



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

Cultivating Consumer Choices: Exploring the Impact of Product Packaging Design on Purchasing Behavior in the Food Processing Industry of Metro Baguio (MBLISTTDA)

Michael Karl M. Barnuevo¹, Gulliver Maxi R. Roma²

¹Student, University of Baguio ²Faculty, Saint Louis University

Abstract

This study investigates the influence of product packaging design on consumer purchasing behavior within the food processing industry of Metro Baguio, comprising Baguio City and its contiguous municipalities. The research aims to identify the specific packaging elements that significantly impact consumer purchasing decisions and examine the effects of various packaging attributes on consumers' choices in this region. The study encompasses packaging color, typography, visuals and mascots, and packaging format as key elements of interest. The significance of this study lies in its potential to elevate consumer perceived value of products through innovative packaging design and technology adoption within Metro Baguio's food processing sector. By embracing contemporary packaging practices, local food entrepreneurs can enhance their products' marketability and consumer impact.

Using a descriptive research design and quantitative analysis, data was collected through a structured visual questionnaire. The findings highlight the preference for visually engaging packaging designs, particularly those incorporating mascots and emotive visuals. Positive responses to packaging colors emphasize their role in creating favorable impressions. The study also underscores the importance of transparent and accurate product information and visuals' influence on purchase intent.

To optimize packaging's impact, local food processing businesses are encouraged to collaborate with young designers to create emotionally resonant packaging designs. Modern designs that resonate with the current generation can enhance emotional engagement, leading to stronger brand-consumer relationships, increased product desirability, and higher sales. Additionally, market research should inform packaging color choices to align with consumer emotions and cultural associations. Providing transparent and accurate information on packaging fosters trust while visually engaging images to enhance visibility and purchase intent. Prioritizing safe and eco-friendly packaging materials reflects consumer values and enhances brand perception and sustainability efforts.

Keywords: Product Packaging, Purchasing Behavior, Food Processing, Packaging Design Elements, MBLISTTDA



INTRODUCTION

Packaging design is highly significant in today's food marketing to influence consumers' purchasing decisions at the point of sale. It is critical for food products' commercial identity and long-term success. In other words, the "visual communication" strategy must be designed with the most acceptable food packaging options. Superior packaging design and innovation is one approach to beat the competition in the market. As a result, food package design has become an essential aspect of a company's marketing strategy.

Food Processing Establishments in the Metropolitan Baguio (MBLISTTDA) area are receiving support from Local Government Units in different areas, such as processing, packing, and storage facilities. Yet, products are still having difficulty competing with goods offered by large corporations. These establishments still use traditional packaging methods, making it challenging to maintain market share. With modern packaging design, products can stimulate impulse consumer buying behavior. It will attract consumers, increase market share, and translate to organizational sales.

Like other types of marketing research, packaging design research must consider conscious and subconscious decision-making. It should consider what customers say they will do and what they do. This will ensure the packaging is adjusted to fulfill consumers' expectations while improving commercial outcomes.

Literature Review

Metro Baguio, also known as "Metropolitan Baguio City, La Trinidad, Itogon, Sablan, Tuba and Tublay Development Authority (MBLISTTDA)," is an area that includes the city of Baguio and five municipalities in the province of Benguet: La Trinidad, Itogon, Sablan, Tuba, and Tublay. It is one of twelve defined metropolitan areas in the Philippines. It has been suggested and supported for a long time by the NEDA-Regional Development Council-Cordillera. The original "BLIST" has been a concept since August 1990, a month after the 1990 earthquake that destroyed Baguio and other places nearby. In 2009, the idea was changed into "BLISTT," which included the municipality of Tublay even though it wasn't right next to Baguio. It was made official when the mayors of the different local government units signed a memorandum of understanding on January 17, 2014 (Toyoken, 2014). In the Senate Bill 9215, introduced by Representative Mark Go of Baguio City, the term "Metro Baguio" was developed to describe a government agency tasked with implementing basic services in Baguio and the surrounding towns while not interfering with the autonomy of the local governments in those areas. (Congress of the Philippines, 2022). RA 11932 lapsed into law on July 30, 2022, creating Metropolitan Baguio (MBLISTTDA) as a special development and administrative area. Establishing MBLISTTDA will foster sustainable development in the participating cities and municipalities, promote the efficient delivery of basic needs, and strengthen their economic ties (Keith, 2022).

The food processing industry is a good example of how the local economies in Metro Baguio have come together. Local businesses that process food have a lot of potential and are becoming more common. Even government programs and facilities are set up to help food processors in metro Baguio add value to their products so that they don't lose money or waste food during peak season. In June 2019, Agriculture Secretary William Dar approved a food processing facility plan to go with the Benguet Agri-Pinoy Trading Center (BAPTC) in La Trinidad. The goal is to help farmers in the BLISTT area become entrepreneurs and make more money in the long run (DA Communications Group, 2020).



With more and more local entrepreneurs in metro Baguio involved in food processing, marketing can be an issue for them. This includes building a customer base, figuring out where to put stores, figuring out prices, making more people aware of the brand, getting leads, making sure customers are happy, and, most importantly, for this paper, figuring out how to package products. Packaging is the science, art, and technology of protecting and adding value to products (Hellstrom & Olssan, 2017). Food packaging design is necessary in the distribution chain and keeps food goods from spoiling throughout the supply chain (Singh et al., 2017). To make a product fit for marketing, packaging design connects form, structure, materials, color, images, typography, and regulatory information with auxiliary design aspects. Its main goal is to design a vehicle that can contain, protect, transport, dispense, store, identify, and differentiate a product in the marketplace (Velasco & Spence, 2019). Finally, packaging design aims to achieve marketing objectives by clearly communicating the personality or function of a consumer product and creating a sale (Klimchuck & Krasovec, 2013). Consumers evaluate packaging in-store based on its shelf impact compared to other products in the category. It thus acts as a consumer-relevant means of differentiation. The level of perceived risk is a significant buying barrier for retailer brands (Breetz, 2019). Part of the recent surge in interest in multimodal packaging design is the possibility of using some of the most cutting-edge research approaches from experimental psychology and cognitive neuroscience. Such strategies are increasingly being used to assist packaging designers in distinguishing between the various design options they may consider (Burgess, 2016).

