

## BEAUTY ADVISOR PERFORMANCE APPRAISAL AT MARTHA TILAAAR GROUP JEMBER BRANCH USING CPI METHOD

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### ABSTRACT

*Beauty Advisor performance assessment is essential in the beauty industry, maintaining high service standards and increasing customer satisfaction. The researchers developed a decision support system in this study to assess the Beauty Advisor's optimal performance. The system utilized multiple criteria with varying weights for each evaluation. The Composite Performance Index (CPI) is a method used to assess assessments with several stages, greatly influenced by the weights given. The CPI method's calculation process has several stages, including matrix calculation, score matrix calculation, and ranking determination. The final results on the website display a ranking from highest to lowest. The system created based on the success rate with manual calculation results compared to the system calculation results has an accuracy rate of 82%.*

*Keywords: beauty advisor, composite performance index (CPI), decision support system (DSS)*

### INTRODUCTION

Martha Tilaar Group is one of the largest companies in Indonesia that operates in the beauty sector. In an era where the beauty industry is growing, the Martha Tilaar Group has rapidly become one of the leading entities in Indonesia, strengthening its position with the vision of becoming a global leader in the beauty industry. One of the efforts of the Martha Tilaar Group company in the Jember branch is to evaluate Beauty Advisors routinely to create an optimal working atmosphere and improve the quality of the company's operations. Beauty Advisors are individuals who have an understanding of beauty and product knowledge in their workplace [1]. The Beauty Advisor with the highest score will be selected as the best Beauty Advisor and receive a reward from the company. Selection criteria can support a decision support system [2]. The criteria for determining the best performance of a Beauty Advisor are sales SOP, Purchasing SOP, Product Knowledge, presence, reporting, weight and appearance SOP.

The problem faced is that the performance assessment at the Jember branch of the Martha Tilaar Group is calculated manually, so that errors often occur and do not get efficient results and of course this is detrimental to employees and the company. Employees who are selected as employees with the best performance will receive rewards from the company. Due to the weaknesses and losses incurred, a new system is needed to facilitate the assessment of Beauty Advisor performance. The problem formulation of this research is how to implement a system designed using the Composite Performance Index (CPI) method to solve the Beauty Advisor performance assessment problem and what are the accuracy results of the system that has been designed.

This technology is known as the Decision Support technology (DSS), and the assessment process is supposed to be faster and more accurate so that no one loses. A Decision Support System provides the necessary information and analyzes it according to the needs to make decisions in situations that cannot be predicted with certainty [3]. DSS is constant and can be used repeatedly [4].

Next, the Composite Performance Index (CPI) is used to process the assessment data. CPI is a combined index that can be used to assess various alternatives based on several criteria. The CPI method can transform values from different scales into uniform values to obtain effective assessment results. The CPI method can transform values from different scales into uniform values to obtain effective assessment results [5]. The CPI method can determine alternatives based on criteria that are not uniform because each criterion has a positive or negative trend [6]. Decision-making is based on an alternative assessment process that considers the criteria, trends, and weights determined for each criterion. By using the CPI method, supervisors can find the Beauty Advisor score from highest to lowest. The final result of this research is creating a decision support system that produces information that can be used as a reference while still considering several criteria [7]. This research was conducted to determine the application of the Decision Support System (DSS) for assessing Beauty Advisor's best performance using the Composite Performance Index (CPI) method and to determine the accuracy results of the system that has been created.

Based on previous research, employee performance assessments at Mercuru Buana University Yogyakarta using the C4.5 method have been successfully carried out with accuracy results of 86.52% [8]. Some previous researchers used the K-Nearest Neighbor method in assessing security guard performance, with a final result of 66.67% [9]. The difference with research conducted using the Composite Performance Index (CPI) method is that each criterion has a different trend and weight to produce the correct value. Several studies that applied the CPI method to SPK obtained good results [10].

