

SME's processed frozen food packaging perceived hedonic and utilitarian value influence customers buying decision

Journal of Tourism, Hospitality & Culinary Arts (JTHCA)
2022, Vol. 14 (2022) pp 16-31
© The Author(s) 2022
Reprints and permission:
UiTM Press
Submit date: 13th July 2021
Accept date: 03rd November 2021
Publish date: 31st May 2022

Aidza Ashikin Alias*

Ali Mohamad Noor

Faculty of Hotel & Tourism Management, Universiti Teknologi MARA, Malaysia

*aidzaashikin@gmail.com**

Proposed citation

Aidza, A. A., & Ali, M. N. (2022). SME's Processed Frozen Food Packaging Perceived Hedonic and Utilitarian Value Influence Customers Buying Decision. *Journal of Tourism, Hospitality & Culinary Arts*, 14(1), 16-31.

Abstract

This study explores the influence of hedonic and utilitarian values of food packaging design that influences customers' buying decision. It focused on processed frozen food produced by small and medium enterprise (SME) in Malaysia. There are substantial numbers of SME'S that were registered in Malaysia and one of the categories are including food processing sector. However, these enterprises lack of knowledge in marketing strategy particularly in food packaging design to compete in highly competitive market. Six (6) elements of food packaging design which is images, colours, sizes, materials, shapes, and labels are investigated. These elements have an obvious significant relation toward the hedonic and utilitarian values on packaging. The study approaches causal research design on finding the effect of the independent variable (food packaging design perceived hedonic and utilitarian value) towards the dependent variable (customers' buying decision of a processed food product). The data were collected by online survey questionnaire among customers that aware, consumed and purchased SME processed frozen food in Selangor, Malaysia. The questionnaire was distributed on an online platform and to respondents that are residing in Selangor, Malaysia. A total of 263 responses were received, only 243 respondents answered "yes" on familiarity, consuming, or purchasing SME processed frozen food products. As for the finding of the study, it is found that the right elements of food packaging design have relationship in customers decision. The hedonic and utilitarian attributes have a considerable contributing proportion in influencing customers purchase decision. Overall, this study provides an exciting opportunity to advance the knowledge of food packaging design that perceive hedonic and utilitarian value for customers to purchase SMEs processed frozen food.

Keywords:

Food packaging design, Processed frozen food, Hedonic, Utilitarian, Small medium enterprise (SME)

1 Introduction

Customers' confidence to purchase can be derived from the characteristics of the product itself. The product's description can form a mixture of tangible and intangible aspects that promote customers to purchase (Mazhar et al., 2015). In other words, product packaging is one of the tangible and intangible aspects that manufacturers must consider in marketing their products. However, the designation of food packaging is dependent on the food product category that has been selected.

Processed food is one of the food convenient category that increased Malaysian demand as the product has a longer shelf life and can be prepared within a shorter time (Flanders Investment & Trade Malaysia Office, 2020). Most Malaysians prefer product that has a large variety of choices and convenient storage options. Flanders Investment and Trade Malaysia Office (2020) mentioned, over 8,000 processed food establishments were registered in Malaysia. Most of the establishments are comprised of Small Medium Enterprises (SME). Processed frozen food also contributes to the number of small medium enterprise (SME) that were registered in Malaysia.

Furthermore, food packaging design could be one of the aspects that small medium enterprise (SME) needs to consider in marketing their products. Most of the packaging's main purpose is to provide protection towards the product, however, the packaging itself can provide an element of marketing offer for manufacturers to increase their revenue (Zekiri & Hasani, 2015). Hence, six element of food packaging design which is images, colours, sizes, materials, shapes, and labels is being conducted in this study.

In line with the food packaging design theories, customers' lifestyle at the beginning of the 21st century had affected the evolution of packaging tangible aspects (Cortina-Mercado, 2017). A successfully planned food packaging design has a higher probability to attract customers attract and allow them to differentiate food products on shelves. This statement also involves the hedonic and utilitarian value of food packaging design in regards with the customers' buying decision. Hedonic term is related with emotional aspects, while utilitarian terms is connected with functional aspects preferences (Batra & Ahtola, 1991).

Although some research has been carried out on food packaging design, few studies have investigated on processed frozen food. As processed frozen food degradative reactions are distinct, the design and functional packaging are unique than other food products (Sand, 2019). Moreover, there have been very few empirically published accounts of food packaging design that perceive hedonic and utilitarian values in regards with customer purchase decision. One of the study recommendations for hedonic factors where combination of shape and colour into a packaging design will persuade customers' interpretation of the product quality including their emotional response and general preference toward the product (Chitturi et al., 2019). While utilitarian factors

open an opportunity to determine the product quality based on the shape and size of the food packages (Holmes and Paswan, 2012).

Therefore, six independent variables from food packaging design were used in this study according to the most influential food product design attribute with regards to hedonic and utilitarian values on customers' purchase decision. This study provides an exciting opportunity to advance the knowledge of food packaging design that perceives hedonic and utilitarian value in influencing customers' purchase decision on SME's processed frozen food.

