



# Analysis of the Influence of Product Quality, Service Quality, and Sales Promotion on Purchasing Decisions and Consumer Loyalty (A Case Study on Dunkin' Indonesia Consumers)

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## ABSTRACT

The number of restaurant and franchise companies in Indonesia makes people more selective in choosing products that suit what they want. In this case, companies are required to be careful in developing marketing strategies in order to spur competitiveness to win market competition. Therefore, this research tries to find out the influence of product quality, service quality, and sales promotion on purchasing decisions that have an impact on consumer loyalty and strategies to improve Dunkin' consumer purchasing decisions. The research's methodology is the Structural Equation Modeling (SEM) method and SWOT analysis with a sample size of 100 responders. The outcomes of this research show that product quality has a positive and significant effect on purchasing decisions, service quality cannot be proven because it is excluded from the research model, sales promotion has a negative and insignificant effect on purchasing decisions, and purchasing decisions have a positive and significant effect on consumer loyalty. The simultaneous equation obtained is  $Y_1 = 0.367 X_1 + (-0.024) X_3 + Z_3$  and  $Y_2 = 0.117 X_1 + (-0.008) X_3 + Z_4$ . The strategy obtained from the SWOT analysis outcomes and can be applied by Dunkin' is to implement the W-O strategy which consists of: (1) Dunkin' can conduct market research to find the right target market and adjust their sales promotion strategy to the preferences of that target market; (2) Dunkin' can take advantage of technology and digitalization to increase customer convenience and strengthen brand engagement.

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## 1. INTRODUCTION

Dunkin' is an international restaurant and food franchise that focuses mostly on selling doughnuts. William Rosenberg established the company in Quincy, Massachusetts, in the

United States, in 1950. With approximately 7,000 locations scattered across more than 35 countries, Dunkin' is currently the largest donut shop in the world. Dunkin' itself entered Indonesia in 1985 with its first outlet on Jalan

Hayam Wuruk, Central Jakarta. Dunkin' has opened more than 200 outlets in major cities throughout Indonesia, such as Medan, Yogyakarta, Bandung, Bali, Surabaya, Makassar, Jakarta, and other cities in Indonesia.

Dunkin' was once the market leader in the snack (donut) industry in Indonesia, as evidenced by its first position in the 2016 and 2017 Top Brand Awards with a Top Brand Index of 51.7% and 46.7%. However, it now has to lose its prestige due to the many competitors who have also entered the same market. One of the local players that have provided innovations and unique concepts in this culinary business is J.CO Donuts & Coffee. As compared to J.CO Donuts & Coffee, Dunkin' has declined, as shown in Table 1.

**Table 1.** Top brand index of donut shops in Indonesia 2018-2022

No.	Brand Name	Top Brand Index (%)				
		2018	2019	2020	2021	2022
1	J.CO	46.7	43.2	43.4	50.7	51.9
2	Dunkin'	39.9	42.6	43.3	38.5	37.7

Source: Top Brand Award (www.topbrandaward.com) (2023)

In the Top Brand Index data above, it can be seen that in the 2018-2022 period Dunkin' experienced fluctuations and was consistently ranked second below J.CO Donuts & Coffee. This creates competition between the two donut outlets so that Dunkin' needs to determine the right strategy to shape purchasing decisions and maintain them so that consumers become loyal and so that Dunkin' can shift the position of J.CO Donuts & Coffee.

According to studies done by Lubis et al. (2020), the decline in consumer purchasing decisions in choosing products can be caused by internal and external factors. Based on the researcher findings, the first internal problem is about the quality of Dunkin' products which are considered less than J.CO Donuts & Coffee because J.CO's products have a characterful taste with many variants and more attractive toppings. The second internal problem is in the quality of service caused by consumer disappointment because they received poor service from the Dunkin' outlets they visited and led to the complaints that were shared through social media. In addition, the problem

also exists in the sales promotion. Where many promos are held by Dunkin', one of which is for DD card users or Dunkin' physical member cards. However, not all Dunkin' connoisseurs welcome the promo because DD cards are considered outdated considering that now it has entered the digital era which is characterized by many brands that use digital membership cards. In addition to internal problems, problems also occur in the external environment caused by the number of competitors with the same or similar products, the variety of competitor's products is more numerous and diverse, competitor's promotions are more attractive and intensively carried out, market tastes are easy to change according to trends, and the last is the increasing public awareness of healthy lifestyles.

Based on the phenomena described above, the researcher thought to conduct research with the title "Analysis of the Influence of Product Quality, Service Quality, and Sales Promotion on Purchasing Decisions and Consumer Loyalty (A Case Study on Dunkin' Indonesia Consumers)" using the Structural Equation Modeling (SEM) method to find out what variables have an influence on purchasing decisions and consumer loyalty and SWOT analysis method to identify strengths and weaknesses that exist in the internal conditions of the business obtained from frequency distribution of each indicator in the responses to the questionnaire that has been distributed as well as opportunities and threats that exist in the external conditions of the business obtained from the results of interviews with competitors.

## 2. LITERATURE REVIEW

Product is a key element in the market offer marketing planning begins with formulating offers to meet targeted customer needs or wants. While product quality is the key to competitive advantage, namely the ability of a company to achieve market advantage and an important factor that influences consumers in purchasing a product or service (Alamsyah and Rochmoeljati, 2023). According to Gaman and Sherrington (1996) in Bahri et al. (2021), product quality in food is a combination of product attributes described in product quality indicators, especially for food, including color, presentation or appearance, portion, shape, temperature, texture, aroma, level of maturity,

and taste. Essinger and Wylie (2003) in Putri and Sari (2023) divide products, especially dishes or food into several categories with a brief explanation, namely taste quality, quantity or portion, menu variety, distinctive taste, hygiene or cleanliness, and innovation.

