THE IMPACT OF PRODUCT PACKAGING AND PACKAGING DESIGN ON CONSUMER BUYING BEHAVIOR IN NORTH SULAWESI (CASE STUDY ON WARDAH COSMETICS)

DAMPAK KEMASAN PRODUK DAN DESAIN KEMASAN TERHADAP PERILAKU PEMBELIAN KONSUMEN DI SULAWESI UTARA (STUDI KASUS KOSMETIK WARDAH)

By:
Lingkan J. Kalangi¹
Maryam Mangantar²
Merinda H. C. Pandowo³

¹²³International Business Administration, Management Department
Faculty of Economic and Business
Sam Ratulangi University, Manado

E-mail:
¹lingkankalangi062@student.unsrat.ac.id
²mmangantar@unsrat.ac.id
³merindapandowo@unsrat.ac.id

Abstract: The rivalry between the cosmetics industry is currently increasingly competitive, coupled with the emergence of the Covid-19 outbreak which has further complicated the development of products that are being marketed. Companies are required to continue to try to maintain customer trust and loyalty in order to continue to see their products. That's why looking at the cosmetics market today companies are competing to make products more innovative and of high quality both in terms of packaging and design, as well as for the product itself so that it can influence consumer behavior in buying products that are marketed. The purpose of this study is to analyze the influence of product packaging and product design from Wardah Cosmetics to influence consumer purchasing behavior. The type of method carried out is quantitative research methods. The sampling method is carried out by distributing questionnaires to Wardah Cosmetics consumers. The results obtained from this study are that product packaging and packaging design have a significant effect on the purchasing behavior of consumers of Wardah products.

Keyword: Product packaging, packaging design, consumer buying behavior

INTRODUCTION

Research Background

Cosmetic brands are known for producing beautiful gift sets, especially around the holidays. These sets can include some of their top-selling products, essentials for a full routine, value packs, and more. They are usually appealing because they include products that people love, but also include products that one would not purchase...
regularly which exposes consumers to a new variety of products and drives future sales. Many women send cosmetic products as gifts to send to friends and family members so a good-looking package is important when purchasing these items. The cosmetic industry continues to grow due to the increasing trend that shows public awareness of cosmetic products. However, the Covid-19 pandemic broke out at the end of December 2019 and became a global pandemic on March 12, 2020. As a result, Indonesia has decided to implement large-scale social restrictions (PSBB) and community activities (PPKM), regulated by the Indonesian government. In essence, when PSBB and PPKM are implemented, workplace restrictions are carried out by implementing Work From Home (WFH), implementing learning from home (SFH) or online mechanisms, implementing social distancing. During the Covid-19 pandemic, the cosmetic industry was also affected. At the beginning of the pandemic, offline cosmetic sales were even closed due to the implementation of the PSBB. This condition complicates the situation because they still have to pay operational costs every month. This situation requires the cosmetic industry to update its marketing strategy by using an online system and expanding into e-commerce.

As one of the city centers in North Sulawesi, Manado is a place that many foreign immigrants go to both from other countries and migrants from various regions in Indonesia with diverse destinations. One of these facts makes Manado have potential consumers for the cosmetics business. That's why the cosmetics business began to increase slowly along with the increase in consumers who use cosmetics, especially among young people. Some female consumers purchase the items/products only due to high price, low price, colors, brand and beautiful packaging designs. Cosmetics are very important for woman and packaging matters too. Good packaging design also serve as a good marketing strategy. Consumer buying decision on price, quality and function of the product. Problems arise due to the increasing number of cosmetics, such that there is intensifying competition. Consequently, cosmetic shop scramble consumers using various business strategies. Furthermore, the consumers comprise various group of people including the most dominating, which are young women and mature women. Due to the outbreak of coronavirus or Covid-19, the number of people still living in Manado is relatively small as well as consumer that slumped sharply. Consequently, cosmetic shops do not have potential customers anymore and almost all are closed. However, some cosmetic shops not only focus on store but make some improvement on ordering by website or e-commerce. Meanwhile, the customers no longer visit the shops because they prefer to stay at home. This increases the competition, allowing customers the opportunity to try or switch to another cosmetic shop. In line with the above, it becomes a necessity to maintain customer perception by providing good product package and design.