2 Literature Review

2.1 Food Packaging Design

The packaging theory by Prendergast (1995) stated that the products made from a material of any nature give a function of protection, security, delivery, handling, and product presentations, from basic materials proceed to processed food, from manufacturers to customers. Another earliest definition of food packaging based on Pilditch (1957) as cited from Monnot et al. (2015) described that product packaging is the "silent salesman", which means the packaging must be an attraction at the point of purchase in order to represent the "salesman". The purpose of food packaging is to protect the food quality and the design of the food packaging is to create the products representing the food value. According to (Hassan & Mostafa, 2018), identification of a product value and brand identity can be based on the food packaging. Packaging is one of the most important components in generating brand equity as it is connected to product quality. Packaging distinguishes a product from products of other brands (Zekiri & Hasani, 2015). Food packaging can be a crucial part of designing a food product. As mentioned by Cortina-Mercado (2017), when packaging is being created for a new product, it is important to make a unique packaging that can be distinguished and attracts the target market of the product.

2.2 Processed Frozen Food

Processed food can be defined as food that has been processed via cooking, frozen, canned or its nutrition value had been changed (Ellis, 2019). The concept of the food categories is based on the degree of food processing. According to Imiru (2017), processed packaged food is one of the components of the modern lifestyle due to the high demand for easy-to-prepare meal solutions, convenience, portability and to lessen the hassles of grocery shopping and prepare a meals. The processed food formulation can depend on several ingredients which may include sugar, salt, fats, and oil. In addition, according to the Italian Trade Agency (2017), packaged food sells at lower prices to foodservice channels compared to retail and therefore foodservice operators can offer their customers an attractive selling price.

Processed convenient food is also known as a product that has already been pre-packaged. It can be in the form of a fresh product or frozen product that requires

reheating before served (Sen et al., 2019). It is also a product that provides a convenient purpose for the customers. Moreover, the design of processed frozen food packaging considers food nutrition and healthiness purpose. Thus, as mentioned by the same authors, processed frozen food is sold in a proper packaging that is designed with the benefits of utilitarian purposes. Furthermore, it is explained that the degradative reactions of processed frozen food material are different. Thus, the development of design and technical needs of each frozen food is different from one another (Sand, 2019). Designing a processed frozen food packaging can be one of the complicated factors that manufacturers need to consider as they need to maintain the food quality in order to evolve the packaging as an attractive element to purchase simultaneously (Sand, 2019).

2.3 Food packaging Design perceive Hedonic and Utilitarian

Hedonic preference for products user is explained on their emotional response towards the product. As mentioned by Denecli and Babur Tosun (2017), the hedonic value can be explained by customers' preferences that are influenced by certain emotions. In a simple explanation, hedonic benefits can lead to consumers' satisfaction by the products' quality of luxury, fun, and excitement (Wang, 2017).

Three food packaging design element that are being conduct in hedonic attributes which is colours, label, and visual images. As mentioned by Imiru (2017), packaging colours is a unique selling method as it delivers a message for the customers. Moreover, the colour itself personifies most of the thoughts and feelings and it is often used as a medium of communication to deliver the message of the image as it represents the food products (Mazhar et al., 2015). An emotional response from the customers on certain products and the products' memorability are dependent on the colours (Khuong & Tran, 2018). The researchers also mentioned that customers are more likely to buy a colourful package as it especially is memorable and draws attention. Most of the time, labels state the instruction of usage, ingredients, quantity, name of manufacturers, retail stores, and many others. (Khuong & Tran, 2018). Labelling gives information regarding the product's category, ingredients, and instructions. Customers making their decision to purchase the product are just not only guided by the taste, but also some other extrinsic factors such as brand awareness, labelling, price, and origin (Zekiri & Hasani, 2015). Pensasitorn (2015) stated that, graphic design on the packaging is to determine the elements of the packaging and create psychological affects on customers. The images of the processed frozen food products are important because it increases the attention and familiarity of a products. The background image is the image in the mind of the customers which helps to distinguish the brand of the products from different brands (Zekiri & Hasani, 2015).

Therefore, based on the literature review, first hypothesis are as follows:

H1: Perceived processed frozen food packaging's hedonic value increases, customers' intention to purchase processed frozen food products will increase.

H1a: Packaging colours give an enjoyment to customers to purchase processed frozen foods.

H2b: Packaging labels give pleasure to customers to purchase processed frozen foods.

H2c: Packaging graphic elements entertain customers to purchase processed frozen foods.

Utilitarian preference usually is related with consumers convenience on using the products. Utilitarian value considers customers' usage particularly concerning with convenience of opening, re-closing for storage, and disposing the products (Fadzil et al., 2015; Maffei & Schifferstein, 2017; Omar et al., 2011). As defined Yoh et al. (2016), the utilitarian value is considered as the degree of functionality of the products.

