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Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) Methods of Exclusive Matte Lip Cream

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A B S T R A C T

Now cosmetics become one of the current human needs and increasingly develop or become a trend in society. One of the decorative cosmetics for lips is Lip Cream. PT produces exclusive Matte Lip Cream. Paragon Technology and Innovation, but many cosmetics competitors appear lately, and some complaints about the product. This research aims to analyze customer satisfaction and analyze the important attributes of Exclusive Matte Lip Cream. The sampling method used is Simple Random Sampling and analyzed by using the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) methods. The results of customer satisfaction are 75.89%, which means that customers are satisfied. The attribute that needs to be fixed is Formula & Texture of the new formulated Exclusive Matte Lip Cream, especially for lip cream density.

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1. INTRODUCTION

Cosmetics become one of the current human needs and increasingly developing or even become a trend in society. Cosmetics are a part of the world business. Even now, cosmetic technology is very advanced, and a combination of cosmetics and medicine (pharmaceutical) or what is called medical cosmetics (cosmeceuticals) (Tranggono & Latifah, 2007). One of the most popular decorative cosmetics is lip color. This type of lip color, usually called lip cream, is more attractive to consumers because it can moisturize the lips for a long time compared to solid form, making lips shinier and produces a more homogeneous color on the lips (Jessica et al., 2018)

PT. Paragon Technology and Innovation is a company engaged in the cosmetics industry that sells halal cosmetics. PT Paragon Technology and Innovation is located in Tangerang, Banten. One of the decorative cosmetics produced by Paragon is Wardah Exclusive Matte Lip Cream. There are currently many lip cream products being sold by various competitors so that PT. Paragon Technology and Innovation must be able to maintain customer satisfaction who use this product, and in producing lip cream, it must prioritize comfort and safety for consumers. According to Top Brand Indonesia, the categories of self-care (Lipstick / Lip Cream) (Fig. 1)

Fig. 1. Top brand indonesia (lip cream's wardah)

Based on the reviews on E-commerce from September 2019 to April 2020, from 190 people who conducted studies, several complaints (Table 1). Based on the description above, the author wants to measure the quality of the product and analyze the top priorities in the quality improvement of Exclusive Matte Lip Cream. Therefore, using the calculation of the IPA (Importance Performance Analysis) method and the CSI (Customer Satisfaction Index) method with the hope to know the level of consumer satisfaction for the quality of Exclusive Matte Lip Cream by PT. Paragon Technology and Innovation and what attributes are prioritized for improvement.

Table 1. Reviews on E-commerce from September 2019 – April 2020

Complaints	Reviewers
Makes lips dry/chapped	103
Heavy feeling on the lips after use	20
Doesn't last long on the lips	19
Easy to transfer when used to eat	12
Non waterproof	4

Based on the formulation of the problem above, the objectives of this research are as follows:

1. Knowing and measuring the level of customer satisfaction of the Exclusive Matte Lip Cream Products.
2. Analyzing the attributes that are considered very important, where these attributes will be needed to improve the Exclusive Matte Lip Cream Products' quality.

2. LITERATURE REVIEW

2.1 Customer Satisfaction

Satisfaction reflects one's assessment of perceived product performance (results) concerning expectations (Kolter & Keller, 2009). From the definition above, it can be concluded that customer satisfaction in terms of the customer is about what customers have felt about the services or products provided compared to what they want. Satisfaction and dissatisfaction are the correspondence between consumer expectations and consumer perceptions of the services received (Arief, 2007). Several previous studies have shown effectiveness in measuring customer satisfaction (Table 2).

There are three levels of customer satisfaction (Budiarto & Dolly, S, 2001), namely:

a. Customers are very satisfied if the service received is more than the expected service
b. Customers are satisfied if the service received is the same as the service expected
c. Customers are not satisfied if the service received is not as good as the expected service

a. Population and Sample

The population is a generalization area consisting of objects or subjects with specific qualities and characteristics set by the researcher for the study and then conclude (Sugiyono, 2007). Based on the theory, the population in this research were consumers of Exclusive Matte Lip Cream products and those who used online purchases through E-Commerce with a population of 147,188 people (Table 3). The sample is part of the number and characteristics of the population (Sugiyono, 2007). This research uses the Slovin formula because, in sampling, the amount must be representative. The research results can be generalized, and the calculation does not require a sample table. Still, it can be done with a simple formula and calculation, with the procedure:

$$n = \frac{N}{1+Ne^2} \quad (1)$$

When:
n : Number of Samples
N: population size, the number of all consumers
e : Critical value (accuracy limit) desired (percentage) inaccurate allowance due to 10% sampling error