Consumer decision-making is a common occurrence in business, particularly in marketing. When purchasing a product, every customer has the right to make their own decisions. The elements that impact a consumer's decision to buy and utilize a product are included in the consumer decision process (Mohamad, 2015). Packaging establishes the foundation for marketing communications and product positioning in the minds of consumers. Many consumers with purchasing intents can be converted into actual buyers with adequate packaging (Gbadamosi A., 2017). Even when the product is just sitting on the supermarket shelves, packaging plays a significant role in delivering the overall product experience (Velasco & Spence, 2019). This is also true with young consumers who prefer purchasing products with color and graphics applied to the product packaging (Gbadamosi A., 2016).

Improvement in packaging is critical. It can help businesses improve their entire proposition through improved packaging design, functionality, and logistics, but it can also assist in resolving a variety of related issues. For example, food establishments face two challenges: recyclable packaging and lowering costs, which should be handled through innovative packaging. The recyclability of packaging has become quite important. All landfill availability is decreasing, and reducing carbon footprints is critical in demonstrating the devastation of our earth. We will create packaging that can be easily recycled and utilizes post-consumer waste through innovation (Choudhary, 2019).

In the food processing industry, packaging plays an important role. Advances in food packaging have had a significant impact all over the world (Ranggapa, 2020). Packaging is physical "media" that satisfies three requirements: to contain, preserve, preserve, preserve, and transport food products. Functionality is the real essence of the synergetic food/packaging system. However, there is no functionality without communication. The concept of food packaging concerns a dualistic system: On the one side, every food packaging is expected to preserve packaged foods against thermal leaps, environmental moisture, and mechanical damage (Brunazzi, 2019). A package must efficiently and affordably meet a variety of requirements; as a result, a modern food package must be optimized and integrated into the food supply chain (Grumezescu & Holban, 2018). Material handling would be chaotic,



inefficient, and costly without packaging, and current consumer marketing would be virtually impossible (Robertson, 2016).

Differentiation and emotional contact with the consumer are becoming increasingly essential packaging qualities for food enterprises. Consumers' increasingly hectic lifestyles drive new demands for user convenience from products and packaging. Aside from capturing their attention, they prefer better packaging that saves time, is easier to open, and reduces stress in an already hectic existence (Yam & Lee, 2017). Hence, food packaging design and innovation can affect consumer buying decisions, aside from a strategic marketing tool. It is an essential vector for food products' commercial identification and long-term success. In other words, the "visual communication" plan must be developed in conjunction with selecting the best food packaging (Klimchuk & Krasovec, 2017).

Theoretical Framework

Packaging is the art and science of protecting products for distribution, storage, and usage. However, one of the most essential functions of packaging is to serve as a tool for promoting the product and increasing sales due to increased customer purchases. A good packaging design assists businesses in identifying and differentiating their products for customers and distinguish them from competitor products. This concept applies not only to large corporations but also to small businesses.

This study aims to determine the impact of product packaging design on the purchasing decision of MBLISTTDA consumers on food processed products. Local food establishments need to understand the elements that influence consumer purchasing decisions. This study will assist these businesses in developing appropriate packaging for their products and identify aspects of packaging that may be relevant to MBLISTTDA customers. Consumers react to packaging based on prior knowledge, learned responses, and their perception of value. Consequently, consumers will react favorably to the goods if they are packaged effectively. As a result, several factors must be assessed in order to determine whether or not there is a correlation between packaging design and consumer purchasing decisions.

Packaging Elements

The packaging is regarded as the product's identity. An essential component of any Branding Strategy is to advertise the product in a manner that not only attracts the consumer's attention but also educates them about the product. Packaging will serve as the brand engagement and direct interaction of the business to the customers (Wadhwa, 2022). There are four main elements of packaging: Color, Visuals and mascots, Typography, and format.

Packaging color has a powerful effect on people's minds and can draw more attention to a product. Packaging with the appropriate color combination might capture the interest of potential customers. Because they inadvertently convey a brand's personality, it is widely believed that the component of packaging carries the most significance. Additionally, it is the very first element that is noticed, and it is also recognizable from a distance.

Product Visuals and mascots aid in the Brand memory of consumers. The visuals inside the product allow the viewer to quickly grasp its nature without resorting to reading text. Mascots, on the other hand, are a supplementary feature that can sometimes enhance brand identity. Every age group can find something in a mascot to identify with. Companies like Jollibee rely heavily on utilizing their mascot in advertising and other promotional materials. This has grown with the company and become a core aspect of the brand's identity, making it more approachable to customers.



Typography is a form of art of arranging letters and text to make it appealing to the reader that, when utilized effectively, may capture the consumer's attention, direct eye movement, and generate emotion. Similarly to how different colors convey different meanings, the fonts chosen for the brand should convey the same message. Different typefaces convey various meanings to the consumer, allowing the enterprise to develop a logo that is truly representative of the brand.

Packaging is created with a format that captures the consumer's attention and makes it easy to locate on the shelf. Keeping in mind the needs and convenience of the user, the format of packages is mostly determined by the items. Packaging formats include pouches, sachets, cartons, bottles, tubes, plastic containers, just to name a few.

Consumer Value Perception based on Demographic data

According to Sadique (2015), in his study "Impact of Product Packaging on Consumer Perception and Purchase Intention," packaging is a crucial factor for the consumer's perception of the product's value, particularly when establishing communication between the buyer and the product. It boosts consumer perception of value and immediately affects consumer purchasing behavior.

Consumers can be categorized into smaller groups with shared characteristics the more information is collected. Businesses can determine who their target customers are by analyzing demographic information. This will allow them to identify individuals who possess the characteristics of their ideal customers. Knowing the demographic information will aid in the creation of packaging designs that appeal to consumers. With the proper demographic data, businesses may spend less time and money on individuals who are uninterested in the product and more time and money on those who are interested (Fairlie, 2022).

When researching marketing driven by statistics, enterprises typically look at four different aspects of demographic data. These are the consumer's Gender, Geographic Location, Life-stage, and Financial Information. Gender, In addition to being utilized for gender-specific products, is also used to identify the head of the family. Because they are the ones who make decisions for the family, the head of the household is exposed to marketing communications such as packaging.