Three food packaging's design element that are being conduct in utilitarian attributes which is shape, size, and material. Purwaningsih et al. (2019) finds that, packaging shapes contribute to customers' memory perception, as shapes create an easy recall when customers want to purchase the products. Product packaging shapes that provide a compartment have a positive influence on the utility value (Widaningrum, 2014). Based on a previous study conducted, packaging shape scored the highest on memorable packaging element (Hassan & Mostafa, 2028). As mentioned by Ruto (2015), in a situation of having two options of the same products but of different sizes, usually customers would choose the products of the larger volume or quantity although it costs slightly more to spend. In this current situation, usually customers decide based on their perception of the size of the products. According to Khuong and Tran (2018), a product with a larger size will produce more volume than a smaller products. Based on customers' perception, this situation will make them less concerned with quickly running out of products. The higher the quality of the material, the higher the possibilities it will attract the customers as compared to a low-quality product material (Orji, 2014). Food packaging materials that are used have unique representative implications that enhance the communication of food packaging towards consumers (Maffei & Schifferstein, 2017). As mentioned by Ansari and Siddiqui (2019), high-quality material does not only protect the products from the external environment but also contributes to maintaining the shelf life of the products and making the shipment of products more convenient.

H2: Perceived processed frozen food packaging utilitarian value increases, customers' intention to purchase processed frozen food products will increase.

H2a: Packaging shape is convenient that influence customers to purchase processed frozen foods.

H2b: Packaging size provides satisfaction to customers to purchase processed frozen foods.

H2c: Packaging material provides functionality value to customers to purchase processed frozen foods.

2.4 Proposed Study Framework

The framework has been constructed based on the past literature and empirical research study. The model speculates the food packaging design element with the perceive of hedonic and utilitarian that influence customers buying decision. The study framework is showed in Figure 1.

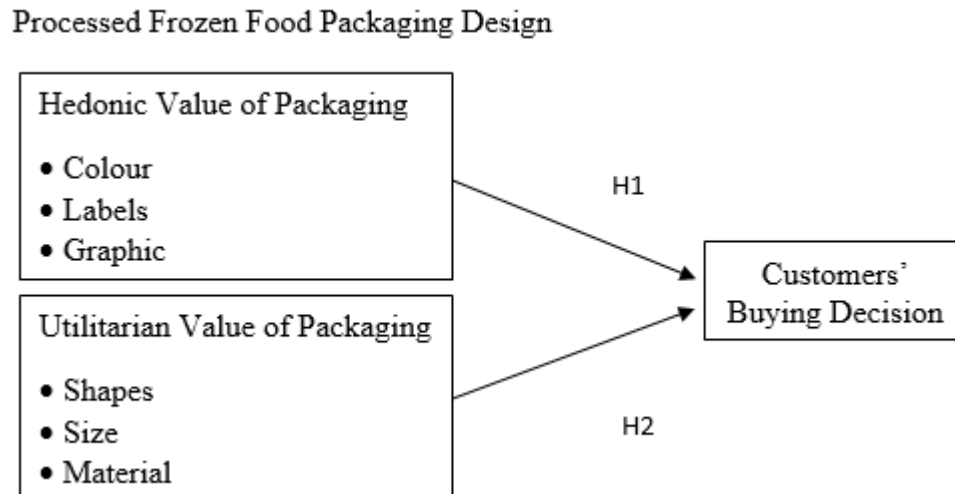


Figure 1: Proposed Framework of The Study

3 Methodology

3.1 Samples and data collection

The purpose of this study is to determine SME processed frozen foods packaging perceived hedonic and utilitarian values influence on the customers buying decision. Food packaging designs under hedonic values include colour, label and graphic, while utilitarian value includes size, material, and shape. The questionnaires were distributed on an online platform to respondents that are residing in Selangor, Malaysia. A total of 263 responses were received, only 243 respondents answered “yes” on familiarity, consuming, or purchasing SME processed frozen food products in the past 8 years, which gave the response rate of 92%. After the data had been cleaned from straight-lining answer and had removed the outliers, a total of 197 data was used for statistical analysis.

3.2 Measurement

To explain the profile of the respondents, the demographic section was developed. Screening questions are included in the questionnaire whether the customers familiar,

consume, and purchased processed frozen food products in the past 8 years. Independent variable of food packaging element was consisted of three (3) elements (colour, label, and image) with the perceive of hedonic attributes and another three (3) elements (shape, size, and material) with the perceive of utilitarian attributes were measured using 4-item respectively. The dependent variables, customers intentions were measured using 6-item. Questions for food packaging design perceive hedonic and utilitarian were constructed based on the adaptations from Wang (2017), Ghali (2020) and Ansari and Siddiqui (2019). Items were measured on 5-point Likert scale format range from “(1) strongly disagree” to “(5) strongly agree”.