One of the most important elements is service quality, which is an effort to fulfill customer needs and desires and the accuracy of product delivery to balance customer expectations (Ramadhani et al., 2023). Research by Zeithaml et al. (1993) in Dhamayanti (2023) defines five main dimensions arranged in order of relative importance, namely reliability, responsiveness, assurance, empathy, and tangibles.

According to Kotler and Keller (2009), sales promotion is a vital component of a marketing plan that entails a range of temporary incentive programs designed to persuade customers or businesses to buy more or more quickly of a specific commodity or service. Referring to the concept of Kotler and Keller (2009) which can be seen in the research of Septyadi et al. (2022), the aspects of sales promotion that are indicators in the study are the range of promotions, the quality of promotions, the quantity of promotions, the timing of promotions, and the accuracy of promotional targets. The sales promotion indicators obtained from Kotler and Keller (2016) in Wiyata and Kusnara (2022), namely advertising, discounts, publicity or public relations, sales promotion, and service.

Consumers go through five stages as they decide what to buy: problem knowledge, information lookup, alternative assessment, purchase decision, and after-purchase actions. These stages start long before the actual purchase is completed and continue long thereafter. Based on the opinion of Kotler and Armstrong (2008) in Rahmah and Supriyono (2022), there are several types of indicators of purchasing decisions, namely buying after knowing product information, buying stability due to the most preferred brand, buying stability because it matches your wishes, and buying stability due to recommendations from others. Meanwhile, according to Kotler and Keller (2012) in Tranggono et al. (2020), there are six indicators of purchasing decisions, namely

product choice, brand choice, choice of distributor or seller, purchase quantity, purchase time, and payment method.

Chaniago (2020) defines customer loyalty as a situation in which consumers make other purchases because of a commitment to something, such as brand, product quality, company, or others. Consumer loyalty to use a product is clear evidence of consumer loyalty. According to Griffin (2003) in Wardani et al. (2022), several indicators of consumer loyalty include makes regular repeat purchase, purchases across product and service lines, refers other, and demonstrates an immunity to the full of the competition. There are five indicators of consumer loyalty according to Hidayat (2009) in Harahap et al. (2020), namely trust, emotional commitment, switching cost, word of mouth, and cooperation.

In this study, the Structural Equation Modeling (SEM) model with Amos 24 software are used as the data analysis method. According to Waluyo and Rachman (2020), SEM is a compilation of statistical methods that enables incremental testing of a number of relatively “complicated” connections. SEM is also frequently referred to as a method that combines multiple regression analysis and factor analysis and is used to create research models with strong theoretical foundations. SEM analysis consists of two sub models, namely measurement model and structural model.

Due to the incomplete analysis results when the strategy analysis is only carried out using the SEM model, the next step to obtain a strategy is used SWOT strategy analysis. SWOT analysis is a method of strategic planning that can be applied to evaluate a company’s strengths, weaknesses, opportunities, and threats in order to recognize corporate objectives and areas that require attention. The results obtained from the SWOT analysis aim to maintain strengths and take advantage of opportunities that have been owned by reducing weaknesses and avoiding existing threats (Rangkuti, 2008).

### **3. RESEARCH METHOD**

This study was carried out at Dunkin’ Indonesia. Several types of data and sources used include primary and secondary data.

Primary data received from the results of questionnaires, field observations, and direct interviews. Meanwhile, secondary data is acquired from literature studies from books, journals, official websites on the internet, and relevant previous research to aid in the application of this study.

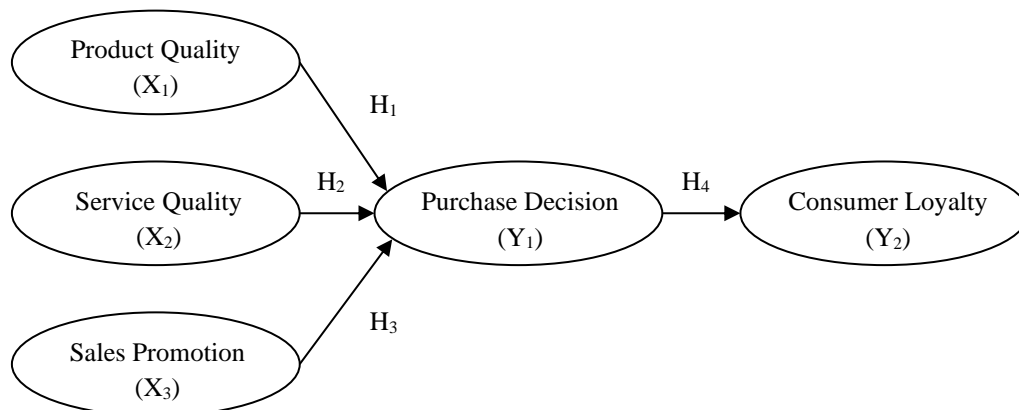
Structural Equation Modeling (SEM) utilizing Amos 24 software and SWOT analysis is the study methodology used. The sampling method combined a purposive sample approach with non-probability sampling. The primary data collection is determined using the number of samples obtained through the calculation of 20 indicators of research variables with 5 times the

number of parameters estimated, so that what is needed is 20 x 5, namely 100 respondents. The number of samples has met the needs of the Maximum Likelihood Estimation (MLE) technique which ranges from 100-200. The focus of this research is on customers who are 18 years of age or older and have visited and made purchases at Dunkin' at least twice. The research framework is visualized in Figure 1 where the determination of research variables in exogenous variables consists of Product Quality ( $X_1$ ), Service Quality ( $X_2$ ), and Sales Promotion ( $X_3$ ). Meanwhile, the endogenous variables consist of Purchasing Decisions ( $Y_1$ ) and Consumer Loyalty ( $Y_2$ ). Some of the indicators used is evident in Table 2.

