

IMPROVING PURCHASING DECISIONS THROUGH PERCEIVED FOOD QUALITY: AN SERVICE DOMINANT LOGIC (SDL) APPROACH

Lusi Suwandari

lusi.suwandari@unsoed.ac.id

Monica Rosiana

Universitas Jenderal Soedirman, Purwokerto

Widiya Avianti

STIE Wibawakartaraharja, Purwakarta

ABSTRAK

Tujuan dari penelitian ini adalah untuk menguji pengaruh kemasan visual dan kemasan verbal terhadap keputusan pembelian melalui kualitas makanan yang dirasakan. Jumlah responden sebanyak 175 responden yaitu konsumen yang membeli produk makanan UMKM di Kabupaten Banyumas seperti makanan, minuman, kerajinan, dan produk lain yang memiliki kemasan. Studi ini menggunakan pemodelan persamaan struktural AMOS untuk menguji model penelitian yang diusulkan. Hasil penelitian menunjukkan bahwa kemasan visual dan kemasan verbal berpengaruh positif terhadap kualitas makanan yang dirasakan dan keputusan pembelian. Variabel kualitas makanan yang dirasakan berpengaruh positif terhadap keputusan pembelian dan mampu memediasi hubungan antara kemasan visual dan kemasan verbal terhadap keputusan pembelian. Model di dasarkan pada logika Service Dominan dengan teori nilai konsumsi yang menyatakan bahwa perilaku konsumen merupakan fungsi dari berbagai evaluasi kognitif dan hedonis yang muncul dari pengalaman konsumsi yang menekankan betapa konsumen berperan aktif dalam menciptakan nilai selama interaksi mereka dengan produk, termasuk kualitas makanan yang dirasakan, kemasan visual, dan kemasan verbal.

Kata kunci: kualitas produk makanan yang dirasakan, keputusan pembelian, kemasan verbal, kemasan visual.

ABSTRACT

This study aimed to investigate the impact of visual and verbal packaging on purchasing choices by assessing the perceived quality of food. One hundred seventy-five respondents were surveyed, specifically consumers who purchase MSME food goods in Banyumas Regency, including food, beverages, crafts, and other packaged items. This study employs AMOS structural equation modelling to examine the proposed research model. The findings indicate that visual and verbal packaging benefits the perceived quality of food and influences consumers' purchasing choices. The variable of perceived food quality has a beneficial influence on purchase decisions and can operate as a mediator between visual and verbal packaging regarding buying decisions. The model is grounded in the Service's Dominant logic and the consumption value theory. According to this theory, consumer behaviour is influenced by cognitive and hedonic evaluations that stem from consumption experiences. These experiences highlight the active involvement of consumers in creating value during their interactions with products, including visual packaging, verbal packaging, and perceived food quality.

Key words: perceived food quality, buying decision, verbal packaging, visual packaging.

INTRODUCTION

Consumers' cognitive and behavioural patterns have undergone a shift. Contemporary consumers exhibit distinct thinking and behaviour patterns, mostly driven by

their focus on procuring the food to meet their essential needs rather than solely seeking taste and aroma. More factors influence their decision to buy food, including the attractive aesthetics of the

package. Due to the shift in consumer behaviour, companies require packaging that adds value. Alternatively, people purchase food for its taste and other criteria, such as attractive package characteristics Vila-López and Küster-Boluda, (2018)

Packaging is a crucial component of commercial products made available at the point of sale, and it is also at the centre of the efforts to manage trademarks (Kalpana et al., 2019). Studies on the aesthetic qualities of colour can enhance visual impact and response Vila-López and Küster-Boluda, (2018). It is common to use colour to engage young customers in assessing the appearance of a can or box.

Each colour has a specific purpose, and customers will react depending on that. For example, red and blue indicate action, calmness, and heat, while black indicates status, dominance, elegance, and grandeur. According to this statement, customer attitudes, purchase intentions, and visual and commercial features will be enhanced by the visual appeal of packaging. A study Vila-López and Küster-Boluda, (2018) and a study Bezaz and Kacha, (2021) found that children's evaluations of packaging and their attitudes towards brands are affected by each of the packaging dimensions. In addition, as shown by previous research (Nesselhauf et al., 2017), packaging affects how consumers identify brands (attention-grabbing identification). Packaging information is more important than visual information because it helps shoppers make wise decisions (Al-Samarraie et al., 2019).

Because consumers' decisions to purchase goods are influenced by various characteristics, including form, brand name, logo, size, colour, language, and others, many studies concentrate on marketing packaging. In addition, a product's packaging is the final impression that consumers remember and come into contact with while deciding whether to purchase a product (Chitroda and Patel, 2020a; Khan et al., 2017a). Some of the characteristics that influence customer purchasing behaviour include the design of

the packaging, the colour of the packaging, the language that is used for printed information on the box, and the positive association between attractiveness and buyer impression. As a result of the incorporation of logos or graphic symbols into the packaging, customers are encouraged to purchase products online (Al-Samarraie et al., 2019). All of these components affect customers' decisions regarding the products they purchase. Packaging can also affect customer loyalty because it significantly influences what customers buy (Salem, 2018).

According to a study by (Jáuregui et al., 2020), consumers are more likely to attribute value to products with complex packaging. However, purchasers can only judge the product's quality by examining the visual attributes of the packaging. Hence, packaging is crucial in encouraging customers to purchase products and capturing their attention.

This work is based on the research gap identified by (Yeo et al., 2020). They concluded that the attributes of the box, such as its form and dimensions, have negligible influence on consumers' inclination to buy a product. This fact might be ascribed to their inclination toward a container design that is both convenient and straightforward to operate.

There is no correlation between the size and shape of the packaging components and views on the desire to make a purchase, according to the research conducted by Yang and Roh, (2019). The findings of this investigation are based on this idea. In addition, Raheem et al., (2014) found that they do not agree with the notion that packaging affects consumers' decision making process. Consumers prefer to be influenced by the quality of the packaging, which should be of an appropriate size and shape. Customers often favour convenient packaging designs. A few academics have performed additional research to investigate how various aspects of packaging design influence customers' decisions regarding their only purchases. More statistical power must be

used to establish a causal association between these packaging design features (Al-Samarraie et al., 2019).