3.3 Method of Analyses

According to the hypothesis testing, the methods used to analyse the data are multiple regression. Descriptive analysis helps the researcher to analyse the demographic information of the respondents. A multiple regression approach is used to predict the variation in the dependent variable. As for this study, multiple linear regression will be conducted to analyse the six-independent variable of three (3) elements (colour, label, and shapes) perceive hedonic attributes and three (3) elements (shape, size, materials) perceive utilitarian to the dependent variable of customers purchase intention.

4 Findings and Discussion

4.1 Demographic Profiles

The sample profile is shown as table below:

Table 1: Demographic profiles of the study

Demographic	Category	Frequency	Percentage
Gender	Male	67	34.0
	Female	130	66.0
Age	21 – 30	171	86.8
	31 – 40	20	10.2
	41 – 50	5	2.5
	Less than 20	1	0.5
Marital Status	Single	134	68.0
	Married	63	32.0
Job	Unemployed	6	3.0
	Student	26	13.2
	Self-employed	30	15.2
	Private	115	58.4
	Civil servant	21	10.7
Income level	Below RM1,000	32	16.2

RM1,001 - RM2,500	89	45.2
RM2,501- RM4,894	59	29.9
RM4,850 and above	17	8.6

The data for testing hypotheses and addressing research goals was gathered using an online questionnaire survey. As presented in Table 5, the total respondents are 197. Male respondents were concluded to be 34% (n=67) and most of the respondents were female, making up 66% (n=130). Most of the respondents are single, 68.0% (n=134) and another 32% (n=63) are married. In regards of age, the result revealed that 0.5% (n=1) of the respondents is less than 20 years old, 2.5% (n=5) of the respondents are between 41-50 years old. Other than that, 10.2% (n=20) respondents are between the age of 31-40, another 86.8% (n=170) represents the highest participation among the age categories which is 21-30 years old. For the respondent job, the majority shows that they are working in private sector, 58.4% (n=115) and followed by self-employed, 15.2% (n=30), civil servant, 10.7% (n=21), student 13.2% (n=26), and the lowest is unemployed, 3.0% (n=6). As for the income level, 16.2% (n=32) of the respondents' income are below RM1,000, followed by 45.2% (n=89) of income range between RM1,001- RM2,500, respondents' income between RM2,501 – RM4,894 is 29.9% (n=59), and the lowest recorded is RM4,850 and above, 8.6% (n=17).

4.2 Reliability and Validity Analysis

The validity of the questionnaire is assured by panels of expert with academic background from UiTM Puncak Alam. Therefore, the questionnaire was distributed to four (4) panels of expert in the hospitality industry to verify the validity of the questionnaire. It is also to avoid mistakes or misunderstood questions in the research instrument.

The reliability of the questionnaire was analysed towards customers in Selangor that familiar, consume, and purchased SME processed frozen food products in the past 8 years. According to Sekaran and Bougie (2016), the nearer Cronbach's alpha to number 1, the more reliable the internal consistency of the instruments. In this research, alpha coefficient of hedonic and utilitarian values towards customers' buying decision has been measured as below:

Table 2: Reliability test of the study variables

Section	Cronbach's Alpha	Number of Item
Section B (Hedonic)	0.899	12
Section C (Utilitarian)	0.909	12
Section D (Customer purchase intention)	0.864	6
Total	0.942	30

Note. N = 197

4.3 Descriptive Statistic

Table 3: Mean scores and standard deviation for study variables

Item	Description	Mean	Std. Deviation
<i>Food packaging perceived Hedonic attributes</i>			
HC1	Frozen food packaging colour gave me joy experience.	4.20	0.795
HC2	Frozen food packaging colour make me felt pleasure.	4.12	0.864
HC3	Frozen food packaging colour make me feel like buying a right thing.	4.03	0.958
HC4	Packaging colour positively affects my emotion on easily remembered frozen food product.	4.32	0.779
HL1	Frozen food packaging label gave me joy experience.	4.05	0.822
HL2	Frozen food packaging label make me felt pleasure	4.09	0.797
HL3	Frozen food packaging label make me feel like buying a right thing.	4.34	0.721
HL4	Packaging label positively affects my emotion on easily understand frozen food product.	4.35	0.745
HI1	Frozen food packaging image gave me joy experience.	4.54	0.602
HI2	Frozen food packaging image make me felt pleasure	4.42	0.692
HI3	Frozen food packaging image make me feel like buying a right thing.	4.37	0.685
HI4	Packaging image positively affects my emotion on easily remembered frozen food product.	4.50	0.636
<i>Food packaging perceived Utilitarian attributes</i>			
US1	Frozen food packaging shape was useful for my practical use (exp: storage or stacking purposes)	4.52	0.659
US2	Frozen food packaging shape was convenient for my use (exp: storage, easy-open food)	4.54	0.673
US3	I fulfil my need just what I wanted through the frozen food packaging shape	4.05	0.888
US4	I found the right frozen food packaging shape I wanted	4.06	0.777
USZ1	Frozen food packaging size was useful for my practical use (exp: storage or stacking purposes)	4.43	0.664
USZ2	Frozen food packaging size was convenient for me (exp: food portion, storage, or easy-open food)	4.46	0.658
USZ3	I fulfil my need just what I wanted through the frozen food packaging size	4.15	0.810
USZ4	I found the right frozen food packaging size I wanted	4.09	0.800
UM1	Frozen food packaging material was useful for my practical use (exp: storage or stacking purposes)	4.24	0.851
UM2	Frozen food packaging material was convenient for my use (exp: eco-friendly, storage or easy-open food)	4.34	0.776
UM3	I fulfil my need just what I wanted through the frozen food packaging material	4.16	0.848
UM4	I found the right frozen food packaging material I wanted	4.14	0.812
<i>Purchase intention</i>			
PI1	Packaging colours influence me to purchase frozen food product.	4.30	0.747
PI2	Food packaging label make me purchase frozen food product.	4.39	0.665
PI3	The graphic on food packaging makes me purchase frozen food product.	4.35	0.731
PI4	Food Packaging shapes is useful and convenient that influences my purchase decision	4.30	0.733
PI5	Food packaging sizes make me have will to buy frozen food product.	4.34	0.722
PI6	Food packaging material make me purchase frozen food product.	4.29	0.798