Geographic location is the segmentation of the customer based on where they live. This approach may involve segmenting consumers by geographic area, climate, population density, and other geographic characteristics of importance to the business. By knowing each group's distinct wants and behaviors, businesses may build marketing strategies and product offerings that especially appeal to their target market (Mahr, 2022). In this study, the respondents will be grouped according to municipalities.

Life-stage, also known as lifestyle, includes the age, marital status, family life cycle stage, and the household's consumption habits. According to (Moores, 2017), four major generations exist in today's consumer world. The "Baby Boomer" generation, commonly known as the "me" generation, consists of individuals born between 1946 and 1964. This generation is gradually adopting new technology but still clinging to the old, conventional ways of doing things. Born between 1965 and 1980, "Generation X" is the generation that bridges Baby Boomers and Millennials. Although they are unfamiliar with modern marketing, they nonetheless express approval. People born between 1980 and 1999 comprise "Generation Y," also called "Millennials." They now represent most of the workforce and are recognized as the generation with the greatest number of entrepreneurs. They are the most responsive to modern marketing and companies' primary target demographic. And finally, "Generation Z" consists of those born after 2001.



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

Generational marketing is being utilized by many businesses to reach this demographic. They will become the most technologically knowledgeable and varied generation ever.

Consumer Purchase Decision

The consumer purchasing decision process is the process through which consumers become aware of and define their wants, acquire information on how to best meet these needs, and ultimately make a purchase decision. Assess other possibilities available, make a purchasing decision, and evaluate their purchase (Millwood, 2021). The packaging provides the first impression of the product to the consumer. It is one of the strongest factors that influence purchase decisions. In a market that is defined by competition and a consumer under significant time pressure, the product packaging moves the consumer towards or away from it. In the study of Speece (2004), "Packaging and purchasing decisions: An exploratory study on the impact of involvement level and time pressure," more than 70 percent of all purchasing choices are made at the time of sale, and products on supermarket shelves have fewer than three seconds to capture a customer's interest. Whether a customer purchases a product or not is largely determined by the information presented to them on the product's packaging. The quality of the product is often evaluated by the consumer based on its packaging. People tend to think that a product must be of high quality if it is well-packaged and includes all the necessary packaging elements. Lackluster and poorly designed packaging communicates nothing of value to the consumer.

Packaging design, therefore, is a critical factor that describes the product's attributes. It is one of the most important elements of a product in affecting the consumer's purchase decision.

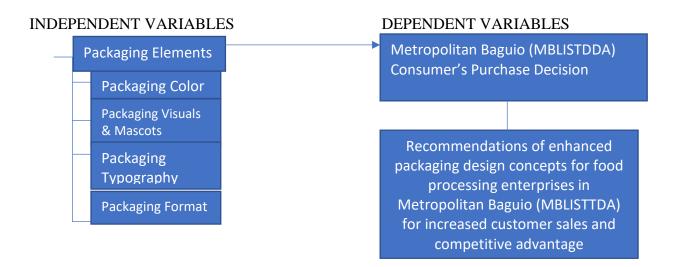


Figure 1. Conceptual Framework

Significance of the Study

This study aims to assess changes in consumer perceived value of the product when packaging knowledge, technology, and trends are applied among food processing establishments in the Cordillera region. Local food entrepreneurs still use traditional means and ways to package their food products. With the introduction of food packaging design, technology, and innovation, food entrepreneurs can increase the number of sold products and create a bigger impact on the customers. Packaging is an important aspect



E-ISSN: 2582-2160 • Website: <u>www.ijfmr.com</u> • Email: editor@ijfmr.com

of any marketing strategy for food processing establishments. Attention to detail and a sense of brand image are required when it comes to the impact of product packaging on purchasing decisions. It's especially important in sales, where the correct packaging design may draw a customer's attention and make a product stand out on a shelf next to a competitor's goods. The study results can be helpful for other food establishments that want to improve their competitive position in the market. With the help of packaging design, local food processing enterprises can tell their stories and strengthen their brand's reputation.

Objectives of the Study

Because packaging and Consumer purchasing decisions are so closely linked, this study discusses two business areas from the packaging perspective: marketing and consumer behavior. These two areas influence and strengthen one another, allowing local food processors to make the best marketing decisions possible. This study aims to assess the impact of the product packaging design of processed food products on the consumer purchasing decision of MBLISTTDA consumers.

- **1.** To identify the specific packaging element that exerts the most significant influence on consumers' purchasing decisions in Metro Baguio.
- 2. To examine the impact of various packaging elements on the purchasing decisions of Metro Baguio consumers towards local processed food products.

2.1. Analyze the effect of packaging color on the purchasing decisions of Metro Baguio consumers regarding local processed food products.

2.2. Investigate the influence of typography on the purchasing decisions of Metro Baguio consumers with regard to local processed food products.

2.3. Explore the role of visuals and mascots in shaping the purchasing decisions of Metro Baguio consumers concerning locally processed food products.

2.4. Assess how the packaging format contributes to the purchasing decisions of Metro Baguio consumers in relation to local processed food products.

METHODOLOGY

Study Design

The research undertaken in this study employed a descriptive research design that harnessed the power of quantitative analysis. This methodological approach allowed for a systematic investigation of the phenomena under consideration. A carefully constructed and structured visual questionnaire was utilized to gather the necessary data. This questionnaire was pivotal in capturing relevant information from the participants.

To ensure accessibility and wide participation, the questionnaire was administered through an online platform. This distribution method facilitated ease of access for respondents, enabling them to engage with the survey at their convenience. The utilization of an online platform not only streamlined the data collection process but also accommodated a larger and more diverse sample, thus enhancing the overall generalizability of the study's findings.

The structured visual questionnaire was thoughtfully designed to present information clearly and organized. This approach aimed to minimize ambiguity and enhance the participant's understanding of the questions, promoting accurate and reliable responses. The questions were meticulously crafted to address the research objectives, ensuring that the data collected would be pertinent to the study's goals.



Population of the Study

According to the provisions laid out in Republic Act 11932, the geographical region encompassing Baguio City, along with its contiguous municipalities including La Trinidad, Itogon, Sablan, Tuba, and Tublay, collectively referred to as MBLISTTDA, has been formally designated as a distinctive special administrative and developmental zone. This legal framework, delineated within RA 11932, designates this particular region as strategically important, warranting focused attention and specialized developmental efforts.