## **RESEARCH METHODS**

Applied research methods are research carried out to find general and fundamental theories of a problem to solve that problem and other problems belonging to the same type [11]. This applied research aims to resolve problems by applying existing theories to solve problems so that the results can be applied in everyday life [12]. The results of application research can be used for human benefit. There are several stages in the study:

1. Data reduction. Data reduction means focusing on analysis according to needs and organized in a structured manner [13]. At this stage, the researcher searches and collects theoretical foundations as references from various sources such as books, journals, papers, and readings related to the research title.
2. Data collection. Meanwhile data collection in the field is undoubtedly related to data mining techniques [14]. The data presentation stage was carried out using two methods, namely observation and direct interviews with Supervisors, to find out the assessment methods used by the company to assess the performance of Beauty Advisors and obtain data that will be used in this research.
3. Data Presentation. The presentation of data is an essential part of research [15]. Presents the results of data that has been compiled using several alternatives

and criteria that will be tested using the CPI method to assess the performance of the Beauty Advisor. The data that will be used is 11 data.

4. Drawing Conclusions. The compiled data is compared to conclude [16]. The conclusion will be that the highest value was detected after calculations using the CPI method. These results are provisional and may change if there is a change in the number of alternatives or criteria.

Calculating the accuracy of the results obtained can use the formula [17]:

$$P = \frac{n}{x} \times 100\% \quad (5)$$

P = Accuracy

x = Number of correct data

n = Number of data

Composite Performance Index (CPI) is a combined index that can be used to determine the assessment or ranking of various alternatives (i) based on several criteria (j) [18]. Testing using the CPI method is carried out using value weights on the criteria, and modification experiments aim to assess how much influence the requirements have on the assessment [3]. The following is the formula used in the CPI method :

$$A_{ij} = X_{ij} (\text{min}) \times 100 \div X_{ij} (\text{min}) \quad (1)$$

$$A_{(i+1,j)} = (X_{(i+1,j)}) \div X_{ij} (\text{min}) \times 100 \quad (2)$$

$$I_{ij} = A_{ij} \times P_j \quad (3)$$

$$I_i = \sum_{j=1}^n (I_{ij}) \quad (4)$$

With :

$A_{ij}$  = Value of the ith alternative on the jth criterion

$X_{ij}(\text{min})$  = Value of the ith alternative at the jth minimum initial criterion

$A_{(i+1,j)}$  = Value of the i+1 alternative on the jth criterion

$(X_{(i+1,j)})$  = Value of the i+1 alternative in the jth initial criterion

$P_j$  = Importance weight of the jth criterion

n ij = n<sup>th</sup> alternative index

$I_i$  = Combined index of criteria for the Ith alternative

i = 1,2,3,.....,n

*The Composite Performance Index (CPI)* can transform different scales into uniform values to obtain alternative values. Alternatives sorted based on Value will help decision-makers have the same assessment of one alternative. According to previous researchers, [20] the settlement procedure for *the Composite Performance Index* is as follows:

1. Identify the trend criteria (+), namely, the higher the Value, the better. The negative trend (-) is that the lower the Value, the better.
2. In positive trend criteria, the minimum Value for each criterion is transformed to one hundred, while the other values are transformed proportionally higher.
3. For negative trend criteria, the minimum value for each criterion is transformed to one hundred, while the other values are transformed to proportionally lower values.

## RESULTS AND DISCUSSION

The following is the implementation stage of calculations using the CPI method. The best Beauty Advisor assessment calculation process uses seven criteria. The criteria and weights used in applying the CPI method are as follows:

Table 1.  
Criteria Table

| Criteria       | Information        | Weight (%) | Trends   |
|----------------|--------------------|------------|----------|
| Y <sub>1</sub> | Sales Sales        | 25%        | Positive |
| Y <sub>2</sub> | Sales Purchase     | 25%        | Positive |
| Y <sub>3</sub> | Product Knowledge  | 15%        | Positive |
| Y <sub>4</sub> | Absence            | 15%        | Positive |
| Y <sub>5</sub> | Reporting (Report) | 10%        | Positive |
| Y <sub>6</sub> | Weight             | 5%         | Negative |
| Y <sub>7</sub> | Appearance SOP     | 5%         | Positive |

Related to each criterion from the Beauty Advisor used in implementing CPI . Apart from the raw data, there are minimum values in Table 2 below.

