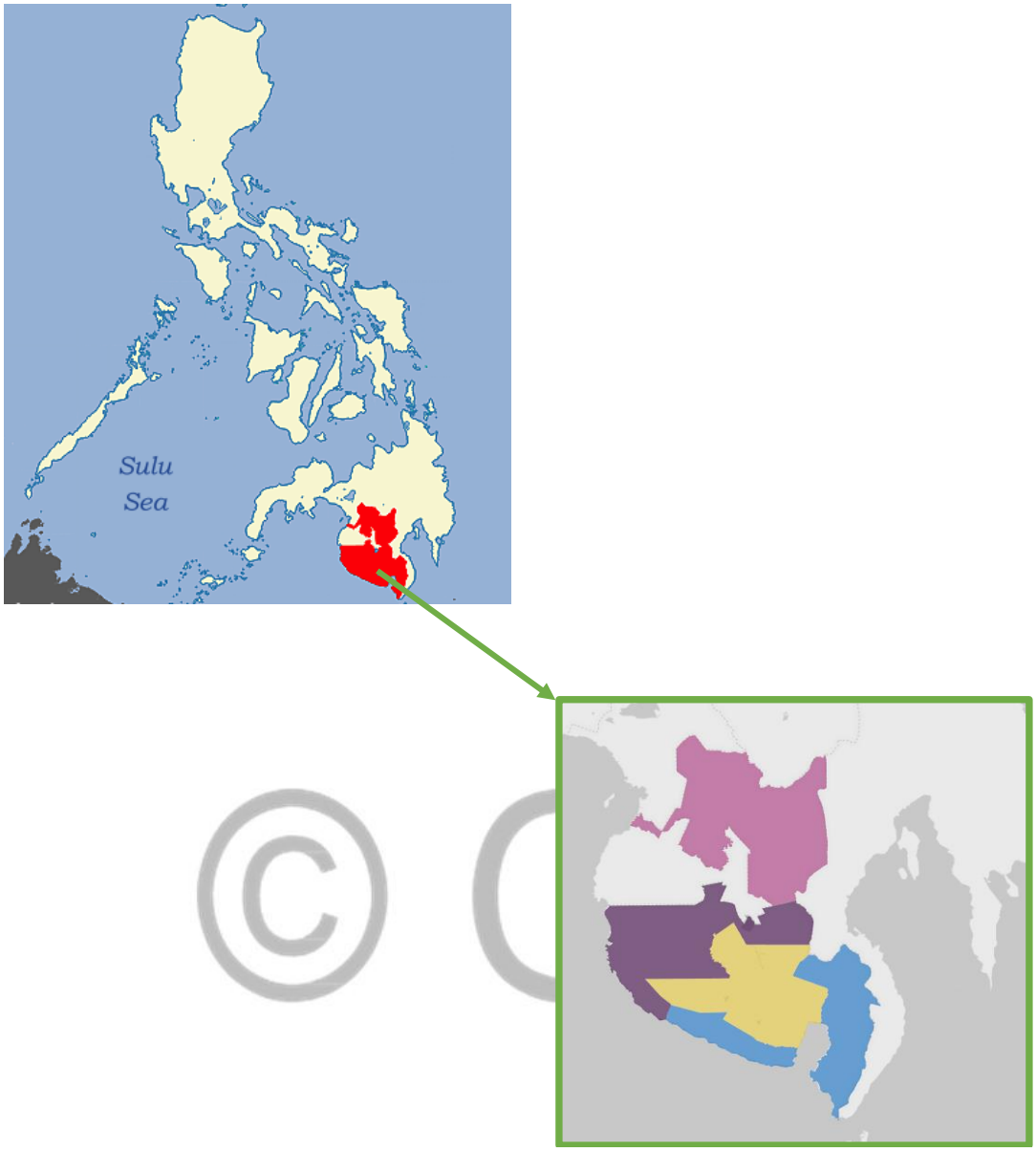

Figure 4: Philippine Map Highlighting Region XII as the Locale of the Study

Respondents

The consideration in respondents and participants collection is the top management of the manufacturing firms in Region XII. They are the executives, managers, and supervisors. To ensure the appropriate personnel were included, they must be knowledgeable in green marketing orientations and sustainability performance of their manufacturing firm. *Quantitative Strand*

According to the data provided by the city government, there are a total of 412 manufacturing firms in the key cities in Region XII as of last quarter of 2023 that specialize in food, beverage, wood, and agricultural products. There are a total of 293 establishments in General Santos City, 28 in Kidapawan City, 67 in Koronadal City, and 24 in Tacurong City.

The sample size obtained using Slovin's Formula was 202, with a margin of error of 0.05, out of this, 157 samples were returned and found useful, resulting in a sample size of n=157. The response rate is 78 percent, considered sufficient for data analysis. Mugenda and Mugenda (2003) state that a response rate of 50% is considered sufficient, 60% is considered satisfactory, and anything beyond 70% is considered excellent. This suggests that the response rate of 78% in this particular instance was satisfactory. Table 1 presents the aggregate count of respondents with the type of industry who took part in the study for each city.

Table 1. Number of Respondents per City with the Type of Industry

Type of Industry	General Santos	Kidapawan	Koronadal	Tacurong	Total
Food and Beverage	48	10	40	12	110
Wood	22	9	1	5	37
Agricultural Products	2	2	6	-	10
Total	**72**	**21**	**47**	**17**	**157**

Qualitative Strand

To conduct a more in-depth examination of qualitative data, a total of ten (10) participants underwent in-depth interview. The purpose of these interviews was to determine the

lived experiences of participants in green marketing and the issues they encountered in relation to sustainability. Finally, three (3) participants took part in the Focus Group Discussion (FGD) to discuss the qualitative aspects of green marketing orientations, sustainability, and its influences. Van Eeuwijk and Angehrn (2017) propose that even with a group of three participants, conducting a Focus Group Discussion (FGD) is acceptable as long as the participants are experienced and well-versed in the topic under discussion.

Sampling Technique

Quantitative Strand

This study employed both probability and non-probability sampling. They were selected by following the mechanisms for Cluster Sampling and Purposive Sampling technique to ensure that the gathered data have an accurate, objective, and information about the green marketing orientation.

In cluster sampling, it involves the division of a target population into distinct clusters, the manufacturing firms located in the key cities of Region XII. From these clusters, a subset is randomly selected to form the sample for the study. This method allows researchers to efficiently gather data by focusing on specific groups within the population, while still maintaining the principles of random selection and probability sampling. Ideally, the clusters should serve as mini representations of the entire population (Simkus, 2023).

Qualitative Strand

The study utilized purposive sampling which is a non-probability sampling for the qualitative inquiry. Crossman (2020) states that purposive sampling is a non-probability sample that is selected based on characteristics of a population and the population of the study. The researcher is the one who chose the sample considering that they are included on the classification of the needed participants.

Instrumentation

Quantitative Strand

The research study utilized an adapted survey questionnaire employing 5-point Likert scale 1 (Strongly Disagree) to 5 (Strongly Agree). The survey questionnaire has three parts: Part 1 is for the profile of the manufacturing firms; Part 2 is for the extent of green marketing orientation; and part 3 is for the extent of sustainability.

Green marketing orientation scale. This study utilized the survey questionnaire developed by Papadas et al. (2017) with 21 items. This is to assess the extent of strategic green marketing orientations, tactical green marketing orientations, and internal green marketing orientations.

The ratings were described using the following interpretation matrix:

Range of Means	Description	Interpretation
4.50 – 5.00	Strongly Agree	The extent of green marketing orientation is very high or evident and strictly implemented.
3.50 – 4.49	Agree	The extent of green marketing orientation is high or evident but not necessarily implemented.
2.50 – 3.49	Neutral	The extent of green marketing orientation is moderate or could either be or not implemented and evident
1.50 – 2.49	Disagree	The extent of green marketing orientation is low or there is green marketing orientation but not evident and not implemented.
1.00 – 1.49	Strongly Disagree	The extent of green marketing orientation is very low or there is no strict adherence to green marketing orientation.

Sustainability scale. To measure the extent of sustainability of manufacturing firms, the survey questionnaire of Yong et al. (2020); Zhu et al. (2008); Laosirihongthong et al. (2013); Paulraj (2011) was adapted with 15 items. This is to measure the extent of sustainability

achieved by manufacturing firms, encompassing economic performance, social performance, and environmental performance.

The ratings were described using the following interpretation matrix:

Range of Means	Description	Interpretation
4.50 - 5.00	Strongly Agree	The extent of sustainability is very high or strongly evident.
3.50 - 4.49	Agree	The extent of sustainability is high or oftentimes evident.
2.50 - 3.49	Neutral	The extent of sustainability is moderate or either evident or not.
1.50 - 2.49	Disagree	The extent of sustainability is low or rarely evident.
1.00 - 1.49	Strongly Disagree	The extent of sustainability is very low or not evident at all

Qualitative Strand

In qualitative data, a semi-structured questionnaire was utilized to determine the lived experience of the participants with green marketing and sustainability issues of manufacturing firms. On the other hand, this study employed in-depth interviews and focus group discussions to gauge participants' perspectives on the extent of green marketing orientation and sustainability. The guiding questions underwent content validation by three (3) experts in the research field. Furthermore, documentation tools including audio recording devices, paper, and pens are utilized in recording the participants' responses.

Data Gathering Procedures

The flow of the sequential explanatory design is presented in Figure 5. It shows the phases of the mixed-method study, which begin from quantitative phase, second phase is the qualitative phase and finally the integration of quantitative and qualitative results.

Quantitative Strand

A documented agreement and authorization letter were created. The purpose was to formally request authorization from Notre Dame University Graduate School, with the endorsement of the research adviser, reader, and the dean.

Before conducting the survey, a letter was sent and coordinated with the top management personnel of the selected manufacturing firms in Region XII. As part of the research process, the study was designed to include an orientation for the participants. Consent forms were also completed to ensure that their participation was voluntary.

The schedules of the respondents were carefully taken into account to ensure their availability during the data collection process, particularly in assisting with the surveys. The quantitative data collection phase spanned a duration of one month. Furthermore, after collecting the data, the numerical figures were carefully analyzed using statistical methods. Afterwards, the findings were utilized to formulate the guided questions for qualitative investigation.

Process	Procedure	Products

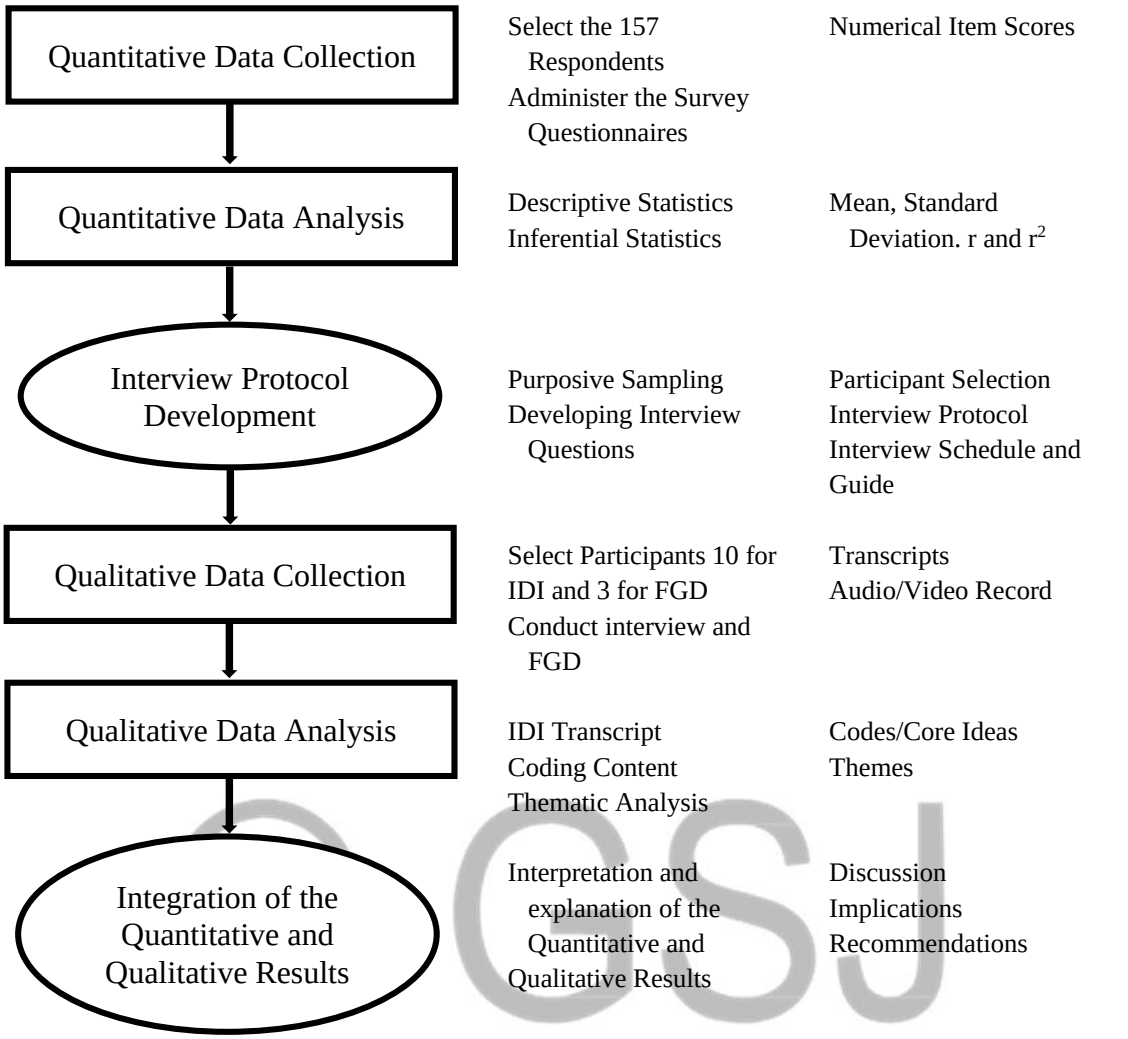

Figure 5: Flow of Procedures

Qualitative Strand

Before gathering the data through interviews and focus group discussion, a letter was sent and coordinated to the participants which are the top management personnel of the selected manufacturing firms in Region XII. Permits to conduct the study were also secured.

The researcher used materials and documentation tools such as audio recording, smartphones, paper, and pen. Employing a research assistant was also considered to help facilitate and record the interviews. Before commencing the recording of the interview, the interviewer obtained full permission from the participants to record the interview session.

The qualitative analysis was interpreted through identifying the transcription, coding, and common generated themes. Thus, these were defined as well as described in context with the study. Finally, the researcher gave debriefing sessions to the participants. This was done through reporting the relevant inputs that were analyzed and generated from the results of the study.

Ethical Considerations

To ensure that the study impose proper proceedings, the Psychological Association of the Philippines (PAP) Code of Ethics on Research states that the researcher should follow:

1. The rights of the participants were respected whether they would decide to refuse on the latter process of the study. Their participation were not forced and their engagement at the course of this study was observed.
2. There was orientation initiated before the study proper. The process and duration of the study was comprehensively discussed to the participants. Furthermore, the informed consent was given prior to the conduct of the study's proceedings.
3. Prior to the interview, participants are advised to consent to the audio recording. The researcher guaranteed that the recordings would be used exclusively for transcription and research purposes.
4. The information that was disclosed and gathered from the participants are all confidential. Their respective identities are kept. If there is an observable harm, inconvenience, and unwillingness to participate in the study, they shall be assisted to authorized personnel for immediate assistance and needed intervention.
5. Upon the completion of analyzed data both and quantitative measures and qualitative analysis, the researcher gave debriefing and provide a summarized comprehensive report on the results of the study and its relevant implications in manufacturing firms.