Table 2. Previous research

No	Authors	Title of research	Methods	Results
1	Budiana (2019)	Efektivitas Dalam Pemilihan Alternatif Trase Jalan Pada Ruas Tol Kamal - Rajeg Dengan Menggunakan Metode IPA (Importance Performance Analysis) Dan SMART (Simple Multi Attribute Rating Technique)	IPA (Importance Performance Analysis) dan SMART	There are 11 attributes that are confirmed to accommodate community aspirations, namely Topography, Geotechnical, Geology, Hydrology, Geometric, Connectivity, Land Acquisition Readiness, Social Disturbances, Community Accessibility, Construction Costs and Settlement Areas
2	Yahya (2019)	Analisis Kepuasan Penghuni Apartemen Mediterania Garden Residence 2 Dengan Metode Importance Performance Analysis (IPA) Dan Quality Function Deployment (QFD)	Importance Performance Analysis (IPA) dan Quality Function Deployment (QFD)	The attributes that affect the satisfaction of residents of the Mediterranean Garden Residence 2 apartment that need to be improved are ten attributes
3	Lestari (2020)	Analisis Kepuasan Pelanggan Terhadap Kualitas Pelayanan Ekspor Udara Di Pt.XYZ Dengan Menggunakan Metode Service Quality (Servqual) Dan Diagram Importance Performance Analysis (IPA).	Metode Service Quality (Servqual) Dan Diagram Importance Performance Analysis (IPA)	Improvements were made to quadrant I, namely 4 attributes.
4	Adini (2020)	Analisa Kepuasan Pelanggan Di Balai Teknologi Polimer-Bppt Dengan Metode Importance Performance Analysis (IPA) Untuk Mencapai Pelayanan Prima.	Importance Performance Analysis (IPA)	It can be seen that the customer satisfaction index value of Balai Teknologi Polymers - BPPT between the performance index compared to the expectation index is 89%.
5	Nindiani et al. (2018)	Product and Service Quality Analysis: An Empirical Study of Customer Satisfaction in a Ba (kery	Importance Performance Analysis (IPA)	The conclusion that can be drawn from the research case in the bakery is an indicator of the taste of product quality and an indicator of service quality courtesy.
6	Perkasa & Prarendra (2015)	Service Quality Analysis For Customer Satisfaction Using Importance Performance Analysis Method On RSUD Cengkareng (	Importance Performance Analysis (IPA)	The results of this study indicate that Cengkareng Hospital must improve 8 attributes of service quality performance to suit the patient's wishes
7	Farminta et al. (2018)	Analisis Kualitas Pelayanan Industri Jasa Olah Raga Dengan Menggunakan Metode Servqual Dan Importance Performance Analisys (IPA)	Importance Performance Analysis (IPA)	Anonymous's services have not met customer expectations because the value of quality (Q) is calculated as ≤ 1. The service is good enough but needs improvement and improvement,
8	Suhendra & Prasetyanto (2016)	Kajian Tingkat Kepuasan Pengguna Trans Metro Bandung Koridor 2 Menggunakan Pendekatan Importance-Performance Analysis	Importance Performance Analisys (IPA)	Factors related to safety, comfort, staff concern, and cleanliness of the bus are the top priorities that must be implemented. This is based on the calculation of the CSI value of 71.74%, which is in the cause for concern category.

Table 2. Previous research(continued)

No	Authors	Title of research	Methods	Results
9	Winarno & Absor (2018)	Analisis Kualitas Pelayanan Dengan Metode Service Quality (Servqual) Dan Importance Performance Analysis (IPA) Pada PT. Media Purna Engineering	Service Quality (Servqual) dan Importance Performance Analysis (IPA)	Service quality of PT. Media Purna Engineering area of PT. Krakatau Steel (Persero) Tbk, for the quality of services provided, is classified as good, but gaps need to be improved.
10	Diniaty (2016)	Analisis Kepuasan Masyarakat Terhadap Pelayanan Kantor Camat Bukitraya Pekanbaru Dengan Pendekatan Importance Performance Analysis (IPA) dan Potential Gain in Customer Value (PGCV)	Importance Performance Analysis (IPA) dan Potential Gain in Customer Value (PGCV)	Based on the results of data processing using the Importance Performance Analysis (IPA) approach, there are 7 (seven) attributes that determine the quality of service in the Bukitraya Pekanbaru Sub-district Office that must be improved.