Table 2.  
Data Table

| Beauty Advisor   | Criteria       |                |                |                |                |                |                |
|------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                  | Y <sub>1</sub> | Y <sub>2</sub> | Y <sub>3</sub> | Y <sub>4</sub> | Y <sub>5</sub> | Y <sub>6</sub> | Y <sub>7</sub> |
| AA               | 100            | 100            | 90             | 100            | 100            | 67             | 97             |
| AB               | 100            | 100            | 100            | 100            | 95             | 67             | 75             |
| AC               | 100            | 100            | 100            | 100            | 90             | 43             | 90             |
| AD               | 80             | 80             | 90             | 100            | 85             | 62             | 95             |
| A.E              | 65             | 50             | 100            | 100            | 85             | 57             | 95             |
| AF               | 70             | 70             | 70             | 100            | 85             | 54             | 90             |
| AG               | 65             | 75             | 80             | 100            | 87             | 64             | 75             |
| AH               | 65             | 65             | 90             | 100            | 85             | 52             | 90             |
| AI               | 100            | 100            | 100            | 100            | 90             | 52             | 85             |
| AJ               | 70             | 70             | 85             | 100            | 80             | 60             | 90             |
| <b>Min Value</b> | <b>65</b>      | <b>65</b>      | <b>70</b>      | <b>100</b>     | <b>80</b>      | <b>43</b>      | <b>75</b>      |

The data in Table 2 will then be calculated using the CPI method with the following steps:

1. Calculate each criterion's Beauty Advisor value matrix by paying attention to trends. If the trend is positive, the Beauty Advisor value is divided by the minimum Value. If the trend is negative, the minimum value is divided by the Beauty Advisor value.

$$AA (Y_1) = 100 \div 65 \times 100 = 153,85 \text{ (positive trend)}$$

$$AA (Y_6) = 43 \div 67 \times 100 = 64,18 \text{ (negative trend)}$$

- After the matrix calculation is carried out, the score matrix is calculated by multiplying the results by 100 for each Value. The results of the following calculation can be seen in Table 3.

Table 3.  
Score Matrix Calculation

| <i>Beauty Advisor</i> | <i>Criteria</i> |                |                |                |                |                |                |
|-----------------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                       | Y <sub>1</sub>  | Y <sub>2</sub> | Y <sub>3</sub> | Y <sub>4</sub> | Y <sub>5</sub> | Y <sub>6</sub> | Y <sub>7</sub> |
| Trends                | Positive        | Positive       | Positive       | Positive       | Positive       | Negative       | Positive       |
| AA                    | 153.85          | 153.85         | 128.57         | 100.00         | 125.00         | 64.18          | 129.33         |
| AB                    | 153.85          | 153.85         | 142.86         | 100.00         | 118.75         | 64.18          | 100.00         |
| AC                    | 153.85          | 153.85         | 142.86         | 100.00         | 112.50         | 100.00         | 120.00         |
| AD                    | 123.08          | 123.08         | 128.57         | 100.00         | 106.25         | 69.35          | 126.67         |
| A.E                   | 100.00          | 76.92          | 142.86         | 100.00         | 106.25         | 75.44          | 126.67         |
| AF                    | 107.69          | 107.69         | 100.00         | 100.00         | 106.25         | 79.63          | 120.00         |
| AG                    | 100.00          | 115.38         | 114.29         | 100.00         | 108.75         | 67.19          | 100.00         |
| AH                    | 100.00          | 100.00         | 128.57         | 100.00         | 106.25         | 82.69          | 120.00         |
| A.I                   | 153.85          | 153.85         | 142.86         | 100.00         | 112.50         | 82.69          | 113.33         |
| A.J                   | 107.69          | 107.69         | 121.43         | 100.00         | 100.00         | 71.67          | 120.00         |