According to Silayoi and Speece, (2007), people believe that bigger product packaging indicates higher value. However, they cannot accurately judge the quality of the product only based on its appearance. The findings indicate that the verbal component is particularly important for products with a small consumer base. The result is demonstrated by the need to complement verbal marketing strategies with non-verbal skills such as perception, learning, and reasoning. The visual system transmits two-thirds of all inputs to the brain. Previous studies have shown that verbal and visual packaging characteristics might impact consumers' purchasing choices. The results of this study cast scepticism on the notion that visual packaging aspects directly impact consumer buying choices. The study is derived from the conclusions of previous studies. Customers patronizing retail enterprises should be mindful of several issues, such as the quality of the products.

The findings show that the verbal component is more significant for products with a smaller client base. Improvements to verbal marketing techniques that use non-verbal skills such as perception, learning, and reasoning are important.

Perceived Quality has two separate classifications of determinants: intrinsic and extrinsic (Solin and Curry, 2023). The following cues are essential for creating high-quality impressions: Intrinsic cues refer to the concrete elements of a product, such as its packaging. Price and brand are extrinsic considerations that do not directly correlate with the product.

Perceptions of quality are more closely associated with inherent characteristics rather than external factors. Intrinsic words refer to the inherent physical characteristics of a product that cannot be changed without fundamentally changing its core nature. The product is immutable, and any attempt to

modify it would fundamentally change its intrinsic qualities.

Customers' active participation can improve quality assessments and increase the probability of successfully meeting goals and satisfying needs. Using the thinking properties of the Service-Dominant Logic theory (SDL), the root slice of the theory applied in this study is that in the SDL theory, there is a value that can be formed or obtained in a certain way. According to consumption value theory, the functional aspect of value refers to individuals' rational and economic evaluations that reflect the quality of using a product or service (Carlson et al., 2019).

Perceived quality is an initial assessment of a product's general quality based on visual inspection. Previous research indicates that the visual attractiveness of packaging significantly influences consumers' impression of product quality. Ecological cues encompass the product and its packaging Kovačević et al., (2019). Wang JianHua et al., (2019) and Wang, (2013) argue that the degree to which a product or service is regarded to be of high quality is referred to as its perceived quality. How customers perceive the certificates and labels displayed on product packaging can affect their decision to acquire products. According to the findings of this study, consumers may identify the quality of food goods by using a variety of factors, including food labels and certifications. They believe that the implementation of quality attractiveness theory within the packaging sector has the potential to enhance our comprehension of the function that packaging plays in the process of forming fantastic.

The phrase "from the engineering point of view, the perceived quality domain is a place where the product meaning, form, sensorial properties, and their execution intersect with human experience" characterizes the quality that is regarded.

Consumers' opinions regarding the quality of their products can affect their decision to buy anything. Regrettably, there has been

a paucity of studies to ascertain the role of product quality as a mediator in the connection between consumer behaviour and perceptions. More information is needed regarding how the perception of food quality influences the connection between food purchases and the packaging of MSME products. For this reason, we will employ a model mediated by perceived food product quality to bridge the gap left by the need for previous research on packaging that includes both visual and verbal packaging. As a result, Indonesian Micro, Small, and Medium-Sized Enterprises (MSME) products cannot compete with foreign products. Packaging that is appealing and has information such as the product name, the company name, the net weight, the expiration date, the nutritional content, the Indonesian National Standard (SNI), the Hazard Analytical Critical Control Point (HACCP), and the halal mark should be attached to products that are manufactured by Small and Medium-Sized Companies (MSMEs). Packaging design that provides a higher level of protection for Micro, Small, and Medium-Sized Enterprises (MSME) products while preserving their shape and flavour. It is essential to provide correct information regarding the name, product, composition, and other aspects of the MSME products that are being transported to attract customers. Consequently, this research aims to ascertain whether the verbal and visual packaging of Micro, Small, and Medium-Sized Enterprises (MSME) products in the Banyumas Regency can indirectly impact consumers' perceptions.

THEORETICAL REVIEW

Service Dominant Logic (SDL) Theory

A theoretical paradigm known as Service Dominant Logic (SDL) explains how value is created by transforming and setting up the entities involved. Lusch and Vargo, (2006) argue that Service-Dominant Logic is based on ten (10) fundamental concepts and assumptions. The sixth concept of the ten fundamental principles asserts that cus-

tomers are continually involved in a collaborative endeavour to produce mutual advantage. Service-dominant logic emphasizes the customer's crucial involvement in creating value through collaboration (Payne et al., 2008). The co-creation process is a collaborative effort in which the customer actively incorporates and adapts their resources during the production or distribution phase of the product or service (Hilton et al., 2012).

Customers can generate utilitarian value by engaging in three ways: enhancing the quality of their experience, receiving personalized services, and gaining more control over their interactions Auh et al., (2007); Chan et al., (2010); Schneider and Bowen, (2010). This active customer interaction enhances quality evaluation and significantly boosts the probability of achieving success and meeting needs, offering a promising outlook for businesses embracing Service-Dominant Logic.

Value co-creation (VCC) is considered in this study's context through the SDL methodology. (Ranjan and Read, 2016) propose that this strategy involves customers and businesses creating value through immediate and direct participation in various phases of the product design, production, and consumption processes. (Ranjan and Read, 2016) identify packaging as a key component of product design.

The core concept of S-D logic is the generation of shared value. Software development logic (S.D. logic) states that value is generated when customers use products or services to meet their needs or desires as value in use (Lusch and Vargo, 2006). According to this perspective, customers, rather than the company itself, are the ones who create value for a company through their interactions with its products, services, facilities, and personnel. Objective assessment of the value of consuming situations is unattainable because each client possesses unique consumption experiences, skills, preferences, and goals. Regarding customer engagement with products and services,

value cocreation highlights that customers actively produce value.

According to Vila-López and Küster-Boluda, (2018b), verbal or informational attributes are referred to as "commercial attributes" because they are beneficial for positioning and communicating a new product. The informational value of a package is a crucial attribute in the commercial context, as it depends on the message's legibility, reliability, and effectiveness. Packaging carries information about a food product, providing consumers with essential details regarding the product's features, properties, storage conditions, and disposal methods. This information can be encoded in the form of linguistic signs (words, expressions, numbers) and iconic signs (photographs, drawings, and graphic signs (Ankiel et al., 2020).