Table 3. Population of customers on E-commerce

E-Commerce	Buyers
Shopee	69.442
Lazada	61.789
Socialla	13.900
Tokopedia	2.057
Total	147.188

So to find out, the sample for this research can be calculated as follows:

$$n = \frac{N}{1+Ne^2}$$

$$n = \frac{147188}{1+(147188)(0.1^2)}$$

$$n = \frac{147188}{1472.88}$$

$$n = 99.932 \approx 100$$

Based on the calculations, the number of respondents needed for this research was 100 people. While the sampling method used is the Simple Random Sampling method, the sampling members of the population are done randomly without paying attention to the population's strata (Sugiyono, 2007).

The questionnaire used in this research is a questionnaire with a Likert scale model. The Likert scale is used to reveal people's attitudes, opinions, and perceptions about social phenomena (Sugiyono, 2011).

To measure the variables above, a Likert scale of five levels is as follows:
a. Strongly Agree (5)
b. Agree (4)
c. Neutral (3)
d. Disagree (2)
e. Strongly Disagree (1)

3. RESEARCH METHOD

3.1 Validity Test

The validity test is used to measure whether a questionnaire is valid or not. A questionnaire is valid if the questionnaire's questions are able to reveal something that will be measured by the questionnaire (Gozali & Syatori, 2012). The formulas that can be used to test construct validity with the Product Moment correlation technique are (Siregar, 2013) :

$$r_{count} = \frac{n(\sum xy) = (\sum x)(\sum y)}{\sqrt{\{n(\sum x^2) = (\sum x)^2\}\{n(\sum y^2) = (\sum y^2)}} \quad (2)$$

Where :
r_{count}: the correlation coefficient for each question
x: variable score (respondent's answer)
y: the total score of the variable for the n-respondent
n: number of respondents

To determine whether the instrument is valid or not, the following conditions are used:

a. If $r_{count} > r_{table}$, the instrument is valid.
b. If $r_{count} \leq r_{table}$, the instrument is invalid.

3.2 Reliability Test

A reliability test is a tool to measure a questionnaire, which is an indicator of a variable or constructs. A questionnaire is reliable if a person's answer to a statement is consistent or stable over time (Gozali & Syatori, 2012).

Reliability measurement is done by the one-shot method or just one measurement, and then the results are compared with other questions or measuring the correlation between the answers to the questions. SPSS provides facilities to measure reliability with the Cronbach Alpha (α) statistical test (Gozali & Syatori, 2012).

The formula is as follows:

$$r_{11} = \left\{\frac{k}{(k=10)}\right\}\left\{1 = \frac{\sum \sigma_b^2}{\sigma_t^2}\right\} \quad (3)$$

When,
r_{11} : instrument reliability
k : the number of questions
$\sum \sigma_b^2$: the total of the variance of each variable
σ_t^2: total variance

A construct or variable is reliable if it gives a Cronbach Alpha value > 0.6. If the Cronbach Alpha value is ≤ 0.6, it is declared unreliable (Gozali & Syatori, 2012).

3.3 Customer Satisfaction Index (CSI)

CSI is used to determine the level of consumer satisfaction using services or products by looking at the level of importance of the product/service attributes. To find out the results of CSI method, there are the steps taken as follows (Stratford, 2006) :

1. Determine the Mean Importance Score (MIS). Mean Importance Score (MIS) or the average importance score of an attribute derived from each consumer's average expectation. Meanwhile, the Mean Satisfaction Score (MSS) is the average reality of an attribute derived from the average company performance perceived by consumers.

$$\text{MIS} = \frac{\overset{n}{[\sum Yi]}}{\underset{n}{i=1}} \quad (4)$$

Where:
n : Number of Consumers
Y_i: Importance value of attribute-Y

$$\text{MSS} = \frac{\overset{n}{[\sum Xi]}}{\underset{n}{i=1}} \quad (5)$$

Where:
n : Number of Consumers
X_i : Performance Value of X-attribute

2. Determine Weight Factors (WF). This weight is the percentage of the MIS value per attribute to the total MIS of all attributes.

