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STRATEGY FOR SELECTING AN IMPORTED EYEWEAR *SUPPLIER* FOR RETAIL BUSINESS USING *ANALYTICAL HIERARCHY PROCESS* (AHP) (STUDY AT METRO OPTICALS)

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Abstract

Glasses are one of the products that have a large market in Indonesia, this has caused Indonesia to be flooded with imported glasses products, where China occupies 90% of the supply of imported glasses in Indonesia. As a business with a large market, Optik Metro plays a role in the imported glasses business. Its large monthly turnover of up to 40 to 60 million demonstrates its success. Optik Metro is currently collaborating with two imported glasses Suppliers, namely PT A, which distributes glasses from Japan, and PT B, which distributes glasses from China. Optik Metro has trusted its supply of goods from these two Suppliers for 10 years. However, over time, these Suppliers were found to have made mistakes that caused Optik Metro to suffer losses, such as delays in the arrival of goods and many products that were found to not meet the requirements or were defective. The length of Optik Metro's cooperative relationship with glasses suppliers PT A and PT B has led Optik Metro to announce delays and defects in imported glasses. However, if this phenomenon is unchecked, large losses may occur and have fatal consequences if the Supplier's performance is not effective and efficient. Supplier selection is one part of Operations Management, namely supply chain management, closely related to distributing products to consumers. Selecting the best-imported eyewear Supplier can be assisted with the Analytical Hierarchy Process (AHP) as a method for selecting Suppliers based on seven criteria determined by the company. The score results determined that Supplier HLI was ranked 1st as the best supplier of imported glasses with a weight of 0.449 and had superior criteria in five out of 7 criteria, especially in accuracy of delivery, quality of goods, products, location and reputation at Optik Metro.

Keywords: Imported Glasses, Supply Chain Management, Analytical Hierarchy Process, Supplier Selection.

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Introduction

Product import: Still interesting in part circles in Indonesia, specifically, is glasses. In Indonesia alone, imports of glasses have reached 46,540 in 2022 from data obtained by the *International Trade Center* (ITC) *Trade Map*, with data that China has controlled a market share in Indonesia 90%.

The Director General of Small, Medium and Miscellaneous Industries (IKMA) from the Ministry of Industry, Gati Wibawaningsih, said that imported products still dominate the eyewear market in Indonesia. Currently, eyewear products in Indonesia are still dominated by Chinese products because they have high economic prices and the products also do not have provisions for mandatory SNI. (Haque, 2023). Therefore, many imported products enter Indonesia easily. Now, only one company in the country produces glasses. One industry can only control 10 percent of the national eyewear market share.

It can be seen in Table 1.1 below that imports of glasses to Indonesia, at The country that controls the market share of imported glasses from 2018 to 2022 is China with a supply of 32,976 glasses, in second place followed by Italy and in 2022 Poland, which has just entered the Indonesian market, will become the third largest supplier of imported glasses.

Table 1 Import of Glasses to Indonesia (PCS)

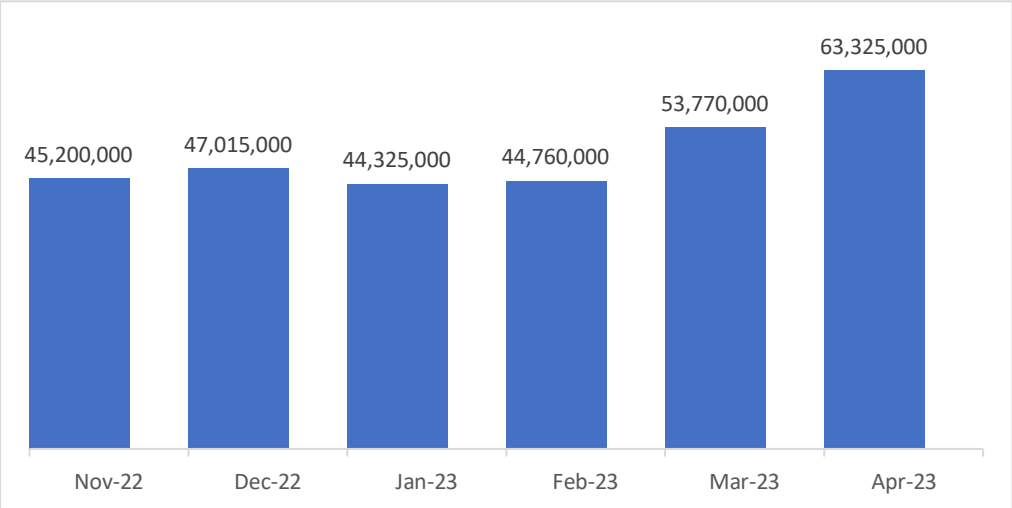
Glasses Exporting Countries	2018	2019	2020	2021	2022
China	33277	43574	28787	23096	32976
Italy	8553	6302	2968	3251	5530
Poland	2	0	0	0	2282
Taiwan	1349	1576	2046	1292	1949
USA	3119	2237	1468	1888	1490
Japan	621	481	377	341	496
Hong Kong, China	2283	1783	935	398	488
German	370	170	422	488	370
Malaysia	6983	433	306	225	257
French	223	195	64	96	217
Singapore	395	664	676	687	180