Ethical considerations were observed to reciprocate participant's trust and confidence to the researcher and strict compliance on the implementation and conduct of research.

Validity and Reliability

Quantitative Strand

The adapted questionnaire was utilized to assess its intended purpose, specifically in describing the extent of green marketing orientation and sustainability. Therefore, the survey instrument underwent validation from three experts in the field of business. Furthermore, pilot testing was conducted to assess the strength of the psychometric properties of the instrument, ensuring validity and reliability in measuring the necessary indicators and variables of the study. Table 2 presents the reliability test result of questionnaires used in the study highlighting the number of items and its Cronbach alpha.

Table 2. Reliability Test Result of Questionnaires

Indicators	Number of Items	Cronbach Alpha (α)
Strategic green marketing orientation	9	.836
Tactical green marketing orientation	5	.815
Internal green marketing orientation	7	.814
Economic performance	5	.808
Social performance	5	.799
Environmental performance	5	.754
Total Number of Items	**36**	

Following the reliability test, the results indicated high Cronbach's alpha values for various dimensions, including strategic green marketing orientation (α=.836), tactical green marketing orientation (α=.815), internal green marketing orientation (α=.814), economic performance (α=.808), social performance (α=.799), and environmental performance (α=.754). According to Field (2005), a Cronbach's alpha value greater than 0.7 indicates that the

instrument is a reliable measurement tool. Thus, it can be concluded that the survey instrument used in the study is highly reliable.

Qualitative Strand

For the in-depth interview and focus group discussion, three (3) research experts looked over the interview guide questions to find out the standpoints of participants on the extent of green marketing orientations, extent of sustainability, and its significant influences. The instrument validators have ensured that the instrument is suitable for providing significant descriptors for the study's specific variables and achieving the overall research objectives.

Data Analysis

Quantitative Strand

To analyze the quantitative data, the means, overall means, and standard deviation were computed using the IBM Statistical Package for the Social Sciences (SPSS) Version 20. These descriptive statistics were used to describe the extent of green marketing orientations and the sustainability of manufacturing firms in Region XII.

Furthermore, IBM SPSS software was utilized to conduct multiple regression analysis (MRA) in order to assess which dimension of green marketing orientation highly influences the sustainability of manufacturing firms.

Qualitative Strand

Thematic analysis was used to identify recurring themes in the qualitative data obtained from participants' interviews, which captured their lived experiences with green marketing, issues with sustainability, and explanation of quantitative results.

Limitations of the Study

This study solely focused on green marketing orientations and its influence on sustainability of the manufacturing firms. The respondents and participants of this research were

limited to those top management of manufacturing firms in Region XII that are engaged in the production of food and beverage, woods, and agricultural products.

CHAPTER III

RESULTS

In this chapter, results are presented under the study's objectives. The quantitative strand identified various aspects related to green marketing orientations and sustainability. This includes the extent of strategic green marketing orientations, tactical green marketing orientations, internal green marketing orientations, the extent of sustainability, and the green marketing orientation dimension that highly influence the sustainability. On the other hand, the qualitative strand focused on examining participants' lived experiences concerning green marketing and sustainability issues.

1. Extent of green marketing orientations in terms of strategic, tactical, and internal of manufacturing firms in Region XII.

Presented in Table 3 are the survey results on the extent of green marketing orientations in terms of strategic green marketing orientation, extent of tactical green marketing orientation, and internal green marketing orientation. For strategic green marketing orientations, the results revealed that manufacturing firms are involved in strategic green marketing processes and activities. Item 1, with a mean of 4.15 and a standard deviation of.876, achieved the highest mean, suggesting a consensus among firms to invest in low-carbon technologies for their production processes. On the other hand, item 5, with a mean of 3.83 and a standard deviation of 1.005, recorded the lowest mean, indicating a consensus among firms to establish a separate department or unit specializing in environmental issues for their organization.

For tactical green marketing orientations, the result shows that the manufacturing firms agreed that they were involved in these green marketing processes and activities. Item 10 obtained the highest mean (mean = 4.48, SD =.656), indicating that they 'agreed' to encourage the use of e-commerce because they consider it eco-friendly. On the other hand, item 12 recorded the lowest mean (mean = 4.17, SD =.826), indicating that manufacturing firms prioritize paperless procurement whenever feasible. The overall mean of 4.31 also indicates agreement with the statements relating to their adherence to tactical green marketing orientations.

Lastly, for internal green marketing orientation, the result reveals that the manufacturing firms expressed agreement that they were involved in the internal green marketing orientations. Item 17 yielded the highest mean (mean = 4.17, SD =.912), suggesting that their employees 'agreed' to uphold the environmental values of their organization. Item 3 recorded the lowest mean (mean = 3.37, SD =.970), indicating that manufacturing firms have established internal environmental prize competitions to encourage eco-friendly behavior. The calculated overall mean of 3.95 suggests that the participants generally agreed with the statements about their adherence to internal green marketing orientations.

Table 3. Extent of Strategic GMO, Internal GMO, and Internal GMO

Items	Mean	SD	Description
Strategic Green Marketing Orientation	**4.00**		**Agree**
1. We invest in low-carbon technologies for our production processes.	4.15	.876	Agree
2. We use specific environmental policy for selecting our partners.	3.92	.967	Agree
3. We invest in Research and Development programs in order to create environmentally friendly products/services.	4.01	1.044	Agree
4. We make efforts to use renewable energy sources for our products/services.	4.07	.825	Agree
5. We create a separate department/unit specializing in environmental issues for our organization.	3.83	1.005	Agree
6. We participate in environmental business networks.	4.02	1.016	Agree
7. We engage in dialogue with our stakeholders about environmental aspect of our organization.	3.97	.898	Agree
8. We implement market research to detect green needs in the marketplace.	3.90	.883	Agree
9. Among other target markets, we also target to environmentally conscious consumers.	4.10	.786	Agree
Tactical Green Marketing Orientation	**4.31**		**Agree**

10. We encourage the use of e-commerce because it is more eco-friendly.	4.48	.656	Agree
11. We prefer digital communication methods for promoting our products/services because it is more eco-friendly.	4.45	.711	Agree
12. We apply a paperless policy in our procurement where possible.	4.17	.826	Agree
13. We use recycled or reusable materials in our products/services.	4.22	.865	Agree
14. We absorb the extra cost of an environmental product/service.	4.25	.748	Agree
Internal Green Marketing Orientation	**3.95**		**Agree**
15. Exemplar environmental behavior is acknowledged and rewarded.	3.96	.876	Agree
16. Environmental activities by candidates are a bonus in our recruitment process.	3.80	.946	Agree
17. We have created internal environmental prize competitions that promote eco-friendly behavior.	3.73	.970	Agree
18. We form environmental committees for implementing internal audits of environmental performance.	3.75	.947	Agree
19. We organize presentations for our employees to inform them about our green marketing strategy.	4.08	.898	Agree
20. We encourage our employees to use eco-friendly products/services.	4.14	.895	Agree
21. Our employees believe in the environmental values of our organization.	4.17	.912	Agree

Scale	Range of Means	Description
5	4.50-5.00	Strongly Agree
4	3.50-4.49	Agree
3	2.50-3.49	Neutral
2	1.50-2.49	Disagree
1	1.00-1.49	Strongly Disagree

Summary of the Extent of Green Marketing Orientations

Presented in Table 4 is a summary of the overall mean for the extent of strategic, tactical, and internal green marketing orientations. As indicated, it has a 4.09 grand mean, indicating a consensus among manufacturing firms in Region 12 that green marketing orientations is evident in their firms. Out of all the items, the tactical green marketing orientation achieved the highest overall mean score of 4.31. Next, the strategic green marketing orientation achieved an overall mean of 4.00. Lastly, internal green marketing orientation got an overall mean of 3.95. All of these demonstrate the consensus among manufacturing firms about the presence of strategic, tactical, and internal green marketing orientations within their firms.

*Table 4***.** Summary of the Extent of Green Marketing Orientations

Green Marketing Orientations	Overall Mean	Description
1. Strategic Green Marketing Orientation	4.00	Agree
2. Tactical Green Marketing Orientation	4.31	Agree
3. Internal Green Marketing Orientation	3.95	Agree

Grand Mean	4.09	Agree

Scale	Range of Means	Description
5	4.50-5.00	Strongly Agree
4	3.50-4.49	Agree
3	2.50-3.49	Neutral
2	1.50-2.49	Disagree
1	1.00-1.49	Strongly Disagree

2. Extent of Sustainability of Manufacturing Firms in Region XII.

Presented in Table 5 are the survey results on the extent of sustainability in terms of economic performance, social performance, and environmental performance. The manufacturing firms surveyed showed agreement towards economic performance. The result showed that item 5 had the highest mean score of 3.82, with a standard deviation (SD) of 1.018, this high standard deviation implies inconsistent or varied responses from the respondents. However, it can still be considered a consensus among manufacturing firms regarding a decrease in fines for environmental accidents. On the other hand, it is worth noting that Item 3 had the lowest mean value of 3.52 with a standard deviation of 1.047, which implies a high SD, indicating inconsistent or varied responses from respondents. Nevertheless, it is still worth noting that there is prevailing agreement among manufacturing firms that they have decreased fees for waste treatment.

For social performance, it can be observed that the manufacturing firms surveyed have indicated an inclination towards focusing on the social performance of their respective firms. The results revealed that Item 4 had the highest mean score (mean = 4.52, SD =.637), indicating a strong agreement among manufacturing firms regarding improving occupational health and safety for employees. The data reveals that the lowest mean score was observed in Item 1 (mean = 4.36, SD =.893). This finding suggests that the manufacturing firms have improved overall stakeholders' welfare. The calculated overall mean of 4.39 indicates that the manufacturing firms generally agreed with the statements on their adherence to social performance.

Finally, the surveyed manufacturing firms have shown a preference for focusing on their own environmental performance. The results revealed that Item 1 had the highest mean score (mean = 4.31, SD =.817), indicating a consensus among manufacturing firms regarding improved compliance with environmental standards. The data reveals that the lowest mean score was observed in Item 3 (mean = 4.15, SD =.778). This finding suggests that manufacturing firms have reduced their energy consumption. The obtained overall mean of 4.20 suggests that the manufacturing firms, on average, expressed agreement with the statements pertaining to their adherence to environmental performance.

Table 5. Extent of Sustainability in terms of Economic Performance, Social Performance, and Environmental Performance

Items	Mean	SD	Description
Economic Performance	**3.62**		**Agree**
1. Our manufacturing firm decreases in costs for materials purchasing.	3.57	1.008	Agree
2. Our manufacturing firm decreases in costs for energy consumption.	3.58	.935	Agree
3. We have decreased in fees for waste treatment.	3.52	1.047	Agree
4. We have decreased in fees for waste discharge.	3.61	1.004	Agree
5. We have decreased in fines for environmental accidents.	3.82	1.018	Agree
Social Performance	**4.39**		**Agree**
1. Our manufacturing firm has improved overall stakeholders' welfare.	4.26	.893	Agree
2. Our manufacturing firm has gained improvement in community health and safety.	4.38	.703	Agree
3. Our manufacturing firm has reduced the environmental impacts and risks to general public.	4.30	.711	Agree
4. Our manufacturing firm has improved the occupational health and safety of employee.	4.52	.637	Strongly Agree
5. Our manufacturing firm has improved the awareness and protection of the claims and rights of people in the community.	4.47	.666	Agree
Environmental Performance	**4.22**		**Agree**
1. Our manufacturing firm has improved compliance with environmental standards.	4.31	.657	Agree
2. Our manufacturing firm has reduced airborne emissions.	4.18	.723	Agree
3. Our manufacturing firm has reduced in energy consumption.	4.15	.778	Agree
4. Our manufacturing firm has reduced in material usage.	4.17	.727	Agree
5. Our manufacturing firm has reduced consumption of hazardous materials.	4.29	.817	Agree

Scale	Range of Means	Description
5	4.50-5.00	Strongly Agree
4	3.50-4.49	Agree

3	2.50-3.49	Neutral
2	1.50-2.49	Disagree
1	1.00-1.49	Strongly Disagree

Summary of the Extent of Sustainability

The summary of the overall mean obtained in the three indicators of sustainability is shown in Table 6. As indicated, it has a 4.07 grand mean which described that the sustainability is evident in the manufacturing firms in Region XII. Among these, social performance obtained the highest overall mean of 4.39. This is followed by the environmental performance with a 4.22 overall mean. Lastly, the economic performance got the lowest overall mean of 3.62. These described that all sustainability indicators are evident in the manufacturing firms in Region XII.

Table 6. Summary of the Extent of Sustainability

Sustainability Indicators	Overall Mean	Description
1. Economic Performance	3.62	Agree
2. Social Performance	4.39	Agree
3. Environmental Performance	4.22	Agree
Grand Mean	**4.07**	**Agree**

Scale	Range of Means	Description
5	4.50-5.00	Strongly Agree
4	3.50-4.49	Agree
3	2.50-3.49	Neutral
2	1.50-2.49	Disagree
1	1.00-1.49	Strongly Disagree

3. Green marketing orientations indicators that highly influence the sustainability.

Before conducting a multiple regression analysis, this study conducted preliminary analyses and checked the normality assumption (See Appendix C). This procedure is essential in examining the quality of data, identifying any missing values, outliers, or errors that may affect the validity of the regression analysis results. Upon conducting these procedures, this study concluded that all requirements are met.

Table 7.1 contains the result of the correlation of the variables—between the three dimensions of green marketing orientations and sustainability. Correlation analysis is necessary as a prelude to regression to determine the influence between variables; hence, the data in the table presents, which of the three dimensions of green marketing orientations have the stronger correlation on the dependent variable. At a glance, it can be observed that there is a significant relationship between the three dimensions of green marketing orientations and sustainability ($p<.05$).

It is also revealed in Table 7.1 the findings that indicate a significant relationship between tactical green marketing orientation and sustainability, as evidenced by Pearson's correlation coefficient of 0.549 R-value. This study reveals a positive correlation between manufacturing firms' adoption of tactical green marketing orientation and their sustainability performance. In other words, when manufacturing firms prioritize and implement tactical green marketing orientations in their operations, it leads to higher levels of sustainability. Conversely, a moderate correlation of 0.418 and 0.382 exists between the strategic green marketing orientations, internal green marketing orientations, and sustainability. The findings of this study suggest that the adoption of strategic green marketing orientations and internal green marketing orientations has a significant impact on the overall sustainability of a manufacturing firms. The existence of a statistically significant relationship between variables signals the need to use regression analysis as a method of analysis.

Table 7.1 Correlations between Green Marketing Orientation Indicators and Sustainability

Indicators correlated with sustainability	r value	p-value	Sig. Level
Strategic GMO	.418	.000	Significant
Tactical GMO	.549	.000	Significant
Internal GMO	.382	.000	Significant

It can be seen that the linear combination of the three green marketing orientation measures was significantly related to the Sustainability index, $R^2 = .34$, $F(3, 153) = 26.55$, $p < .01$. The sample multiple correlation of .59, indicate that approximately 34% of the variance of Sustainability index can be accounted for the linear combination of GMO measures.

The individual predictors were examined further and the results were presented in Table 7.2, indicated that Strategic GMO ($t = .929$, $p = .354$), Tactical GMO ($t = 6.09$, $p < .001$), and Internal GMO ($t = 1.29$, $p = .200$). Based on these results, tactical green marketing orientation appear to be the strongest and the only significant predictor of Sustainability.