- Next, multiply the results of the score matrix calculations by the weight values that have been determined for each criterion. Following are the calculation results:

For *Beauty Advisor* AA, the Value of the *Composite Performance Index* obtained is:

$$\begin{aligned}
 I_{ij} &= A_{ij} \times P_j \\
 &= (153,85 \times 25\%) + (153,85 \times 25\%) + (128,57 \times 15\%) + (100 \times 15\%) + \\
 &(125 \times 10\%) + (64,18 \times 5\%) + (129,33 \times 5\%) = \\
 \sum_{j=1}^7(I_{ij}) &= 38,46 + 38,46 + 19,29 + 15,00 + 12,50 + 3,21 + 6,47 \\
 &= 133,38
 \end{aligned}$$

Table 4.  
CPI calculation results

| <i>Beauty Advisor</i> | <i>Criteria</i> |       |       |       |       |      |      | <b>TOTAL</b> | <b>Rating</b> |
|-----------------------|-----------------|-------|-------|-------|-------|------|------|--------------|---------------|
|                       | Y1              | Y2    | Y3    | Y4    | Y5    | Y6   | Y7   |              |               |
| AA                    | 38.46           | 38.46 | 19.29 | 15.00 | 12.50 | 3.21 | 6.47 | 133.38       | 4             |
| AB                    | 38.46           | 38.46 | 21.43 | 15.00 | 11.88 | 3.21 | 5.00 | 133.44       | 3             |
| AC                    | 38.46           | 38.46 | 21.43 | 15.00 | 11.25 | 5.00 | 6.00 | 135.60       | 1             |
| AD                    | 30.77           | 30.77 | 19.29 | 15.00 | 10.63 | 3.47 | 6.33 | 116.25       | 5             |
| A.E                   | 25.00           | 19.23 | 21.43 | 15.00 | 10.63 | 3.77 | 6.33 | 101.39       | 11            |
| AF                    | 26.92           | 26.92 | 15.00 | 15.00 | 10.63 | 3.98 | 6.00 | 104.45       | 9             |
| AG                    | 25.00           | 28.85 | 17.14 | 15.00 | 10.88 | 3.36 | 5.00 | 105.22       | 7             |
| AH                    | 25.00           | 25.00 | 19.29 | 15.00 | 10.63 | 4.13 | 6.00 | 105.05       | 8             |
| A.I                   | 38.46           | 38.46 | 21.43 | 15.00 | 11.25 | 4.13 | 5.67 | 134.40       | 2             |

|     |       |       |       |       |       |      |      |        |    |
|-----|-------|-------|-------|-------|-------|------|------|--------|----|
| A.J | 26.92 | 26.92 | 18.21 | 15.00 | 10.00 | 3.58 | 6.00 | 106.64 | 6  |
| AH  | 25.00 | 26.92 | 15.00 | 15.00 | 10.63 | 3.64 | 6.00 | 102.19 | 10 |

In the composite performance index formula calculation, Beauty Advisor AC was ranked first with the highest score of 135.60, and Beauty Advisor AE was ranked last with a score of 101.39.