Source: *International Trade Center* (ITC) *Trade Map*, 2022

In Indonesia, no market dominates compared to China regarding glasses (Putranti & Retnowati, 2019). Also, the standards applied to import countries, especially China, are one of the main triggers for sellers to trade freely in the Indonesian market (Asy'ari, 2014). Indonesia, which is known as a very consumer country with a large population, can encourage the optical industry to mushroom further. Moreover, in the technological era, more and more people need glasses as a tool, plus people's knowledge about fashion and *fashion* increasingly strengthens people's ability to use glasses. Even though the level of competition is increasingly complex where soft lenses exist, this industry is still able to enable people of all ages and groups to meet their needs.

The rapid flow of glass imports into Indonesia has made one of the business entities, namely Optik Metro, also take part in the imported glasses business. As a retail business, Optik Metro sells glasses and also sells eye examination services before fitting the glasses lenses. Optik Metro currently has two branch shops or outlets, both located in Tangerang City. One of the outlets that has the highest turnover is in Pamulang Square.

The good turnover of Optik Metro demonstrates the large consumer demand for the eyewear market. Below, the author provides data regarding the sales turnover of Optik Metro from 2022 to 2023, which describes the turnover achieved, which can occur from the end of the year to the middle of the year for 5 months. The highest results were significantly higher in April 2023 compared to previous months. The turnover ranges from 40 to 60 million monthly (see Figure 1).



Source: Metro Optic Internal Data
Figure 1 Metro Optical Sales Turnover

Optik Metro has a fairly good turnover, but on the other hand, there is concern about suppliers of *imported* glasses, which are feared will cause turnover to decline. Optik Metro is currently collaborating with two suppliers *of* imported glasses to meet their product needs: PT A, which distributes glasses from Japan, and PT B, which distributes glasses from China. Optik Metro has trusted its supply of goods from these two *suppliers* for 10 years. However, over time, these *suppliers* were found to have made mistakes that caused Optik Metro to suffer losses, such as delays in the arrival of goods and many products that did not meet the requirements or were defective.

Optik Metro sets a standard for receiving supplies of imported glasses every month on the 1st via courier sent by PT A and PT B. However, the two *suppliers still* send the goods late. Delays in the glasses distribution to Optik Metro outlets resulted in a shortage of goods. This meant consumer satisfaction was not met optimally because the desired goods had not yet arrived at Optik. Product defects in the form of cracks on the glasses meant that Optik Metro had to exchange the glasses back to *the supplier*, this resulted in delays in the goods arriving in the hands of consumers. The following is a data table showing delays and product defects for the two *suppliers* (Table 2).