$$WF = \frac{MIS_i}{\sum_{i-1}^{\alpha} MIS_i} \quad (6)$$

Where:
p : attribute of importance to-p

3. Determine Weight Score (WS). This weight is the multiplication of the WF and the Mean Satisfaction Score (MSS).

$$WSi = WFi \; x \; MSS \quad (7)$$

4. Determine the Customer Satisfaction Index (CSI)

$$\text{CSI} = \frac{\sum_{i=1}^{\rho} \text{MIS}_i}{\text{HS}} \text{ x } 100\% \quad (8)$$

where:
p : p-attribute of importance
HS : (Highest Scale) The maximum scale used

The consumer satisfaction scale used in the interpretation of the index is a scale of 0 to 1. The following is a table of the Customer Satisfaction Index (CSI) Value Criteria Scale (Table 4) (Stratford, 2006).

Table 4. Criteria Scale of CSI

No	CSI score	CSI criteria
1	X > 0,81	Very satisfied
2	0,66 – 0,80	Satisfied
3	0,51 – 0,65	Satisfied enough
4	0,35 – 0,50	Less satisfied
5	0,00 – 0,34	Not satisfied

3.4 Importance Performance Analysis (IPA)

Importance Performance Analysis is used to

compare the consumer's assessment of the importance of service quality (Importance) with service quality (Performance). The dimensions of service quality used are the five dimensions of service quality developed by parasuraman and friends (Ong & Pambudi, 2014). To measure the level of importance and level of satisfaction/performance with the respondent's answers, a 5-level scale is used (Likert scale).

Factors that affect user satisfaction of Exclusive Matte Lip Cream products.

1. Level of Importance (Importance)
As a guide for consumers to assess the level of importance
quality of service, used a Likert scale with a value of 1-5
1: Very Not Important
2: Doesn't matter
3: Simply Important
4: Important
5: Very Important
2. Performance Level (Performance)
As a guideline for consumers to assess the level of service performance, a Likert scale with a value of 1-5 is also used
1: Not very good
2: Not OK
3: Good enough
4: Fine
5: Very well

In this study consisted of 2 variables representing the letters X and Y, where X is the level of company performance/reality that can provide satisfaction to customers, while Y is the level of customer interest/expectation.
The formula used is:

$$\text{Tki} = \frac{\text{X}_\text{i}}{\text{Y}_\text{i}} \text{x} 100\% \quad (9)$$

With:
Tki : suitability level of the respondent
Xi : performance/reality appraisal score of the company
Yi : Customer interest / expectation score

On the axis (Y), the score for the level of importance/expectation is filled, and on the horizontal axis (X), the score for the level of implementation/reality is filled. To simplify the formula, each factor that affects customer satisfaction is as follows:

$$\bar{X} = \frac{\sum X_i}{n} \quad (10)$$

$$\bar{Y} = \frac{\sum Y_i}{n} \quad (11)$$

With:
X : Average score of implementation / reality level
Y : average score of importance / expectation
n : Number of respondents

A Cartesian diagram is a building of four parts bounded by two lines that intersect perpendicularly at points (X, Y). X is the average score of the level of implementation of customer satisfaction of an attributing factor. Y is the average score of the importance of all aspects or attributes that affect customer satisfaction. Altogether there is a K factor. The next formula used is:

$$\bar{\bar{X}} = \frac{\sum_{i=1}^{n} \bar{X}i}{K} \quad (12)$$

$$\bar{\bar{Y}} = \frac{\sum_{i=1}^{n} \bar{Y}i}{K} \quad (13)$$

Where:
K : The number of factors or attributes that affect customer satisfaction.

Furthermore, these elements' levels will be broken down and divided into four parts into a Cartesian diagram. The cartesian diagram is a shape divided into four parts bounded by two lines that intersect perpendicular to the points (C-Line) or (x, y), where x is the average score of the level of customer satisfaction from all attributes and y is the average value of the attribute importance level score of all attributes that affect attribute performance (Fig. 2) (Supranto, 2002).