Note: $N = 197$. All items were used on 5-point likert scale with (1=strongly disagree to 5=strongly agree)

As showed in table above, shows the overview of mean scores which range between 4.03 to 4.54 for overall items. The two items with the highest mean value were “Frozen food packaging image gave me joy experience” ($M=4.54$, $SD=0.602$) and “Frozen food

packaging shape was convenient for my use (exp: storage, easy-open food)” ($M=4.54$, $SD=0.673$). The item with the lowest mean value is “Frozen food packaging label gave me joy experience” ($M=4.03$, $SD=0.958$).

4.4 Hypothesis Testing

Table 5: Model summary for processed frozen foods packaging perceived hedonic attributes and customers’ purchase intention.

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.628 ^a	.395	.385	2.64955

a. Predictors: (Constant), Hedonic Colour, Hedonic Label, Hedonic Image

b. Dependent Variable: Purchase Intention

According to the model summary, the value of R (0.628) indicates a moderate relationship between SME processed frozen foods packaging of colour, label and image perceived hedonic attributes towards customers purchase. The value of R² (0.395) means 39.5% of total variation in the overall purchase intention can be explained by processed frozen foods packaging with the perceived hedonic attributes.

Table 6: Regression coefficients for processed frozen food packaging perceived hedonic attributes on customers’ purchase intention.

Coefficients^a						
		Unstandardized Coefficient		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Model						
1	(Constant)	8.071	1.658		4.869	.000
	Hedonic colour	.341	.100	.264	3.396	.001
	Hedonic label	.221	.092	.167	2.406	.017
	Hedonic image	.447	.109	.313	4.389	.000

a. Dependent Variable: Purchase Intention

The first question in this study sought to determine whether SME processed frozen food packaging with the perceived hedonic value influence customers to purchase the product. In the regression analysis, respondents predicted purchase intention is equal to $8.071 + 0.341(\text{colour}) + 0.221(\text{label}) + 0.447(\text{image})$. The data concluded from the coefficients result indicate that colour ($\beta = 0.264$, $p\text{-value} = 0.001 < 0.05$), label ($\beta = 0.167$, $p\text{-value} = 0.017 < 0.05$), and image ($\beta = 0.313$, $p\text{-value} = 0.000 < 0.05$) have significant positive effects on customers’ purchase intention. Therefore, H1a, H1b and H1c are supported in hedonic perspective towards customer purchase intention. Consequently, the first hypothesis (H1) is supported.

Table 7: Model summary for processed frozen food packaging perceive utilitarian attributes and customers purchase intention.

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.542 ^a	.294	.283	2.86132

a. Predictors: (Constant), Utilitarian Shape, Utilitarian Size, Utilitarian Material

b. Dependent Variable: Purchase Intention

According to the model summary, the value of R (0.542) indicates a moderate relationship between SME processed frozen food packaging size, shape, and label perceived utilitarian attributes with customers' purchase intention. The value of R² (0.294) which means 29.4% of total variation in the overall purchase intention can be explained by processed frozen food packaging perceived utilitarian attributes.

Table 8: Regression coefficients for processed frozen food packaging perceived utilitarian attributes on customers' purchase intention.