Table 7.2 Multiple Regression Analysis on the Influence of Strategic GMO, Tactical GMO, and Internal GMO on Sustainability

Variables	***Standard Coefficient Beta***	***p-value***	***t***	***Sig.***
Strategic GMO	.103	.354	.929	Not Significant
Tactical GMO	.451	.000	6.091	Significant
Internal GMO	.136	.200	1.288	Not Significant
$r^2 = .342$				
F = 26.55				
p = <.05				

Split-half Method

This study used a split-half reliability method to assess the instrument's internal consistency and validate the findings on the influence of three green marketing orientation indicators on sustainability. In this test, the 157 was split into two halves. This method will provide insights into the degree of consistency with which the measure evaluates the construct of interest.

Table 7.3 reveals the results of this test; through multiple regression analysis, the half-split method confirmed that tactical green marketing orientations are consistently the only and strongest predictor of sustainability. On the other hand, the other two indicators of green

marketing orientation remain to have no significant influence, as their p-value is not less than .05.

Table 7.3 Multiple Regression Analysis on the Influence of Strategic GMO, Tactical GMO, and Internal GMO on Sustainability through Split-half Method

Variables	***Standard Coefficient Beta***	***p-value***	***t***	***Sig.***
Strategic GMO	.315	.072	1.822	Not Significant
Tactical GMO	.480	.000	4.959	Significant
Internal GMO	-.073	.665	-0.435	Not Significant
r^2 = .382				
F = 15.450				
p = <.05				

Qualitative Results

Profile of the Participants

The data presented in Table 8 pertains to the individuals who participated in the in-depth interviews and focus group discussions. Ten (10) participants were identified as owners or managers who willingly agreed to take part in the inquiry. As a measure to uphold research ethics, the researcher opted to employ a pseudonym rather than using the actual identities of the participants (Lahman et al. 2023). This decision was made to safeguard their privacy throughout the study.

Table 8. Profile of the Participants

CODE	**PSEUDONYM**	**POSITION**	**YEARS IN THE FIRM**	**SUB INDUSTRY**	**LOCATION (City)**
IDI-001	Jennifer	Owner/Manager	7	Food	Tacurong
IDI-002	Tristan	Owner/Manager	8	Food	Koronadal
IDI-003	Daisy	Owner/Manager	8	Beverage	Koronadal
IDI-004	Kimberly	Manager	6	Food	Koronadal
IDI-005	Donald	Owner/Manager	25	Food	Koronadal
IDI-006	Vicky	Owner/Manager	36	Food	General Santos
IDI-007	Benny	Owner/Manager	11	Agricultural	General Santos

IDI-008	Daniel	Manager	7	Wood	Kidapawan
IDI-009	Lloyd	Owner/Manager	8	Wood	Kidapawan
IDI-010	Hannah	Manager	8	Food	Koronadal
FGD-001	Gretchen	Owner/Manager	10	Food	Koronadal
FGD-002	Jacky	Owner/Manager	6	Beverage	Koronadal
FGD-003	Alexa	Owner/Manager	10	Wood	General Santos

4. Lived Experiences of Participants in Green Marketing.

This section provides an account of the lived experiences of the participants in green marketing. Table 9 displays the three fundamental themes such as expensive green products and equipment, unavailability of green materials or suppliers, and active involvement for green activities.

*Table 9***.** Lived Experiences of Participant in Green Marketing.

Essential Themes	**Core Ideas**
Expensive green products and equipment	Facing challenges in acquiring environmentally friendly goods and equipment due to its high price.
	Needing to increase product prices as a result of increasing expenses associated with green materials.
	Opting to utilize non-eco-friendly materials due to their lower cost compared to green materials.
Unavailability of suppliers for green materials	Having difficulties finding alternative suppliers in the local area that sells eco-friendly materials.
	Needing to purchase eco-friendly materials and machines from other cities due to limited supplies in the local market.

Active involvement in green activities	Exerting best effort to engage in daily waste segregation practices.
	Participating in tree growing activities to promote environmental conservation.
	Strictly observing the environmental standards and ordinance set forth by the respective the city government.

Expensive Green Products and Equipment. The core ideas why expensive green products and equipment a challenge in acquiring environmentally friendly goods and equipment is due to its high price; there is a need to increase product prices as a result of increasing expenses associated with green materials and utilizing non-eco-friendly materials instead due to their lower cost compared to green materials. Presented below are the precise narratives made by the participants.

Daisy, one of the participants shared her experience about the utilization of eco-friendly products. She emphasized that their company is trying to shift to more sustainable packaging but the challenge for them is it's the high cost of the said materials. She shared:

> As to the packaging, that's our problem now because we are still using pet bottles. Our local government firmly opposes the use of pet bottles. Here in the city, including schools and LGUs, the use of plastic materials are not allowed. Although, other areas are still using plastics. The packaging is currently our biggest issue. The schools typically prohibit the use of plastic bottles. The government has mandated the use of eco-friendly packaging, such as beverage packaging carton, which comes at a significant cost. Too expensive.
>
> *"Ang* packaging, *yun ang problema namin ngayon kasi ang* packaging is really pet bottles. So, *ang* LGU *namin* is against *talaga sila sa* pet bottles. *Kasi kami dito, kahit sa mga* schools *at* LGU *bawal talaga ang mga* plastics. *Pero may mga part naman na pwede naman.* So, *ang* packaging *ang pinaka* problem *namin kasi* out *na kami ngayon sa mga* schools, *kasi ang* schools *ngayon* usually *naga bawal na sila ng* plastic bottles. *Gusto kasi ng* government *yung* eco-friendly *na* packaging *katulad sa karton which is mahal masyado*. *Mahal masyado*." **(IDI_003)**

Daniel asserted that environmentally friendly machines are expensive in price and its maintenance cost. He also pointed out that most of these machines are not available in the Philippines. He stated:

> Machineries like solar are very expensive. That's what we've always seen; every now and then we've been training about green engineering. For example, in making environmentally friendly products, one of the problems is that it's really expensive and then it's not available in the Philippines. This is also expensive in terms of maintenance costs.
>
> "Very expensive *kaayo ang mga machineries like* solar. *Mao pud ang among nakita lagi*, every now and then *man gud naga* training *mi about sa* green engineering, *for example sa pagbuhat sa mga* products *na* environmentally friendly, *isa gyud sa mga problema kay* expensive *gyud siya tapos hindi kaayo siya* available *sa pinas*. Expensive *pud siya* in terms of maintenance cost." **(IDI_008)**

Like Daniel's experience, Lloyd added that green materials are costly and, concurrently, not accessible in their city. He expressed the following statement:

> It's really expensive and not available here in the city since people are meticulous when it comes to price.
>
> "Expensive *gyud siya ug dili siya* available *diri sa* city since *ang mga tao kay* meticulous *pag-abot sa* price." **(IDI_009)**

Unavailability of Suppliers for Green Materials. The core ideas for this theme are based on the narratives of the participants on having difficulties finding alternative suppliers in the local area that sells eco-friendly materials, needing to purchase eco-friendly materials and machines from other cities due to limited supplies in the local market.

Lloyd expressed his company experience about how it is challenging to them to find suppliers of green materials. One of their production materials is water-based chemicals which is known for being non-hazardous and eco-friendly chemical. He shared that:

> The chemicals we use are water-based, these are really expensive compared to other chemicals. Sometimes it can't just be bought here, it has to be ordered in Davao, because the supplier is there and it has

> to be wholesaled due to its limited availability in the hardware stores.
>
> *"Kaning mga ginagamit namo kay* water-based *man, mahal gyud siya* compare *sa ibang* chemical. *Usahay hindi basta-basta mapalit diri, kinahanglan pa i*-order *sa* Davao, *kay didto man ang* supplier *ug kailangan bultuhan kay para isahan lang ba kay usahay lang pud na siya* available *sa* hardware." **(IDI_009)**

Aside from environmentally-friendly chemicals, some manufacturing companies also suffers from finding eco-friendly packaging on their city. Kimberly shared her aspiration about finding a supplier of green products that is both affordable and available in their city. She emphasized that:

> I hope we can find a supplier that sells affordable non-plastic packaging in the city. This will help us save money and reduce our company expenses. It will be a big help if we can find suppliers that offer more affordable supplies.
>
> *"Daad may mga* supplier *na mura nga* non-plastic packaging *diri sa* city. *Para hindi na bug-at sa* part *namon. Para mabawas-bawasan man ang* expenses *namon. Kag dako gid daad nga bulig kung may makita kami* supplier *na mura ang* offer." **(IDI_004)**

Active Involvement in Green Activities. The core ideas for active involvement and willingness for green activities were exerting the best effort to engage in daily waste segregation practices, participating in tree planting activities to promote environmental conservation, and making sure that environmental standards set forth by the respective municipal government are strictly observed.

Manufacturing firms in Region XII are participating actively in different green activities inside and outside of their company. Donald stated that their companies are always participating in tree growing activities. He also pointed out that this activity is part of their company culture. He said:

> Our offices actively participate in tree-planting activities. It has been done several times already. It's really part of our culture here.

> *"Ang mga* office *namin nagpa*-participate *talaga sa mga* tree-planting activities. *Ilang beses nayan*. Part *na talaga yan ng* culture *namin dito."* **(IDI_005)**

Benny also shared that they prioritize the cleanliness of their environment as prerequisite in manufacturing products. He also added that their company is very particular when it comes to the practice of waste segregation. He pointed out that:

> Of course, cleanliness is our top priority. We make sure that the surroundings are really clean. Because when you have a factory, it should be clean. In our case, even a speck of dust is prohibited, that's why the factory located at the back is air-conditioned to avoid exposure. We also segregate waste that can no longer be used. Plastic and non-plastic items are separated because there are recyclers who collected them. Biodegradable and non-biodegradable waste cannot be mixed together.
>
> *"Syempre* number one, kalinisan. *Sinisigurado talaga namin na malinis dapat ang paligid. Kasi dapat pag nag* factory *ka, dapat malinis. Kasi sa amin dyan bawal kahit alikabok kaya naka*-aircon *ang factory sa likod para hindi ma*-expose. *Sini*-segregate *namin yung kagaya ng mga basura na hindi na pwede. Iba din yung* plastic *at hindi* plastic, *sinisegregate din yan dahil may kumukuha din yan. Yung mga nabubulok at di nabubulok hindi namin pwede pagsamahin yun."* **(IDI_007)**

Vicky also shared their active involvement in environmental initiatives. She highlights in order to contribute to environmental care they plant trees in their lots. She stated:

> We are planting our own fruit trees on our lots.
>
> *"Naga plant kami ng sarili naming fruit trees doon sa mga lots namin."* **(IDI_006)**

5. Sustainability Issues of Manufacturing Firms.

This section outlines the sustainability issues of manufacturing firms in Region XII. Table 10 covers issues associated with each sustainability indicator, encompassing economic performance, social performance, and environmental performance. For economic performance, two essential themes emerged: expensive raw materials and a high cost for electricity. For social

performance, only one essential theme emerged, and that was noncompliance of compulsory benefits to employees. Lastly, for environmental performance, the utilization of non-eco-friendly materials was the essential theme.

Table 10. Issues of Manufacturing Firms on Sustainability.

Sustainability Indicators	**Essential Themes**	**Core Ideas**
Economic Performance	Rising cost of raw materials	Encountering challenges due to increasing prices of production materials in the local market.
		Purchasing production materials in other countries since they are more affordable than in the Philippines.
		Facing challenges with sourcing cost-effective raw materials that meet the quality standards.
	Increasing cost of electricity	Recognizing the issue caused by increasing electricity costs in the area.
		Relying heavily on electrical machinery for daily production that results to high utility expense.
Social Performance	Noncompliance of compulsory benefits to employees.	Failing to provide comprehensive health and other social insurance benefits to the entire

		workforce, such as PhilHealth and SSS.
		Limiting the number of employees who will receive basic health and other social insurances.
Environmental Performance	Utilization of non-eco-friendly packaging	Making use of non-ecofriendly packaging materials such as plastics and cellophanes as it more affordable than ecofriendly packaging.
		Opting to use plastic packaging as it is more suitable to the company's product.

Rising Cost of Raw Materials. The sustainability issue of manufacturing firms in the economic performance is rising cost of raw materials. The core ideas for this issue are encountering challenges due to increasing prices of production materials in the local market, purchasing production materials in other countries since they are more affordable than in the Philippines, and facing challenges with sourcing cost-effective raw materials that meet the quality standards. The exact narratives of the participants in relation to the essential theme are presented below.

According to the participants, one of their challenging issues on sustainability is expensive raw materials. Hannah observed that the cost of raw materials is significantly increasing. She stated that:

> In terms of ingredients and other necessary things, the price is very high, but we are not raising our product price. Even though the

> ingredients are expensive, we never switch to cheaper ones. It's just the same quality, even if it is expensive on our part.
>
> *"Sa mga* ingredients *kag sa mga iban pa na kailangan, naga taas gid ang presyo pero wala kami naga taas sing* price. *Bisan mahal ang mga* ingredients *wala gid kami naga* change *sing mas mura na* ingredients. *Same quality lang gid bahala ma mahalan kami."* **(IDI_010)**

One of the participants also shared his experience on this issue. Donald emphasized that this economic issue significantly affects their business performance. He said:

> There are many factors that affect our business, just like the economy, the pricing, the costs of the materials, and the quality of the materials that are delivered.
>
> *"Madami talaga factors na nakakaapekto* sa business *namin* just like *yung* economy, *yung* pricing, *mga* cost *ng mga* materials *at mga* quality *ng* materials *na dumadating*." **(IDI_005)**

Increasing Cost of Electricity. The issue on high cost of electricity is one of the issues of manufacturing firms on sustainability. These are the following core ideas: recognizing the issue caused by increasing electricity cost in the area, and relying heavily on electrical machinery for daily production that results to high utility expense.

The rising cost of electricity affects the economic performance of manufacturing companies as well. Daisy stated that the cost of electricity is high, prompting them to pursue energy-saving strategies in order to reduce this expense. She emphasized:

> Electricity is really expensive in our area. What we do when the product is already frozen, we turn off the freezer. We can save electricity. It's just that, electricity is expensive because our product is frozen. We need freezer because our ingredients are natural and it should not be exposed too long outside. Thus, our market accepts purely natural.
>
> *"Mahal talaga ang kuryente sa lugar namin*. *Ang ginagawa namin pag* frozen *na sya, pinapatay na namin ang* freezer. *Para makatipid kami sa kuryente. Yun lang gid, magasto sa kuryente kasi ang* product *namin* is frozen. *Hindi siya masyado magtagal kasi* natural. *Mas* acceptable *kasi sa* market *ang* natural." **(IDI_003)**

The company incurs a high cost of electricity mostly due to its heavy reliance on electrical power for production, as the majority of its machinery are powered by electricity. Kimberly shared that:

> Our electricity bills are high because we need electric machine like oven in order to make cakes and bread.
>
> *"Taas gid ang* bills *namon pag abot sa kuryente kay dira gid halin ang mga* cakes *kag* bread *na ginahimo namon*. Oven *gid abi ang ginagamit namon diri*." **(IDI_004)**

Noncompliance of compulsory benefits to employees. In terms of sustainability issues on social performance, the study revealed that there are still manufacturing firms that are not complying with some compulsory state benefits to employees, such as health and other social insurance. The core ideas on this issue are failing to offer comprehensive health and social insurance benefits to the entire workforce, such as PhilHealth and SSS, and limiting the number of employees who will receive basic health and other social insurance.