**Table 2.** Research variables

Variables	Dimensions	Indicators
Product Quality ( $X_1$ )	Exogenous Variables	a. Appearance ( $X_{1,1}$ ) (Bahri et al., 2021) b. Texture ( $X_{1,2}$ ) (Bahri et al., 2021) c. Taste Quality ( $X_{1,3}$ ) (Putri and Sari, 2023) d. Menu Variety ( $X_{1,4}$ ) (Putri and Sari, 2023)
Service Quality ( $X_2$ )	Exogenous Variables	a. Reliability ( $X_{2,1}$ ) (Dhamayanti, 2023) b. Responsiveness ( $X_{2,2}$ ) (Dhamayanti, 2023) c. Assurance ( $X_{2,3}$ ) (Dhamayanti, 2023) d. Empathy ( $X_{2,4}$ ) (Dhamayanti, 2023) e. Tangibles ( $X_{2,5}$ ) (Dhamayanti, 2023)
Sales Promotion ( $X_3$ )	Exogenous Variables	a. The Range of Promotions ( $X_{3,1}$ ) (Septyadi et al., 2022) b. The Accuracy of Promotional Targets ( $X_{3,2}$ ) (Septyadi et al., 2022) c. Advertising ( $X_{3,3}$ ) (Wiyata and Kusnara, 2022)
Purchase Decision ( $Y_1$ )	Endogenous Variables	a. Buying after Knowing Product Information ( $Y_{1,1}$ ) (Rahmah and Supriyono, 2022) b. Buying Stability due to the Most Preferred Brand ( $Y_{1,2}$ ) (Rahmah and Supriyono, 2022) c. Buying Stability due to Recommendations from Others ( $Y_{1,3}$ ) (Rahmah and Supriyono, 2022) d. The Choice of the Seller ( $Y_{1,4}$ ) (Tranggono et al., 2020)
Consumer Loyalty ( $Y_2$ )	Endogenous Variables	a. Makes Regular Repeat Purchase ( $Y_{2,1}$ ) (Wardani et al., 2022) b. Refers Other ( $Y_{2,2}$ ) (Wardani et al., 2022) c. Demonstrates an Immunity to the Full of the Competition ( $Y_{2,3}$ ) (Wardani et al., 2022) d. Switching Cost ( $Y_{2,4}$ ) (Harahap et al., 2020)

Source: Primary data



**Figure 1.** Research conceptual framework

Source: Primary data

## 4. RESULT AND DISCUSSION

### 4.1 Respondent Stratification

The sample frame in this study is stratified based on certain criteria such as gender, age, and domicile. The determination of these criteria is based on the conditions of the research needs so that with a clear sample stratification, the output of this research is expected to be implemented by Dunkin’.

#### a. Gender of Respondents

Table 3 below shows that respondents who are 18 years old or older and have visited and made a purchase at Dunkin’ at least twice are classified according to their gender.

**Table 3.** Recapitulation of respondent’s gender

No.	Gender	Frequency (People)	Percentage (%)
1	Male	41	41
2	Female	59	59
<b>Total</b>		<b>100</b>	<b>100</b>

Source: Primary data processed

#### b. Age of Respondents

Table 4 below shows that respondents who are 18 years old or older and have visited and made a purchase at Dunkin’ at least twice are classified according to their age.

**Table 4.** Recapitulation of respondent’s age

No.	Age (Years)	Frequency (People)	Percentage (%)
1	18-25	71	71
2	26-35	18	18
3	36-45	9	9
4	> 45	2	2
<b>Total</b>		<b>100</b>	<b>100</b>

Source: Primary data processed

#### c. Domicile of Respondents

Table 5 below shows that respondents who are 18 years old or older and have visited and made a purchase at Dunkin’ at least twice are classified according to their domicile.

**Table 5.** Recapitulation of respondent’s domicile

No.	Domicile	Frequency (People)	Percentage (%)
1	Surabaya	38	38
2	Semarang	6	6
3	Bandung	6	6
4	Sidoarjo	5	5
5	Malang	5	5
6	Jakarta	5	5
7	Bogor	5	5
8	Yogyakarta	4	4
9	Bekasi	4	4
10	Bali	4	4
11	Balikpapan	4	4
12	Surakarta	3	3

13	Depok	3	3
14	Banjarmasin	3	3
15	Palembang	2	2
16	Makassar	2	2
17	Tangerang	1	1
<b>Total</b>		<b>100</b>	<b>100</b>

Source: Primary data processed

### 4.2 Questionnaire Data Processing

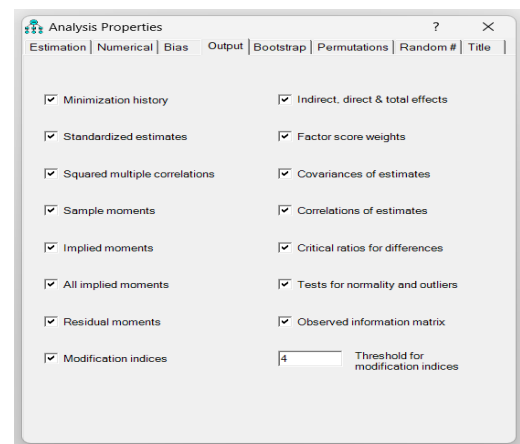
Descriptive analysis is carried out so that further analysis can be carried out. In this analysis, the researcher presents the research findings in a descriptive manner, describing how each respondent responded to the questionnaire’s statements for each variable.

#### 4.2.1 Data Sufficiency Test

According to Waluyo and Rachman (2020), the SEM sample size assumption for the Maximum Likelihood Estimation (MLE) technique must be met with a minimum of 100 samples, and the sample used in this study was 100 samples. This means that the SEM assumption using the MLE technique with a total size of 100 samples is sufficient for the data needed in the study.

#### 4.2.2 Selecting the SEM Matrix and Estimation

In the SEM method, when the data collected is sufficient for the minimum limit of the MLE technique, the next step is to select the matrix and estimate. The software usually used in the SEM method is Amos 24. Matrix selection and estimation using Amos 24 software in this study are shown in Figure 2.