Maintaining innovations that remain firmly held, Wardah held an inspirational campaign and social movement aimed at inviting the community, especially Muslims, to take advantage of the moment of Ramadan and contribute to efforts to overcome Covid-19, during the month of Ramadan through the Corporate Social Responsibility (CSR) program reported from Republika.co.id (2020). The pandemic is still spreading in the following year, Wardah then moved to expand product sales on several available online platforms, especially providing special online channels for consumers as a step to make it easier for consumers to obtain Wardah products without having to go out amid limited activities during the pandemic reported from liputan6.com (2021). In the following year, Wardah then boldly moved forward by participating in Indonesia Fashion Week at the beginning of the year by showing makeup results during the Wardah Beauty Conference event reported from suara.com (2022).

Research Objectives
1. To analyze the product package impact consumer buying behavior.
2. To analyze the packaging design impact consumer buying behavior.
3. To analyze the product package and packaging design impact consumer buying behavior.

THEORETICAL FRAMEWORK

Marketing

According to Kotler (2008), Marketing is a process of planning and executing the perception, pricing, promoting and distribution of ideas, good and services to create exchange that satisfy individual and organizational goals.
Consumer Behavior

Consumer behavior is a process by which an individual or group of individuals can select, buy, use or dispose products, services or experiences to satisfy their desires or needs. Solomon (2013) claimed that marketers can influence consumers’ behavior.

Product Package

Packaging includes the sub elements such as price, product, place and promotion which work with marketing tools (Cutler, 2011). The packaging in industry is therefore, an important tool of marketing and competition in the international community for executive officers and owners of industries and commercial firms and the need to investigate about it has been highlighted by some scholars (Sahhafzade, 2016 in Farahani, Shababi, and Ashtiani, 2021).

Packaging Design

According to Klimchuk and Krasovec (2007), the packaging design’s function is to visually communicate product differences. In the competitive market of today, packaging design becomes a brand’s promotional vehicle, highlighting its position on the shelf.

Previous Study

Rambabu and Porika (2020) purposed that the research aspiration is to establish that the speculation of packaging approaches will influence on buyers’ purchasing mode. An attempt has been made to examine and present the results. This research facilitates to discern the perception of consumer in the direction of packaging strategies and to spot the power of packaging factors, elements and strategies of product packaging on purchasing mode of buyers. Data were collected from 836 respondents from the four major cities of two states in India through structure questionnaire. Every age of the respondents was targeted in the this study to get their perception and buying mode of them, and the analysis was done by using analysis of variance, correlation and regression analysis by using 23.0 version of SPSS. The consequence of research reveals that media exposures, packaging strategies and elements have better influence on the buyers ‘buying mode. Business people must produce innovative bundling designs for their items to market. These allow the keeping and catching the new and existed customers, because packaging has superior influence and also helps in acquiring and retaining the new consumers for their new products.

Silva, Bento, and Guaraldo (2022) summarised the general results of the Chilean Food Law implementation to help to understand how this policy has changed consumer's behaviour. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) extension for scoping reviews (PRISMA-ScR) guidelines were followed. Five databases were searched for studies published from January 2015 to February 2020 evaluating the Chilean population's perception, behaviour and purchasing habits of processed foods. The results showed that consumers support the implementation of a front-of-package warning label (FOPWL) and thought it a good strategy to help make healthier food choices for themselves. However, even with a positive perception about these products, the intention to change the purchase of unhealthy food occurred only for sugar-sweetened beverages. Meanwhile, children did not stop eating foods that had a FOPWL, although the mothers’ perception was that the presence of FOPWLs could be important to differentiate unhealthy from healthy products. The availability of products with FOPWLs at schools decreased, indicating that the law was being complied with and that the child-directed marketing strategy showed a reduction after the first phase of implementation.