It is important for the packaging to have certain features, such as a user-friendly and functional design, information about the product and the brand, and the use of recyclable materials during the manufacturing process. According to Lusch and Vargo, (2006), they can considerably influence the level of happiness customers feel and how they choose to make purchases. Visual engagement and value exchange will impact purchasing decisions. Customers' desire to purchase things directly results from their perception that they can obtain value while benefiting the organization. This exchange of value is what we call it. Companies can communicate the value of the products they offer roundaboutly through the packaging of those products. When it comes to selling food, visual value is of utmost importance (Xiong et al., 2023).

Purchase Decision

The customer purchase decision procedure has five stages. The initial phase involves identifying a need or problem, searching for information, comparing alternatives, making the final purchase, and engaging in post-purchase behaviour. The purchase process involves a series of decisions the consumer must first make after

deciding he or she needs to be satisfied. Marketing aspects such as product, packaging, aesthetics, advertising, distribution, service, and price are among the elements that affect consumer purchasing decisions (Mutsikiwa and Marumbwa, 2013). Food packaging greatly influences individual consumers' cognitive, affective, and behavioural components, affecting their purchasing behaviour and decision-making process (Tsai et al., 2020).

Marketers can influence consumers' decisions by furnishing them with product or service information. Buyers frequently solicit information regarding pertinent products, including utilization from prior experiences. In other words, buyers regard previous experiences as an internal source of information they can trust before purchasing.

Solomon et al., (2012) state that consumers typically make decisions through several processes. After the problem is identified, the subsequent stage involves the search for information, the evaluation of alternative options, and the final step of product selection. In this instance, the consumer recognizes the distinction between the present and the future states. The second stage of information search entails the acquisition of logical judgments regarding product investigation.

Visual and Verbal Packaging

Packaging is crucial because it influences consumers' emotions. Marketers can capitalize on the aesthetic components of packaging, particularly colour, to accommodate their products into various categories. Colours have a substantial impact on the emotions and thoughts of consumers. A specific brand and distinctiveness can be more strongly associated by utilizing colour as a cue. Packaging colours are regarded as connotations due to cultural distinctions in colour. Colour preference is determined by an associative (Alhamdi, 2020). In addition to colour, packaging design significantly influences consumer product selection.

The measurement discrepancy results from the need for careful and thorough evaluation. However, the amount of packing may differ based on the specific needs and preferences of the target market. The dimensions of the product are the main factor that determines its functionality. Visual components, such as pictures and charts, are crucial in recognizing and distinguishing products. Therefore, graphics on packaging are considered one of the most efficient means of conveying product information and visuals. Therefore, graphics on packaging are considered one of the most efficient means of conveying product information and visuals.

Perceived Food Product Quality

Purchase decisions are influenced by Perceived Quality (P.Q.) (Cronin Jr et al., 2000). Quality cues may be intrinsic and extrinsic, allowing consumers to assess product quality. Intrinsic cues are product-related attributes like price, brand name, and packaging, which are not part of the physical product (Konuk, 2018). The intrinsic value of a good or service draws customers in and ultimately influences their choice to buy.

According to prior research, product Packaging Design Elements (PDEs) are effective marketing signals that can influence consumers' purchasing decisions. Consumers' capacity to identify, evaluate, and contrast products from various categories illustrates this. PDE is a critical communication instrument for disseminating consumer information (Al-Samarraie et al., 2019).

Consumer perceptions of packaging, particularly food packaging, are discussed in these sensations. Display information about food composition (Robertson, 2005). Packaging plays a crucial role in the food supply. By doing so, it can explain the quality of food products. It is challenging to find information about food product quality. Positive service perception positively influences customer intentions (Karunaratna and Kumara, 2018). Most of the research has

focused on assessing the factors that affect consumer loyalty. The study's findings indicated that perceived service quality is the most significant factor in consumer decision-making. Research conducted by (Kovačević et al., 2019) indicates that.

Hypothesis Development The Visual and Verbal Packaging to Purchase Decision

Research by (Amron, 2018) and (Konuk, 2018) showed that product packaging influences purchasing decisions, with time pressure and customer involvement level as moderators. According to this study, visual components such as colour, shape, and size have a greater influence than information components on time (Togawa et al., 2019). Informational elements are essential for each consumer with a high level of involvement. In contrast, for consumers with a low level of involvement, packaging elements such as size, colour, information, technology, images, and shapes are the most essential (Ankiel et al., 2020).

Consumer involvement levels and time constraints influence product packaging and purchasing decisions. The findings of this investigation suggest that the effects of packaging variables, which are composed of two components-visual elements and information-vary based on the current time environment. Information is subordinated to visual components, including colour, shape, and size. Nevertheless, packaging features such as size, colour, information, technology, visuals, and shape are more significant to highly involved consumers than to less involved customers.

This study aimed to determine how much packaging elements affect Thai customers' purchasing decisions (Silayoi and Speece, 2007). The visual category is subdivided into two categories based on the size and design of the package, while the information category includes technology and information accessibility. The results suggest that the package's dimensions, form, hue, layout, and degree of engagement

impact consumers' buying choices. When customers are under time constraints, visual features influence their purchasing choices more significantly than informational variables. The following claims are based on theoretical justifications taken from a range of study findings:

H₁: Purchasing decisions are positively influenced by visual packaging.

H₂: Verbal packaging exerts a favourable influence on purchasing decisions.

Visual and Verbal Packaging to Perceived Food Quality

Regarding packaging qualities or features, such as specific selections of colour, typography, graphics, and sizes, consumers' "attitudes towards visual packaging design" in this study relate to how they feel about these aspects. Product quality can be ensured through the use of information packing. Considerable exertion is necessary before they discover knowledge about the quality of meals. Consequently, visual features are seen as markers of product quality. According to Spence and Velasco, (2018) the significance of sensory experience in food products is strongly connected to this matter. This sensory experience encompasses auditory cues, such as spoken prompts, written cues, and visual cues, such as pictures, that can be altered by product packaging. According to Boz et al., (2020), sustainable packaging improves the perceived food quality. Instead of essential product names, descriptive food labels that provide specific information about each component enhance the overall flavour perception. Language is a cultural element that has been recognized as influencing consumer behaviour. Customers can assess the quality of a product based on the information offered. The English language used on packaging can indicate product attributes such as high quality and contemporary nature (Khan and Lee, 2020).

Moreover, a recent study has demonstrated that using Western language on the packaging, without any translation, conveys to Chinese customers that the pro-

duct is imported and of superior quality (Celhay et al., 2020). The packaging can significantly influence the perception of product quality (Kovačević et al., 2019).