Quadrant A Very important and not satisfied (Top Priority)	Quadrant B Very important and very satisfied (Maintain achievement)
Quadrant C Less important and less satisfied (Low Priority)	Quadrant D Less important and very satisfied (Excessive)

Fig. 2 Cartesian diagram of IPA

4. RESULTS AND DISCUSSION

Question attributes used in the preliminary questionnaire as many as 13 questions.

4.1 Validity Test

This validity test is carried out using the product-moment correlation technique. This test results can be valid if the r_{count} value of each attribute is greater than the r_{table} value. The value of r_{table} is sought with a significance level of 10% and degrees of freedom (df) = 28 in order to obtain an r_{table} value of 0.3061.

The calculation to test the validity of this performance & importance level uses the product-moment correlation technique. In this validity test, X is the score for each question, and Y is the total score of the 13 questions on the questionnaire. The results of the overall performance & importance level validity test for 30 data can be seen in Table 5.

Table 5. Validity test (30 date)

No	Attributes	r_{count} value		r_{table} score	Conclusion
		Performance	Importance		
1	P1	0.525	0.615	0.3061	Valid
2	P2	0.594	0.659	0.3061	Valid
3	P3	0.784	0.532	0.3061	Valid
4	P4	0.740	0.529	0.3061	Valid
5	P5	0.553	0.677	0.3061	Valid
6	P6	0.604	0.578	0.3061	Valid
7	P7	0.508	0.502	0.3061	Valid
8	P8	0.567	0.637	0.3061	Valid
9	P9	0.670	0.548	0.3061	Valid
10	P10	0.599	0.492	0.3061	Valid
11	P11	0.528	0.793	0.3061	Valid
12	P12	0.690	0.341	0.3061	Valid
13	P13	0.750	0.615	0.3061	Valid

Based on the Table 5, it can be seen that all attributes at the performance level are declared valid. This attribute is considered valid because it has a r_{count} value greater than the r_{table} value (0.3061). This means that each question item above can actually measure the intended variable.

Table 6. Validity Test (106 Date)

No	Attributes	r_{count} value		r_{table} score	Conclusion
		Performance	Importance		
1	P1	0.552	0.624	0.1606	Valid
2	P2	0.621	0.480	0.1606	Valid
3	P3	0.514	0.360	0.1606	Valid
4	P4	0.632	0.484	0.1606	Valid
5	P5	0.557	0.534	0.1606	Valid
6	P6	0.568	0.495	0.1606	Valid
7	P7	0.456	0.470	0.1606	Valid
8	P8	0.539	0.658	0.1606	Valid
9	P9	0.486	0.478	0.1606	Valid
10	P10	0.571	0.501	0.1606	Valid
11	P11	0.462	0.547	0.1606	Valid
12	P12	0.584	0.493	0.1606	Valid
13	P13	0.689	0.625	0.1606	Valid

Then, the validity test calculation was carried out using SPSS 22.0 for windows software for the 106 collected questionnaires. The value of r_{table} is sought with a significance level of 10% and degrees of freedom (df) = 104 so that the r_{table} value is 0.1606. From the validity test results using the 106 collected questionnaires, it can be seen that r_{count} is greater than r_{table}, it can be concluded that the questionnaire questions are valid (Table 6).

4.2 Reliability Test

The reliability test in this research was carried out by distributing the preliminary questionnaire twice to the same 30 respondents at different times, namely with an interval of 7 days. The reliability test was carried out using the Cronbach Alpha analysis technique. A questionnaire can be reliable if the Cronbach Alpha value is greater than 0.60. The following are the results of the reliability test in Table 7. Then performed the calculation of the reliability test using SPSS 22.0 for windows software for the 106 questionnaires collected, with the results in Table 8.

Table 7. Reliability Test

Variable	Cronbach Alpha	Results
Performance	0.862	Reliable
Importance	0.833	Reliable

Table 8. Reliability Test

Variable	Cronbach Alpha	Results
Performance	0.807	Reliable
Importance	0.769	Reliable

Based on Table 8, it can be seen that all items of the variable level of performance and importance are declared reliable because the Cronbach Alpha value is greater than 0.60. This proves that the attributes of the questionnaire's questions are reliable, which means that the questionnaires that have been distributed can show the stability of the observations when measured using these attributes.