Ahmed, Parmar and Amin (2014) determined role of packaging on consumer’s buying behavior. The purpose of this research is to examine the essential factors, which are driving the success of a brand. This research also identified the relationship between the dependent and independent variables. This is the primary research and data has been collected through questionnaire and for analysis purpose SPSS software has been used. In this study samples of 150 respondents has been collected and tested the reliability of the model. According to the finding of the research study, it has been observed that the packaging is the most important factor. It is further concluded that the packaging elements like its Colour, Packaging material, Design of Wrapper and innovation are more important factors when consumers making any buying decision. Finally it has also been concluded that the Packaging is one of the most important and powerful factor, which influences consumer’s purchase decision.
Conceptual Framework

![Conceptual Framework Image](image)

**Figure 1. Conceptual Framework**

*Source: Data Processed, 2022*

### RESEARCH METHOD

#### Research Procedures

The research procedures is Choose the research topic, Compose the statement, find journals, articles, and books that related to this research in complete the theoretical framework, Obtain and collect the data needed from company, Make a questionnaire, Spread the questionnaire, Collect the questionnaire, Doing the data analysis, and the last is Writing the result.

#### Population, Sample, and Sampling Technique

The population in this research are the people in Manado who used and had experience with Wardah cosmetics. The sample that is used is 100 from the total of the population. The sampling technique in this study was to use purposive sampling techniques.

#### Data Collection Method

Data obtained from the questionnaires and already processed and obtained through documents or can obtained from books, journals, articles, and relevant literature from library and internet. Sekaran and Bougie (2009:28) defined primary data as “data gathered for research from the actual site of occurrence of events”.

#### Operational Definition of Variable

1. Consumer Behavior. Solomon (2013) defined the term as the study of the process involved when individuals or groups, select, purchase, use dispose of products, service, ideas or experiences to satisfy needs and desire.
2. Product Package. Product packaging is an essential marketing mix that projects firm brand image, which is designed to convey image of high quality (Orth, Campana, and Malkewitz, 2010).
3. Design Package. The design aspects of packaging shows the beautiful packaging designs increases the appetite of consumers and persuades consumers to buy the product (Ahmadi, Bahrami, and Ahani, 2013).

#### Multiple Regression

Multiple regressions are a statistical technique that simultaneously develops a mathematical relationship between two or more independent variables and an interval-scaled dependent variable (Sekaran, 2009). The formula of multiple regressions models in this research is shown as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + e \]

Description:

- **Y** = Consumer Buying Behavior (Dependent Variable)
- **\( \alpha \)** = The constant, when all independent variable equal to 0
- **X_1** = Product Package (Independent Variable)
- **X_2** = Design (Independent Variable)
- **\( \beta_1, \beta_2 \)** = The slope for each independent variable
- **e** = Error
RESULT AND DISCUSSION

Result

Table 1. Validity Test Result

<table>
<thead>
<tr>
<th></th>
<th>Product Package</th>
<th>Design Packaging</th>
<th>Consumer Buying Behavior</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>1</td>
<td>.610**</td>
<td>.520**</td>
<td>.836**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Design packaging</strong></td>
<td>.610**</td>
<td>1</td>
<td>.625**</td>
<td>.862**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Consumer buying behavior</strong></td>
<td>.520**</td>
<td>.625**</td>
<td>1</td>
<td>.806**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>.836**</td>
<td>.862**</td>
<td>.806**</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
Source: SPSS Output Data (2022)

From the result in table, it can be seen that value of correlation index for relation among variable independent (product package and packaging design) with variable dependent (consumer buying behavior) are greater than 0.3 and below significant level of 5% (0.05). The correlation between product packages (0.836), packaging design (0.862) with consumer buying behavior (0.806) show a positive relationship.

Table 2. Reliability Test Result

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>Reliability Statistics</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cronbach's Alpha</strong></td>
<td>.752</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Source: SPSS Output Data (2022)

Based on the table above shows that the value of Alfa Cronbach is 0.752, which is means that is above acceptance limit of 0.6. Therefore, the research instrument for relationship among the variable indicates good consistency and the data is acceptable. The interpretation of alfa Cronbach (Sekaran, 2009) is:
- < 0.6 indicates unsatisfactory internal consistency or consider that the data is unreliable
- 0.7 indicates that the data is acceptable
- > 0.8 indicates good internal consistency or consider that the data resulted is reliable.

Figure 2. Heteroscedasticity Test Result

Source: SPSS Output Data (2022)
Based on the figure above shows that the pattern of the dots is spreading and does not create a clear pattern. The dots are spreading above and below 0 (zero) in the Y and it proves that the model is free from heteroscedasticity.