H₃: Visual Packaging has a positive effect on the Perceived food quality

H₄: Verbal packaging has a positive effect on perceived food quality

Perceived Food Quality to Purchase Decision

Today, packages are containers for advertising a product, making it simpler and safer to use, landing contents together and preserving. Organizations can create value in the product packaging design by improving customer perceptions of packaging characteristics or components. The elements that contribute to the visual appearance of a design include size, graphics, fonts, colours, and typefaces Wang, (2013) (Rasouli Valajoozi and Zangi, 2016) They can be regarded as stimuli that activate packaging attributes or qualities. Consumer perception pertains to an individual's interpretation of the visual aspects of packaging design, particularly food packaging.

This study Ketelsen et al., (2020) examines how product packaging (material, design, and labelling) influences product perception and evaluation. The impact of eco-friendly packaging on consumers' impression of product quality However, Ketelsen et al., (2020) suggest that visual elements can indicate food product quality.

Enhanced visibility facilitates considering consumers' needs and encourages spontaneous purchasing (Salem, 2018). Solin and Curry, (2023) Studies have shown that packaging styles and shapes can enhance visibility. Subsequently, a predilection for the calibre of the visual content is likely to emerge. Product packaging can be an external indicator for evaluating the quality of a product. Improving the aesthetic appeal of these packaging can enhance buyers' perceptions of quality. In contrast, improving the flavour, ingredients, and other inherent characteristics can increase the

perceived excellence and confidence in organic, locally sourced, and environmentally friendly food products (Konuk, 2018). The following statement is derived from the theoretical rationale behind the findings of multiple studies:

H₅: Perceived food quality has a positive effect on purchasing decisions.

Perceived Quality Mediated Visual and Verbal Packaging to Purchase Decision.

Based on the literature, P.Q. is influenced by two types of determinants: intrinsic factors, such as packaging, and external signals, such as pricing and shop image, which contribute to forming a quality impression. Modifying the packaging is an inherent signal leading to a corresponding alteration in the product's physical characteristics. The influence of intrinsic signals on perceptions of quality is more significant than extrinsic cues, indicating that concerns are connected to the stage in the purchase decision process where quality evaluation occurs (Zeithaml, 1988; Pires Gonçalves, 2008; Solin and Curry, 2023).

H₆: Perceived food product quality mediates between verbal packaging and purchasing decisions.

H₇: Perceived food product quality mediates between visual packaging and purchase Decision.

RESEARCH METHOD

This research is a quantitative project. The exact number of respondents who regu-

larly purchase MSME items is still being determined. Therefore, the hypothesis proposed by Hair Jr and Sarstedt (2019) is employed to ascertain the appropriate sample size. According to this theory, a sample size ranging from 100 to 200 is appropriate for conducting an analysis utilizing Structural Equation Modeling (SEM). Furthermore, a sample size in the Structural Equation Modelling (SEM) is recommended to be five to ten times larger than the expected values. The formula for calculating the number of parameters in a Structural Equation Modelling (SEM) model is the product of the total number of parameters and the sum of the path coefficients and indicators.

Following these guidelines, the total number of samples for this investigation is determined as follows: $(30 + 5) \times 5 = 175$. The respondents were chosen based on the fact that they have bought a variety of Banyumas MSME products, including food and beverages. Structural equation modelling (SEM) and AMOS version 2.3 are used in the hypothesis testing. SEM is combined with a thorough structural model and confirmatory factor analysis to evaluate the model twice. The measurement items used in the study were extracted from previous research studies. Table 1 lists every construct and item used in this investigation. To assess verbal and visual packaging, five questions that were modified from Salem, (2018); Raheem et al., (2014); Yang and Roh, (2019a) were used. Five criteria were used to assess the quality of food items.

Table 1
Variable Operational Definitions

Variable	Indicator	Load factor
Vi	Attractive packaging colors	0,691
	Easy to remember packaging colours	0,690
	Attractive packaging form	0,721
	Convenient packaging form	0,607
	Packaging size according to requirements	0,796
	Packaging size attractive to purchase	0,610
	The packaging image is highly recognizable.	0,741
	Eye-catching font for packaging	0,642

Variable	Indicator	Load factor
VIP	A brand name that is appealing on the packaging	0,633
	The package bears a distinctive brand name.	0,638
	It is simple to recall the brand name that is printed on the package	0,667
	Following the information on the packaging is simple.	0,616
	A reliable source of information is the packaging.	0,636
	The package is provided in the native language.	0,629
	Details about the product packaged in the container	0,747
		0,806
PFPQ	Excellent quality	0,832
	High-quality components and components	0,902
	A sound procedure	0,698
	The assurance of quality	0,653
	Exceptional longevity	0,675
PD	It is important to maintain quality.	0,749
	The brand of the packaging might influence a purchasing choice.	0,612
	Product information has an impact on the choice to make a purchase.	0,835
	The colour of the package influences purchase decisions.	0,815
	The form of packaging influences the choice to make a purchase.	0,793
	Purchase decisions are influenced by the size of the box	0,763
	Purchase decisions are influenced by how simple it is to utilize the product.	0,750
	Packaging that is simple to dispose of influences the decision to buy.	0,772
	The advantages of the packaging influence the decision to buy.	0,796

Source: *The Authors, 2024*

Every indication has a loading factor value greater than or equal to 0.5 (Ghozali and Latan, 2015). This study suggests that the coefficient value of the association between the latent variables and the indicators significantly increases. Consequently, every indicator item on the variable satisfies the requirements.

ANALYSIS AND DISCUSSION

Respondent Characteristics

Based on the criterion of people who had purchased various Small and Medium-Sized Enterprise (SME) products in Banyumas Regency, including food and beverages, a sample size of 175 participants was selected. From the data collected from 175 respondents, it was found that the majority of participants in this study were female, accounting for 52.6%, while males accounted for 47.4%. The majority of responses fall between the following age ranges: 17–25 years (23.4%), 26–35 years (21.7%), 36–

45 years (27.4%), and 45 years or older (27.4%).

Characteristics based on occupation are dominated by undergraduate and postgraduate students (S2) by as much as 31.4%, followed by civil servants by as much as 28%, entrepreneurs by as much as 26.9%, and others by 13.7%. Based on the characteristics of respondents' income, 41.7% of respondents earn more than \$2 million, 32% earn between \$2 and \$5 million, and 26.3% have an income above \$5 million. By looking at the composition of age, occupation, and income of the respondents, it is said that the participants in this study have a good enough income and are worthy of being used as research respondents.