Coefficients^a						
		Unstandardized Coefficient		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Model						
1	(Constant)	11.207	1.662		6.743	.000
	Utilitarian shape	.380	.119	.266	3.192	.002
	Utilitarian size	.383	.130	.266	2.944	.004
	Utilitarian material	.100	.096	.082	1.033	.303

a. Dependent Variable: Purchase Intention

The second question in this study sought to determine whether SME processed frozen food packaging with the perceived utilitarian value influence customers to purchase the product. In the regression analysis, respondents predicted purchase intention is equal to $11.207 + 0.380(\text{shape}) + 0.383(\text{size}) + 0.100(\text{material})$. The data concluded from the coefficients result indicates that shape ($\beta = 0.266$, $p\text{-value} = 0.002 < 0.05$) and size ($\beta = 0.266$, $p\text{-value} = 0.004 < 0.05$) have significant positive effects on customers purchase intention. However, packaging material ($\beta = 0.082$, $p\text{-value} = 0.303 > 0.05$) has no significant affect towards customer purchase intention. Therefore, only H1a and H1b support utilitarian perspective towards customer purchase intention. Consequently, the second hypothesis (H2) is supported.

5 Discussion

The analyse data in hedonic attributes, it has indicated that SME processed frozen food packaging colour, label, and image are accepted to be influential towards customers' purchase intentions. The result of food packaging colour's influence is

aligned with Ansari and Siddiqui (2019) where they had mentioned a proper decision of colours and image can shape the customers' intention on purchasing the products. However, the consideration of colour can be extended as mentioned from Imiru (2017) in which marketers must completely study and appreciate the many cultural connotations of colours as well as the perception of various colour combinations because this is crucial when consumers make purchasing decisions. Moreover, food packaging label as explained from Zekiri and Hasani (2015) that labels help customers learn more about the product, including its origin, contents, and intended use. The authors also said the information on the label also aids organization in marketing their products. Some of the customers are aware of the healthy lifestyle, thus they read the information's displayed on the products before purchasing. In accordance with the present results, previous studies from Ansari and Siddiqui (2019) have demonstrated that a proper choice of colours and visual images of packaging may capture the interest of customer attention in affecting their purchase decision. The image visual of the packaging may contribute to displaying the product visual appearance that may attract customer to purchase the products.

According to the result of utilitarian attributes, it has indicated that only SME processed frozen food packaging shape and size with the are accepted towards customers' purchase intention. Meanwhile packaging material with the perceived of utilitarian value has no significant influence towards customers' purchase intention. A preferable packaging shape may involve customers' convenience in keeping their product in storage accordingly in a structured manner. The right packaging shape also gives customers convenience in saving space in their storage. This result is consistent with the data obtained by Ansari and Siddiqui (2019) where their study stated that usually customers are drawn to packaged food products due to its size and shape. There are customers who prefer a small size due to its convenience to carry and there are customers who prefer a larger size due to the volume of the product. On the contrary of utilitarian, the result had showed packaging material has no significant influence on customers to purchase SME processed frozen food product. This finding contradicts previous studies from Zandi et al. (2019) which they determined material of food packaging may provide convenient in easy-open package, good quality package and sustainable package to customers. Not many people practice an environmentally friendly lifestyle. In this study, this is not a good sign for our ecosystem since customers prefer food products that are visually pleasing but harmful for our environment. However, this finding is consistent with Imiru (2017) where packaging material has no significant affect because most customers care less on material used in lieu, they only judge other characteristic of a product (Ansari & Siddiqui, 2019).

6 Conclusion

The purpose of this study is to examine the influence of SME's processed frozen food packaging design with the perceive of hedonic and utilitarian towards customers buying decision. Turning now to the result that was analysed, most of the participants

agreed that packaging elements with the perceived hedonic attributes are influential towards customers' purchase intention. Meanwhile, in utilitarian attributes only shape and size were agreed by respondents that influential towards customers buying decision.

This study creates an opportunity to small-medium enterprise (SME) to focus only on a certain element towards the food packaging design. It is an advantage to SME retailers and manufactures on promoting and attracting their products to the customers. Hence, it is recommended for small-medium enterprises to focus more on colour, label, and visual image of food packaging design to influence customers' buying decision in hedonic perspective. Furthermore, for utilitarian attributes, SME can sustain or improve their shape and size for customers to purchase processed frozen food products. In consistent with recommendation, designation of food packaging should be made according to customers' preference since it can help to attract their attention. It is also recommended that SME to be more creative in making new visual and appearance of the food packaging design. They may focus on keeping up with the trend especially with millennials' interest. Uniqueness of food packaging can easily lure customers to buy the product. Hence, the potential of combining the elements (values) of hedonic and utilitarian can be considered as a way to capture customers attention towards the food product packaging.

The limitation of this study is that the researcher only focused on those three (3) variables (food packaging colour, label, and visual image) in hedonic attributes and three (3) variables (food packaging shape, size, and material) in utilitarian attributes that influence customers' buying decision. Other limitation of this study is, it was only conducted in Selangor, Malaysia. In future investigations, it may be possible to use a different food packaging element that is appropriate and aligned with hedonic and utilitarian attributes. As for the food packaging elements, the researchers suggest other elements that can be conducted as an intervention for future study such as quality or price. Moreover, future study can also be expanded on the packaging elements by separating and only focusing on either one of the attributes, hedonic or utilitarian.