Table 3. Multicollinearity Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.568</td>
</tr>
<tr>
<td>Product Package</td>
<td>.480</td>
</tr>
<tr>
<td>Packaging Design</td>
<td></td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Consumer Buying Behavior*  
*Source: SPSS Output Data (2022)*

Based on the table above shows that the tolerance value of product package is 0.568 and packaging design is 0.480, it means that the tolerance value for each variable is more than 0.10. The VIF value of product package is 1.760 and packaging design is 2.085, it means that the VIF value for each variable is less than 10.00. Since all the tolerance values are more than 0.10 and VIF value of each independent variable is less than 10, so this research is free from multicollinearity.

![Figure 3. Normality Test Result](source: SPSS Output Data (2022))

Based on the figure above shows the data represented by the dots spreading near and follow the diagonal line. This proves that regression model of the impact of cosmetic product package and packaging design on consumer buying behavior fulfills the condition of normal data.

Table 4. Multiple Regression Analysis Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>3.776</td>
<td>1.357</td>
<td></td>
<td>2.783</td>
</tr>
<tr>
<td>Product Package</td>
<td>.282</td>
<td>.125</td>
<td>.223</td>
<td>2.258</td>
</tr>
<tr>
<td>Packaging Design</td>
<td>.481</td>
<td>.141</td>
<td>.373</td>
<td>3.413</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Consumer Buying Behavior*  
*Source: SPSS Output Data (2022)*

Based on table above (Results of Multiple Linear Regression Result) above, it can be seen that the multiple linear regression equation is as follows:

\[ Y = 3.776 + 0.090 + 0.314 + \varepsilon \]

The constant value \( b_0 \) = 3.776. This means that if all independent variables have a value of zero (0) then the value of the dependent variable is 3.776 or in other words the consumer buying behavior variable (Y) will be constant at 3.776 if it is not influenced by product package \( X_1 \) and packaging design \( X_2 \). Product package \( X_1 \) on consumer buying behavior \( Y \)/\( b_1 = 0.282 \). It means product package variable \( X_1 \) has a positive impact on
consumer buying behavior (Y) of 0.282, this also means that if the product package variable increases by one unit, the consumer buying behavior will increase by 0.282. If the product package variable decreases, the consumer buying behavior will also decrease with the assumption that the other independent variables ($X_2$) = 0. Packaging design ($X_2$) on consumer buying behavior (Y) results in a coefficient of -0.481. It means packaging design variable ($X_2$) has a positive impact on consumer buying behavior (Y) of 0.481, this also means that if the packaging design variable increases by one unit, the consumer buying behavior will increase by 0.481. If the packaging design variable decreases, the consumer buying behavior will also decrease with the assumption that the other independent variables ($X_1$) = 0.

### Table 5. F-Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>206.389</td>
<td>2</td>
<td>68.796</td>
<td>24.778</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>224.921</td>
<td>96</td>
<td>2.343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>431.310</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Consumer Buying Behavior  
b. Predictors: (Constant), Product Package, Packaging Design  
Source: SPSS Output Data (2022)

Based on the table above shows that $F_{\text{count}}$ is 24.778 with the level significant 0.000. By using the level of significant of 0.05 ($\alpha = 0.05$), value is 0.000 < 0.05. The value of $F_{\text{table}} = 19.000$ it can be concluded that $F_{\text{count}} > F_{\text{table}} = 19.000$. The overall influence of product package ($X_1$) and packaging design ($X_2$) toward consumer buying behavior (Y) is significant. Since the $F_{\text{count}}$ is greater than $F_{\text{table}}$, $H_0$ is rejected and $H_1$ is accepted. It means that the independent variable significantly affect the dependent variable simultaneously.

### Table 6. T-Test Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>206.389</td>
<td>2</td>
<td>68.796</td>
<td>24.778</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>224.921</td>
<td>96</td>
<td>2.343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>431.310</td>
<td>99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Consumer Buying Behavior  
b. Predictors: (Constant), Product Package, Packaging Design  
Source: SPSS Output Data (2022)

Based on table above obtained from the results of data processing using SPSS (Statistical Package for Social Science) version 22, the t-test of each X variable is obtained as follows:
- $T_{\text{count}}$ of product package variable (2.258) > $t_{\text{table}}$ (1.660) and the significant value <0.05 is 0.026, it means that $H_1$ which is the product package variable has partially significant influence on consumer buying behavior and it is accepted.
- $T_{\text{count}}$ for packaging design variable (-3.413) < $t_{\text{table}}$ (1.660) and a significant value <0.05 is 0.001, which means $H_2$ packaging design variables partially on consumer buying behavior.