**Figure 2.** Matrix selection and estimation

Source: Primary data processed

### 4.3 Measurement Model

#### 4.3.1 Goodness of Fit Test

At the measurement model stage, an evaluation of several goodness of fit criteria and cut-off

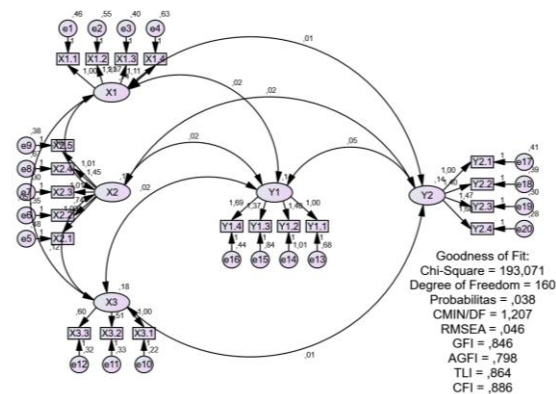
value that show the latent variables are still not correctly reflected by the model under analysis is done to determine the model's adequacy. These criteria are listed in Table 6.

**Table 6.** Goodness of fit and cut-off value on measurement model

Criteria	Model Test Results	Critical Value	Description
X <sup>2</sup> Chi-Square	193.071	Small, X <sup>2</sup> with df = 160 with $\alpha = 0.05$	Good
Probability	0.038	$\geq 0.05$	Not good
CMIN/DF	1.207	$\leq 2.00$	Good
RMSEA	0.046	$\leq 0.08$	Good
GFI	0.846	$\geq 0.90$	Marginal
AGFI	0.798	$\geq 0.90$	Not good
TLI	0.864	$\geq 0.95$	Marginal
CFI	0.886	$\geq 0.95$	Marginal

Source: Primary data processed

The model test results are displayed in Table 6 above in comparison to their critical levels, there are three good criteria (X<sup>2</sup> Chi-Square, CMIN/DF, and RMSEA), three criteria that are marginal or close to good (GFI, TLI, and CFI), and two criteria that are not good (probability and AGFI). The measurement model is evident in Figure 3.



**Figure 3.** Measurement model

Source: Primary data processed

### 4.3.2 Validity Test

Validity is a measure that demonstrates that the variable being measured is really the variable to be studied. The validity test is evaluated by determining whether every estimated indicator accurately assesses the characteristics of the idea it is testing utilizing the measuring model created for the research. If each indicator has C.R. > 2.S.E., this indicates that the indicator is valid (Waluyo and Rachman, 2020). Table 7 below shows the results which can be concluded

that all indicators have a C.R. value > 2.S.E. so that all indicators are declared valid.

### 4.3.3 Significance Test

In the regression weight analysis stage, a variable may be used in conjunction with other elements to confirm a latent variable. A t-test on the regression weight, which is shown in Table 7, can be used to examine the ability of these dimensions to create latent variables. The t-count in regression analysis is the same as the Critical Ratio or C.R. Therefore, C.R. must be compared with the t-table. A variable is said to significantly form a dimension of a latent variable characterized by a C.R. greater than the t-table (t-count > t-table). The t-table at the 0.05 level with df = 20 (the total number of indicators) obtained a t-value of 1.725 so that when viewed in Table 7, all indicators are significant.

**Table 7.** Validity test, significance test, and regression weights on measurement model

	S.E.	C.R.	2.S.E.	Estimate Standardized Regression Weights
X1.1 <--- X1				0.482
X1.2 <--- X1	0.422	3.110	0.844	0.553
X1.3 <--- X1	0.442	3.092	0.884	0.628
X1.4 <--- X1	0.419	2.653	0.838	0.463
X2.1 <--- X2				0.508
X2.2 <--- X2	0.227	3.267	0.454	0.455
X2.3 <--- X2	0.274	3.705	0.548	0.606
X2.4 <--- X2	0.403	3.601	0.806	0.588
X2.5 <--- X2	0.298	3.388	0.596	0.557
X3.1 <--- X3				0.669
X3.2 <--- X3	0.254	1.992	0.508	0.352
X3.3 <--- X3	0.313	1.961	0.626	0.412
Y1.1 <--- Y1				0.418
Y1.2 <--- Y1	0.551	2.545	1.102	0.467
Y1.3 <--- Y1	0.532	2.576	1.064	0.495
Y1.4 <--- Y1	0.639	2.638	1.278	0.694
Y2.1 <--- Y2				0.503
Y2.2 <--- Y2	0.339	4.147	0.678	0.642
Y2.3 <--- Y2	0.369	3.993	0.738	0.707
Y2.4 <--- Y2	0.419	4.015	0.838	0.763

Source: Primary data processed

### 4.3.4 Reliability Test

The model that has been tested for suitability is continued by conducting a reliability test to show that in a model, the indicators chosen are suitable to a good extent. Constructs are considered reliable if the construct reliability value on each variable is  $\geq 0.70$ . However, in exploratory research, even values below 0.70 are still acceptable if accompanied by empirical reasons. Nunally and Bernstein (1994) in Waluyo and Rachman (2020) state that



reliability between 0.5-0.6 is acceptable. Table 8 below demonstrates that all of the outcomes of the reliability test are reliable when the construct reliability results are  $\geq 0.50$ .

**Table 8.** Reliability test on measurement model

Variables	Construct Reliability
X1	0.706907047
X2	0.763152889
X3	0.567185538
Y1	0.690725424
Y2	0.831574595

Source: Primary data processed

### 4.3.5 Correlation Test

To ascertain whether two variables are associated with one another, a correlation test is used. The correlation matrix's range, which is 0 to 1, is consistent and fixed. According to Table 9 below, the correlation coefficient (r) between the acquired variables has a positive value and is very close to 1, indicating that the relationship between the variables is strengthening. If the value is close to 0, on the other hand, it indicates that the link between the variables is weakening. Therefore, all influences between variables are strong and unidirectional (positive), meaning that an increase in each variable will result in an increase in the other factors.