Employees' mandated benefits include health and other social insurance. This is to maintain employees' rights and well-being. Benny shared that his company did not offer these insurances to the whole workforce due to the personal decisions of its employees. He stated:

> I don't give them any benefits. I used to offer them PhilHealth and PAG-IBIG, but they don't want it because they want to receive their salary in full. They just want to receive their full salary.
>
> *"Wala akong* benefits *na binibigay sa kanila*. *Dati inofferan ko sila ng* PhilHealth *and* PAG-IBIG, *ayaw nila kasi gusto nila pakyawan ang* style. *Gusto nila ibawi nalang sa sahod*." **(IDI_007)**

Additionally, Vicky disclosed that not all of their employees were provided with health insurance at the time. There were only certain employees that were given it. She stated:

> Not everyone has benefits or health insurance. The only employees that received benefits were those who cooked in the production and the assistant.

> *"Hindi lahat may* benefits *at* health insurance. *Yung may* benefit *lang yung nagaluto sa* production, *and yung* assistant *niya."* **(IDI_006)**

This issue was also evident at Lloyd's company, as he mentioned that they are currently in the planning phase to process their employees' insurance plans. He stated that:

> Not all of our employees have PhilHealth and SSS, but we hope we shall process soon so that all employees will have PhilHealth and SSS.
>
> *"Sa mga empleyado namo, hindi man tanan may* PhilHealth *ug* SSS *pero puhon i*-process *namo na unta tanan naa na* PhilHealth *ug* SSS." **(IDI_009)**

Utilization of non-eco-friendly packaging. In terms of sustainability issues on environmental performance, this study found that there are certain manufacturing firms that are still using non-eco-friendly packaging on their products. The core ideas for this environmental issue are making use of non-eco-friendly materials such as plastic, which accumulates trash, and opting to use plastic packaging as it is more suitable for the company's product.

Certain manufacturing companies have chosen to package their products in non-eco-friendly ways. Jennifer aspires to use eco-friendly packaging but admits that their company uses packaging made from plastic because it is less expensive than eco-friendly packaging. She reveals that:

> As of now, if I had to choose, I really want paper packaging, but it's expensive comparably to the price of plastic packaging. It is really expensive.
>
> "As of now, *kung ako lang papipiliin, gusto ko talaga mag* paper packaging *kaso mahal, i*-compare *mo sa* price *ng* plastic packaging. *Mahal talaga siya."* **(IDI_001)**

Benny shared his company's experience with the use of plastic packaging such as cellophane for their products. He underlined that ecofriendly packaging, such as paper packaging, is incompatible with the products they create because frozen products will damage

this type of packaging. That's why they opted to plastics as the main packaging of their product. He stated:

> We still use cellophane. We don't use paper packaging because when you freeze it, it will stick to the product. Then, when you take it out, the product will moist, and the paper packaging would moist, so it will be damaged.
>
> Cellophane *pa din ang gamit namin. Hindi kami gumagamit ng* paper packaging *kasi pag na*-freezer *mo yan, didikit sa* product *yan. Tapos pag nilabas mo naman siya, magmo*-moist *yung* product *bale mababasa yung* paper *na* packaging, *masisira siya.* **(IDI_007)**

Standpoints of the Participants on the Qualitative Results Regarding the Extent of Independent and Dependent Variable.

The data presented in Table 11 presents the standpoints of the participants on the qualitative results regarding green marketing orientation indicators and sustainability. The essential themes for the green marketing orientations were strategic green marketing orientation, tactical green marketing orientation, and internal green marketing orientation. For sustainability, the essential themes were economic performance, social performance, and environmental performance.

Strategic Green Marketing Orientation (SGMO). The participants confirmed the presence of strategic green marketing orientation with the following core ideas: utilizing sustainable machines that have low emissions to minimize pollution, forming a team that focuses on environmental protection of the organization, adhering to the government environmental standards for business, and being aware of environmental issues of the organization. The exact statements of the participants in relation to the essential theme are presented below.

Daniel, one of the participants confirmed the presence of SGMO, he highlighted the need to utilize machines with low emissions in the production process due to environmental advantages. Daniel said:

> We really agree, Sir, because it is really important that our machines emit less smoke because that is the cause of this so-called climate change. It's the same with us here; we only use electric sanders; that's the machine we have here; we don't use other machines that produce smoke.
>
> "Agree *gyud ta dira* sir *kay importante man gyud na ang ginagamit nato na mga makina kay gamay gyud ang aso kay kana man ang* cause *sa kining* climate change *ron na ginatawag. Parehas namo diri,* sander *lang gyud ang among ginagamit na dikuryente, kana gyud ang makina namo diri, hindi na mi naga gamit ug lain na mga makina na nagahatag usok*." **(IDI_008)**

Jennifer stated the necessity for manufacturing firms to have a dedicated department for environmental concerns to actively engage in corporate social responsibility and other initiatives aimed at environmental conservation. She stressed that:

> Yes Agree. For big companies. They should have their own department for environmental concerns, and has corporate social responsibility, or CSR. As a provider, we should be involved in that. We should make a contribution to the community and the environment, just like tree planting.
>
> "Yes Agree. *Kapag sa mga malalaking* company. *Meron talaga dapat* department for environmental concerns, *tapos meron dapat* corporate social responsibility *o* CSR. *Kami* as provider, *dapat kasali kami doon. Dapat meron kaming ambag sa* community *at sa* environment just like tree planting." **(IDI_001)**

Table 11. Standpoints of the Participants on the Quantitative Results of the Extent of Green Marketing Orientation and Sustainability.

Variable	Essential Themes **Presence of:**	Core Ideas
1. Green Marketing Orientations *(Independent Variable)*	Strategic Green Marketing Orientation	Utilizing sustainable machines that have low emissions to minimize pollutions.
		Forming a team that focuses on environmental initiatives of the organization.
		Adhering to the government environmental standards for business

		Being aware of environmental issues of the organization.
	Tactical Green Marketing Orientation	Increasing online presence through promoting products in different platforms.
		Utilizing e-commerce platforms to sell products
		Encouraging the use of digital technologies for procurement and communication activities.
	Internal Green Marketing Orientation	Providing awareness to the employees to practice eco-friendly behavior.
		Assigning environmental protection duties to employees.
		Recognizing environmentally conscious employees by providing both monetary and non-monetary rewards.
		Believing in the workforce's commitment to environmental protection.
2. Sustainability *(Dependent Variable)*	Economic Performance	Preventing environmental accidents to avoid penalties.
		Giving emphasis on the most efficient utilization of resources.
		Reducing cost for utilities through energy saving practices.
		Creating a separate waste disposal facility to reduce waste charges.
	Social Performance	Ensuring the general well-being of the community by preventing disruptions.
		Prioritizing the occupational health and safety measures in the workplace.
		Concentrating on customer welfare through the

		utilization of safe and quality materials.
	Environmental Performance	Adhering to government environmental regulations.
		Reducing the consumption of non-eco-friendly chemicals.
		Investing in renewable energy source to reduce energy consumption.

Tactical Green Marketing Orientation (TGMO). The core ideas regarding tactical green marketing orientation were increasing online presence through promoting products in different platforms, utilizing e-commerce platforms to sell products, and encouraging the use of digital technologies for procurement and communication activities. The participants' subsequent views were as follows:

Hannah confirmed the presence of TGMO by emphasizing the significance of online media platforms to promote and sell their products. In addition, she highlighted the advantages of reducing the utilization of traditional marketing materials such as flyers. She stated:

> Yes. It's a big help. The easier you can publish, the easier you can advertise. Then, you don't need to use several papers. Just like if we have an event here, we just post it, and it increases customers, so it can really help with sales.
>
> "Yes. Big help *siya*. *Mas madali ka maka*-publish, *mas madali ka maka*-advertise *ba*. *Tapos, hindi mo kailangan sing damo-damo na papel. Parehas sinang may* event *kami, i*-post *lang namon kag magdamo gid ang* customer *kaya makabulig gid siya sa* sales." **(IDI_010)**

Kimberly pointed out the necessity of digital technologies in minimizing paper use for procurement activities. She expressed that:

> Agree. Most companies today don't use paper anymore because they engage online transactions. And there are gadgets and computers, so paper is not really necessary anymore.
>
> "Agree. *Kadamuan naman gid subong kay hindi na kaayo gagamit sing papel kay* more on online transactions *na*. And, *may mga*

> gadgets *kag* computer *na kaya hindi na gid kaayo* necessary *ang papel subong*." **(IDI_004)**

Internal Green Marketing Orientation (IGMO). The core ideas with regard to internal green marketing orientation are providing awareness to the employees to practice eco-friendly behavior, assigning environmental protection duties to employees, recognizing environmentally conscious employees by providing both monetary and non-monetary rewards, and believing in the workforce's initiatives and commitment to environmental protection.

Donald confirmed the evidence of IGMO by discussing his company's experience with his employees' constant initiative and dedication to environmental efforts inside the company. He expressed:

> Agree. Like us, my employees are very kind; they don't need to be ordered to remind them of their tasks. For instance, they ensure the segregation of our production waste after.
>
> "Agree. *Tulad sa amin, napakabait ng mga* employees *ko, hindi na sila kailangan utusan para i*-remind *sa mga* task *nila*. For example, *sa mga* production waste, they make sure *na* after *matapos ang* process *naka*-segregate *na ang mga basura namin*." **(IDI_005)**

Lloyd also added that he motivates their employees who frequently engage in environmental tasks by providing them with monetary rewards, aiming to foster motivation towards environmentally friendly activities within the organization. He stated:

> I give monetary rewards to employees who have good initiatives for our company. They are all really rewarded. Waste management is one of their basic tasks, once I see that their effort is consistent, I give rewards. This is our own way for them to keep good service in the overall business operation.
>
> *"Naga hatag jud ko monetary reward sa mga employees na may maayong* initiatives *sa among* company. Rewarded *gyud silang tanan. Isa man gud sa mga* basic task *nila ang* waste management, once *na nakita nako na* consistent *ang* effor*t nila, nagahatag jud ko* rewards. This is our own way *para i*-continue *nila ang maayong* service *sa* overall business operation." **(IDI_009)**

Economic Performance. The core ideas for economic performance are preventing environmental accidents to avoid penalties, giving emphasis on the most efficient utilization of resources, reducing cost for utilities through energy saving practices, and creating a separate waste disposal facility to reduce waste charges.

Lloyd confirms the evidence of positive economic performance by emphasizing the significance of efficient financial management. He emphasized that they focus on efficient resource utilization to prevent incurring extra expenses. Lloyd pointed out:

> Agree. It is important to handle finances. Like us here, we are very meticulous when it comes to expenses. We try our best to keep our expenses low, especially electric bills and other materials. That's why it's part of employees' practices to be efficient in using resources.
> "Agree. *Importante jud ang pag* handle *sa* finances. *Kagaya namo diri*, very meticulous *mi pag-abot sa* expenses. We try our best *na hindi dako ang* expenses *namo* especially *sa* electric bills *ug sa* other materials. That's why *ang mga* employees *namo diri kay* part *na jud sa* practices *nila na maging* efficient *sa paggamit ug mga* resources.**" (IDI_009)**

Daisy emphasized the necessity of complying to government regulations to prevent penalties, as this can harm the business's economic success. She stated that:

> It's a personal awareness that we should avoid fines because they are costly. Especially in waste segregation, there really should be segregation when it comes to garbage because if the government finds out that you haven't segregated your trash, you will be fined, and your business permit will be affected when you renew. So that should be avoided.
>
> "Personal awareness *yan eh na dapat mag* avoid *tayo sa mga multa kasi* costly *yan. Lalong-lao na sa* waste segregation, *na dapat may* segration *talaga pagdating sa mga basura kasi pag nalaman ng* government *na hindi ka nag*-segregate *ng basura mo, pagmumultahin ka and maapektohan ang* business permit *mo pag nag*-renew *ka*. *Kaya dapat talaga iwasan yan*." **(IDI_003)**

Tristan also added the need to have an exclusive garbage disposal facility, as it reduces company expenses. He stated:

> Yes, I agree. Like us, to be free from paying fines for garbage, we made our own garbage dump away from food processing so that we could pay less.
>
> "Yes, agree. *Kagaya sa amon para hindi kami maka bayad para sa mga basura, nag-pahimo gid kami sing sarili namon na basurahan na malayo sa* food processing *para maka-less kami sa bayad*. **(IDI_002)**

Social Performance. The participant also confirms the presence of social performance with these core ideas: ensuring the general well-being of the community by preventing disruptions, prioritizing occupational health and safety measures in the workplace, and concentrating on customer welfare through the utilization of safe and quality materials.

Gretchen affirms the existence of social performance by emphasizing the significance of maintaining welfare in the workforce. In addition, she stressed the need to ensure the safety of employees during the production process by providing personal protective gear. Gretchen shared that:

> Agree. When it comes to my employees, I ensure they undergo medical screenings before they begin work, as I consider this a crucial requirement in our food business. There has never been an illness or accident in our factory because we really take care of them. And if they get sick, I give them time off to rest. If they need medical assistance, we are willing to help them. When they arrive inside the factory, we make sure they are safe; we make them wear body protection and masks.
>
> "Agree. *Yung mga* employees *ko, pinapa*-medical *ko talaga bago mag*-start *sa trabaho, kasi para sa akin,* requirement *talaga yun* since food business *kami*. *Never pa naman nagkaroon ng sakit or disgrasya sa* factory *namin kasi inaalagaan namin yung mga* employees. *At kung nagkakasakit man sila, binibigyan ko sila ng* off *para maka pahinga. Kung kinakailangan man nila ng* medical assistance, willing *naman kami na tulungan sila*. *Pagdating sa loob ng* factory, *sinisigurado namin na* safe *sila, pinapasuot namin sila ng mga pang protekta sa katawan at* mask." **(FGD_001)**

Jennifer also confirms the existence of worthy social performance by prioritizing the well-being of their consumers through the production of goods using clean and safe ingredients.

In addition, she emphasized their concerns with the community by limiting the hours during their conduct of manufacturing operations. She expressed:

> Agree, for me, that's important. For the customer, it's really necessary to prioritize their welfare because, of course, what if someone gets sick from consuming your products, you're liable under the law and could even face legal action. We ensure that the water used is clean and safe, and that the materials are non-toxic, with no preservatives, just natural ingredients. When it comes to the community, of course, our employees and machines shouldn't cause disturbance. We don't operate at night to avoid disrupting the community.
>
> "Agree, *para sa akin importante yun. Para sa* customer, *kailangan talaga na unahin natin ang kapakanan ng* customer *mo kasi siyempre paano kung magkakasakit yung mga kakain ng* products *mo, may pananagutan ka sa batas niyan at makakasuhan ka pa.* We see to it *na malinis*, safe *yung* water *na ginagamit, at yung mga* materials *dapat* non-toxic and *dapat* no preservatives, *dapat* natural *lang. Pagdating sa* community, *syempre dapat hindi maingay yung mga* employees and machines. *Hindi kami nag-*operate *pag gabi para hindi kami makadistorbo sa* community." **(IDI_001)**

Environmental Performance. The core ideas for environmental performance were adhering to governmental regulations about environmental standards, reducing the consumption of non-eco-friendly chemicals, and investing in renewable energy source to reduce energy consumption.