Table 1
Data on product delays and defects by *supplier*

Period	*Suppliers*	Frequency	Lateness	Order Quantity	Defective product
Nov-22	PT A	Each month	3 days	80 Glasses	8 Glasses (10%)
	PT B	Each month	2 days	80 Glasses	2 Glasses (2.5%)
De s -22	PT A	Each month	3 days	60 Glasses	5 Glasses (8.3%)
	PT B	Each month	1 day	100 Glasses	6 Glasses (6%)
Jan-23	PT A	Each month	1 day	80 Glasses	7 Glasses (8.7%)
	PT B	Each month	5 days	90 Glasses	6 Glasses (6.6%)
Feb-23	PT A	Each month	2 days	70 Glasses	4 Glasses (5.7%)
	PT B	Each month	2 days	70 Glasses	10 Glasses (14%)
Mar-23	PT A	Each month	4 days	80 Glasses	6 Glasses (7.5%)
	PT B	Each month	1 day	60 Glasses	7 Glasses (11.6%)
Apr-23	PT A	Each month	1 day	90 Glasses	7 Glasses (7.7%)
	PT B	Each month	1 day	70 Glasses	3 Glasses (4.2%)

Source: Metro Optic Internal Data

As seen from the table above, from November 2022 to April 2023, the average delay in the arrival of imported glasses is 1 day to 5 days, and the average defect in imported glasses is 2% to 14%. After being investigated by Optik Metro, the reason the product was late and defective was that there was a disruption in the delivery of goods from China and Japan accompanied by negligence of the supplier courier *and* defects in the goods were usually due to stacking and friction during the delivery of the goods, causing scratches on the lenses.

Optik Metro selected *suppliers of* imported glasses based on recommendations from close friends of optical business owners who had met at *workshops*. Meanwhile, choosing the quality of eyeglass lenses is based on how clear the glass is for vision, the weight of the lens, and also how strong the lens is. The eyeglass *frames* themselves have certain quality criteria determined by optics, such as how sturdy the *frame* is to support the lens (Izzah, 2021). The long working relationship between Optik Metro and glasses *suppliers* PT A and PT B has led Optik Metro to announce delays and defects in imported glasses. However, if this phenomenon is unchecked, large losses may occur and have fatal consequences if *the supplier's performance* is not effective and efficient. In appointing a *supplier*, there is also operations management, namely *supply chain management*, which is closely related to distributing products to consumers. (Tahwin, Mahmudi, & Dewi, 2016). The *supplier's* performance will positively impact the partner company (Yusnaeni

et al., 2017). This is why the selection of suppliers *should* not be arbitrary and must have certain standards for the good of its business partners.

Analytical Hierarchy Process (AHP) is a method for selecting the right *supplier because there are criteria that are adjusted to the company's needs, and the selected supplier* is also a *supplier* that complies with the standards. (Wicaksono, Fathimahhayati, & Sukmono, 2020).

Previous research also discussed the AHP method (Lukmandono et al., 2019) regarding manufacturing industry suppliers, which used 7 criteria and 17 sub-criteria. Another research was conducted by (Rahman and Haldar, 2018). regarding selecting the best supplier regarding selecting the best supplier for the jute industry in Bangladesh. The AHP approach was chosen because it allows decision-makers in the jute industry to rank alternative suppliers based on subjective assessments of the most important attributes. While studying the government and private jute industries, the author found that neither industry used modern decision-making methods.

Based on previous research, research (Wolniak, 2019) is used as the main reference for determining criteria to be considered by companies when selecting suppliers and (Brunelli, 2014) is used as the main reference in using the AHP method because of the theory and methodology with more relative measurements, which is This does not look from the perspective of definite measurements on quantitative matters but rather on the proportions of the various options available. The final results of this research will be to obtain criteria and alternatives for the best *supplier* of imported glasses for Optik Metro. Apart from that, the author is of particular interest because there has been no research on AHP related to the eyewear business

Based on the description of this phenomenon and data, the author paid special attention to *the suppliers* of Optik Metro and conducted in-depth research on selecting the best *supplier,* which could be very profitable for the future of Optik Metro's business itself. Therefore, the author conducted research entitled: "Selection Strategy for Imported Glasses *Suppliers* for Retail Business Using *Analytical Hierarchy Process* (AHP)."

Research methods

Method used in study This is a type method of descriptive case studies using a quantitative approach. Method study descriptive is a study Which showed For looks for know mark independent variable (Good One variable or more) without looking for comparison or connecting one variable with another variable. “Besides study, this uses a quantitative approach, Which is where the study is structured and calculates data For can generalize."