**Table 9.** Correlation test on measurement model

	Estimate
X1 <-> X2	0.645
X1 <-> X3	0.287
X1 <-> Y1	0.151
X1 <-> Y2	0.044
X2 <-> X3	0.672
X2 <-> Y1	0.098
X2 <-> Y2	0.117
X3 <-> Y1	0.138
X3 <-> Y2	0.037
Y1 <-> Y2	0.351

Source: Primary data processed

It is evident in Table 9 above which shows the highest correlation rate between exogenous variables (with a value of 0.672) is found in variable X<sub>2</sub> (Service Quality) with X<sub>3</sub> (Sales Promotion). Sembiring (1995) states that in regression and correlation theory, if X<sub>1</sub> and X<sub>2</sub> are collinear, remove one of them. The researcher chose to remove the X<sub>2</sub> (Service Quality) variable from the model. After X<sub>2</sub> was removed, the new model was tested using parameters at critical values.

### 4.3.6 Goodness of Fit Test after X<sub>2</sub> is Removed

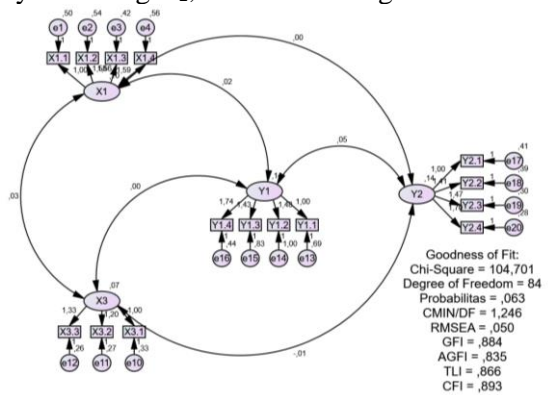
The goodness of fit test results after X<sub>2</sub> was removed is evident in Table 10 below.

**Table 10.** Goodness of fit and cut-off value on measurement model after X<sub>2</sub> is removed

Criteria	Model Test Results	Critical Value	Description
X <sup>2</sup> Chi-Square	104.701	Small, X <sup>2</sup> with df = 84 with $\alpha = 0.05$	Good
Probability	0.063	$\geq 0.05$	Good
CMIN/DF	1.246	$\leq 2.00$	Good
RMSEA	0.050	$\leq 0.08$	Good
GFI	0.884	$\geq 0.90$	Marginal
AGFI	0.835	$\geq 0.90$	Marginal
TLI	0.866	$\geq 0.95$	Marginal
CFI	0.893	$\geq 0.95$	Marginal

Source: Primary data processed

Comparing the model test results to their critical values, Table 10 above demonstrates that there are four good criteria (X<sup>2</sup> Chi-Square, probability, CMIN/DF, and RMSEA) and four criteria that are marginal or close to good (GFI, AGFI, TLI, and CFI). For an image of the measurement model in the new model, namely by removing X<sub>2</sub>, is evident in Figure 4.



**Figure 4.** Measurement model after X<sub>2</sub> is removed  
Source: Primary data processed

### 4.3.7 Validity Test after X<sub>2</sub> is Removed

After removing X<sub>2</sub>, the validity test was carried out again on the new model. The test results are summarized in Table 11. The table shows that every indicator has a C.R. value  $> 2.S.E.$  so that all indicators can validly measure the model.

### 4.3.8 Significance Test after X<sub>2</sub> is Removed

A variable is significantly said to form a dimension of the latent variable which is characterized by a C.R. greater than the t-table (t-count  $>$  t-table). The t-table at the 0.05 level with df = 15 (the number of all indicators after

excluding the X<sub>2</sub> variable) obtained a t-value of 1.753 so that when viewed in Table 11, all indicators are significant.

**Table 11.** Validity test, significance test, and regression weights on measurement model after X<sub>2</sub> is removed

	S.E.	C.R.	2.S.E.	Estimate Standardized Regression Weights
X1.1 <--- X1				0.408
X1.2 <--- X1	0.577	2.743	1.154	0.564
X1.3 <--- X1	0.572	2.723	1.144	0.604
X1.4 <--- X1	0.633	2.510	1.266	0.558
X3.1 <--- X3				0.418
X3.2 <--- X3	0.546	2.192	1.092	0.518
X3.3 <--- X3	0.684	1.962	1.368	0.567
Y1.1 <--- Y1				0.405
Y1.2 <--- Y1	0.598	2.469	1.196	0.476
Y1.3 <--- Y1	0.577	2.479	1.154	0.500
Y1.4 <--- Y1	0.659	2.636	1.318	0.693
Y2.1 <--- Y2				0.501
Y2.2 <--- Y2	0.341	4.134	0.682	0.642
Y2.3 <--- Y2	0.369	3.989	0.738	0.705
Y2.4 <--- Y2	0.424	4.002	0.848	0.766

Source: Primary data processed

#### 4.3.9 Reliability Test after X<sub>2</sub> is Removed

After testing the validity and significance, the next step is to test the reliability of the new model. If each variable's construct reliability value is  $\geq 0.70$ , the construct is regarded as reliable. However, in exploratory research, even values below 0.70 are still acceptable if accompanied by empirical reasons. Nunally and Bernstein (1994) in Waluyo and Rachman (2020) state that reliability between 0.5-0.6 is acceptable. Table 12 below shows that in the reliability test on the new model, the results are all reliable where the construct reliability results are  $\geq 0.50$ .