Vicky emphasized the significance of adhering to the environmental regulations established by the government. She highlighted that the government maintains a strict approach to inspecting drainage and waste management practices at every manufacturing firm. She asserted that:

> Agree. The government is strict when it comes to the environment. They regularly check factories. They check if we follow their requirements. We have to comply with all their documentary requirements, especially with regard to garbage and our drainage.
>
> "Agree. *Strikto ang* government *pagdating sa* environment. Regular *ang pag-*check *nila sa mga* factory. *Tinitingnan nila kung sinusunod namin ang mga* requirements *nila*. *Kailangan i-*comply *lahat ng*

> *mga* documentary requirements *nila at lalo na sa mga basura at yung* drainage *namin*." **(IDI_006)**

Daniel confirms the worth of environmental performance by promoting the use of renewable resources for conserving energy. Additionally, he discussed his company's adoption of solar energy in their production facility. Daniel conveyed the following information:

> I agree with this because now that more people are using solar, they are saving, and we can save. Here at our firm, we actually use solar instead of electric for lights.
>
> "Agree *ko ani kay karon man gud mas daghan na ang naga-gamit ug* solar, *tipid na siya ug maka*-save *na ta*. *Diri sa amua nagagamit gyud mi ug* solar instead *sa* electric *para sa ilaw*." **(IDI_008)**

One of the FGD participants also confirms the presence of environmental performance. Alexa emphasized from her company experience that they prefer to utilize eco-friendly chemicals and mixtures such as water-based paints, which are also safer for human use. Alexa said:

> We do not use hazardous materials. The paints we use are water-based, and we avoid using materials for mixing that could harm the lungs. Water-based paints are preferable because they are odorless and dry quickly.
>
> *"Hindi kami gumagamit ng mga delikado na* materials. *Yung mga pintura na ginagamit namin ay* water-based, *tapos hindi kami gumagamit ng* materials *na pang*-mixed *na puwedeng maka sira sa lungs. Mas mabuti talaga yung* water-based sir *kasi* odorless *sya at madaling matuyo."* **(FGD_003)**

Standpoints of the participants on the Quantitative Results Regarding the Influence of Tactical Green Marketing Orientation to Sustainability.

The data provided in Table 12 presents the standpoints of the participants on the high influence of tactical green marketing orientation on sustainability. The information highlighted the essential theme of the confirmed worth of a tactical green marketing orientation towards sustainability.

Table 12. Standpoints of the participants on the Quantitative Results

Regarding the Influence of Tactical Green Marketing Orientation to Sustainability

Influence of TGMO on Sustainability	Essential Themes	Core Ideas
High Influence of TGMO to Sustainability	Confirmed worth of TGMO to Sustainability	Utilizing e-commerce and social media platforms contributes to sustainability
		Employing digital technology platforms improves business performance
		Using eco-friendly materials contribute to sustainability
		Recycling and reusing practices promotes sustainability

Confirmed worth of Tactical Green Marketing Orientation to Sustainability. The participants confirmed the high influence of tactical green marketing orientation to sustainability. The core ideas of the participants include utilizing online media contributes to sustainability, employing digital technologies improves business performance, using eco-friendly materials contribute to sustainability, recycling and reusing practices promotes sustainability.

The following are the discourse made by participants to support the confirmed worth of tactical green marketing orientation to sustainability as an essential theme:

Daisy affirms that TGMO yields substantial advantages for the business. She stressed that this will ensure the sustainability of the business by generating economic benefits. She said:

> I believe in that. When we use this, you don't need to wait a long time; you just sit and make transactions. In terms of effort, it eliminates the need for travel, significantly reduces costs, and allows for significant cost savings. It's more about strategy to save money; it can really sustain.
>
> *"Naniniwala ako dyan. Kapag ito ang gagamitin natin hindi mo na kailangan ng mahabang* time, *nakaupo ka lang magkaka-*transaction *kana. Pagdating sa* effort *mo, hindi mo na kailangan mag* travel, *talagang* less *ang gastos at maka* cost cut *ka talaga.* It's more on strategy *para makatipid, talagang makaka-*sustain *talaga ito."* **(IDI_003)**

Kimberly also stated that TGMO plays a role in attaining sustainability. She stated that TGMO is environmentally sustainable and actively promotes the financial success of the company. She stressed that:

> Overall, Sir, tactical is really good because it can really help sustain the business. Apart from being able to reduce expenses, it can also help promote the business and increase sales. It's very eco-friendly and, at the same time, very beneficial to the business.
>
> "Overall Sir, *nami gid si* tactical *kay maka bulig gid siya para ma-*sustain *ang negosyo*. *Maliban sa maka-*less *siya sa* expenses *maka bulig pa siya ma-*promote *ang negosyo para mag* increase *ang* sales. Eco-friendly *gid siya* and at the same time *dako gid ang* benefit *niya sa negosyo."* **(IDI_004)**

Jennifer also confirms the significance of TGMO to sustainability. She emphasized that this indicator bring significant benefit to the business by minimizing the cost. Jennifer stated:

> Yes, I agree. The presentation is good. This is right; there will be sustainability because of the tactical green marketing orientation. Because it's more about strategy so you can benefit, you don't need to spend a lot. This is really a big help in business.
>
> "Yes, I agree. *Maganda yung* presentation. *Tama yun siya, magkakaroon talaga ng* sustainability *dahil ka*y tactical green marketing orientation. *Kasi* more on *diskarte para maka-*benefit *ka, yung tipong hindi mo na kailangan gumasto ng malaki. Malaking tulong talaga siya sa* business." **(IDI_001)**

Data Integration of Quantitative and Qualitative Findings

The present study employs a sequential explanatory design, which combines both quantitative and qualitative methods. As such, Table 13 shows a joint display of the results obtained from the data collected.

Extent of Green Marketing Orientation. The category means of the three indicators of green marketing orientation range from 3.95 to 4.31, indicating a high level of agreement or evidence of green marketing orientation in manufacturing firms. The qualitative data obtained in this study provide further support for the quantitative findings. The participants' responses consistently expressed positive responses towards the three indicators under study, namely strategic green marketing orientation, tactical green marketing orientation, and internal green marketing orientation. Therefore, the nature of integration is *connecting-merging (confirmation).*

*Table 13***.** Joint Display of Quantitative Results and Qualitative Results

Research Area	Quantitative Results	Qualitative Results	Nature of Integration
1. Extent Green Marketing Orientation and Sustainability			
1.1 Green Marketing Orientations	The three indicators of GMO—Strategic GMO, Tactical GMO, and Internal GMO obtained category mean scores ranging from 3.95 to 4.31 that resulted to an overall mean of 4.09, which is described as agree or evident in the manufacturing firms. (Refer to Table 4)	The participants confirmed the high rating of the three indicators as showed in the three essential themes which are Strategic GMO, Tactical GMO, and Internal GMO. (Refer to Table 11)	Connecting-merging (confirmation)
1.2 Sustainability	The three indicator of Sustainability—Economic Performance, Social Performance, Environmental Performance obtained	The participants confirmed on the high rating of the three indicators, which resulted to three essential themes with very positive core	Connecting-merging (confirmation)

	category mean scores ranging from 3.62 to 4.39 that resulted to an overall mean of 4.08, which describes as agree or evident. (Refer to Table 6)	ideas in the qualitative results. (Refer to Table 11)	
2. High Influence of Tactical GMO to Sustainability	The Tactical GMO is the strongest and only significant predictor of sustainability since it has a high Beta coefficient (B=.451, p<.05). Refer to Table 7.2	The participants agreed on the result that Tactical GMO highly influence the sustainability as showed in the essential theme *confirmed worth of Tactical GMO to Sustainability*. Refer to Table 12	Connecting-merging (confirmation)

Extent of Sustainability. The study reveals that the sustainability indicators have an overall mean of 4.08. The result suggests a general agreement or evidence of sustainability with the manufacturing firms. The participants' confirmation of the quantitative results aligns with their claims regarding the presence of three indicators of sustainability: economic performance, social performance, and environmental performance. Therefore, the nature of integration is *connecting-merging (confirmation).*

High Influence of Tactical Green Marketing Orientation on Sustainability. The findings of the quantitative analysis indicate that tactical green marketing orientation is the only significant and strongest predictor of sustainability, and this result was confirmed by all participants involved in the study. Thus, the nature of integration is *connecting-merging (confirmation).*

CHAPTER IV

DICUSSION

This chapter presents the discussion of the quantitative and qualitative findings of the study that pertains to the extent of green marketing orientation, extent of sustainability, and its influences. Moreover, this chapter also highlights the qualitative discussion regarding on the lived experiences and sustainability issues of manufacturing firms in Region XII.

Extent of Green Marketing Orientation

Throughout the course of the study, the respondents agreed on the three indicators of Green Marketing Orientation thus, this result has proven that Green Marketing Orientation in general is evident however it is not necessarily implemented in the respondents respected manufacturing firms. With this, the importance of observing GMO in every manufacturing firm should be taken seriously. Calvo-Porral (2019) argued that the prevailing trends in consumption, production, and development fall short of meeting sustainable industry benchmarks. Consequently, the operational methodologies of these enterprises pose a significant environmental concern and represent a direct threat to ecological integrity. According to the assumptions of the natural resource-based view, increased environmental pressures cause organizations to strategically use their resources, strengths, and capabilities in order to reduce the costs of their activities on the natural environment. As a result, organizations are able to transform threats to the environment into opportunities (Shaukat & Ming, 2022; Fraj et al., 2013). GMO serves as a guiding principle for both organizational and environmental goals, ensuring the fulfillment of customer satisfaction, as highlighted by Papadas et al. (2017).

Extent of Strategic Green Marketing Orientations. The over-all result for strategic shows that most manufacturing companies in Region XII agree with statements about their commitment to strategic green marketing. This indicates a widespread consensus among them.

These findings underscore how involved these firms are in adopting environmentally friendly practices. Therefore, SGMO are evident in the respondents' manufacturing firm but some are not fully implemented. This result supports the study of Ismael et al. (2023) stating that strategic green marketing can contribute to environmental conservation, which could result in sustained long-term sustainability. By shaping an organization's relationship with the environment, strategic green marketing orientation (SGMO) has the potential to advance environmental sustainability. Therefore, it is plausible to assert that SGMO can foster environmental sustainability within organizations due to its direct connection to how organizations engage with the natural environment. Similarly, Vaitone and Skackauskiene's (2019) research demonstrates that strategic green marketing orientations can enhance the sustainability and growth of firms. This is achieved through a concentrated effort to build stronger relationships with environmentally conscious customers.

Among the practices indicated in this area, investing in low-carbon technologies for the manufacturing firm's production process got the highest score. This finding corroborates to the study of Li et al.'s (2021) extensive investigation into the impact of low-carbon technology innovation on manufacturing firms' performance. Their findings show that low-carbon technology innovation has a positive impact on performance, with green core competitiveness playing a mediating role and enterprise size playing a regulating role. Moreover, according to Pan et al. (2021), the adoption of low-carbon technology by manufacturing firms can enhance energy efficiency, decrease carbon emissions, and consequently have a beneficial impact on both the environment and the companies' financial performance.

On another perspective, manufacturing firms create a separate department/unit specializing in environmental issues for our organization, received the lowest rating from the respondents. Although they acknowledged its importance and agreed that it is evident in their firms, this lower score suggests that it may not be their highest priority. Nevertheless, creating a

specialized department or unit within a manufacturing firm dedicated to environmental issues is a highly strategic decision in line with the prevailing trend of sustainable development and corporate social responsibility. Such a division can play a crucial role in ensuring compliance with environmental regulations, reducing ecological damage, and promoting sustainable practices throughout the company.

Extent of Tactical Green Marketing Orientations. As for the tactical green marketing orientation, most of the respondents agreed that the Tactical Green Marketing Orientation is evident in their manufacturing firms, but it is not necessarily implemented or followed. The item which got the highest score is the use of e-commerce because it is more eco-friendly. This outcome aligns with the research conducted by Sarkar (2023), who noted that the Green Revolution has been a global initiative for many years, with e-commerce playing a role within this movement. Added to this, the research claimed that e-commerce is environmentally friendlier than traditional retail sales, others take the opposite view. Moreover, Lin et al. (2020) claimed that in the realm of e-commerce, modern businesses can now access every household, enabling the advertisement, purchase, and payment of goods and services without direct human intervention. In a study conducted by Oláh et al. (2018), they explained that green marketing involves an organization's efforts to promote, assess, and communicate products that are environmentally friendly, aiming to balance environmental preservation with economic sustainability. They emphasize the increasing significance of this approach, particularly in the era of widespread e-commerce, where companies must proactively address the needs of consumers, businesses, and society while considering both commercial and environmental factors. On the other hand, the application of paperless policy in the firms' procurement where possible got the lowest score but it the respondents still agreed that is it evident in their respective firms, but it is not really implemented. Nonetheless, it is still a good practice under the tactical green marketing orientations. This result is similar to the claim of Paperturn (2023),

using sustainable marketing and going paperless is not just good for the environment—it also helps businesses in many ways. This includes reducing their carbon footprint, saving money, targeting customers better with personalized marketing, and being more flexible. When companies use sustainable practices, they can create a positive image, earn the trust of eco-friendly customers, and catch the attention of investors who care about sustainability.

Extent of Internal Green Marketing Orientation. Based on the over-all result for internal green marketing orientation, respondents expressed their agreement that they are involved in the internal green marketing orientations of their respective manufacturing firms. Among the items listed in this section, employees believe in the environmental values of our organization got the highest score. It confirms with the study of Elshaer et al. (2024), stating that IGMO involves encouraging employees to be environmentally committed, acknowledging how this commitment affects business performance, using it as a mediator, and recognizing the importance of a green organizational identity in shaping this commitment. In addition, Internal green marketing orientation (IGMO) encompasses the dissemination of environmental values throughout the organization with the aim of fostering a broader corporate green culture (Papadas & Avlonitis, 2014). These endeavors encompass initiatives such as employee training, endeavors to enhance environmental consciousness within the organization, and activities focused on environmental leadership (Papadas et al., 2017).

Extent of Sustainability

The respondents agreed that the three indicators of sustainability such as economic performance, social performance, and environmental performance are evident and observed in their firms. This result support the study of Darnall et al. (2020); and Singh et al. (2021), stating that incorporating sustainability practices into manufacturing companies is essential for securing their endurance over time, optimizing resource utilization, adhering to regulations, and improving competitiveness. Likewise, recent research emphasizes the essential role played by

economic, social, and environmental performance as fundamental markers of sustainability in manufacturing enterprises. Scholars like Vanhamäki et al. (2020) underscore the importance of economic performance, highlighting its influence on profitability, competitiveness, and sustained viability. Authors such as Walker et al. (2021) delve into social performance, encompassing areas like employee well-being, diversity, and engagement with stakeholders, thereby emphasizing its role in fostering trust, improving reputation, and driving innovation. Additionally, Jiang et al. (2022) advocate for environmental performance, stressing its necessity in reducing carbon emissions, waste generation, and adherence to environmental standards. These interconnected indicators, as demonstrated by recent studies (Vanhamäki et al., 2020; Walker et al., 2021; Jiang et al., 2022), are central in shaping sustainable strategies, mitigating risks, and generating enduring value for manufacturing firms, all while positively impacting society and the environment.

Extent of Economic Performance. The survey revealed that the economic performance is evident in the manufacturing firms in Region XII. The findings underscore the proactive engagement of manufacturing enterprises in Region XII, emphasizing their strong emphasis on economic performance. This highlights the crucial role that these firms play in driving economic development and growth within the region. Furthermore, Thevanes and Weerasinghe (2018) argued that adopting green marketing strategies can bolster a firm's economic performance. This is achieved through the diligent implementation of an "eco-marketing" approach and by strategically positioning their offerings to appeal to the growing green consumer segment. Based on the result, the item that got the highest score is that the manufacturing firms have decreased in fines for environmental accidents. This is similar with the study of Smith et al. (2020), firms have experienced notable enhancements in economic performance due to reduced fines for environmental accidents. Their study identified a strong correlation between successful

environmental management practices and lower financial penalties, highlighting a positive influence on the overall economic well-being of these firms.