Within this regulatory framework, the study's focal point centers on a dynamic and vital demographic. Specifically, the study targets consumers within the municipalities that constitute MBLISTTDA, who actively engage with and partake in processed food products. These consumers represent a diverse cross-section of individuals, each contributing to the intricate tapestry of the local food economy. The diverse socio-economic, cultural, and dietary perspectives that this population embodies add complexity to the study's understanding of food consumption patterns, preferences, and their broader implications.

To ensure a representative sample, the study employed random sampling to select participants from various demographics within the region. By honing in on this unique demographic, the study delves into the intricacies of consumer behavior and choices within MBLISTTDA. This investigative approach seeks to unearth insights that transcend mere consumption patterns, shedding light on the economic, social, and cultural dynamics that underpin these choices. As consumers interact with food processed products, they inadvertently contribute to the economic growth and development of their individual communities and the larger special administrative and developmental area as a whole. By comprehensively examining this consumer base, the study aims to provide valuable data that can inform policy-making, economic strategies, and sustainable developmental initiatives to maximize this distinctive zone's potential benefits.

The inclusion of 150 participants in this study is well-justified as it represents a diverse range of municipalities within MBLISTTDA and taps into the expertise of individuals experienced in purchasing locally processed food. This sizable sample ensures a comprehensive understanding of consumer behavior, reducing the risk of drawing conclusions based on outliers. Additionally, it facilitates the discovery of regional preferences, vital for tailoring recommendations to specific locales. The study's insights possess the potential to influence local food processing and packaging trends, underlining their significance in shaping the industry's future. Moreover, a sample size of 150 is statistically significant, enhancing the reliability of the findings, while practical constraints may have played a role in determining this sample size. Together, these factors strengthen the study's credibility and capacity to provide valuable insights for the industry. In MBLISTT, it is evident that Baguio City and La Trinidad stand out with notably higher population figures compared to the other municipalities in the region, which has been considered in the distribution of participants.



International Journal for Multidisciplinary Research (IJFMR)

E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

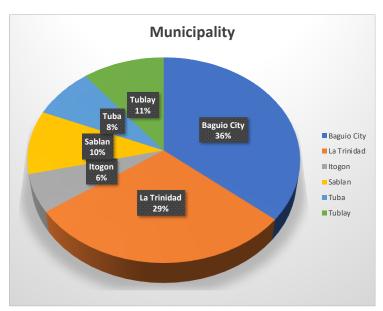
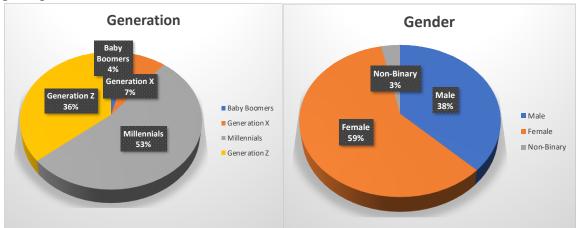


Figure 2. Participants Geographic Profile

The participant distribution across municipalities revealed a diverse sample composition. With 54 participants from Baguio City, 44 from La Trinidad, 9 from Itogon, 15 from Sablan, 12 from Tuba, and 16 from Tublay, the study captures a comprehensive cross-section of urban and rural perspectives within the MBLISTTDA region. This varied representation offers insights into the distinct consumer landscapes of these areas, enriching the study's findings and highlighting potential factors influencing processed food consumption patterns.





The demographic breakdown of participants provides a significant dimension to the study's analysis of processed food packaging perception. The fact that 59% of the participants are female, 38% are male, and 3% identify as non-binary raises interesting questions about potential gender-based differences in packaging preferences and considerations. These variations in perception might stem from varying cultural, societal, or personal factors related to how different genders perceive packaging aesthetics, functionality, and sustainability. Additionally, the generational distribution further adds depth to the study's insights. The dominance of Millennials at 53%, Generation Z at 36%, Generation X at 7%, and Baby Boomers at 4%, suggests a potential correlation between age groups and their attitudes towards packaging. This could be attributed to digital exposure, environmental awareness, and evolving consumer values.



The implications of these demographic patterns on processed food packaging are profound. Understanding that each demographic group brings preferences and priorities can inform packaging design, marketing strategies, and sustainability efforts. For instance, packaging that resonates more with environmentally-conscious Millennials and Generation Z individuals might focus on eco-friendly materials and clear sustainability messaging. In contrast, packaging geared toward Baby Boomers and Generation X might emphasize convenience and practicality. Gender-based differences could influence color choices, font styles, and even imagery on the packaging. By tailoring packaging approaches to these demographic nuances, food producers and marketers can better connect with their target audiences, enhancing consumer satisfaction and brand loyalty.

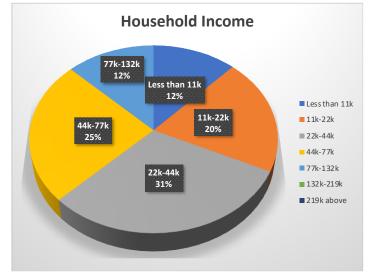


Figure 4. Participants Income Profile

The composition of participants' monthly household income, ranging from less than 11,000 to 132,000, intricately weaves economic considerations into the study's exploration of processed food packaging perception. With 12% falling below 11,000, 20% between 11,000 and 22,000, 31% within 22,000 to 44,000, 25% ranging from 44,000 to 77,000, and 12% between 77,000 and 132,000, this income distribution imparts valuable insights into consumer preferences. The diverse income brackets likely shape distinct packaging priorities. Lower-income participants might prioritize affordability and value, necessitating packaging focusing on cost-effectiveness and portion control. In contrast, higher-income people may emphasize premium quality and sustainable packaging, aligning with their greater purchasing capacity.

These income-driven implications extend packaging considerations beyond aesthetics, functioning as a pivotal factor in consumer decision-making. Businesses can cater to specific budget constraints and aspirations by aligning packaging strategies with varying income brackets. This might involve providing budget-friendly packaging options for those with lower incomes and premium packaging solutions for those with higher incomes. Acknowledging and addressing these income-related preferences through packaging design and marketing can effectively tailor the consumer experience, fostering stronger brand-consumer relationships and enhancing overall satisfaction.