**Table 12.** Reliability test on measurement model after X<sub>2</sub> is removed

Variables	Construct Reliability
X1	0.709343802
X3	0.601438655
Y1	0.690725424
Y2	0.831366264

Source: Primary data processed

#### 4.3.10 Correlation Test after X<sub>2</sub> is Removed

The correlation test was carried out again on the new model (after X<sub>2</sub> was removed). According to Table 13 below, the correlation coefficient (r) between variables has positive and negative values that are close to 1 to -1, showing that the relationship between variables is becoming stronger. If the value is close to 0, on the other hand, it indicates that the link between the

variables is weakening. Positive numbers signify a one-way link (X increases, then Y increases), but negative values signify an inverse relationship (X increases, then Y decreases). The correlation test results below are used for structural model measurement without including X<sub>2</sub>.

**Table 13.** Correlation test on measurement model after X<sub>2</sub> is removed

	Estimate
X1 <--> X3	0.322
X1 <--> Y1	0.154
X1 <--> Y2	0.039
X3 <--> Y1	0.021
X3 <--> Y2	-0.068
Y1 <--> Y2	0.346

Source: Primary data processed

It is evident in Table 13 above, the conclusion obtained from the correlation test results after the variable X<sub>2</sub> is removed is that the correlation between exogenous and exogenous variables is not significant so that it complies with the existing rules or there is no indication of multicollinearity. This is in accordance with the statement of Waluyo and Rachman (2020) which states that research that aims to regress two or more exogenous variables on one or more endogenous variables, the requirement that must be met is that the correlation between exogenous variables is not significant.

#### 4.4 Structural Model

##### 4.4.1 Goodness of Fit Test

Parameters are tested with their critical values set and Table 14 provides a summary of the results. In the structural model, the model used is the model after removing X<sub>2</sub>.

**Table 14.** Goodness of fit and cut-off value on structural model

Criteria	Model Test Results	Critical Value	Description
X <sup>2</sup> Chi-Square	108.199	Small, X <sup>2</sup> with df = 87 with $\alpha = 0.05$	Good
Probability	0.062	$\geq 0.05$	Good
CMIN/DF	1.244	$\leq 2.00$	Good
RMSEA	0.050	$\leq 0.08$	Good
GFI	0.881	$\geq 0.90$	Marginal
AGFI	0.836	$\geq 0.90$	Marginal
TLI	0.867	$\geq 0.95$	Marginal
CFI	0.890	$\geq 0.95$	Marginal

Source: Primary data processed

Comparing the model test results to their critical values, Table 14 above demonstrates that there



are four good criteria ( $X^2$  Chi-Square, probability, CMIN/DF, and RMSEA) and four criteria that are marginal or close to good (GFI, AGFI, TLI, and CFI). Because all indicators are included in good and marginal criteria, therefore the structural model does not need to be modified. For the structural model image can be seen in Figure 5.

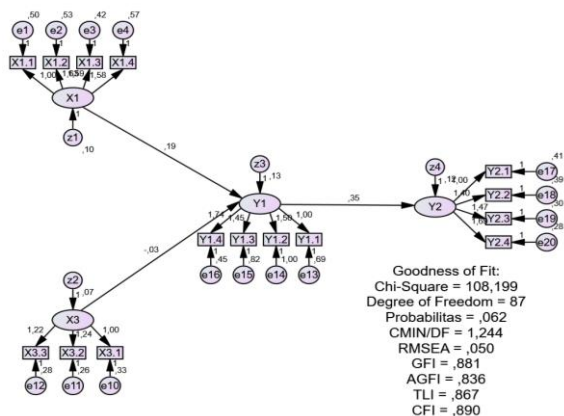


Figure 5. Structural model  
Source: Primary data processed

**4.4.2 Validity Test**

The validity test is assessed using the structural model created for the study by establishing if each estimated indicator appropriately assesses the features of the notion it is testing. If each indicator has C.R. > 2.S.E., this indicates that the indicator is valid (Waluyo and Rachman, 2020). Table 15 below shows the results which can be inferred that each variable and each indicator are deemed to be valid, except for one invalid variable, namely X<sub>3</sub> (Sales Promotion) against Y<sub>1</sub> (Purchase Decision) because the C.R. value is < 2.S.E.

**4.4.3 Significance Test**

According to Waluyo and Rachman (2020), a variable is considered significant when the variable has a C.R. value greater than the t-table (t-count > t-table). The t-table at the 0.05 level with df = 15 (the number of all indicators after excluding the X<sub>2</sub> variable) obtained a t-value of 1.753 so that it is possible to state that the indicator is significantly a dimension of the latent variable formed. Table 15 demonstrates that one variable has a C.R. value smaller than the t-table (t-count < t-table) so that it can be interpreted that there is one variable that is not significant. The insignificant variable is X<sub>3</sub> (Sales Promotion) against Y<sub>1</sub> (Purchase Decision).

**Table 15.** Validity test, significance test, and regression weights on structural model

	S.E.	C.R.	2.S.E.	Estimate Standardized Regression Weights
Y1 <--- X1	0.121	2.814	0.242	0.367
Y1 <--- X3	0.262	-0.126	0.524	-0.024
Y2 <--- Y1	0.123	2.451	0.246	0.320
X1.1 <--- X1				0.402
X1.2 <--- X1	0.603	2.701	1.206	0.572
X1.3 <--- X1	0.595	2.679	1.190	0.610
X1.4 <--- X1	0.636	2.481	1.272	0.547
X3.1 <--- X3				0.427
X3.2 <--- X3	0.637	1.961	1.274	0.550
X3.3 <--- X3	0.602	2.022	1.204	0.529
Y1.1 <--- Y1				0.403
Y1.2 <--- Y1	0.608	2.470	1.216	0.481
Y1.3 <--- Y1	0.587	2.477	1.174	0.505
Y1.4 <--- Y1	0.659	2.637	1.318	0.688
Y2.1 <--- Y2				0.502
Y2.2 <--- Y2	0.339	4.142	0.678	0.641
Y2.3 <--- Y2	0.367	3.998	0.734	0.704
Y2.4 <--- Y2	0.423	4.011	0.846	0.767

Source: Primary data processed

**4.4.4 Reliability Test**

A reliability test must be performed on the model after it has been fitted and assessed for compatibility to demonstrate that the indicators used in the model have a high degree of suitability. Constructs are considered reliable if the construct reliability value on each variable is  $\geq 0.70$ . However, in exploratory research, even values below 0.70 are still acceptable if accompanied by empirical reasons. Nunally and Bernstein (1994) in Waluyo and Rachman (2020) state that reliability between 0.5-0.6 is acceptable. Table 16 demonstrates that all of the outcomes of the reliability test are reliable when the construct reliability results are  $\geq 0.50$ .