In conclusion, there are many factors that future researchers can investigate. In addition to food packaging elements, other types of packaging elements can also be studied. Food packaging is very important since the main reason of packaging is to protect the food and play a big part in keeping the food safe. Nevertheless, the study also concluded the needs to pay attention to other elements in increasing customers' buying decision as food packaging is already one of the major marketing factors that attract customer to purchase.

7 About the author

Aidza Ashikin Alias had received her education in Diploma Tourism Management from University Technology Mara, Dungun Terengganu in year 2016. Then, she earned her degree and had received vice chancellor award for bachelor first class achievement in Bachelor (Hons) Science Culinary Arts Management from University Technology Mara in year 2019. In current year she has further her studies in Master of Hospitality Management. She had been exposed in front service experience as a supervisor in food and beverage industry and expand her experience in industrial training toward travel agency and back of house that include Mexican western, French, and Nusantara fine dining cuisine.

Ali Mohamad Noor is a Senior Lecturer @ Chef Instructor at Centre of Culinary Arts and Gastronomy Studies, Faculty of Hotel and Tourism Management, UiTM Puncak Alam– teaching practical cookery courses particularly Food Styling, Asian and Western Cuisine and theoretical courses such as Food Retailing, Food Marketing Management and Gastronomic Entrepreneurial Business Operation. Research focused on gastronomic studies, food retailing and marketing.

8 References

- Ansari, M. U. A., & Siddiqui, D. A. (2019). Packaging Features and Consumer Buying Behavior. *Global Scientific Journal*, 7(3), 1050–1073.
<https://doi.org/http://dx.doi.org/10.2139/ssrn.3381882>
- Batra, R., & Ahtola, O. T. (1991). Artificial Intelligence Robotics : Services and Future roadmap. Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes, 2(2), 159–170.
<https://doi.org/http://dx.doi.org/10.1007/BF00436035>
- Chitturi, R., Carlos Londono, J., & Alberto Amezquita, C. (2019). The Influence of Color and Shape of Package Design on Consumer Preference: The Case of Orange Juice. *International Journal of Innovation and Economic Development*, 5(2), 42–56.
<https://doi.org/10.18775/ijied.1849-7551-7020.2015.52.2003>
- Chua, L. C. (2006). Sample Size Estimation Using Krejchic and Morgan and Cohen Statistical Power Analysis: A Comparison. *Jurnal Penyelidikan IPBL*, 7, 78–86.
<http://www.ipbl.edu.my/portal/penyelidikan/jurnalpapers/jurnal2006/chua06.pdf>
- Cortina-Mercado, M. (2017). Effect of Packaging Design in the Purchase Decision Process: a Comparison of Generations. *Global Journal of Business Research*, 11(2), 11–26.
www.theIBFR.com
- Denecli, C., & Babur Tosun, N. (2017). Impact of Utilitarian and Hedonic Attitudes on the Dimensions of Brand Trust. *Galatasaray Üniversitesi İletişim Dergisi*, 0(23), 151–151.
<https://doi.org/10.16878/gsuilet.285318>
- Ellis, E. (2019). Processed Foods: What's OK, What to Avoid. *Eat Right*.
<http://www.eatright.org/resource/food/nutrition/nutrition-facts-and-food-labels/avoiding-processed-foods>
- Fadzil, A. S. A., Zaki, N. A. S. A., Nasir, S. J. A., & Sukery, M. H. (2015). Product packaging and consumers ' buying decision : A case study in company A. *International Conference on Business & Tourism, September*, 29–34.
<https://www.researchgate.net/publication/324834085%0AProduct>