Table 5.  
Comparison of CPI calculations with manual calculations

| CPI Method Calculation |                |        | Manual Calculation |                |       | Testing |
|------------------------|----------------|--------|--------------------|----------------|-------|---------|
| Rank                   | Beauty Advisor | Mark   | Rank               | Beauty Advisor | Mark  |         |
| 1                      | AC             | 135.60 | 1                  | AC             | 94.29 | TRUE    |
| 2                      | A.I            | 134.40 | 2                  | A.I            | 93.57 | TRUE    |
| 3                      | AB             | 133.44 | 3                  | AB             | 92.86 | TRUE    |
| 4                      | A A            | 133.38 | 4                  | A A            | 92.43 | TRUE    |
| 5                      | AD             | 116.25 | 5                  | AD             | 87.14 | TRUE    |
| 6                      | A.J            | 106.64 | 6                  | A.J            | 82.86 | TRUE    |
| 7                      | AG             | 105.22 | 7                  | AH             | 82.14 | FALSE   |
| 8                      | AH             | 105.05 | 8                  | AG             | 80.29 | FALSE   |
| 9                      | AF             | 104.45 | 9                  | AF             | 80.00 | TRUE    |
| 10                     | A A            | 102.19 | 10                 | A A            | 79.71 | TRUE    |
| 11                     | A.E            | 101.39 | 11                 | A.E            | 79.29 | TRUE    |

Information:

1. Manual calculation by averaging raw data
2. Accuracy Formula for the number of correct data divided by the amount of data multiplied by 100%

Based on the comparison of assessment calculations using the *CPI method* with manual calculations, it can be concluded that the assessment accuracy is 81% from a total of 11 data with two incorrect data and nine correct data.

$$\frac{9}{11} = 0,81 (81\%)$$

Implementation of the interface system that has been designed is carried out to test the system that has been created.

a. Home Page

home page is the initial page displayed first when the system is started. The home page has four main menus: employee data, criteria, assessment, and methods. The home page can be seen in Figure 1.



Figure 1. Home page

b. Employee Data Page

The employee data page is a page that contains employee data such as Beauty Advisor ID, name, address, age, date of birth, last education, and cellphone number, and there is also a feature to edit and delete Beauty Advisor data. The following employee data page can be seen in Figure 2.

**Beauty Advisor Data**

[Add Data](#)

| ID Beauty Advisor | Name | Action                                        |
|-------------------|------|-----------------------------------------------|
| 1                 | AA   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 2                 | AB   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 3                 | AC   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 4                 | AD   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 5                 | AE   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 6                 | AF   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 7                 | AG   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 8                 | AH   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 9                 | AI   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 10                | AJ   | <a href="#">Edit</a>   <a href="#">Delete</a> |
| 11                | AK   | <a href="#">Edit</a>   <a href="#">Delete</a> |

Figure 2. Employee Data Page

c. Criteria Data Page

The criteria data page contains the criteria that will be used to carry out the assessment, and there are weights and trends for each criterion. There are also actions to edit and delete criteria. The following criteria data page can be seen in Figure 3.

**Criteria Data**

[Add Data](#)

| Criteria | Information        | Weight | Trend    | Action                                        |
|----------|--------------------|--------|----------|-----------------------------------------------|
| Y1       | Sales Sales        | 25     | Positive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| Y2       | Sales Purchase     | 25     | Positive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| Y3       | Product Knowledge  | 15     | Positive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| Y4       | Absence            | 15     | Positive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| Y5       | Reporting (Report) | 10     | Positive | <a href="#">Edit</a>   <a href="#">Delete</a> |
| Y6       | Body weight        | 5      | Negative | <a href="#">Edit</a>   <a href="#">Delete</a> |
| Y7       | Appearance SOP     | 5      | Positive | <a href="#">Edit</a>   <a href="#">Delete</a> |

Figure 3. Pages of Criteria Data

d. Assessment Data Page

The assessment data page is a page that contains the scores obtained from each Beauty Advisor according to their respective criteria. Each criterion also states the minimum Value used in calculations using the *CPI method*. There is also a feature for

editing and deleting assessment data. The following assessment data page can be seen in Figure 4.