**Table 16.** Reliability test on structural model

Variables	Construct Reliability
X1	0.70843166
X3	0.602874614
Y1	0.691675182
Y2	0.831366264

Source: Primary data processed

**4.5 Simultaneous Equation**

The simultaneous equation for the model developed in this study:

- $Y_1 = f(X) + Z_3$
- $Y_1 = f(X_1) + f(X_3) + Z_3$
- $Y_1 = 0.367 X_1 + (-0.024) X_3 + Z_3$
- $Y_2 = ff(Y_1) + Z_4$
- $Y_2 = 0.320 (0.367 X_1) + 0.320 ((-0.024) X_3) + Z_4$
- $Y_2 = 0.117 X_1 + (-0.008) X_3 + Z_4$

#### 4.6 Hypothesis Test

Hypothesis testing is carried out by contrasting the t-count value, specifically the C.R. value, with the t-table value of 1.753 and showing the value of the regression coefficient.  $H_0$  is approved if the C.R. value is less than the t-table value (1.753), while  $H_0$  it is denied if the C.R. value is higher than the t-table value (1.753).  $H_1$  may be accepted if  $H_0$  is rejected, and vice versa. These are the study's hypothesis findings:

##### Hypothesis 1

$H_0$  : Product quality has no significant effect on purchasing decisions.

$H_1$  : Product quality has a significant effect on purchasing decisions.

Table 15 presents the outcomes of the hypothesis test. In that table, it can be seen that the effect of product quality on purchasing decisions obtained a C.R. value of 2.814 and a t-table of 1.753 (t-count > t-table). So, in this hypothesis  $H_1$  is accepted, namely product quality has a significant effect on purchasing decisions. The effect of product quality on purchasing decisions has a regression coefficient value of 0.367, which means that both have a positive and significant effect. The results of this study support the research of Kasmad (2022) and Putri and Sari (2023) which state that product quality has a significant effect on purchasing decisions.

##### Hypothesis 2

$H_0$  : Service quality has no significant effect on purchasing decisions.

$H_1$  : Service quality has a significant effect on purchasing decisions.

Outcomes from the second hypothesis test cannot be proven because the service quality variable ( $X_2$ ) is removed from the model due to multicollinearity symptoms in the data. The results of this expenditure is evident in Figure 3 and Figure 4 to see the model before and after removing the service quality variable ( $X_2$ ).

##### Hypothesis 3

$H_0$  : Sales promotion has no significant effect on purchasing decisions.

$H_1$  : Sales promotion has a significant effect on purchasing decisions.

Table 15 presents the outcomes of the hypothesis test. In that table, it can be seen that the effect of sales promotion on purchasing decisions obtained a C.R. value of -0.126 and a t-table of 1.753 (t-count < t-table). So, in this

hypothesis  $H_0$  is accepted, namely sales promotion has no significant effect on purchasing decisions. The effect of sales promotion on purchasing decisions has a regression coefficient value of -0.024, which means that both have a negative and insignificant effect. The outcomes of earlier research by Irawan and Kamil (2022) are used to corroborate the results of this research, which show that there is no significant influence between sales promotion on purchasing decisions. However, the findings of this research contradict research conducted by Dhamayanti (2023), where the study states that promotion has a positive and significant effect on purchasing decisions.

##### Hypothesis 4

$H_0$  : Purchasing decisions have no significant effect on consumer loyalty.

$H_1$  : Purchasing decisions have a significant effect on consumer loyalty.

Table 15 presents the outcomes of the hypothesis test. In that table, it can be seen that the effect of purchasing decisions on consumer loyalty is obtained a C.R. value of 2.451 and a t-table of 1.753 (t-count > t-table). So, in this hypothesis  $H_1$  is accepted, namely purchasing decisions have a significant effect on consumer loyalty. The effect of purchasing decisions on consumer loyalty has a regression coefficient value of 0.320, which means that both have a positive and significant effect. The results of this study support the research of Kasmad (2022) which found that purchasing decisions have a significant effect on consumer loyalty.

#### 4.7 SWOT Matrix

The SWOT analysis is carried out to design marketing strategies based on internal factors and external factors. Internal factors refer to the strengths and weaknesses that exist within the company and can affect its performance. As such, these strengths and weaknesses are realities on the ground. It can be seen from the results of the questionnaire, respondents' answers to the sales promotion variable are calculated to be lower than product quality, where sales promotion is dominated by answers in the good category, while product quality is dominated by answers in the very good category. So, it can be concluded that product quality is a strength and sales promotion is a weakness in this SWOT matrix. Meanwhile,

external factors including opportunities and threats are obtained from interviews with Dunkin' competitors. This matrix can generate four different types of alternative strategies,

including Strengths-Opportunities (S-O), Weaknesses-Opportunities (W-O), Strengths-Threats (S-T), and Weaknesses-Threats (W-T) strategies which is evident in Table 17 below.