As demonstrated in table 2, the statistical significance of the AVE value is higher than that of the squared correlation across constructs. As a fact, each variable is related to the others. The findings of this investigation are consistent with Kline's hypo-

theses (Kline, 2023). The results of the tests allow one to conclude that each of the utilized constructs possesses a high level of validity, and these constructs can be utilized for subsequent stages of the study. Each correlation coefficient between variables is less than the square root of the mean value (AVE) on the major diagonal. This case is for all of the variables. Consequently, the metrics produced by this study exhibit a satisfactory level of discriminating validity.

Table 2
Validity testing

	VIP	VIP	PFPQ	PD
VIP	0,8902			
VIP	0,3119	0,9262		
PFPQ	0,6728	0,3181	0,7633	
PD	0,5147	0,4119	0,5690	0,9117

Source: The Authors, 2024

Hair Jr and Sarstedt, (2019) argument that factor analysis results show that all model variables' factor load values are acceptable when the critical ratio is 0.5. Every item on the statement about every variable in this study is deemed reliable based on Cronbach's alpha coefficient and research testing that meets the qualifying 0.7 threshold. Compared to the square of the link between the verbal and visual components of packaging, the perceived quality of food

goods, and purchase decisions, all AVE values are significant.

Furthermore, the correlation between the pertinent variables is not as significant as the mean derived from the extracted variance's square root. All recommended validity and reliability thresholds have been met or surpassed (Cronbach and Warrington, 1951; Bagozzi and Yi, 1988). Consequently, it is possible to infer from the test results that every construct employed has good validity and is suitable for use in the subsequent analytical phase. The structural model was examined in the second phase of this investigation using the model fit index, as indicated in table 3 below. This test is run to determine if there is a correspondence between the study hypothesis and the data gathered. The researcher can use the fit index and cut-off value to evaluate the model's value. Test results are displayed in table 3.

Table 3 illustrates that the model fit (GoF) produced good results overall, with 175 GoF parameter values largely satisfying the established parameters. The estimated values, crucial ratios, and probabilities of the regression weights normalized by SEM AMOS output will also be assessed to test the research hypotheses. The model fit is clearly shown, with a statistical p-value greater than 0.05 (CMIN/DF: 1.49; GFI: 0.919; TLI: 0.982; RMSEA: 0.033; CFI: 0.985).

Table 3
Goodness of Fit Full Model SEM

Model Fit Indeks	Cut-off Value	Model Analysis Results	Criteria
χ^2 - Chi-Square	$< \chi^2_{123,225}(p 0,05; df 99)$	115,886	Good
Probability	$\geq 0,05$	0,118	Good
CMIN/DF	$\leq 2,00$	1,171	Good
RMSEA	$\leq 0,08$	0,033	Marginal
GFI	$\geq 0,90$	0,919	Good
AGFI	$\geq 0,90$	0,888	Good
TAG	$\geq 0,95$	0,982	Good
CFI	$\geq 0,95$	0,985	Good

Source: The Authors, 2024

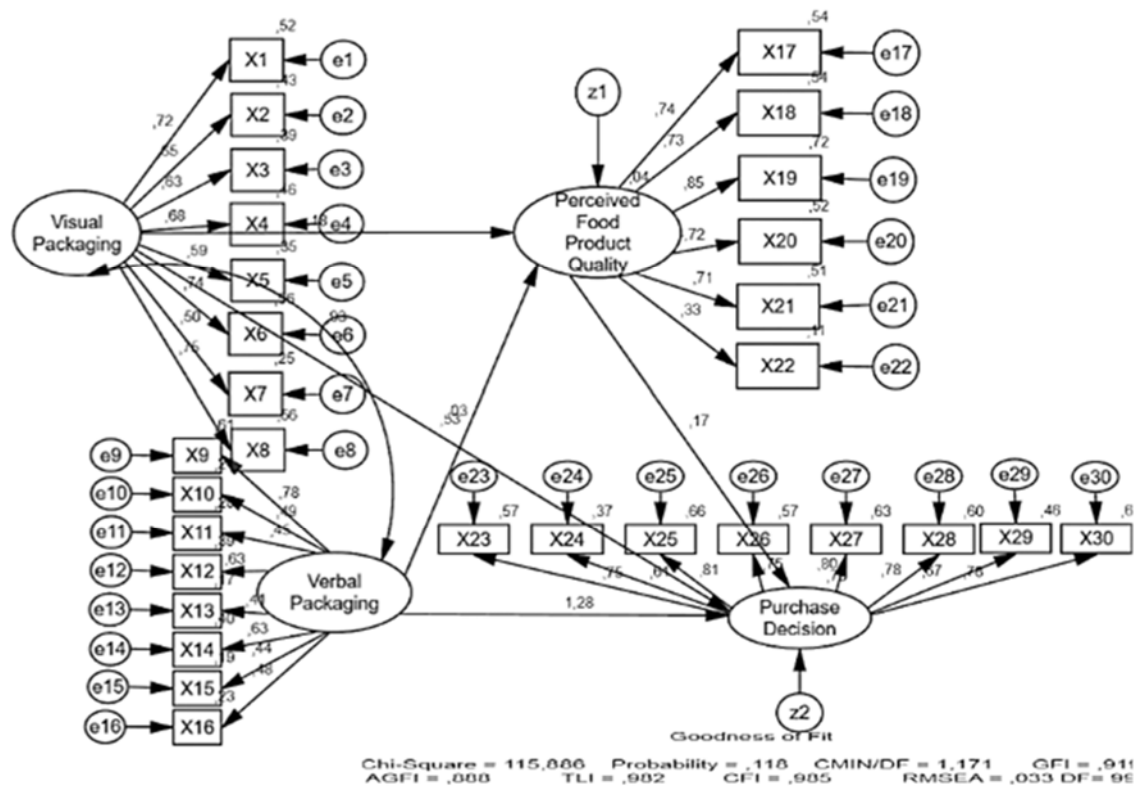


Figure 1
 Complete Model SEM

Source: The Authors, 2024

In order to account for the tendency of chi-square statistics, a metric called Root Mean Square Error (RMSEA) is employed to reject models with high sample sizes (Chen, Curran et al., 2008). A value less than or equal to 0.08 is an acceptable metric. The RMSEA value in this study is 0.033, indicating that the model's accuracy based on the RMSEA value is 0.08. The model accuracy is deemed adequate if the RMSEA value falls within the relevant category. The figure's entire structural equation model is shown below.