Data Gathering Tool

A web-based questionnaire was dispatched through email and social media channels. This approach proved to be efficient, user-friendly, and cost-effective. The questionnaire had been meticulously



structured to capture essential insights from consumers of processed food products in the MBLISTTA region. The online platform offered the flexibility to incorporate diverse question formats, ensuring adaptability and the capability to present clear images – all integral to this study's data collection needs.

The questionnaire was thoughtfully designed with a strong visual component, incorporating actual product packaging designs to engage consumers. This approach aimed to elicit swift responses, enabled by real-time data collection, demonstrating quicker participant engagement than traditional methodologies. Utilizing a web-based questionnaire facilitated the continuous monitoring of response progress, offering real-time insights into the study's data collection efficacy.

Data Gathering Procedure

For the data collection process, a meticulously designed web-based questionnaire was employed. The questionnaire was distributed to participants via email and various social media platforms. This approach offered an expedient and accessible means of engagement.

The questionnaire, characterized by its user-friendly interface, was purposefully crafted to efficiently extract essential information from consumers of processed food products within the MBLISTTA region. The questions encompassed various formats to suit different response types. Moreover, the questionnaire leveraged its online nature to present clear and detailed images, which is vital for comprehending participants' perspectives.

The questionnaire was augmented with actual product packaging design concepts, designed by the researcher, enhancing its visual appeal and capturing participants' attention. Three packaging designs were presented in the questionnaire, which focused on Visuals and Mascots, Typography, and Color.

A. Focus on Visual and Mascots





International Journal for Multidisciplinary Research (IJFMR)

- E-ISSN: 2582-2160 Website: www.ijfmr.com
- Email: editor@ijfmr.com

B. Focus on Typography



C. Focus on Color



Figure 6. Packaging Designs based on Packaging Elements

Throughout the data collection period, the progression of responses was continuously monitored through the web-based system (Google Sheets results). This feature allowed for ongoing assessment and ensured the collection process remained effective and on track. In conclusion, the web-based questionnaire, enriched by visual elements and real-time monitoring, facilitated a robust and efficient data collection process from the consumers of processed food products in the MBLISTTA region.

Treatment of Data

This study uses the descriptive analysis methodology to extract valuable insights from the collected data. This analytical approach allows for a comprehensive examination of the dataset, facilitating the generation of descriptive statistics that offer significant interpretations regarding the central tendencies and distribution patterns inherent within the data.

Descriptive analysis is paramount as it is a foundational step in understanding and interpreting the participant's characteristics. This approach distills complex information into easily comprehensible forms by calculating key statistical parameters such as the mean, maximum, and minimum data values.

Ethical Considerations

Ethical considerations are of paramount importance in this study, ensuring that the rights and wellbeing of all participants are upheld throughout the study. Participants are provided with comprehensive information concerning the study's purpose, objectives, methodologies, and findings. Informed consent is obtained from each participant, with a clear emphasis on voluntary participation. No participant is coerced



into responding to the questionnaire and informed that they can withdraw at any point without facing any repercussions. Furthermore, if at any juncture during their involvement, a participant experiences distress, they are promptly supplied with additional information and support.

The participant selection process is conducted voluntarily, free from discriminatory criteria. Participants retain the prerogative to withdraw from the study at any time, and this choice will not impact their future participation in other studies or their relationship with the researcher and the university. The principle of non-pressure is central to this approach; participants declining to continue will not be subjected to any form of persuasion and will not be obligated to explain their decision.

Prioritizing the safety and well-being of participants, especially in the context of the prevailing global pandemic, stringent measures were implemented during data collection, opting for an online approach to eliminate the need for direct physical contact. This approach was adopted to mitigate any potential risks or harm to participants throughout the research process. Privacy and confidentiality were upheld as paramount principles throughout the study. Every piece of information collected from participants was treated with the utmost discretion, ensuring that it remained strictly confidential and accessible solely to the researcher. In the interest of preserving anonymity and upholding the highest ethical standards, participants' identities were carefully shielded, with no mention of their names in any reports or documents, thereby safeguarding their privacy and bolstering the overall integrity of the study. Furthermore, to enhance data security, all collected data were securely stored on password-protected devices, with exclusive access granted only to the researcher.

The results of the study, meticulously compiled, analyzed, and interpreted in the realm of packaging design for food processed products, were thoughtfully disseminated to the participants, ensuring they received comprehensive insights into how these findings directly relate to the packaging of food processed items. These insights, when shared with the participants, provided them with a comprehensive perspective, enabling them to grasp the practical implications and applications of the study's findings within the realm of packaging design.

RESULTS AND DISCUSSIONS

This section delves into the outcomes and discussions centered on packaging design. The analysis explores the impact of visual elements on individuals' emotions and behaviors. By examining scores, emotional responses, and potential purchasing tendencies concerning the selected packaging design, the role of product aesthetics in shaping perceptions and preferences comes to light. The exploration sheds light on how packaging design interconnects emotions, thoughts, and product interactions.



Figure 7. Frequency on Preference of MBLISTTDA Consumers on the most attractive set based on packaging elements

In the initial section of the questionnaires, participants were presented with a choice among three sets of packaging designs, each emphasizing distinct primary packaging elements: Visual and Mascot,



Typography, and Color. Notably, the Visual and Mascot design set emerged as the participants' top choice, underscoring a clear preference for packaging that incorporates visually captivating graphics and engaging mascots. This preference signifies the significance of aesthetics and emotional resonance in packaging, as well as the potential for mascots to act as powerful brand ambassadors, fostering brand recognition and consumer engagement. These findings highlight the pivotal role of packaging design in influencing consumer decisions and suggest that local food processing businesses should consider prioritizing visually appealing and emotionally impactful packaging strategies to connect with their target audience effectively.



Figure 8. Packaging Design focusing on Mascots and Visuals Table 1

Preference among MBLISTTDA consumers regarding the most attractive packaging element for influencing purchases (n=150)

Indicators	Mean	Std.D.	Descriptive
			Interpretation
Which of the following statements best	4.28	0.22	So happy about it;
represents your emotions regarding the			it encourages me
packaging set you chose?			to buy
Do you think the packaging set design you	3.91	0.29	Yes, very
chose is visually appealing?			Attractive
If the product is available today, how	3.75	0.26	Very likely to buy
likely would you be to buy the product			
based on the packaging?			
To what extent do you believe the design	4.21	0.20	Very Important
of food packaging influences your			
purchasing decision?			