**Table 17. SWOT matrix of Dunkin'**

<p><b>INTERNAL</b></p> <p style="text-align: right;"><b>EKSTERNAL</b></p>	<p><b>Strengths (S)</b></p> <ol style="list-style-type: none"> <li>The appearance of Dunkin' donuts is attractive so that it increases consumer appetite.</li> <li>Dunkin' donuts have a soft and light texture that suits consumer's appetite.</li> <li>The Dunkin' donuts served have well-maintained flavor quality.</li> <li>Dunkin' has a variety of donut menus that are diverse and always available.</li> </ol>	<p><b>Weaknesses (W)</b></p> <ol style="list-style-type: none"> <li>Dunkin' often provides a variety of attractive promos, such as discounts. However, these promotions are followed by terms and conditions that are not favored by consumers.</li> <li>The promotions held by Dunkin' do not make consumers buy more often at Dunkin' than at other brands.</li> <li>The advertisements delivered by Dunkin' do not make consumers interested in making purchases.</li> </ol>
<p><b>Opportunities (O)</b></p> <ol style="list-style-type: none"> <li>Dunkin' global presence provides a wider market potential and greater expansion opportunities.</li> <li>Dunkin' has a recognized name with a high level of awareness.</li> <li>The increasing snacking habits of Indonesians with donuts as one of the favorite snacks of Indonesians.</li> <li>High purchasing power of the people.</li> <li>The development of information technology as a media promotion.</li> <li>Public interest in products that have promos.</li> </ol>	<p><b>S-O Strategy</b></p> <ol style="list-style-type: none"> <li>Dunkin' can continue to maintain product quality to remain consistent in the eyes of consumers. (S1;S2;S3;S4;O1;O2;O3; O4)</li> <li>Dunkin' can utilize good product quality to create a superior customer experience. (S1;S2;S3;S4;O1;O2;O3; O4;O6)</li> </ol>	<p><b>W-O Strategy</b></p> <ol style="list-style-type: none"> <li>Dunkin' can conduct market research to find the right target market and adjust their sales promotion strategy to the preferences of that target market. (W1;W2;W3;O1;O2;O3; O4;O5;O6)</li> <li>Dunkin' can take advantage of technology and digitalization to increase customer convenience and strengthen brand engagement. (W1;W2;W3;O4;O5;O6)</li> </ol>
<p><b>Threats (T)</b></p> <ol style="list-style-type: none"> <li>The number of competitors with the same or similar products.</li> <li>The variety of competitor's products is more numerous and diverse.</li> <li>Competitor's promotions are more attractive and intensively carried out.</li> <li>Market tastes are easy to change according to trends.</li> <li>The increasing public awareness of healthy lifestyles.</li> </ol>	<p><b>S-T Strategy</b></p> <ol style="list-style-type: none"> <li>Dunkin' can make product innovations to maintain attractiveness and attract new consumers without reducing the quality of the products it already has. (S1;S2;S3;S4;T1;T2;T4; T5)</li> <li>Dunkin' can expand their food menu options to attract customers who are looking for other menu options. (S1;S2;S3;S4;T1;T2;T4; T5)</li> </ol>	<p><b>W-T Strategy</b></p> <ol style="list-style-type: none"> <li>Dunkin' needs to conduct an in-depth analysis of competition and market trends to tackle the threats. (W1;W2;W3;T1;T2;T3; T4)</li> <li>Dunkin' can create creative and attractive promotional campaigns to attract the attention of potential customers. (W1;W2;W3;T1;T2;T3; T4)</li> </ol>

Source: Primary data processed

Viewed from the problems that occur, where sales promotion is a weakness in Dunkin' which results in consumer purchasing decisions, the strategy that could be used is the W-O strategy which aims to overcome the weaknesses possessed by utilizing existing opportunities. The W-O strategies in question are: (a) Dunkin' can conduct market research to find the right target market and adjust their sales promotion strategy to the preferences of that target market.

Based on the stratification of respondents in Table 4, the majority of questionnaire fillers are aged 18-25 years old who belong to generation Z. This indicates that Gen Z is a potential target market in this business. Therefore, Dunkin' must know the characteristics of the target market to adjust the sales promotion strategy for the success of the promotion run. Gen Z has characteristics that are highly dependent on social media, prefer brands that are unique and

characterized, and are more easily influenced by information in the form of videos. Based on these characteristics, strategies that suit Gen Z preferences can be done by prioritizing mobile friendly products (websites designed specifically for mobile devices), using influencer marketing strategies (marketing strategies that work with influencers for promotion), emphasizing visual content that is high in interactivity and creativity, and maximizing their shopping experience. (b) Dunkin' can take advantage of technology and digitalization to increase customer convenience and strengthen brand engagement. In the modern era like now, the use of technology is inseparable from human activities. One of the ways that Dunkin' can do is to apply a digital membership card considering that until now Dunkin' still uses a physical membership card (DD card) which is not practical because it must be updated annually. With a digital member card, the company can notify new products or services through data that has been obtained when consumers register themselves as members. This way, the promotion that is carried out will be right on target and the company can make savings, especially in matters of promotion or product marketing.

## 5 CONCLUSION

In accordance with the study's findings, it could be argued that product quality has a positive and significant effect on purchasing decisions, service quality cannot be proven because it is excluded from the research model, sales promotion has a negative and insignificant effect on purchasing decisions, and purchasing decisions have a positive and significant effect on consumer loyalty. The simultaneous equation obtained is  $Y_1 = 0.367 X_1 + (-0.024) X_3 + Z_3$  and  $Y_2 = 0.117 X_1 + (-0.008) X_3 + Z_4$ . The strategy obtained from the SWOT analysis outcomes and can be applied by Dunkin' is to implement the W-O strategy. Suggestions that can be offered by researchers to Dunkin' are that Dunkin' is expected to keep and enhance the quality of its products that are currently good and apply marketing strategies to sales promotions that have been formulated in order to encourage purchasing decisions and maintain them so that Dunkin' customers establish long-term loyalty and keep purchasing products. Meanwhile, the suggestion for further

researchers is that further researchers can use this research as reference material and can analyze the effect of the W-O strategy in improving purchasing decisions and loyalty on Dunkin' Indonesia consumers.

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