- Flanders Investment & Trade Malaysia Office. (2020). *Food & Beverage Industry Report Malaysia 2020. Flanders State of the Art*.
https://www.flandersinvestmentandtrade.com/export/sites/trade/files/market_studies/FB_Industry_Report.pdf
- Ghali, Z. Z. (2020). Effect of utilitarian and hedonic values on consumer willingness to buy and to pay for organic olive oil in Tunisia. *British Food Journal*, 122(4), 1013–1026.
<https://doi.org/10.1108/BFJ-06-2019-0414>
- Hassan, A. A. Eig., & Mostafa, D. H. M. N. (2018). The Importance of packaging design as a branding Factor in Consumer Behavior. International Conference of Faculty of Applied Arts 2015, Helwan University, Egypt.
https://www.academia.edu/38617966/The_Importance_of_packaging_design_as_a_branding_Factor_in_Consumer_Behavior
- Holmes, G. R., & Paswan, A. (2012). Consumer reaction to new package design. *Journal of Product and Brand Management*, 21(2), 109–116.
<https://doi.org/10.1108/10610421211215553>
- Imiru, G. A. (2017). The Effect of Packaging Attributes on Consumer Buying Decision Behavior in Major Commercial Cities in Ethiopia. *International Journal of Marketing Studies*, 9(6), 43.
<https://doi.org/10.5539/ijms.v9n6p43>
- Italian Trade Agency. (2017). *Food and Beverages Market Report in Malaysia. Italian Trade Commission Trade Promotion Office of The Italian Embassy*.
https://www.ice.it/it/sites/default/files/inline-files/Nota_Mercato_Agroalimentare_-_Malesia_-_2018_0.pdf
- Khuong, M. N., & Tran, N. T. H. (2018). The Impacts of Product Packaging Elements on Brand Image and Purchase Intention — An Empirical Study of Phuc Long’s Packaged Tea Products. *International Journal of Trade, Economics and Finance*, 9(1), 8–13.
<https://doi.org/10.18178/ijtef.2018.9.1.580>
- Maffei, N. P., & Schifferstein, H. N. J. (2017). Perspectives on food packaging design. *International Journal of Food Design*, 2(2), 139–152.
https://doi.org/10.1386/ijfd.2.2.139_2
- Mazhar, M., Daud, S., Bhutto, S. A., & Mubin, M. (2015). Impact of Product Packaging on Consumer’s Buying Behavior. *European Journal of Scientific Research 202X European Journal of Scientific Research*, 16(2), 1450–216.
<https://doi.org/10.13140/2.1.2343.4885>
- Monnot, E., Parguel, B., & Reniou, F. (2015). Consumer responses to elimination of overpackaging on private label products. *International Journal of Retail and Distribution Management. The Eletronic Library*, 43(4/5), 329–349.
<https://doi.org/http://dx.doi.org/10.1108/IJRDM-03-2014-0036>
- Omar, M. W., Fadzil, M. I., Ali, M. N. M., & Shaharudin, M. R. (2011). The Effectiveness of Bumiputra SME Food Product Packaging in the Malaysian Customers’ Perception. *Canadian Social Science*, 7(2), P102–109.
<https://doi.org/http://dx.doi.org/10.3968/j.css.1923669720110702.014>
- Orji, M. O. (2014). *Packaging Attributes and Consumer Purchase Behaviour Towards Bread Products in Abia State*. 16(1), 12–21.
- Pensasitorn, W. (2015). The Use of Images in Graphic Design on Packaging of Food and Beverages. *Journal of Economics, Business and Management*, 3(12), 1159–1163.
<https://doi.org/10.7763/joebm.2015.v3.351>
- Prendergast, G. (1995). The EC directive on packaging and packaging waste: current status and logistical implications. *Logistics Information Management*, 8(3), 10–17.

<https://doi.org/10.1108/09576059510091616>

- Purwaningsih, I., Surachman, S., Pratikto, P., & Santoso, I. (2019). Influence of Packaging Element on Beverage Product Marketing. *International Review of Management and Marketing*, 9(6), 205–210. <https://doi.org/10.32479/irmm.8831>
- Ruto, W. C. (2015). *the Effect of Product Packaging on Consumer Choice of Cosmetic Brands : a Case of Students in Usiu-Africa. Ruto United States International University- Africa.*
- Sand, C. K. (2019a). *Frozen Food Packaging Heats Up. January 2018*, 69–70.
- Sand, C. K. (2019b). The Complexities of Compostable Food Packaging. *Ift, October*, 85–87. <https://www.researchgate.net/publication/337485068%0AThe>
- Sekaran, U., & Bougie, R. (2016). *Research Methods for Business. John Wiley & Sons Ltd.*
- Sen, S., Antara, N., & Sen, S. (2019). Factors influencing consumers' to Take Ready-made Frozen Food. *Current Psychology*, 40(6), 2634-2643. <https://doi.org/10.1007/s12144-019-00201-4>
- Wang, E. S. T. (2017). Different Effects of Utilitarian and Hedonic Benefits of Retail Food Packaging on Perceived Product Quality and Purchase Intention. *Journal of Food Products Marketing*, 23(3), 239–250. <https://doi.org/10.1080/10454446.2014.885867>
- Widaningrum, D. L. (2014). The importance of take-out food packaging attributes: Conjoint analysis and quality function deployment approach. *EPJ Web of Conferences*, 68, 1–7. <https://doi.org/10.1051/epjconf/20146800036>
- Yoh, T., Chen, H. (Yentin), & Jang, I. (2016). Utilitarian and Hedonic Consumption Values on American College Students Athletic Footwear Purchase Intention. *International Journal of Academic Research in Business and Social Sciences*, 6(12), 307–320. <https://doi.org/10.6007/ijarbss/v6-i12/2498>
- Zandi, G., Xiaokang, S., & Nellikunnel, S. (2019). Innovative packaging attributes and customer purchase intention in snack foods. *Humanities and Social Sciences Reviews*, 7(2), 424–433. <https://doi.org/10.18510/hssr.2019.7250>
- Zekiri, J., & Hasani, V. V. (2015). the Role and Impact of the Packaging Effect on Consumer Buying Behaviour. *Ecoforum*, 4(0), 232–240.