### Discussion

**The Impact of Product Package on Consumer Buying Behavior**

Based on the results of the study, it is known that the product packaging variables obtained positive and significant results on consumer purchasing behavior. This is in accordance with research that states that Product Packaging has a positive effect on Consumer Buying Behavior (Ahmed, Parmar, and Amin, 2014). Referring to the results of this study, it can be seen that product packaging can affect Wardah's consumer purchasing behavior because the type and shape of packaging is friendlier in the eyes and is in line with product packaging standards in general. In addition, by making it easier for consumers to recognize the types of Wardah cosmetics, consumers are made freer to explore the types and functions per each packaging provided. The innovations carried out were no less interesting, when Wardah upgraded the shape and model of the packaging so that it was not outdated.
The Impact of Packaging Design on Consumer Buying Behavior

Based on the results of the research above, the packaging design variable has a positive but not significant effect on consumer purchasing behavior. It also shows that packaging design is a variable that affects the rise or fall of consumer purchasing behavior. Therefore, the impact of the final packaging on the impression of the brand and subsequent consumer behavior provided by Chen (2020) is one of the elements in determining consumer purchasing behavior. With the improvement of packaging design services provided, consumers’ purchasing behavior will automatically increase because customers feel satisfied and happy with the services provided. Referring to the results of this study, it can be seen that packaging design does not hold strong power in consumers' purchasing behavior towards a product. However, positive results are certainly an important estimate in this regard because Wardah's packaging design itself is not so much in the limelight when the product is marketed. Wardah's packaging design is basically the same as packaging design in general, what distinguishes is that Wardah has carved its own colors and characteristics for consumers.

The Impact of Product Packaging and Packaging Design on Consumer Buying Behavior

Based on the results of the research above, it can be concluded that the two variables, Product Packaging and Packaging Design both have a positive effect on Consumer Buying Behavior but do not have a significant effect. This is reinforced by the results of previous studies from Shamsa Riaz, Samia Wasif, Farhat Nisar, Ume Farwa, Ammara Rashid (2015) which stated that good and beautiful / pleasant cosmetic packaging designs have a strong influence on the purchasing behavior of female consumers. The study shows that female customers love classic and simple packaging designs and fairytale-shaped, beautiful, cool and niche packaging designs. The study reflects that cosmetic packaging design and women’s purchasing behavior have a strong and positive relationship with each other. The results of the study illustrate that female consumers are more likely to be interested in the packaging design of cosmetic products.

CONCLUSION AND RECOMMENDATION

Conclusion

This research is conducted to analyze the variables in which are affecting the customer’s continuance in using Wardah cosmetic. After the result and the discussion on previous chapter it can be concluded that:

1. Product Packaging has a positive and significant effect on Consumer Buying Behavior, meaning that product packaging partially contributes to Wardah consumers’ interest and purchasing behavior.
2. Packaging Design has a positive but insignificant effect on Consumer Buying Behavior, meaning that packaging design partially contributes to the interest and purchasing behavior of Wardah consumers.
3. Product Packaging and Packaging Design simultaneously have a significant effect on Consumer Buying Behavior, meaning that if Product Packaging and Packaging Design together experience an increase, it will have an impact on increasing Wardah's Consumer Buying Behavior.

Recommendation

With the significances between the variables that would affect the likelihood of the subscription continuance of the customers itself, the research would provide several recommendations as follows:

1. It is recommended to Wardah Cosmetics to maintain the product package because it can improve consumer behavior and to pay more attention to the packaging design because it is not able to improve consumer behavior to buy Wardah cosmetics products.
2. All the marketing units pay attention for good packaging design. They accept that poor packaging is one of the causes of product failure in the market. It is necessary to set the packaging standard and to implement accordingly for better protection and promotion of a product.
3. Brand is important and its strategy is in consideration in the cosmetics. Product packaging is valuable for brand equity, product differentiation, market segmentation, new product introduction, pricing, promotion etc. Brand name using plan implementation must be effective in the units. It could be great to analyze for other researcher.
REFERENCES