Extent of Social Performance. As for the Social performance of the manufacturing firms in Region XII, the respondents agreed with the statements on their adherence to social performance. Social performance, within the context of manufacturing firms, denotes an essential index for sustainability. It includes several aspects like human rights, labor practices, community commitment, and diversity and inclusion. Kolk and Perego (2010) reaffirmed that social performance should be critical for sustainable development, since it reflects the values of ethics and company integrity, as well as their commitment to stakeholders and commitment to societal well-being. In turn, Lozano et al. (2016) revealed a strong correlation between strong social performance and financial performance in manufacturing firms. This implies that efforts to focus on social aspects do not only conform to sustainability but also propel long-run business viability. Thus, improvement of metrics of social performance monitoring can contribute immensely to the overall sustainability of manufacturing firms. Among the items listed in social performance, the respondents expressed their strong agreement on their firms' improvements in occupational health and safety of the employee. This means that the firms in Region XII give priority to the safety and welfare of their employees. This result anchors in the study of Hasle et al. (2021), where they highlight the importance of prioritizing occupational health and safety (OHS) within manufacturing, emphasizing its role in enhancing employee well-being, productivity, and the resilience of the organization. Social performance in manufacturing companies, particularly concerning the health and safety of employees, is a crucial aspect that has a direct impact on both the workforce and the overall sustainability of the company. Measures related to occupational health and safety (OHS) are vital for safeguarding employees from workplace risks, reducing accidents, and creating a conducive work environment. Furthermore, focusing on OHS contributes to sustainability by reducing the environmental

impact of accidents, cutting down healthcare expenses, and bolstering the company's reputation as a responsible employer. Dong et al. (2020) supports this idea by demonstrating the positive link between robust OHS practices and enhanced organizational performance in terms of efficiency and profitability. By prioritizing employee well-being, companies can achieve long-term success while fulfilling their ethical and social obligations.

Extent of Environmental Performance. Another indicator of sustainability is environmental performance and on average, the result indicates that manufacturing companies in Region XII generally agreed with statements regarding their commitment to environmental performance. Among the statements, reduction in consuming hazardous materials got the highest score. This means that manufacturing firms in the region are proactively tackling environmental concerns by cutting down on the use of harmful substances, a strategy that not only aligns with sustainability objectives but also boosts competitiveness and resilience in a dynamic global economy. The result conforms to the findings of Garetti et al. (2020), wherein they stress the significance of minimizing the use of hazardous materials in manufacturing, underlining its favorable influence on environmental sustainability. Through actions like substituting materials, optimizing processes, and implementing waste reduction strategies, companies can notably reduce their environmental impact and improve resource efficiency. Additionally, cutting down on the consumption of hazardous materials not only has positive effects on the environment but also leads to enhanced operational efficiency and cost-effectiveness. Businesses or enterprises that prioritize sustainable practices typically enjoy a better reputation, increased customer loyalty, and opportunities to enter new markets that uphold strict environmental standards.

Influence of Tactical Green Marketing Orientation on Sustainability

On the three dimensions of green marketing orientations, namely strategic green marketing orientations, tactical green marketing orientations, and internal green marketing orientations, the quantitative findings indicate that tactical green marketing orientations emerge

as the sole and strongest predictor of sustainability. It can be inferred that embodying values in tactical marketing decisions has a significant impact and is crucial in promoting sustainability. This result agrees with the findings of Mishra et al. (2019) which revealed that tactical green marketing orientation which are widely used in e-commerce, digital communication, and framing of a paperless policy will enhance the efficiency and overall sustainability of a firm.

Similarly, the result aligns with the result of Negi et al. (2023), which revealed that among the three dimensions of green marketing orientations, only tactical green marketing orientation showed a direct effect on the overall organizational performance for sustainable organizational development. The study of Smith and Brown (2023) also confirms the findings of this study which emphasized that while strategic green marketing orientation establishes long-term objectives and provides a framework for sustainability, it is tactical green marketing orientation exerts a direct influence on consumer perceptions and behaviors. The study also highlights the effectiveness of various tactical green marketing initiatives, such as eco-labeling, green packaging, and product eco-certifications. These initiatives are shown to have a significant and measurable impact on consumer choices and attitudes towards sustainability.

Conversely, the study by Elshaer (2024) revealed that the third dimension of green marketing orientation, which is internal green marketing orientation, has a positive influence on overall business performance, which is also one of the requirements for attaining sustainability. The research conducted by Ismail et al. (2023) is also different from this study; their study revealed that strategic green marketing orientation has a positive influence on sustainability, specifically environmental sustainability. These study findings signify that all of the dimensions of green marketing orientations have potential for influencing sustainability; however, these influences may vary depending on the organizational culture and practices of manufacturing firms.

Lived Experiences of Participants on Green Marketing

The study revealed three essential themes on the lived experiences of manufacturing firms on green marketing. These experiences are expensive green materials and equipment, unavailability of green materials or suppliers, and active involvement and willingness for green activities.

Expensive green materials and equipment. Manufacturing firms experience the high cost for environmentally friendly materials, such as eco-friendly packaging, non-hazardous chemicals, and environmentally friendly equipment and machines for production. Although they provide substantial environmental advantages, their high cost can restrict accessibility and adoption. This experience affects the decisions of various manufacturing firms in Region XII in investing in green materials and equipment. Such experience is similar to the study of Mao and Wang (2018) that green manufacturing is expensive since it has influence by the high cost of eco-friendly materials and equipment. Magnier and Crie (2015) also indicated that businesses perceive eco-friendly materials such as packaging to be more expensive, resulting in difficulty among many businesses and consumers to make a purchase.

Manufacturing companies consider environmentally friendly production machines and equipment to be expensive that cause challenge to the integration and investment decision of business owners. This is congruent to the study of Ben-Salem, et al., (2016), the allocation of resources towards technology investment in green production processes is expensive. Sustainable technology, in particular, tends to be associated with a high selling cost and limited availability.

Unavailability of green materials or suppliers. One of the experiences of manufacturing companies in Region XII is the lack of access or unavailability of green materials or suppliers. This presents significant challenges for most manufacturing firms that are dedicated to contribute on sustainability. The utilization of green materials encompasses various components such as packaging, chemicals, and other materials that hold substantial importance

in the manufacturing process of firms. As a result of the limited availability of green materials, manufacturers have to procure from many different places in order to locate suitable suppliers for green materials.

This study is similar to the study of Akabogu (2023) that green resources, such as eco-friendly materials, are either scarce or produced in limited amounts. Numerous issues, such as limited production capacity, inadequate demand, or insufficient facilities for the processing and transportation of the said environmentally friendly materials, contribute to this situation.

Active involvement and willingness for green activities. The study revealed that manufacturing firms in Region XII actively involved in different green activities in order to take part in environmental protection initiatives. This include daily waste segregation practices and participation on tree planting activities. This involvement and participation of manufacturing companies in the said initiative is considered as significant practice for green initiatives. As being prominent contributors to global resource consumption and environmental degradation, manufacturing firms possess a substantial responsibility to address their environmental impact and promote sustainable initiatives.

This is congruent to the study of Ahmad, et al., (2021) that manufacturing firms exhibited high involvement in different environmental protection initiatives such as pollution reduction practices in order to contribute for environmental protection. This is further supported by the research conducted by Shahbazi et al. (2016), which reveals that manufacturing enterprises in Sweden actively engage in various measures related to industrial waste management and segregation to ensure the protection of the environment.

Sustainability Issues of Manufacturing Firms

Manufacturing firms encounter various issues pertaining to sustainability, which also influence the production and operations of the organization. The aforementioned issues encompass the fundamental pillars of sustainability, namely economic performance, social

performance, and environmental performance. In this study, two crucial themes emerged in relation to economic performance: the rising costs of raw materials and the increasing costs of electricity. Concerning social performance, an essential theme has been identified, namely non-compliance with mandatory employee benefits. Finally, in terms of environmental performance, only one essential theme emerged that pertains to the utilization of non-eco-friendly materials.

Rising Costs of Raw Materials. Manufacturing firms are challenge on the economic issue that pertains to the rising costs of raw materials. The study revealed that this is the major concern of the manufacturing firms in Region XII because raw materials play a vital role in their production process, and any significant increase in their prices can have a detrimental impact on the overall cost of production. This is congruent to the study of Mussa and Chinniah (2016), that the rising costs for raw materials is the major challenge of different business industries including manufacturing firms in Malaysia. These challenges are primarily driven by price fluctuations in the market which directly affect the profitability of the business.

The study also found that rising raw material costs prompted manufacturing firms to seek out affordable raw materials and suppliers in other cities and countries. According to the participants majority of the suppliers are from China and Malaysia which offers more affordable and suits on their quality standards. This is anchored to the study of Infosys BPM (2024), where it was found that 68% of manufacturing enterprises in the United States opt to outsource their raw materials to countries in Asia and Eastern Europe. The decision of these companies on outsourcing activities is due to the low cost of raw materials in the aforementioned countries.

Increasing Costs of Electricity. Manufacturing companies are dealing with increasing challenges to deal with issues of sustainability related to the increasing costs associated with electricity. The findings of the study indicate that the increased cost of electricity can be attributed to the substantial dependence of manufacturing firms on electricity. This reliance is primarily due to the utilization of electric-powered machinery and equipment, which play a

crucial role in their day-to-day operations and production processes. This study additionally revealed that the increasing expenses associated with electricity can be attributed to the concurrent surge in electricity costs within the geographical regions where the manufacturing firms are located. This is congruent with the study conducted by Ondina and Fuster (2022), which found that the manufacturing industry, as a significant electricity consumer, is particularly vulnerable to the negative impacts and long-term effects of the ongoing rising energy costs, which place pressure on the economic performance and sustainability of manufacturing companies. Sadath and Acharya's (2015) research also showed that rising energy prices negatively impact the financial performance of various manufacturing firms, thereby compromising their sustainability.

Noncompliance of Mandatory Benefit to the Employees. The findings of the study revealed that manufacturing firms operating in Region XII are currently encountering issues related to their social performance, which in turn leads to sustainability concerns. There are still manufacturing firms that fail to provide mandatory benefits to employees, such as health and other social insurance mandated by the Philippine government that protects the overall welfare of workers. It has been determined that certain manufacturing firms offer health and social insurance coverage to a limited number of their employees, while other employers completely neglect to provide such insurance to their entire workforce.

This is anchored to the study of Alkenbrack, et al. (2015) that business sectors such as manufacturing industry are least likely to enroll the workforce to health and social security. The primary factor contributing to non-compliance is the limited understanding and insufficient attention given to this issue. This study is also present in the study of Jamallulah et al. (2018), which revealed that lack of management commitment, cost consideration, time constraints, inadequate training, insufficient knowledge, and inadequate supervision are the main factors

contributing to the noncompliance of occupational health and safety, which includes health and insurance benefits.

Utilization of Non-eco-friendly Packaging. The study revealed that the sustainability issue concerning environmental performance is associated with the use of packaging that is not eco- friendly. Certain manufacturing companies in Region XII keep utilizing plastics and cellophanes for product packaging for various reasons. This is due to the affordability and its suitability for companies' products. This study is connected to the research conducted by Rahma, et al. (2024), which found that the substantial buildup of plastics is the main cause of issues on environmental sustainability, this is the result of the usage of non-eco-friendly packaging by many different industries, including manufacturing companies. This finding aligns with the research conducted by Samsudin et al. (2021), which demonstrates that the primary source of contemporary environmental problems is the business sector, specifically manufacturing enterprises. This is attributed to the extensive utilization of packaging materials that are not eco-friendly.

This finding aligns with the study of Nguyen (2020), which revealed that the utilization of non-eco-friendly packaging of manufacturer companies is due to its affordability than eco-friendly packaging. The study emphasized that manufacturers frequently use plastic as a cost-efficient method to enhance product availability in the market. The expense associated with eco-friendly packaging serves as an obstacle to the adoption of eco-friendly packaging materials.

Standpoints of the Participants on the Quantitative Results

Regarding the Extent of Green Marketing Orientation and Sustainability

This section presents the standpoints of the participants on the salient points of both independent and dependent variables which surfaced during the in-depth interview and focus group discussion.

Confirmed strategic green marketing orientation as evident. The participants confirmed that strategic green marketing orientation is evident in their manufacturing firms through the utilization of sustainable machines that have low emissions to minimize pollutions. They also form a team that focuses on environmental initiatives of the organization, adhering to the government environmental standards for business, and being aware of environmental issues of the organization. Manufacturing firms take environmental principles into account while making strategic decisions, which helps them eliminate the undesirable impact of their business operations on the environment in order to be more sustainable organizations. The result supports the study of Ismail et al. (2023), which indicated manufacturing enterprises should incorporate environmental considerations into their strategic resources and efforts in order to enhance eco-friendly outcomes. The integration of strategic green marketing orientations plays a crucial role in facilitating the transformation of manufacturing firms into environmentally sustainable organizations. Furthermore, the findings of this study correspond with the research conducted by Khalid (2021), which highlights the significance of adopting a strategic green marketing orientation. This orientation serves as a favorable factor in enhancing the organization's efforts to promote its green image and contribute to environmental sustainability.

Confirmed tactical green marketing orientation as evident. The participants provided confirmation on the evidence of tactical green marketing orientation through increasing online presence through selling and promoting products in different platforms, utilizing e-commerce platforms to sell products, and encouraging the use of digital technologies for communication and procurement activities. This is align to the study of Choudhury et al. (2019) that revealed that the implementation of different tactics within a tactical green marketing orientation is intended to improve the environmental sustainability of the traditional marketing mix. This improve the marketing strategy of the organization through eco-friendly initiative by utilizing e-commerce and digital technologies. Moreover, the present study aligns with the study of Khan et

al. (2023) that by integrating a tactical green marketing approach into corporate strategies, firms can enhance their ability to fulfill the expectations of their stakeholders, resulting in enhanced sustainable business performance.

Confirmed internal green marketing orientation as evident. The participants affirmed the presence of internal green marketing orientation through providing awareness to the employees to practice eco-friendly behavior, assigning environmental protection duties to employees, recognizing environmentally conscious employees by providing both monetary and non-monetary rewards, and believing in the workforce commitment to environmental protection. This finding is congruent to the study of Papadas et al. (2019) that the implementation of internal green marketing initiatives has the potential to enhance the influence of the fundamental green marketing strategy on gaining a competitive edge. For example, awards that encourage environmentally-friendly actions and rewards for exceptional environmental employee behavior could enhance the organization's managerial skills and foster a distinct corporate culture that sets it apart from competitors. Moreover, this study reinforces the conclusions drawn by Elshaer et al. (2024) that promoting employee environmental commitment, acknowledging the influence of employee commitment on business performance, and utilizing employee commitment as a mediator are crucial components of internal green marketing orientation that help the organization become more environmentally focused.

On the standpoints of participants on sustainability the essential themes are economic performance, social performance, and environmental performance.