Figure 1 displays the outcomes of processing the research data using AMOS SEM. The model's structural equations are utilized with AMOS SEM.

The output section for regression weights presents the crucial ratios, probability values, and estimated values.

Scale the standardized regression coefficients to indicate the statistical importance of

testing the hypothesis. The hypothesis was tested using Structural Equation Modeling (SEM) analysis, and the results are presented in table 4.

Table 4
 The SEM Analysis to Hypothesis Test (Regression Weights) Full Mode Results of the Analysis

	Es	S.E.	C.R.	P-
VIP → PFPQ	,771	,259	3,98	***
VeP → PFPQ	,313	,089	3,99	***
VIP → PD	,202	,077	2,81	,013
VeP → PD	,147	,041	2,72	,036
PFPQ → PD	,919	,299	173	,029

Notes:
 ViP=Visual Packaging
 VeP=Verbal Packaging
 PFPQ=Perceived Food Quality
 PD= Purchase Decision
 * mean $p < 0.001$

Source: The Authors, 2024

According to the data processing results in the table above, the five hypotheses in this study are accepted. The p-value that determines is $0,000 < 0,01$, which shows it reaches statistical significance. The hypothesis (H₁) of the statistical test results presented in the table shows that ViP significantly positively affects PFPQ. It is acknowledged by Hypothesis (H₂) that VeP significantly affects PFPQ. (H₃) acknowledges the significant influence of ViP., which is a noteworthy improvement in Parkinson's disease. Hypothesis (H₄) acknowledged that VeP significantly influences substantial improvement in PFD.

Consequently, the sense of food quality, packaging that is both visible and audible, and the choice to buy are made by all impacted. Assessing food quality is seen as a mediating factor connecting verbal and visual packaging factors in buying. The result of the mediation test (Table 5).

Table 5
The Result of Sobel Test Mediation

Relationship	T Stat	S.E.	P Value
ViP→PFPQ→PD	2.304	0.363	0.021
VeP→PFPQ→PD	2.251	0.371	0.024

Source: The Authors, 2023

Food's perceived quality is a mediating variable between visual packaging and verbal packaging variables on purchasing decisions. The hypothesis (H₆) is accepted, with a p-value = 0.021, meaning that ViP has a significant positive effect on P.D. through PFPQ. Moreover, the hypothesis (H₇) is accepted, with a p-value = 0.024, meaning that VeP significantly positively affects P through PFPQ.

DISCUSSION

Compared to visual packaging, verbal packaging has the highest coefficient value when purchasing decisions. The verbal packaging coefficient value of 3.987 indicates that the verbal packaging contains easily accessible information. The phrases on the package emphasize the important elements of improving customer decision-making.

(Al-Samarraie et al., 2019); (Ankiel et al., 2020); (Raheem et al., 2014). The utilization of local language in packaging is an indicator of verbal packaging. With a loading factor of 0.747, this practice can effectively convey product attributes such as modernity and quality (Khan et al., 2017b).

Similarly, studies show that packaging in the local language symbolizes to consumers that the product is a typical product of the region and an upscale product (Cellhay et al., 2020). Consumers in the Banyumas district pay more attention to verbal packaging for MSME products, as seen by the specific messaging contained in information about brand names, clear information about items, storage information, terms that employ the Bayumas language, and product expiration date information. Instead of images, consumers can use facts to assess the quality of a product. Knowledge about the products' production and expiration dates, as well as information on how to store them, is one of the most crucial things for customers to know about food and beverage products.

According to the findings of this statistical investigation, the packaging's verbal and visual components, specifically, influence consumers' decisions to buy products. These findings align with research Silayoi and Speece, (2007); Salem, (2018); Khan et al., (2017b)(Chitroda and Patel, 2020b) that verbal packaging significantly impacts consumer purchasing decisions due to the efficient communication of brand name measurement items, product information, storage information, production and expiration dates, and letter shapes. The study's findings also demonstrate that colours used in visual packaging can draw customers in and help them remember it, demonstrating the importance of colour to consumer choice. The product is also made more attractive by its shape, size, image, and typeface, which can also be a key element in setting it apart from rivals. However, in contrast with Yang and Roh (2019b), packaging components do not directly impact purchase decisions.

According to the Sobel test, the variable of food perceived quality can mediate the influence of verbal and visual package factors on purchasing decisions. When considered from the mediation perspective, however, the perceived quality of the food best mediates the interaction between verbal and visual packaging factors on purchasing decisions. In order to increase purchase decisions, high levels of food perceived quality are needed in addition to aesthetic and verbal packaging tactics. Chen, (2016); Kovačević et al., (2019); Silayoi and Speece, (2007) states that when consumers cannot determine the quality of the product by the appearance of the packaging, the size of the packaging will have a very strong impact on the consumer's purchasing intentions. Many consumers need help to evaluate the quality of the packaging material; therefore, they rely on the packaging design to form an opinion (Waheed et al., 2018). It is assumed that the material of packaging, as one of the visual packaging forms, gives the perception that the form of packaging can maintain the quality of food products and will influence purchasing decisions (Konuk, 2018).

CONCLUSIONS AND SUGGESTIONS

Conclusions

The findings of this study enhance our comprehension of how verbal and visual communication impact the process of identifying consumer needs. The study highlights the significance of food product quality as the primary factor in determining consumer needs. In order to cultivate a favourable perception of the product offered by UMKM and boost sales, the company must exhibit innovative prowess in product development and devise an ethical marketing strategy that showcases the product's quality. Therefore, indicators such as warnings, timing, images, personal names, and transmitted information are major factors that demonstrate the impact of verbal communication on consumers' inclination to make purchases.

In addition, the findings of this study indicate that the utilized visual communication can inform the audience and assist them in comprehending the information currently being communicated to them, as well as highlighting the most important perinatal for the consumer to be provided. In addition to this, the product is designed to be more attractive in terms of its shape, size, dimensions, and characteristics, as well as its type of product, which can also be a determining factor in the process of obtaining a licence from the seller. The quality of the food provided can mediate the impact of verbal and visual factors on the communication process between the buyer and seller.