4.3 Customer Satisfaction Index (CSI)

CSI is used to determine the level of overall consumer satisfaction by looking at the level of reality of each variable of the product quality statement Exclusive Matte Lip Cream. To calculate CSI, it begins with calculating the Mean

Importance Score (MIS), Mean Satisfaction Score (MSS), Weight Factors (WF), Weight Score (WS).

Table 9. Results of MIS, WF, MSS, and WS

No	Attributes	Mean Importance Score (MIS)	WF%	Mean Satisfaction Score (MSS)	WS
1	P1	4.08	8.04%	4.00	0.33
2	P2	3.75	7.40%	3.66	0.27
3	P3	3.92	7.74%	3.70	0.27
4	P4	3.86	7.61%	3.79	0.30
5	P5	3.88	7.65%	3.79	0.30
6	P6	3.67	7.24%	3.44	0.25
7	P7	3.80	7.50%	3.58	0.25
8	P8	3.78	7.46%	3.70	0.28
9	P9	4.00	7.89%	3.97	0.32
10	P10	4.08	8.06%	3.98	0.32
11	P11	3.63	7.16%	3.48	0.25
12	P12	4.22	8.32%	4.08	0.33
13	P13	4.03	7.94%	4.02	0.33
TOTAL					3.79

An example of calculating the MIS, MSS, WF and WS values for attribute 1 is as follows:

1. Calculating the Mean Importance Score (MIS)

$$MIS = \frac{\text{n}\ [\sum \text{Yi}]\ \text{i} = 1}{\text{n}}$$

$$MIS_1 = \frac{(4+4+3+5+4+\cdots 5)}{432}$$

$$MIS_1 = 4.08$$

2. Determine Weight Factors (WF%)

$$WF = \frac{MIS_i}{\sum_{i-1}^{\alpha} MIS_i}$$

$$WF_1 = \frac{4.08}{4.08+3.62+3.66+\cdots..+4.03}$$

$$WF_1 = 8.22\%$$

3. Determine Mean Satisfaction Score (MSS)

$$MIS = \frac{\text{n}\ [\sum \text{Xi}]\ \text{i} = 1}{\text{n}}$$

$$MIS_1 = \frac{(5+3+3+4+4+\cdots 4)}{424}$$

$$MIS_1 = 4.00$$

4. Determine Weight Score (WS)

WSi = WFi x MSS

$$WS_1 = 8{,}22\% \text{ x } 4.00$$

$$WS_1 = 0.33$$

The results obtained can be seen in Table 9.

5. Determine the Customer Satisfaction Index (CSI)

The CSI percentage value is calculated by dividing the weighted score by the maximum scale used. So the calculation is:

$$CSI = \frac{\sum_{i=1}^{\rho} \text{MIS}_\text{i}}{\text{HS}} \text{ x } 100\%$$

$$CSI = \frac{3.79}{5}$$

$$CSI = 75.89\%$$

Based on the results of the calculation table that has been determined using CSI, it can be seen that the customer satisfaction index for the Exclusive Matte Lip Cream product is 75.89% on a scale ranging from 0.66 to 0.80. The level of customer satisfaction, in general is in the "Satisfied" category.

4.4 Importance Performance Analysis (IPA)

The average calculation results for the level of performance and the level of importance for each Attribute of Exclusive Matte Lip Cream can be seen in Table 4.6.

Table 10. Average importance and satisfaction level of exclusive matte lip cream

No	Attributes	Total Score	
		Performance (X)	Importance (Y)
1	P1	4.00	4.08
2	P2	3.66	3.75
3	P3	3.70	3.92
4	P4	3.79	3.86
5	P5	3.79	3.88
6	P6	3.44	3.67
7	P7	3.58	3.80
8	P8	3.70	3.78
9	P9	3.97	4.00
10	P10	3.98	4.08
11	P11	3.48	3.63
12	P12	4.08	4.22
13	P13	4.02	4.03
Average		3.79	3.90

Based on the calculation of the average that has been obtained at the level of performance and importance, then it is made in the form of an Importance Performance Analysis (IPA) diagram by putting the performance level score as a horizontal axis (X) and the importance level as a vertical axis (Y). Thus, it will be known as the attribute grouping into each Importance Performance Analysis (IPA) quadrant. The form of the Importance Performance Analysis (IPA) diagram has been created based on the calculations' results (Fig. 3).