Variable Operationalization

The criteria specified in this research variable are mandatory. There is a choice of *suppliers* obtained from combination journals as well as a discussion with the owner at a time, CEO Optics Metro. Following information about the explanation from the operationalization variable, Which is in the table illustration as follows :

Table 3
Operationalization Variable

Variable Draft	Criteria	Indicator	Instrument Data
Election *supplier*	Quality	Goods according to standards	Interviews and questionnaires
		Provision of goods without defects	
		Consistency of Goods Quality	
	Flexibility	Easy to contact	
		Speed of response	
		request	
		Speed of resolving complaints	
	Location	The location distance between the supplier and Optik Metro	
		Shipping costs	
		Price according to quality of goods	

Variable Draft	Criteria	Indicator	Instrument Data
	Price	Discount	
	Product	The quantity of goods sent is correct.	
	Reputation	Level *supplier's* reputation in general	
	Accuracy Delivery	Delivery according to date	

Source: Stevenson, 2018

Results and Discussion

Data Presentation

The author has defined the problem and the problems faced; then decomposition will be carried out; namely, the problem is divided completely into its elements until a bigger solution is not possible. Therefore, this analysis process is also called hierarchy. The hierarchical structure contained in this thesis contains *goals*, criteria and alternatives. *The goal* in the hierarchy is to select the most appropriate supplier. The criteria are quality, flexibility, location, price and product, reputation, and accuracy in delivery. (Saputra, 2018). The structure contained in the AHP hierarchy is as follows (Figure 2).

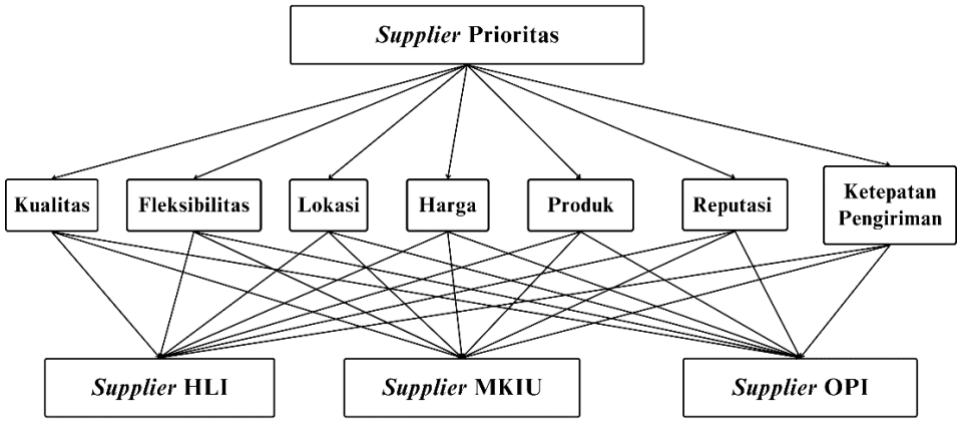


Figure 2 Hierarchical Structure of the Problem

Note: HLI (PT Hoya Lens Indonesia), MKIU (PT Mata Karya Indo Utama), OPI (PT Optikal Partners Indonesia).

Source: Researcher's Process (2023)

In Figure 2 you can see the alternative *suppliers* to be selected: HLI *Supplier, MKIU Supplier*, OPI *Supplier*. Then, from these criteria and alternatives, the results of researchers' interviews with parties who are experts in their fields are obtained. In the field of imported glasses business, the authorities in this research are the CEO of Optik Metro, the Manager of Optic Metro, other optical owners who import similar glasses and optical Optics Consultant who have informed us about the criteria and alternatives. Respondent data filling results the questionnaire shown in Table 4.1 and the attachment will be used as a basis for modeling.

Table 4
Respondent Data

No	Name Respondent	Position	Experience Work
1	A	CEO of Metro Optics	10 years
2	B	CEO Optik Mitra	9 years
3	C	Optics Consultant	20 years
4	D	Manager Operational Metro Optics	5 years
5	E	CEO Optik Mitra	11 years old

Source: Processed Researcher (2024)

In Table 4 you can see the respondent data, their position, and work experience. The preparation of the criteria is then entered into *the Expert Choice Software*, as well as the weighting of the assessments by the respondents so that the results of the weighting of these criteria will be able to determine the best alternative *supplier*.