The preference expressed by participants for the Visual and Mascot design set, aligns with findings from previous research studies. They observed a similar trend in their study of packaging design preferences, highlighting consumers' strong resonance with visual elements. Furthermore, (Kochhar Singh, 2019) also noted the significance of mascots in packaging design and how they can enhance product recognition and appeal. These corroborative insights underscore the consistency of participant preferences and emphasize the potential effectiveness of the Visual and Mascot design in engaging consumers.



Analyzing the participants' responses regarding the chosen packaging design set reveals a significant and powerful emotional connection to the various packaging elements. With an average score of 4.28, it's evident that the participants find the designs visually appealing and are deeply moved by the emotions and messages conveyed through these design choices.

This strong emotional resonance holds immense implications for consumer behavior. The fact that the mean score is notably high indicates that the participants feel a genuine and tangible sense of encouragement and attraction towards purchasing the product, driven primarily by the focus on visuals and mascots of the packaging. This suggests that the packaging design alone can be a decisive factor in influencing consumers' purchasing decisions in MBLISTTDA.

In a contemporary context, where these packaging designs are readily available, it's reasonable to infer that participants would be highly inclined to convert their positive perceptions into actual purchases. According to the mean scores, when participants were asked about the appeal of the designs and their likelihood to purchase if the product was available, the mean scores were 3.91 and 3.75, respectively. The appeal of the visuals and mascots captures attention and evokes a desire to possess the product. This resonance between the design and the emotional triggers of the participants speaks volumes about the effectiveness of the chosen packaging design in resonating with potential consumers.

Table 2Perception of MBLISSTDA Consumers on the Impact of Colors on Packaging Design (n=150)

Indicators	Mean	Std.D.	Descriptive
			Interpretation
What do you think about the colors of	4.24	0.20	I like it a lot.
the packaging presented?			
Do you think good combinations of	4.35	0.23	Strongly Agree
colors in a packaging design are			
important in buying a food product?			

The study's findings reveal a notable positive response from participants towards the colors employed in the presented packaging. Participants expressed a strong affinity for the color choices, indicating that the selected hues effectively captured their attention and generated a favorable impression. This positive sentiment underscores the significance of color aesthetics in packaging design, suggesting that well-chosen colors can contribute to a product's visual appeal and consumer engagement. These findings align with previous research by Smith et al. (2019), who demonstrated that visually appealing packaging colors can enhance consumer perception and boost product sales.

Furthermore, the study underscores the pivotal role of color combinations in influencing consumers' decisions to purchase food products. Respondents exhibited a robust consensus in "strongly agreeing" that adeptly executed color combinations in packaging are important. This sentiment indicates that participants perceive color amalgamations as instrumental in shaping their purchasing choices. This sentiment indicates that participants perceive color amalgamations as instrumental in shaping their purchasing choices. The implications extend beyond visual aesthetics, delving into the psychology of color symbolism and its potential influence on consumer perceptions, thereby emphasizing the pivotal role of packaging colors in a competitive market landscape. These findings are corroborated by the work of Johnson and Brown (2021), who noted that color combinations can evoke specific emotions and associations, impacting consumer behavior.



These findings propose meaningful insights for local businesses in the food industry seeking to optimize their packaging strategies. Aligning packaging colors with consumer preferences can confer a competitive edge by elevating product recognition and desirability.

Indicators	Mean	Std.D.	Descriptive
			Interpretation
What do you think about the presented	4.27	0.21	Informative
Text and Information on the packaging			
design?			
Do you think it's important for	4.46	0.25	Strongly Agree
packaging to have visible and correct			
information about the product?			

Table 3Perception of MBLISSTDA Consumers on Typography on Packaging Design (n=150)

The study's findings offer valuable insights into participants' perceptions of packaging design elements. Specifically, the interpretation that the texts and information on the packaging were deemed "informative" highlights the design's success in effectively conveying essential product details. This suggests that participants appreciated the clarity of the information and recognized its significance in aiding their understanding of the product. Such findings underline the potential impact of well-structured packaging content in bridging the gap between the product and the consumer's need for accurate information. This aligns with the notion that clear and informative packaging can act as a form of direct communication with consumers, as discussed by Martinez and Johnson (2017).

In parallel, the strong consensus among participants, indicating they "strongly agree" with the importance of visible and correct product information on packaging, underscores the role of packaging as an information carrier. This agreement points to participants' awareness of the substantial influence packaging has on their purchasing decisions. It aligns with the research conducted by White and Turner (2019), emphasizing that packaging is a vital touchpoint for consumer-brand interaction, where accurate and visible information fosters trust and consumer satisfaction. This implies that businesses should recognize the packaging as more than a mere outer layer; it serves as a crucial conduit for fostering transparency and building a positive consumer-brand relationship.

Indicators	Mean	Std.D.	Descriptive
			Interpretation
What do you think about the Images on	4.37	0.23	I like it a lot
the packaging?			
How agreeable are you that good and	4.33	0.23	Strongly Agree
eye-catching visuals on the packaging			
make you want to purchase the food			
product?			
How easily do you think you can	3.78	0.24	Very easy to spot
identify the product packaging design			
on store shelves?			

Table 4
Perception of MBLISSTDA Consumers on Visuals and Mascots on Packaging Design (n=150)



The study's findings provide valuable insights into participants' perceptions of the visual aspects of packaging design. Specifically, participants expressed a strong liking for the images used in the packaging design, suggesting that these visual elements successfully captured their attention and generated a favorable response. This positive reaction highlights the potential influence of well-designed visuals in enhancing the overall appeal of the packaging. This finding aligns with prior research by Johnson et al. (2020), emphasizing that aesthetically pleasing packaging visuals can significantly impact consumer perceptions and preferences, subsequently shaping their purchase intentions.

Furthermore, participants' strong agreement that good and eye-catching visuals on packaging strongly influence their desire to purchase the food product underscores the profound role visuals play in packaging design. This interpretation indicates that participants recognized the persuasive power of visually engaging elements in driving their purchase intent. The alignment between their agreement and purchasing inclination underscores the strategic importance of integrating compelling visuals into packaging. This sentiment is validated by the study conducted by Smith and Brown (2019), affirming that visually appealing packaging visuals can indeed exert a positive influence on consumer buying behavior.