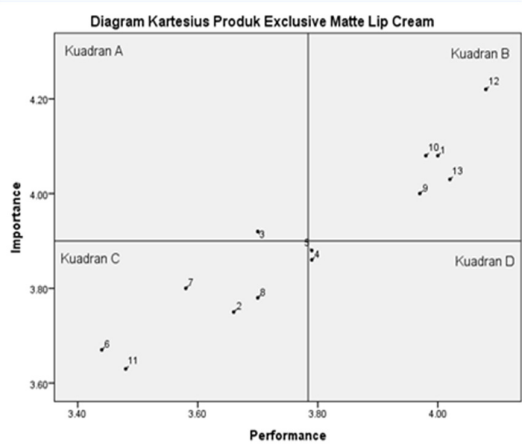

Fig. 3. Cartesian diagram for exclusive matte lip cream

Quadrant A is the Top Priority where the attributes plotted into this quadrant should get more attention or urgently need to be improved (Table 11). This shows that consumers feel dissatisfied with the attributes or product quality is given, so there needs to be an improvement in these attributes and need to be prioritized. The attributes that need to be improved are question number 3 because these attributes greatly influence customer satisfaction of Exclusive Matte Lip Cream product, namely in terms of formula and texture in terms of density of lip cream so that customers can feel satisfied reduce disappointment from the customer.

Table 11. Quadrant A of exclusive matte lip cream

Attribute	Statements
3	Formula & texture of new reformulated Wardah EMLC in terms of density of lip cream

Quadrant B is Maintain achievement where in this quadrant has the highest score level both in terms of the level of importance and level of satisfaction so that the attributes in quadrant B have fulfilled what the customer wants and performance must be maintained. The attributes that are plotted into this quadrant include the characteristics of questions number 1, 9, 10, 12, and 13 (Table 12).

Table 11. Quadrant B of exclusive matte lip cream

Attribute	Statements
1	The color of the variant is interesting and preferred
9	In accordance with the type of packaging used
10	Applicator pads that are not too long, fatter, more stringy, and only tilted at the edges for lip cream application
12	In accordance with the ease of getting information related to products at outlets and E-Commerce
13	Overall product quality, according to good assumptions on the quality and reputation of Wardah Exclusive Matte Lip Cream product quality

Quadrant C is Low Priority, where this attribute is considered a less important influence for customers, and in fact, the performance is not too special. The company should consider this attribute again because the attributes that fall into this quadrant are considered less important and less satisfying for customers of Exclusive Matte Lip Cream Products. The attributes plotted into this quadrant include attributes for questions number 2, 6, 7, 8, and 11 (Table 12).

Quadrant D is redundant; this shows that this quadrant's attributes are considered to have a low level of importance but the level of performance given is high. It is considered less important, but the services provided are very satisfying to 106 customers. Exclusive Matte Lip Cream Products. The attributes plotted in this quadrant include the attributes for questions number 4 and 5 (Table 13).

Table 12. Quadrant C of exclusive matte lip cream

Attribute	Statements
2	The formula & texture of Wardah's new reformulated EMLC is better than the Creamy Grade lip cream
6	Long Lasting Lip Cream Color on the lips
7	The finishing is felt after using lip cream
8	Types of fragrances with perfumes that exist
11	The average price is IDR 62,000 per pcs which have spread across various outlets or e-commerce in Indonesia

Table 13. Quadrant D of exclusive matte lip cream

Attribute	Statements
4	Formula & texture of new reformulated Wardah EMLC in terms of lip cream pigmentation level
5	Formula & texture of new reformulated Wardah EMLC in terms of Matte lip cream grade

5. CONCLUSION

Based on the research results that has been done on the Exclusive Matte Lip Cream Products from PT. Paragon Technology and Innovation, the value of the customer satisfaction level for the Exclusive Matte Lip Cream product using the Customer Satisfaction Index (CSI) method is 75.89%, which means that the customer is "satisfied" with the quality of the Exclusive Matte Lip Cream product. 13 attributes influence customer satisfaction of Exclusive Matte Lip Cream products. Based on the Importance Performance Index (IPA) analysis, one of the priority attribute with the least satisfactory performance value is the Formula & Texture of the newly formulated Wardah EMLC in Lip Cream Density Level. To improve this attribute's quality, it is necessary to develop formulations in stages to get product results that are by what the customer wants.

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