From a mediation standpoint, the link between verbal and visual package characteristics explains how perceived food quality affects purchasing decisions. Verbal traits are considered reliable indications of product quality because they provide information regarding food product quality. Visual packaging strategies to enhance purchasing decisions require aesthetic cues like colours, logos, and more.

Banyumas Regency's MSME food and beverage product packaging can affect consumer preference. It is, therefore, advised that MSME owners who wish to innovate and set themselves apart from the competition do so. Verbal packaging enhances data precision, including brand names, usage guidelines, storage recommendations, manufacture, and letter-form expiration dates. People's ratings of perceived quality are influenced by their perceptions of food goods' quality because it is challenging to find information regarding the quality of food goods. They discovered two restrictions on how food goods are viewed to be of different colours in their packaging. The packaging's appearance indicates product quality. It is not possible to guarantee that the effects of verbal and visual packaging apply to all food products. As such, we recommend more investigation to identify the attributes that consumers utilize to evaluate the quality of a product.

This study aims to investigate the food products manufactured by Micro, Small, and Medium-Sized Companies (MSMEs) in the Banyumas Regency. It uses a sophisticated decision-making framework that considers the various possible interactions between the various packaging components to better understand their significance in customer decision-making.

We recommend carrying out our research on food products that are produced in Indonesia. This study aims to analyze customers' purchasing decisions regarding packaging while considering their perception of the quality of food goods. Both Small and Medium-Sized Companies (MSMEs) and scholars deem the results of this study to be highly significant for the advancement of food packaging. Specifically, our research findings enhance comprehension of Micro, Small, and Medium-Sized Firms (MSMEs) and their strategies. However, this research encompasses several areas that require improvement. We successfully collected customer information from various Micro, Small, and Medium-Sized Enterprises (MSME) food outlets in the Banyumas Regency. To identify existing problems in MSME food and beverage products, individuals from different districts were assembled to conduct a forthcoming investigation.

Suggestions

This research exhibits specific deficiencies and constraints that necessitate attention and scholarly examination, serving as opportunities for enhancement in future research. This study has some limitations and restrictions: (1) This study specifically targets customers responsible for purchasing products offered by micro, small, and medium enterprises (MSMEs). These products include food, drinks, crafts, and other packaged things. Using a unit of analysis that includes similar products, specifically food and beverages, is recommended. Visual packaging elements and verbal mass indicators are designed specifically for food and beverage

products, ensuring they can only be used in comparable research studies.

However, the research errors and limitations that have been mentioned do not detract from this study's importance and core conclusions.

Given the outlined constraints of the research, it is crucial to consider numerous factors to advance future research. The study opens up a world of possibilities for further study, specifically: (1) Subsequent studies could additionally investigate this study model within the context of various packaging items that possess pertinent attributes to enhance this research's overall applicability and external validity; (2) The sample size is limited to the Banyumas Regency; hence, conducting tests in a wider variety of other places is imperative.

REFERENCES

- Alhamdi, F. (2020). Role of packaging in consumer buying behavior. *Management Science Letters*, 10(6), 1191–1196.
- Al-Samarraie, H., Eldenfria, A., Dodoo, J. E., Alzahrani, A. I., and Alalwan, N. (2019). Packaging design elements and consumers' decision to buy from the Web: A cause-and-effect decision-making model. *Color Research and Application*, 44(6), 993–1005.
- Amron, A. (2018). The influence of brand image, brand trust, product quality, and price on the consumer's buying decision of MPV cars. *European Scientific Journal*, ESJ, 14(13), 228.
- Ankiel, M., Sojkin, B., and Grzybowska-Brzezinska, M. (2020). Packaging as A Source of Information on The Product in Food Purchasing Decisions: The case of Poland. *European Research Studies Journal*. XXIII(1), 356-372
- Auh, S., Bell, S. J., McLeod, C. S., and Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of Retailing*, 83(3), 359–370.
- Bezaz, N., and Kacha, M. (2021). An experimental study of the effect of packaging colour on children's evalua-

- tion of packaging and attitude towards the brand. *International Journal of Retail and Distribution Management*, 49(6), 701–716.
- Boz, Z., Korhonen, V., and Koelsch Sand, C. (2020). Consumer considerations for the implementation of sustainable packaging: A review. *Sustainability*, 12(6), 2192.
- Carlson, J., Wyllie, J., Rahman, M. M., and Voola, R. (2019). Enhancing brand relationship performance through customer participation and value creation in social media brand communities. *Journal of Retailing and Consumer Services*, 50, 333–341.
- Celhay, F., Cheng, P., Masson, J., and Li, W. (2020). Package graphic design and communication across cultures: An investigation of Chinese consumers' interpretation of imported wine labels. *International Journal of Research in Marketing*, 37(1), 108–128.
- Chan, K. W., Yim, C. K., and Lam, S. S. K. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of Marketing*, 74(3), 48–64.
- Chen, I.-S. (2016). A combined MCDM model based on DEMATEL and ANP for the selection of airline service quality improvement criteria: A study based on the Taiwanese airline industry. *Journal of Air Transport Management*, 57, 7–18.
- Chitroda, J., and Patel, P. (2020a). A study on product packaging impact on consumer buying behaviour. *International Journal of Novel Research in Marketing Management and Economics*, 7(1), 74–82.
- Chitroda, J., and Patel, P. (2020b). A study on product packaging impact on consumer buying behaviour. *International Journal of Novel Research in Marketing Management and Economics*, 7(1), 74–82.
- Cronin Jr, J. J., Brady, M. K., and Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218.
- Ghozali, I., and Latan, H. (2015). Partial Least Squares Concepts, Techniques and Applications using the SmartPLS 3.0 Program. *Semarang: Diponegoro University Publishing Agency*, 76–77.
- Hair Jr, J. F., and Sarstedt, M. (2019). Factors versus composites: Guidelines for choosing the right structural equation modeling method. *Project Management Journal*, 50(6), 619–624.
- Hilton, T., Hughes, T., and Chalcraft, D. (2012). Service co-creation and value realisation. *Journal of Marketing Management*, 28(13–14), 1504–1519.
- Jáuregui, A., Vargas-Meza, J., Nieto, C., Contreras-Manzano, A., Alejandro, N. Z., Tolentino-Mayo, L., Hall, M. G., and Barquera, S. (2020). Impact of front-of-pack nutrition labels on consumer purchasing intentions: a randomized experiment in low-and middle-income Mexican adults. *BMC Public Health*, 20, 1–13.
- Kalpna, S., Priyadarshini, S. R., Leena, M. M., Moses, J. A., and Anandharamakrishnan, Cjt. (2019). Intelligent packaging: Trends and applications in food systems. *Trends in Food Science and Technology*, 93, 145–157.
- Karunaratna, A. C., and Kumara, P. A. P. (2018). Determinants of customer loyalty: A literature review. *Journal of Customer Behaviour*, 17(1–2), 49–73.
- Ketelsen, M., Janssen, M., and Hamm, U. (2020). Consumers' response to environmentally-friendly food packaging-A systematic review. *Journal of Cleaner Production*, 254, 120123.
- Khan, H., Lockshin, L., Lee, R., and Corsi, A. (2017a). When is it necessary to localise product packaging? *Journal of Consumer Marketing*, 34(5), 373–383.
- Khan, H., Lockshin, L., Lee, R., and Corsi, A. (2017b). When is it necessary to localise product packaging? *Journal of Consumer Marketing*, 34(5), 373–383.

- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications. New York City
- Konuk, F. A. (2018). The role of store image, perceived quality, trust and perceived value in predicting consumers' purchase intentions towards organic private label food. *Journal of Retailing and Consumer Services*, 43, 304–310.
- Kovačević, D., Brozović, M., and Ivanda, K. I. (2019). Eco-mark on product packaging and its effect on the perception of quality. *Journal of Graphic Engineering and Design*, 10(2), 17–24.
- Lusch, R. F., and Vargo, S. L. (2006). Service-dominant logic: reactions, reflections and refinements. *Marketing Theory*, 6(3), 281–288.
- Mutsikiwa, M., and Marumbwa, J. (2013). The impact of aesthetics package design elements on consumer purchase decisions: a case of locally produced dairy products in Southern Zimbabwe. *IOSR J. Bus. Manag*, 8, 64–71.
- Nesselhauf, L., Deker, J. S., and Fleuchaus, R. (2017). Information and involvement: The influence on the acceptance of innovative wine packaging. *International Journal of Wine Business Research*, 29(3), 285–298.
- Payne, A. F., Storbacka, K., and Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36, 83–96.
- Pires Gonçalves, R. (2008). *Consumer behavior: product characteristics and quality perception*. Universitat Autònoma de Barcelona-UAB, Barcelona.
- Raheem, A. R., Vishnu, P., and Ahmed, A. M. (2014). Impact of product packaging on consumer's buying behavior. *European Journal of Scientific Research*, 122(2), 125–134.
- Ranjan, K. R., and Read, S. (2016). Value co-creation: concept and measurement. *Journal of the Academy of Marketing Science*, 44, 290–315.
- Rasouli Valajoozi, M., and Zangi, N. O. (2016). A review on visual criteria of pure milk packaging for parents and their children (case study: Tehran, Iran). *British Food Journal*, 118(1), 83–99.
- Robertson, G. L. (2005). *Food packaging: principles and practice*. CRC press. Boca Raton. Amerika Serikat.
- Salem, M. Z. (2018). Effects of perfume packaging on Basque female consumers purchase decision in Spain. *Management Decision*, 56(8), 1748–1768.
- Schneider, B., and Bowen, D. E. (2010). *Winning the service game: Revisiting the rules by which people co-create value*. Springer.
- Silayoi, P., and Speece, M. (2007). The importance of packaging attributes: a conjoint analysis approach. *European Journal of Marketing*, 41(11/12), 1495–1517.
- Solin, A., and Curry, A. (2023). Perceived quality: in search of a definition. *The TQM Journal*, 35(3), 778–795.
- Solomon, M., Russell-Bennett, R., and Previte, J. (2012). *Consumer behaviour*. Pearson Higher Education AU. Upper Saddle River, New Jersey, Amerika Serikat
- Spence, C., and Velasco, C. (2018). On The Multiple Effects of Packaging Colour on Consumer Behaviour and Product Experience in The 'Food and Beverage' and 'Home and Personal Care' categories. *Food Quality and Preference*, 68, 226–237.
- Togawa, T., Park, J., Ishii, H., and Deng, X. (2019). A packaging visual-gustatory correspondence effect: using visual packaging design to influence flavor perception and healthy eating decisions. *Journal of Retailing*, 95(4), 204–218.
- Tsai, P.-H., Lin, G.-Y., Zheng, Y.-L., Chen, Y.-C., Chen, P.-Z., and Su, Z.-C. (2020). Exploring the effect of Starbucks' Green Marketing on Consumers' Purchase Decisions from Consumers' Perspective. *Journal of Retailing and Consumer Services*, 56, 102162.
- Vila-López, N., and Küster-Boluda, I. (2018a). Commercial versus technical

- cues to position a new product: Do Hedonic and Functional/Healthy Packages differ? *Social Science and Medicine*, 198, 85–94.
- Vila-López, N., and Küster-Boluda, I. (2018b). Commercial versus technical cues to position a new product: Do hedonic and functional/healthy packages differ? *Social Science and Medicine*, 198, 85–94.
- Waheed, S., Khan, M. M., and Ahmad, N. (2018). Product packaging and consumer purchase intentions. *Market Forces*, 13(2).
- Wang, E. S. T. (2013). The influence of visual packaging design on perceived food product quality, value, and brand preference. *International Journal of Retail and Distribution Management*, 41(10), 805–816.
- Wang JianHua, W. J., Tao JunYing, T. J., and Chu May, C. M. (2019). *Behind the label: Chinese consumers' trust in food certification and the effect of perceived quality on purchase intention*. Jiangsu, PR China.
- Xiong, S., Hu, N., and Ma, Y. (2023). The influence of implied motion on expected taste perception of advertised foods: The mental simulation perspective. *Food Quality and Preference*, 111, 104968.
- Yang, J. Y., and Roh, T. (2019a). Open for green innovation: From the perspective of green process and green consumer innovation. *Sustainability*, 11(12), 3234.
- Yang, J. Y., and Roh, T. (2019b). Open for green innovation: From the perspective of green process and green consumer innovation. *Sustainability (Switzerland)*, 11 (12). <https://doi.org/10.3390/su10023234>
- Yeo, S.-F., Tan, C.-L., Lim, K.-B., and Khoo, Y.-H. (2020). Product packaging: impact on customers' purchase intention. *International Journal of Business and Society*, 21(2), 857–864.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a meansend model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22.