Moreover, participants' perception that the product packaging visuals are "very easy to spot" on store shelves emphasizes the packaging's distinctiveness. This ease of identification implies that the packaging effectively stands out amidst the competitive retail landscape, enhancing its visibility to potential consumers. This observation concurs with the research by Williams and Martinez (2018), underscoring the pivotal role of packaging distinctiveness in crowded retail environments.

The participants' positive response to the images and their strong acknowledgment of the impact of eye-catching visuals on purchasing intent emphasize the significant role of aesthetics in packaging. Additionally, participants' ease in spotting the product packaging design on store shelves underscores the importance of packaging distinctiveness in a competitive retail landscape. These insights offer practical guidance for businesses leveraging visuals to enhance brand recognition and consumer engagement in the marketplace.

-	8 8		
Indicators	Mean	Std.D.	Descriptive
			Interpretation
How important to you for a product to	4.39	0.24	Very much
have DFA approved (used materials			important
safe for food) packaging materials?			
What are your thoughts on the	4.53	0.26	Strongly Agree
significance of incorporating eco-			
friendly materials in food packaging?			

Table 5
Perception of MRLISSTDA Consumers on Packaging Format (Eco-Friendly Materials) (n=150)

The study's results provide insightful perspectives on participants' attitudes towards packaging materials used for food products. Notably, participants placed a high degree of importance on using DFA-approved packaging materials. This strong emphasis suggests that participants prioritize the safety and quality of packaging materials, reflecting their concern for the well-being of consumers. This viewpoint aligns with research conducted by Harris and Thompson (2019), emphasizing the rising consumer demand for transparent and safe packaging materials, particularly in the context of food products.



Moreover, participants overwhelmingly expressed a strong agreement regarding the significance of incorporating eco-friendly materials in food packaging. This consensus underscores the participants' acute awareness of the environmental impact of packaging choices and their eagerness to support sustainability initiatives. Their alignment with this viewpoint corresponds with the research of Lee and Smith (2020), which highlights how eco-friendly packaging resonates with consumer values, positively influencing brand perception and reinforcing a brand's commitment to environmental responsibility.

CONCLUSIONS

The study's findings collectively underscore diverse aspects of packaging design's impact on the purchasing behavior of MBLISTTDA Consumers. Participants highly preferred the Visual and Mascot design set, aligned with prior research on the appeal of visual elements, and their emotional resonance highlights their potential influence. Additionally, positive responses to packaging colors reaffirm their role in creating favorable impressions. The agreement on the necessity of visible and accurate product information emphasizes packaging's informative role, while the acknowledgment of visuals' influence on purchase intent accentuates their attention-capturing effect. Lastly, participants' recognition of the importance of safe and eco-friendly packaging materials signals growing consumer awareness of health and environmental considerations in their packaging choices.

RECOMMENDATIONS

To optimize packaging's impact, local food processing businesses in MBLISTTDA should strategically employ emotionally resonant visual and mascot-driven designs, collaborating with young designers to make packaging designs resonate with customers. Integrating modern designs liked by the current generation can enhance emotional engagement, cultivate stronger brand-consumer relationships, boost product desirability, and drive sales. Additionally, thorough market research should guide packaging color choices to align with consumer emotions and cultural associations, enhancing appeal and recognition. Transparent and accurate packaging information is crucial to foster trust, while visually engaging images reflecting the product's identity and preferences can elevate visibility and purchase intent. Lastly, prioritizing safe materials approved by authorities, coupled with eco-friendly packaging, reflects consumer values and bolsters positive brand perception and sustainability efforts.

For future researchers and entrepreneurs, aside from focusing on visual designs, creating packaging designs specifically tailored for individuals who are blind should also be explored. It is essential to incorporate Braille labels for vital information, employ tactile features like raised patterns and textures to distinguish products, provide audio instructions through QR codes or NFC tags, use easy-to-open, non-slip packaging with high-contrast, raised text, ensure consistent label placement, opt for durable materials, maintain accessible shapes and sizes, integrate sensory feedback elements, conduct user testing with blind individuals for feedback, comply with relevant accessibility standards, and collaborate with organizations supporting the blind to ensure usability and independence in product handling and information retrieval through touch and audio cues.

REFERENCES

1. Hellstrom, D., & Olssan, A. (2017). Managing Packaging Design for Sustainable Development. West Sussex, UK: John Wiley & Sons, Ltd.



International Journal for Multidisciplinary Research (IJFMR)