**Table Data**

[Add Data](#)

| ID                   | Name | Y1        | Y2        | Y3        | Y4         | Y5        | Y6        | Y7        | Action                                      |
|----------------------|------|-----------|-----------|-----------|------------|-----------|-----------|-----------|---------------------------------------------|
| 1                    | AA   | 100       | 100       | 90        | 100        | 100       | 67        | 97        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 2                    | AB   | 100       | 100       | 100       | 100        | 95        | 67        | 75        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 3                    | AC   | 100       | 100       | 100       | 100        | 90        | 43        | 90        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 4                    | AD   | 80        | 80        | 90        | 100        | 85        | 62        | 95        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 5                    | AE   | 65        | 50        | 100       | 100        | 85        | 57        | 95        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 6                    | AF   | 70        | 70        | 70        | 100        | 85        | 54        | 90        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 7                    | AG   | 65        | 75        | 80        | 100        | 87        | 64        | 75        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 8                    | AH   | 65        | 65        | 90        | 100        | 85        | 52        | 90        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 9                    | AI   | 100       | 100       | 100       | 100        | 90        | 52        | 85        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 10                   | AJ   | 70        | 70        | 85        | 100        | 80        | 60        | 90        | <a href="#">Edit</a> <a href="#">Delete</a> |
| 11                   | AK   | 65        | 70        | 70        | 100        | 85        | 59        | 90        | <a href="#">Edit</a> <a href="#">Delete</a> |
| <b>Minimum Value</b> |      | <b>65</b> | <b>65</b> | <b>70</b> | <b>100</b> | <b>80</b> | <b>43</b> | <b>75</b> | <a href="#">Update</a>                      |

Figure 4. Pages of Assessment Data

e. Valuation Methods page

The assessment method page contains the sequence of Beauty Advisor performance assessment calculations using the *CPI method* as well as the ranking results, which have been sorted from highest to lowest value.

**Valuation Method**

| Criteria | Y1       | Y2       | Y3       | Y4       | Y5       | Y6       | Y7       |
|----------|----------|----------|----------|----------|----------|----------|----------|
|          | Positive | Positive | Positive | Positive | Positive | Negative | Positive |
| AA       | 1.538    | 1.538    | 1.290    | 1        | 1.23     | 0.662    | 1.393    |
| AH       | 1.538    | 1.538    | 1.429    | 1        | 1.188    | 0.662    | 1        |
| AC       | 1.538    | 1.538    | 1.429    | 1        | 1.125    | 1        | 1.3      |
| AD       | 1.393    | 1.251    | 1.290    | 1        | 1.003    | 0.094    | 1.347    |
| AE       | 1        | 0.769    | 1.429    | 1        | 1.003    | 0.734    | 1.347    |
| AF       | 1.077    | 1.077    | 1        | 1        | 1.003    | 0.790    | 1.3      |
| AG       | 1        | 1.154    | 1.143    | 1        | 1.008    | 0.672    | 1        |
| AH       | 1        | 1        | 1.290    | 1        | 1.003    | 0.827    | 1.2      |
| AI       | 1.538    | 1.538    | 1.429    | 1        | 1.125    | 0.827    | 1.133    |
| AJ       | 1.077    | 1.077    | 1.214    | 1        | 1        | 0.717    | 1.2      |
| AK       | 1        | 1.077    | 1        | 1        | 1.003    | 0.729    | 1.2      |

Figure 5. Pages of Assessment Methods

The assessment method stage displays the results of the Beauty Advisor value matrix calculation for each criterion by paying attention to trends (Figure 5). If the trend is positive, then the Beauty Advisor value is divided by the minimum value.