Confirmed economic performance as evident. The participant confirmed their economic performance through preventing environmental accidents to avoid penalties, giving emphasis on the most efficient utilization of resources, reducing cost for utilities through energy saving practices, and creating a separate waste disposal facility to reduce waste charges. This result is consistent with the study of Tuan and Tram (2021), which suggested financial management

capacity and legal policy systems are the factors that affect the economic performance of manufacturing enterprises. Financial management involves the effective utilization of resources that are significant to the daily operational and production activities of manufacturing firms. Moreover, the legal policy system affects the economic performance of manufacturing firms since government policies for businesses are meant to build trust in conducting business operations and create favorable conditions for improving production and business efficiency, considering social and environmental regulations. Additionally, the findings align with the study of Alarussi and Alhaderi (2018), which emphasized that when a company is effective at using its monetary and non-monetary resources in its daily business activities, it becomes more efficient overall. This means it can achieve its goals using fewer resources, which is a sign of effectiveness and good economic performance.

Confirmed social performance as evident. The participants confirmed the evidence of their positive social performance through the following core ideas: ensuring the general well-being of the community by preventing disruptions, prioritizing the occupational health and safety measures in the workplace, and concentrating on customer welfare through the utilization of safe and quality materials. These results are congruent with the research undertaken by Leong and Yang (2020), indicating that companies demonstrate superior social performance when they exhibit comprehensive practices across various domains, including community engagement, environmental stewardship, protection of human rights, and treatment of employees. Likewise, the outcome aligns with Sutherland's (2016) research, which identified key factors influencing a social dimension of sustainability. These encompass the holistic and continuous improvement of welfare of various stakeholders such as employees, shareholders, customers, suppliers, the community, and the public at large.

Confirmed environmental performance as evident. The participant affirmed on their environmental performance through adhering to government regulations about environmental

standards, reducing the consumption of non-eco-friendly chemicals, and investing in renewable energy source to reduce energy consumption. Manufacturing firms prioritize adherence to legal policies established by their respective local governments to ensure environmental protection while conducting their business operations. Through following these regulations, they aim to minimize their ecological impact and contribute to sustainable practices within their operational strategies. This commitment to compliance shows their dedication to environmental stewardship and responsible organization, aligning with broader societal goals of preserving natural resources and safeguarding the environment for future generations.

This finding agrees with Latan et al. (2018). They pointed out that to enhance environmental performance, it is essential for the top management to be fully committed. Their strategies play a significant role in ensuring that the company follows environmental standards and adopts appropriate environmental plans, which are vital for achieving success and improving environmental performance. Similarly, the finding is congruent with the study of Verrier et al. (2014), which revealed that the organization's environmental performance is influenced by holistic approaches including the reduction of excessive power and water consumption, ensuring resource utilization, and implementing measures to control waste production and pollution. By concentrating on these aspects comprehensively, businesses can effectively contribute to environmental sustainability and mitigate their ecological footprint.

Standpoints of the Participants on the Influence of

Tactical Green Marketing Orientation to Sustainability

Confirmed tactical green marketing orientation as having a high influence on sustainability. The participants confirmed that tactical green marketing orientation could significantly influence the sustainability of manufacturing firms in Region XII. The participants emphasized the importance of embodying environmental values in tactical green marketing decisions in achieving sustainability. These include the utilization of e-commerce and social

media platforms, employing digital technology platforms, using eco-friendly materials, and practices on recycling and reusing.

This finding corroborates with the study of Choudhury et al. (2019) that observed that tactical green marketing decisions as widely used in e-commerce and digital platforms, these contributes to the efficiency and superior performance which has significant effect in achieving sustainability. Moreover, the result is consistent with the research conducted by Chung (2020), which underscores the significance of adopting a tactical green marketing approach as a crucial business tactics for fostering a more sustainable organization

Data Integration of Quantitative and Qualitative Results

This section presents the quantitative and qualitative results on three specific research areas and their nature. These research area are the extent of green marketing orientation extent of sustainability, and the high influence of tactical green marketing orientation on sustainability.

On the extent of green marketing orientation, the qualitative results confirmed the overall agreement of respondents on the quantitative results regarding on the presence of three dimension of green marketing orientation on their manufacturing firm. These dimension are strategic, tactical, and internal green marketing orientation. Thus, the nature of integration is connecting-merging-confirmation. This confirmation indicates that the manufacturing firms in Region XII engages in strategic, tactical, and internal processes and activities which holistically aim at creating, communicating, and delivering products or services with the minimal environmental impact.

This result corroborates the argument put forth by Vilkaite and Skackauskiene (2020), emphasizing that green marketing orientation serves as a contemporary marketing philosophy facilitating businesses in prioritizing societal and environmental welfare. Moreover, this finding aligns with the research conducted by Amegbe and Nuwasiima (2017), which emohasized the significance of green marketing orientation in enabling managers to comprehend how their

organizations contribute to environmental sustainability and how these efforts impact business outcomes.

On the extent of sustainability, the qualitative results confirmed the agreement of respondents on the quantitative results regarding the presence of sustainability in their manufacturing firm. The sustainability encompasses three indicators which are economic performance, social performance, and environmental performance. Hence, the nature of integration is connecting-merging-confirmation. This confirmation connotes that the manufacturing firms in Region XII has the ability to achieve and maintain sustainability considering its three pillars which are significant in assessing the firm's overall sustainability.

This finding supports the assertion made by Harik et al. (2015), and Garbie and Garbie (2020), regarding the evaluation of manufacturing firms' sustainability, which should encompass holistic indices comprising economic, social, and environmental performance metrics. Recognizing the significance of these sustainability indices and proactively pursuing them can lead to increased profits as a positive outcome of such policies.

Finally, on the influence of tactical green marketing orientation on sustainability, the participants confirmed the significant influence of tactical green marketing orientation on sustainability. Thus, the nature of integration is connecting-merging-confirmation. This affirmation underscores the pivotal role played by the tactical green marketing initiatives and decisions of the firm in shaping its overall sustainability efforts. This finding reinforces the assertion posited by Mishra et al. (2019), indicating that tactical green marketing endeavors exert a notable influence on company performance, consequently contributing to sustainability outcomes. Moreover, the transition from traditional to digital marketing practices facilitates enhancements in overall business performance for enterprises.

Implications for Business Practice

The findings of this study may have significant business implications, particularly within the manufacturing context, aiming to enhance and attain sustainability goals while conducting business activities in a green manner. These implications are intended for manufacturers, managers, environmental activist, and other stakeholders. It encompasses various impact on business aspects including production and operations management, marketing management, strategic planning, and more.

The research findings strongly affirm that tactical green marketing orientation stands out as the most influential predictor of sustainability. This suggests that the decisions and actions taken in the realm of tactical green marketing play a pivotal role in driving overall sustainability efforts. This implies that manufacturing firms must give emphasis to and embody environmental values in tactical marketing decisions, which include the use of eco-friendly marketing approaches such as e-commerce and digital technologies, which are significant in reducing the utilization of paper and traditional marketing materials. Added to this, manufacturers must consider the use of recycled and reusable materials in their products in order to minimize their undesirable impact on society and the environment. Aside from its benefits from social and environmental performance, the findings from both quantitative and qualitative analyses also underscore the substantial benefits of these tactical initiatives to the economic performance of manufacturing firms. Specifically, they contribute to cost reduction in marketing expenditures and other production and operational costs associated with manufacturing activities.

Finally, to consider tactical environmental approaches, managers and business owners should thoroughly evaluate and select the most suitable green initiatives for their manufacturing firms. This evaluation should extend to the e-commerce platforms and digital technologies they employ, ensuring that the chosen tactics effectively enhance their marketing efforts.

CHAPTER V

SUMMARY

This chapter presents the summary of the research findings, conclusion, recommendations, and recommendations for further study.

Summary of the Research Findings

The following were the main findings of the study on the extent of green marketing orientations, extent of sustainability, influence of tactical green marketing orientation to sustainability, lived experiences on green marketing, issues on sustainability, and standpoints of the participants on quantitative study.

a. The participants agreed that the three dimensions of green marketing orientation are evident or present in their manufacturing firms. In terms of strategic green marketing orientation, manufacturing firms agreed that they integrate the environmental imperative in their strategic marketing decisions. Regarding tactical green marketing orientation, manufacturing firms recognized that they embody environmental values in tactical marketing decisions through the utilization of modern marketing strategies that promotes eco-friendly behavior both for organization and stakeholders. As for internal green marketing orientation, manufacturers acknowledged that they integrate corporate environmental values on their internal stakeholders.
b. The participants acknowledged that sustainability is evident in their manufacturing firms. This encompasses economic performance, social performance, and environmental performance.
c. For significant influence of independent variable to dependent variable, this study revealed that tactical green marketing orientation is the only and strongest predictor of sustainability.

d. Based on the lived experiences of participants with green marketing, three essential themes emerged. First, manufacturers experience that the green materials and equipment are expensive which create challenges to them. Second, they experience the unavailability of suppliers for green materials which forces them to seek alternative suppliers in other cities. Lastly, manufacturing firms are actively involved in green activities such as tree planting and proper waste segregation.

e. On the sustainability issues of manufacturing firms, three essential themes emerged. For economic performance, the rising cost of raw materials and increasing cost for electricity challenges the manufacturing firms economically. The issue associated with social performance are the noncompliance of mandatory benefits such as health and other social insurances. Finally, the utilization of non-eco-friendly packaging are the main issue of the manufacturing firms for environmental performance.

f. For the integration of quantitative and qualitative results, participants agreed the presence of the three dimensions of green marketing orientation and the presence of the three indices of sustainability in their manufacturing firms. Furthermore, all participants agreed that tactical green marketing orientation has a positive influence in sustainability.

Conclusion

The presence of green marketing orientation in terms of strategic, tactical, and internal dimensions are evident among the manufacturing firms in Region XII. This implies that these manufacturing firms engage in green marketing orientation processes and activities that holistically create, communicate, and deliver products and services with the minimal environmental impact. The presence of sustainability encompassing economic, social, and environmental performance are also evident. This indicates that the manufacturing firms can achieve and maintain sustainable development through the Triple Bottom Line (TBL) or the three pillars of sustainability. Moreover, this study established that tactical green marketing

orientation is the only and the strongest predictor of sustainability. Such findings on the quantitative data were also confirmed by the participants through in-depth interview and focus group discussion. Acquiring environmentally friendly product and equipment are a challenge due to high cost and unavailability in the local market. Green activities such as waste segregation, tree planting-growing and adherence to government environmental standards are strictly observed. Despite the presence of sustainability, there have been issues on the three indicators that need to be addressed and complied.

Recommendations

Based on the research findings, the manufacturers, top management, government agencies, and policy makers should consider the following recommendations:

a. Ensure that managers are consistent and actively promote green marketing initiatives and integrating sustainability goals into the company's overall vision and mission. Added to this, they must provide regular training, updating and education sessions to the workforce to raise awareness about the significance of green marketing and equip them with the necessary orientations and skills in implementing green practices effectively.

b. Assess the business operation to determine areas for improvement in the implementation of green marketing orientation. Continuous engagement in green trends and commitment to government environmental policies will help them become fully aware of the holistic business practices that promote environmental sustainability.

c. Policy makers and government agencies should proactively provide grant programs and incentives for manufacturers to purchase green materials. In this case, the programs should be purposely created to reduce financial pressure in purchasing

alternative materials that are costly, which will persuade more industries to adopt sustainable practices.

d. Manufacturing companies must explore any government and non-government incentives, grants, or subsidies available for the use of green materials or sustainable production practices. Utilizing these approaches can help them reduce the costs involved with transitioning to more sustainable business.

e. The non-compliance of manufacturing firms on mandatory benefits for employees which include health and other social insurance benefits implies that the Department of Labor and Employment (DOLE) must strengthen their enforcement and monitoring mechanisms to track compliance with mandatory benefits over time. This ensures fair and just compensation and protection to the rights and welfare of employees.

f. Marketing managers should promote and encourage the utilization of tactical green decisions in their daily marketing endeavors. This includes modern eco-friendly marketing approaches and channels like e-commerce, social media, and other digital technologies that help bolster their marketing approaches towards becoming a more environmentally conscious organization.

Recommendations for Further Studies

The study highlights area beneficial for further studies.

1. Green hospitality and corporate social responsibility, and competitive advantage of hospitality sector in Bangsamoro Region.
2. A structural equation model of sustainability of manufacturing firms in Bangsamoro Region.
3. Green marketing orientations of manufacturing firms in Region XII toward rank-and-file organizational satisfaction.

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APPENDIX A

Survey Questionnaires

Survey Questionnaires

RESEARCH TITLE: GREEN MARKETING ORIENTATIONS TOWARD SUSTAINABILITY OF MANUFACTURING FIRMS IN REGION XII

Part 1. Profile of the Manufacturing Firm

Manufacturer:_____

Type of Industry: *(Please check one)*

☐ Food and Beverage ☐ Wood
☐ Agricultural Others *(Please Specify):*_____

Age of the Firm: *(Please check one)*

☐ 0 to 4 years ☐ 10 to 14 years ☐ 20 to 24 years ☐ 30 to 34 years
☐ 5 to 9 years ☐ 15 to 19 years ☐ 25 to 29 years ☐ 35 years and above

Address: _____

Email Address/Contact Number: _____

Part 2. Level of Green Marketing Orientation

Instructions: Read the statements carefully and indicate your rating based on the given scale and description as presented below. Encircle the scale provided corresponding to each item.

Legend:

5	Strongly Agree	The green marketing orientation is very evident and strictly implemented in our manufacturing firm.
4	Agree	The green marketing orientation is evident but not necessarily implemented in our manufacturing firm.
3	Neutral	The green marketing orientation could either be or not implemented and evident in our manufacturing firm.
2	Disagree	There is green marketing orientation but not evident and not implemented in our manufacturing firm.
1	Strongly Disagree	There is no strict adherence to green marketing orientation in our manufacturing firm.

A. Strategic Green Marketing Orientation

1. We invest in low-carbon technologies for our production processes. 1 2 3 4 5
2. We use specific environmental policy for selecting our partners. 1 2 3 4 5
3. We invest in R & D programs in order to create environmentally friendly products/services. 1 2 3 4 5
4. We make efforts to use renewable energy sources for our products/services. 1 2 3 4 5

5.	We create a separate department/unit specializing in environmental issues for our organization.	1 2 3 4 5
6.	We participate in environmental business networks.	1 2 3 4 5
7.	We engage in dialogue with our stakeholders about environmental aspect of our organization.	1 2 3 4 5
8.	We implement market research to detect green needs in the marketplace.	1 2 3 4 5
9.	Among other target markets, we also target to environmentally conscious consumers.	1 2 3 4 5

B. Tactical Green Marketing Orientation

1.	We encourage the use of e-commerce because it is more eco-friendly.	1 2 3 4 5
2.	We prefer digital communication methods for promoting our products/services because it is more eco-friendly.	1 2 3 4 5
3.	We apply a paperless policy in our procurement where possible.	1 2 3 4 5
4.	We use recycled or reusable materials in our products/services.	1 2 3 4 5
5.	We absorb the extra cost of an environmental product/service.	1 2 3 4 5

C. Internal Green Marketing Orientation

1.	Exemplar environmental behavior is acknowledged and rewarded.	1 2 3 4 5
2.	Environmental activities by candidates are a bonus in our recruitment process.	1 2 3 4 5
3.	We have created internal environmental prize competitions that promote eco-friendly behavior.	1 2 3 4 5
4.	We form environmental committees for implementing internal audits of environmental performance.	1 2 3 4 5
5.	We organize presentations for our employees to inform them about our green marketing strategy.	1 2 3 4 5
6.	We encourage our employees to use eco-friendly products/services.	1 2 3 4 5
7.	Our employees believe in the environmental values of our organization.	1 2 3 4 5

Part 3. Level of Sustainability of Manufacturing Firms

Instructions: Read the statements carefully and indicate your rating based on the given scale and description as presented below. Encircle the scale provided corresponding to each item.