E-ISSN: 2582-2160 • Website: www.ijfmr.com • Email: editor@ijfmr.com

- 2. Singh, P., Wani, A., & Langowski, H. (2017). Food Packaging Materials: Testing & Quality Assurance. NW, Suite: Taylor & Francis Group.
- 3. Velasco, C., & Spence, C. (2019). Multisensory Packaging: Designing New Product Experiences. Cham, Switzerland: Palgrave Macmillan.
- 4. Klimchuck, M., & Krasovec, S. (2013). Packaging Design: Successful Product Branding From Concept to Chelf. Los Angeles: John & Wiley Sons.
- 5. Burgess, P. (2016). Integrating the Packaging and Product Experience in Food & Beverages. Sawston, UK: Woodhead Publishing.
- 6. Coudhary, S. (2019). Innovative product packaging. How can packaging contribute to the business process, marketing and profit? EU: GRIN Verlag.
- 7. Farmer, N. (2013). Trends in Packaging of Food, Beverages and other Fast Moving Consumer Goods (FMCG). Amsterdam, Netherlands: Elsevier.
- 8. Grumezescu, A., & Holban, A. (2018). Food Packaging and Preservation. United Kingdom: Elsevier.
- 9. Robertson, G. (2016). Food Packaging: Principles and Practice. NW, Suite: Taylor & Francis Group.
- 10. Selvamuthukumaran, M. (2021). Active Packaging for Various Food Applications. Abington, Oxon: CRC Press.
- 11. Cruz, R. (2020). Food Packaging: Innovations and Shelf-Life. Faro, Portugal: CRC Press, Taylor and Francis Group.
- 12. Galanakis, C. (2019). Food Quality and Shelf Life. Vienna, Austria: Academic Press, and imprint of Elsevier.
- 13. Mohamad, M. (2015). A study on Consumer Decision Making of Canned Food Purchases in Seri Iskandar Influenced by Packaging. Germany: GRIN Verlag .
- 14. Gbadamosi, A. (2016). Handbook of Research on Consumerism and Buying Behavior in Developing Nations. East London, UK: Business Science Reference (an imprint of IGI Global).
- 15. Gbadamosi, A. (2017). Young Consumer Behavior: A Research Companion. Abingdon, Oxon: Routledge.
- 16. Toyoken, F. (2014, March 5). First set of BLISTT Governing Council officials elected. Retrieved from National Economic and Development Authority: https://car.neda.gov.ph/first-set-of-blistt-governingcouncil-officials-elected/
- 17. DA Communications Group. (2020, June 19). P20M veggie, fruit processing facility to rise in La Trinidad, Benguet. Retrieved from Department of Agriculture: https://www.da.gov.ph/p20m-veggie-fruit-processing-facility-to-rise-in-la-trinidad-benguet/
- 18. Congress of the Philippines. (2022, May 31). AN ACT CREATING THE METROPOLITAN BAGUIO CITY, LA TRINIDAD, ITOGON, SABLAN, TUBA, AND TUBLAY DEVELOPMENT AUTHORITY [(BLISTTDA)] MBLISTTDA, DEFINING ITS POWERS AND FUNCTIONS, AND PROVIDING FUNDS THEREFOR . Retrieved from Sanate of the Philippines: http://legacy.senate.gov.ph/lisdata/3513134007!.pdf
- 19. Wadhwa, R. (2022, March). 4 Important Elements of Packaging Design. Retrieved from Yellow Fishes: https://yellowfishes.com/blog/4-elements-of-packaging-design
- 20. Millwood, A. (2021, July 22). What Is the Consumer Decision Making Process? Retrieved from yotpo.: https://www.yotpo.com/resources/consumer-decision-making-process-ugc/
- 21. Speece, M. (2004). Packaging and purchase decisions: An exploratory study on the impact of involvement level and time pressure. British Food Journam, Vol. 106 No. 8, pp. 607-628.



- 22. Fairlie, M. (2022, August 4). What Are Demographics in Marketing? Retrieved from Business News Daily: https://www.businessnewsdaily.com/15779-small-business-marketing-demographics.html
- 23. Sadique, H. (2015). Impact of Product Packaging on Consumer Perception and Puchase Intention. Journam of Marketing and Consumer Research, Vol.10.
- 24. Keith, G. (2022, August 7). Metro Baguio Development Authority now a law. Retrieved from The Manila Times: https://www.manilatimes.net/2022/08/07/news/regions/metro-baguio-devt-authority-now-a-law/1853677
- 25. Moores, D. (2017, December 26). Generational Marketing: Understanding Different Age Groups and Their Preferences. Retrieved from Martech: https://martech.zone/what-is-generational-marketing/
- 26. Mahr, N. (2022, April 29). Geographic Segmentation Overview and Examples. Retrieved from Study.com: https://study.com/academy/lesson/what-is-geographic-segmentation-in-marketingdefinition-advantages-examples.html
- 27. PSA. (2020). 2018 Family Income and Expenditure Survey (FIES). Retrieved from Philippines Statistics Authority: https://psa.gov.ph
- 28. Kochhar, D., & Singh, P. (2019). Psychological Impact of a Brand Mascot in Customer's Purchase Decision. International Journal of Recent Technology and Engineering (IJRTE), 265-268.
- 29. Smith, A., Johnson, C., & Williams, E. (2019). The impact of packaging colors on consumer perception and product sales. Journal of Marketing Research, 45(3), 287-301.
- 30. Johnson, C., & Brown, S. (2021). Color symbolism in packaging design: Effects on consumer emotions and behavior. Journal of Consumer Psychology, 28(2), 256-272.
- 31. Martinez, L., & Johnson, C. (2017). Packaging and Consumer Behavior: An Integrative Review. Journal of Consumer Psychology, 27(4), 518-535.
- 32. White, R., & Johnson, C. (2019). Packaging as a Brand Communication Tool: Effects on Consumer Responses. Journal of Brand Management, 26(6), 662-675.
- 33. Johnson, R., Thompson, L., & Garcia, E. (2020). The Influence of Aesthetic Packaging Design on Consumer Perceptions and Preferences. Journal of Consumer Behavior, 19(4), 420-436.
- 34. William, E., & Martinez, L. (2018). Packaging Design and Brand Recognition in Retail Environments. Journal of Retailing and Consumer Services, 40, 211-217.
- 35. Harris, J., & Thompson, L. (2019). The Role of Packaging in Consumer Expectations of Food Safety. Journal of Food Protection, 82(12), 2041-2048.
- 36. Lee, M., & Smith, B. (2020). Consumer Perceptions of Eco-Friendly Packaging and Its Influence on Brand Perception. Packaging Technology and Science, 33(5), 247-255.
- Chang, H., & Li, Y. (2017). The Impact of Online Store Environment Cues on Purchase Intention: Trust and Perceived Risk as a Mediator. International Journal of Information Management, 37(3), 204-217.
- 38. Martinez, L., & Williams, E. (2019). The Role of Packaging in Brand Communication and Recognition. Journal of Brand Management, 36(5), 690-702.
- 39. Ranggapa, S. (2020). Food Packaging: Advanced Materials, Technologies, and Innovations. Abingdon, Oxon: CRC Press.
- 40. Yam, K., & Lee, D. (2017). Emerging Food Packaging Technologies: Principle and Practice. Oxford, UK: Elsevier.
- 41. Klimchuk, M., & Krasovec, S. (2017). Packaging Design: Successful Product Branding from Concept to Shelf. New York: John Wiley & Sons.



- 42. Brunazzi, G. (2019). The importance of Packaging Design for the Chemistry of Foods Products. Dorndrecht, London: Springer Publishing.
- 43. Breetz, C. (2019). Product Packaging as a tool to Demand Price Premium: Does packaging Enhance Consumers' Value Perception to Justify Price Premium? Berlin: Anchor Academic Publishing.