**Matrix Calculation**

**X100 Results**

| Criteria | Y1       | Y2       | Y3       | Y4       | Y5       | Y6       | Y7       |
|----------|----------|----------|----------|----------|----------|----------|----------|
| Trnin    | Positive | Positive | Positive | Positive | Positive | Negative | Positive |
| AA       | 153.85   | 153.85   | 128.57   | 100      | 125      | 64.18    | 129.33   |
| AB       | 153.85   | 153.85   | 142.86   | 100      | 118.75   | 64.18    | 100      |
| AC       | 153.85   | 153.85   | 142.86   | 100      | 112.5    | 100      | 120      |
| AD       | 123.08   | 123.08   | 128.57   | 100      | 106.25   | 69.35    | 126.67   |
| AE       | 100      | 76.92    | 142.86   | 100      | 106.25   | 75.44    | 126.67   |
| AF       | 107.69   | 107.69   | 100      | 100      | 106.25   | 79.63    | 120      |
| AG       | 100      | 115.38   | 114.29   | 100      | 108.75   | 67.19    | 100      |
| AH       | 100      | 100      | 128.57   | 100      | 106.25   | 82.69    | 120      |
| AI       | 153.85   | 153.85   | 142.86   | 100      | 112.5    | 82.69    | 113.33   |
| AJ       | 107.69   | 107.69   | 121.43   | 100      | 100      | 71.67    | 120      |
| AK       | 100      | 107.69   | 100      | 100      | 106.25   | 72.88    | 120      |

Figure 6. Pages of the Matrix Calculation Assessment Method

Figure 6. above is the advanced result of the matrix calculation, where the result of the matrix calculation for each criterion is multiplied by 100.

### Calculation of Results X Weight

| Criteria | Y1       | Y2       | Y3       | Y4       | Y5       | Y6       | Y7       |
|----------|----------|----------|----------|----------|----------|----------|----------|
| Train    | Positive | Positive | Positive | Positive | Positive | Negative | Positive |
| AA       | 38.46    | 38.46    | 19.29    | 15       | 12.5     | 3.21     | 6.47     |
| AB       | 38.46    | 38.46    | 21.43    | 15       | 11.88    | 3.21     | 5        |
| AC       | 38.46    | 38.46    | 21.43    | 15       | 11.25    | 5        | 6        |
| AD       | 30.77    | 30.77    | 19.29    | 15       | 10.63    | 3.47     | 6.33     |
| AE       | 25       | 19.23    | 21.43    | 15       | 10.63    | 3.77     | 6.33     |
| AF       | 26.92    | 26.92    | 15       | 15       | 10.63    | 3.98     | 6        |
| AG       | 25       | 28.85    | 17.14    | 15       | 10.88    | 3.36     | 5        |
| AH       | 25       | 25       | 19.29    | 15       | 10.63    | 4.13     | 6        |
| AI       | 38.46    | 38.46    | 21.43    | 15       | 11.25    | 4.13     | 5.67     |
| AJ       | 26.92    | 26.92    | 18.21    | 15       | 10       | 3.58     | 6        |
| AK       | 25       | 26.92    | 15       | 15       | 10.63    | 3.64     | 6        |

Figure 7. Pages of Results Calculation Assessment Methods

Next, the results of the score matrix calculation are multiplied by the weights for each criterion. So, the results can be seen in the image above.

### Ranking

| Name | Total value |
|------|-------------|
| AC   | 135.6       |
| AI   | 134.4       |
| AB   | 133.44      |
| AA   | 133.39      |
| AD   | 116.26      |
| AJ   | 106.63      |
| AG   | 105.23      |
| AH   | 105.05      |
| AF   | 104.45      |
| AK   | 102.19      |
| AE   | 101.39      |

Figure 8. Pages of Ranking Results

The final step is to add up the results by multiplying the score matrix with the weights to get the final score. In the ranking table, the results are sorted from highest value to lowest value.

### CONCLUSION

The CPI research identifies the most outstanding Beauty Advisor with the highest score of 135.6. This system, customized to the needs of the Martha Tilaar Group, improves objectivity in evaluating alternatives. The study offers an objective assessment system for identifying top-performing Beauty Advisors, which is helpful for businesses like the Martha Tilaar Group. The CPI approach enhances accuracy, attaining 82% from the 11 data points. While the study provides valuable insights, its limitations, such as the reliance on seven criteria and 11 options, should be addressed because they may impact the generalizability of the findings. Future research efforts should focus on expanding the study and introducing more diverse criteria to achieve thorough and nuanced results.

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