Legend:

5	Strongly Agree	The sustainability performance was strongly evident in the manufacturing firm.

4	Agree	The sustainability performance was evident in the manufacturing firm.
3	Neutral	The sustainability performance is either evident or not in the manufacturing firm.
2	Disagree	The sustainability performance was not evident in the manufacturing firm.
1	Strongly Disagree	There was no sustainability performance in the manufacturing firm.

A. Economic Performance

The economic performance of the manufacturing firm emphasizes the economic efficiency and income of the business.

1. Our manufacturing firm decreases in costs for materials purchasing. 1 2 3 4 5
2. Our manufacturing firm decreases in costs for energy consumption. 1 2 3 4 5
3. We have decreased in fees for waste treatment. 1 2 3 4 5
4. We have decreased in fees for waste discharge. 1 2 3 4 5
5. We have decreased in fines for environmental accidents. 1 2 3 4 5

B. Social Performance

The social performance of the manufacturing firm emphasizes the quality of life, safety, and services for citizens including the employees, customers, and community at large.

1. Our manufacturing firm has improved overall stakeholders' welfare. 1 2 3 4 5
2. Our manufacturing firm has gained improvement in community health and safety. 1 2 3 4 5
3. Our manufacturing firm has reduced the environmental impacts and risks to general public. 1 2 3 4 5
4. Our manufacturing firm has improved the occupational health and safety of employee. 1 2 3 4 5
5. Our manufacturing firm has improved the awareness and protection of the claims and rights of people in the community. 1 2 3 4 5

C. Environmental Performance

The environmental performance of the manufacturing firm emphasizes the availability and quality of natural resources through reduction of undesirable environmental impact.

1. Our manufacturing firm has improved compliance with environmental standards.	1	2	3	4	5
2. Our manufacturing firm has reduced airborne emissions.	1	2	3	4	5
3. Our manufacturing firm has reduced in energy consumption.	1	2	3	4	5
4. Our manufacturing firm has reduced in material usage.	1	2	3	4	5
5. Our manufacturing firm has reduced consumption of hazardous materials.	1	2	3	4	5

APPENDIX B

Interview Guide Questionnaires

Interview Guide for SOP 4 and 5

Research Questions	Interview Questions	Probing Questions
SOP#3. Lived Experience of Participant with Green Marketing.	3.1 Can you share to me about your idea on green marketing?	• When it comes to the implementation and adaptation of green marketing, how knowledgeable are you to them?
	3.2 What are the processes of your implementation of green marketing?	• In what specific area of manufacturing activities does the firm observe green marketing practices?
	3.3 What have been your experiences in implementing green marketing?	• Based on your experience, what were your insights with regards to the implementation and green marketing orientation?
	3.4 What are the challenges encountered?	• What are the benefits and challenges that was observed in your green marketing experiences?
	3.5 What are your aspirations?	
SOP#4: Issues of Manufacturing Firms with Sustainability	4.1 Can you tell me, what are the issues of sustainability of your manufacturing firm in terms of: (KII) a.) Economic Performance (Profit) b.) Social Performance (People) c.) Environmental Performance (Planet)	• What are the potential compromises that could intervene in manufacturing firm's sustainability in terms of profit, to its people, and to the planet?

	4.2 What do you think are the identified causes that confronted these issues?	• What are the known hindrances or reasons that affected the manufacturing firm's sustainability?
	4.3 Can you explain to me the strategies or mechanisms adopted by of your manufacturing firm to sustain sustainability?	
	4.4 What prohibits the manufacturing firm to have the needed results and achieve its sustainability?	

INTERVIEW GUIDE FOR SOP 6

A. Main Questions:

1. How do you understand green marketing orientation (GMO) and sustainability?

If the participant's understanding is different from the working definition of the variables, then the variables will be explained in accordance with the most important indicator and question items for each variable in the survey questionnaire. However, If the understanding is correct as defined in the manuscript, then proceed to question no.2.

2. The ratings of the respondents in the survey for the three dimensions of GMO and three indicators of sustainability are high or agree, meaning each of the variable is evident in their manufacturing firm.

   For GMO:
   The mean of Strategic GMO is 4.00 interpreted agree or high. Do you agree, why or why not?

   The mean of Tactical GMO is 4.31 interpreted agree or high. Do you agree, why or why not?

   The mean of Internal GMO is 3.95 interpreted agree or high. Do you agree, why or why not?

   For Sustainability:
   The mean of Economic Performance is 3.62 interpreted agree or high. Do you agree, why or why not?

   The mean of Social Performance is 4.39 interpreted agree or high. Do you agree, why or why not?

The mean of Environmental Performance is 4.22 interpreted agree or high. Do you agree, why or why not?

3. From the results of the survey, tactical green marketing orientation highly influence the sustainability, do you agree why or why not?

B. Concluding Questions

4. Are there some more comments and ideas you would like to add before we end this session?

CLOSING REMARKS

The collected data will undergo transcription, and a transcript will be provided to you to verify your responses. Thank you once again for your valuable participation in this study.
May God shower you with abundant blessings!

APPENDIX C

Statistical Results from SPSS

Table 1.1 Descriptive Statistics

	Mean	Std. Deviation	N
SUSTAINABILITY	4.0756	.48441	157
STRATEGIC	3.9979	.73082	157
TACTICAL	4.3134	.60691	157
INTERNAL	3.9463	.73902	157

Table 1.2 Correlations

		SUSTAINABILITY	STRATEGIC	TACTICAL	INTERNAL
Pearson Correlation	SUSTAINABILITY	1.000	.418	.549	.382
	STRATEGIC	.418	1.000	.464	.783
	TACTICAL	.549	.464	1.000	.369
	INTERNAL	.382	.783	.369	1.000
Sig. (1-tailed)	SUSTAINABILITY	.	.000	.000	.000
	STRATEGIC	.000	.	.000	.000
	TACTICAL	.000	.000	.	.000
	INTERNAL	.000	.000	.000	.
N	SUSTAINABILITY	157	157	157	157
	STRATEGIC	157	157	157	157
	TACTICAL	157	157	157	157
	INTERNAL	157	157	157	157

Table 1.3 Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.585[a]	.342	.329	5.950

a. Predictors: (Constant), Intrnal_GMO, Tactcl_GMO, Strat_GMO

b. Dependent Variable: Sustainability

Table 1.4 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2819.414	3	939.805	26.545	.000[b]
	Residual	5416.777	153	35.404		
	Total	8236.191	156			

a. Dependent Variable: Sustainability

b. Predictors: (Constant), Internal_GMO, Tactical_GMO, Strategic_GMO

Table 1.5 Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.8544	4.4848	4.0756	.28342	157
Residual	-.96774	.91035	.00000	.39284	157
Std. Predicted Value	-4.309	1.444	.000	1.000	157
Std. Residual	-2.440	2.295	.000	.990	157

a. Dependent Variable: SUSTAINABILITY

Table 1.6 Collinearity Diagnostics

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	STRATEGIC	TACTICAL	INTERNAL
1	1	3.959	1.000	.00	.00	.00	.00
	2	.024	12.857	.19	.09	.14	.17
	3	.010	19.815	.71	.06	.67	.08
	4	.007	24.456	.10	.84	.19	.75

a. Dependent Variable: SUSTAINABILITY

Table 1.7 Test of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.074	157	.034	.987	157	.134

a. Lilliefors Significance Correction

APPENDIX D

Respondents Profile

Respondents Profile

Table 1: Position of the Respondents per City

Position	General Santos	Kidapawan	Koronadal	Tacurong	Total
Owner	16	7	12	8	43
Manager	56	14	35	11	114
Total	**72**	**21**	**47**	**17**	**157**

Table 2: Number of Years in the Manufacturing firm of Respondents per CIty

Number of Years in the Firm	General Santos	Kidapawan	Koronadal	Tacurong	Total
Less than 5 years	7	4	5	3	19
5 to 9 years	26	11	23	12	72
10 to 14 years	16	6	10	-	32
15 to 19 years	10	1	5	2	18
20 to 24 years	8	-	3	-	11
25 to 29 years	3	-	1	-	4
More than 30 years	2	-	-	-	2
Total	**72**	**21**	**47**	**17**	**157**

Appendix E

Permission Letter

October 6. 2023

MA. ARACELI C. JULIANO, Ed.D.
Graduate School Dean
Notre Dame University

Madame:

Greetings of Peace and Prosperity.

I am Harold L. Fernandez, a student at Notre Dame University-Graduate School in the degree program Doctor of Business Administration. I am now in the data gathering stage of my dissertation entitled **"Green Marketing Orientations Toward Sustainability of Manufacturing Firms in Region XII"**.

In this regard, I humbly request that you allow me to conduct a study at manufacturing firms in Region 12, specifically in Tacurong City, Koronadal City, General Santos City, and Kidapawan City. The said study involves survey questionnaires, interviews, and focus group discussions (FGD), which will require the top management or any equivalent positions as respondents and participants in the study. Rest assured that I will follow the proper protocols based on the Notre Dame University Graduate School Dissertation Guidelines in gathering data.

I am hoping for your approval on this endeavor. God bless and more power.

Respectfully yours,

HAROLD L. FERNANDEZ
Researcher

Noted by:

CATLYN O. PONGOT, DBA
Research Adviser

Approved by:

MA. ARACELI C. JULIANO, Ed.D.
Dean, Graduate School

Appendix F

Results Summary of the Validation of Quantitative Research Questionnaires

RESULTS SUMMARY OF THE VALIDATION OF QUANTITATIVE RESEARCH QUESTIONNAIRES

Validators' Information:

Validator	Degree	Position	Number of Years in Teaching and Research
1	DBA	Program Head	9 years
2	DBA	Faculty	6 years
3	DBA	Faculty	12 years
4	Ph.D.	Program Head	10 years

	Validator 1	Validator 2	Validator 3	Validator 4	Average
1. Clarity of the direction and items. The vocabulary level, language structure and conceptual of the questions suit the level of the respondents. The test direction and items are written in a clear and understandable manner.	5	5	5	5	**5.00**
2. Presentations / Organization of Items The items are organized in logical manner.	4	4	5	5	**4.50**
3. Suitability of Items. The items appropriately represent the substance of the research. The questions are designed to determine the conditions, knowledge, skills and attitudes that are supposed to be measured.	5	5	5	5	**5.00**
4. Adequateness of Items per Category. The items represent the coverage of the research adequately. The number of questions per category is representative enough of all questions needed for the research.	5	5	5	4	**4.75**
5. Attainment of the Purpose.	5	5	5	5	**5.00**

The instrument as a whole fulfills the objective for which it was constructed.					
6. Objectivity. Each item question only one specific answer to measure only one behavior and no aspect of the questionnaire suggests bias on the part of the research.	4	5	5	5	**5.00**
7. Scale and Evaluation in Rating System. The scale adopted is appropriate for the items.	5	4	5	5	**4.75**

Point of Equivalent:

Scale	Range of Mean	Description
5	4.50-5.00	Excellent
4	3.50-4.49	Very Good
3	2.50-3.49	Good
2	1.50-2.49	Fair
1	1.00-1.49	Poor

Summary of Remarks:

- The question items are clear.
- The question items per variable are enough, suitable, objective, and will attain the intention of the study.
- For Type of Industry: why not enumerate all the industries as identified by the Philippine Statistics Authority - Congratulations...

APPENDIX G

Results Summary of the Validation of Qualitative Research Questionnaires

RESULTS SUMMARY OF THE VALIDATION OF QUALITATIVE RESEARCH QUESTIONNAIRES

Validators' Information:

Validator	Degree	Position	Number of Years in Teaching and Research
1	Ph.D.	Program Head	10 years
2	Ph.D.	Faculty	17 years
3	Ph.D.	Program Head	8 years

Sections	Items	Validator 1	Validator 2	Validator 3
Introduction Key Components	1. Is there an opening statement expressing gratitude to the research participant for his or her willingness to join the session?	Yes	Yes	Yes
	2. Does this section of the questionnaire reveal the name of the researcher? (i.e the researcher Introducing himself or herself)	Yes	Yes	Yes
	3. Is the purpose explicitly stated?	Yes	Yes	Yes
	4. Is the duration of the session clearly stipulated?	Yes	Yes	Yes
	5. Is there a statement assuring the research participant of the confidentiality of his or her responses?	Yes	Yes	Yes
	6. Does this section explain how the in-depth interview or the focus group discussion be conducted?	Yes	Yes	Yes
	7. Does this section include a statement assuring the research participant of his or her opportunity to be clarified further before proceeding to the intended activity?	Yes	Yes	Yes
	8. Does this section provide spaces for the signature of the research participant?	Yes	Yes	Yes
Questions	9. Are there no more than 15 questions (i. e. no more than 3 research questions with no more than 5 probing questions each)?	Yes	Yes	Yes
	10. Are factual questions asked first before the probing questions?	Yes	Yes	Yes
	11. Are there questions requiring the participant to describe his or her experiences?	Yes	Yes	Yes
	12. Are there questions requiring the participant to explain the meaning of his or her shared experiences?	Yes	Yes	Yes

	13. Are the vocabulary level and language structure of the questions appropriate to the age and capability of the research participant?	Yes	Yes	Yes
	14. Are the questions clear and understandable?	Yes	Yes	Yes
	15. Do the questions possess the ability to elicit qualitative data relevant to the attainment of the objectives of the study?	Yes	Yes	Yes
Closing Key Components	16. Does this section guarantee the participant of his or her chance to give additional comments?	Yes	Yes	Yes
	17. Does this section inform the research participant of the researcher's plan regarding the data being collected, its analysis, and the corresponding report and what the researcher would do next?	Yes	Yes	Yes
	18. Does this section of the questionnaire express gratitude to the research participant?	Yes	Yes	Yes

Appendix H

Pictures Taken during Data Gathering

Distribution of survey questionnaires.

A pose after the interview with the owners and managers of Manufacturing Firms in Region XII.

Appendix I

Curriculum Vitae

CURRICULUM VITAE

HAROLD LUTOG FERNANDEZ
March 22, 1996
Timanan, South Upi, Maguindanao
haroldf22@yahoo.com

Educational Attainment

Doctoral:	Doctor of Business Administration Notre Dame University, Cotabato City June 2024
Graduate:	Master of Business Administration Notre Dame University, Cotabato City March 2018
Baccalaureate:	Bachelor of Science in Business Administration-Fin. Mngt. Notre Dame University, Cotabato City March 2016

Trainings and Seminars Attended

Ready to Teach Network-Wide Online Training, STI College Ortigas, Cainta
January 2024

Quantitative and Qualitative Research Methodologies Seminar Workshop
International Alert Philippines and Notre Dame University, Cotabato City
May 2022

Position Held/ Professional Affiliation

Faculty Member, STI College Cotabato
2019 to Date

Data Controller, LGU South Upi
2016 to 2019

General Manager, LGU South Upi Employees' Cooperative, South Upi, Maguindanao
2016 to 2018

Commendation and Awards

Most Outstanding Presenter: 1st Students' Multidisciplinary Paper Presentation
Notre Dame University
April 27, 2024

Abacus Award, STI College Cotabato
April 20, 2024

Resource Speaker, Magnegosyo Like a Pro
STI College Cotabato
December 2023

Research Presenter, Hybrid International Conference
Payap University, Thailand
April 2023
Distinguished FCCE Awardee, STI College Cotabato
April 2023

Research Grant Awardee, International Alert Philippines/
Notre Dame University-Research and Publication Center
June 2022

Grantee, Scholarship for Instructors' Knowledge Advancement Program (SIKAP)
Commission on Higher Education, Region XII
November 2021

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