AHP calculation steps using *Expert Choice*

1. Develop a hierarchical structure of the problem (Figure 4.2).

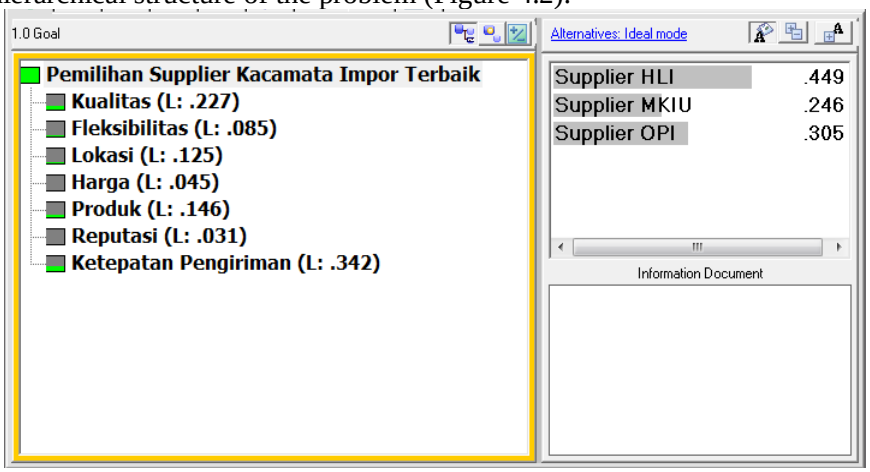


Figure 3 Structure Hierarchy in Expert Choice
Source: Processed Researcher (2024)

Figure 3 is a Hierarchy of models in *expert choice software*. The Left part describes the 7 criteria (Quality, Flexibility, Location, Price, Product, Reputation, and Accuracy Delivery) used for choosing alternative *Suppliers*' glasses import and the sections on the right show alternative. Each criterion has 3 alternatives (HLI *Supplier*, MKIU *Supplier*, and OPI *Supplier*). The three alternatives will be sorted based on *their ranking* on each criterion until an overall alternative *ranking is obtained.*

2. Determine the weight for each criterion

After comparing criteria and criteria between alternatives, weighting is obtained using a *distributive mode approach*. Each criterion obtained has the following weight: Quality 22.6%; Flexibility 8.4%; Location 12.6%; Price 4.5 %; Products 14.6 %; Reputation 3.1 %; and Delivery accuracy 34.2 %.

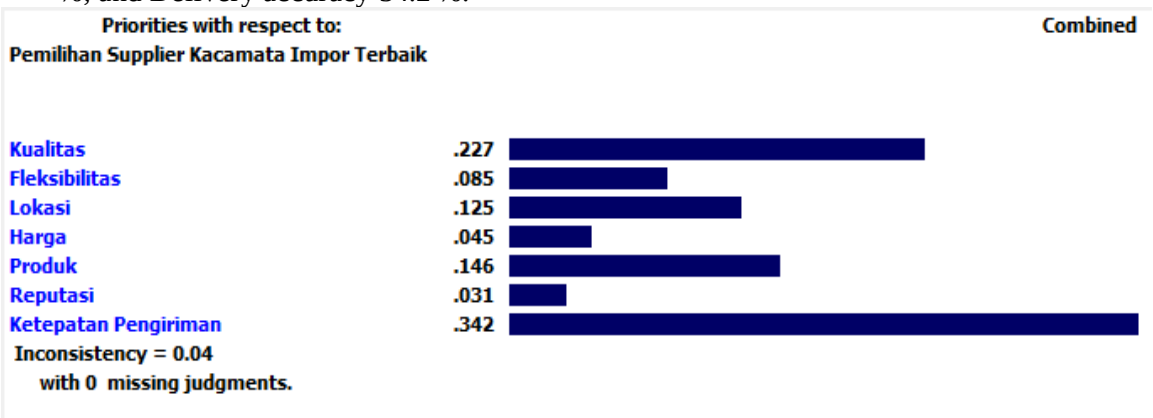


Figure 4 Weight in each criterion
Source: Researcher's Process (2024)

Table 5 Pairwise Comparison Matrix Between Criteria

Criteria	Quality	Flexibility	Location	Price	Product	Reputation	Delivery Accuracy
Quality	1	4.043	2.197	4.224	1.644	5.619	0.608
Flexibility	0.247	1	0.740	2.667	0.320	4.573	0.223
Location	0.455	1.351	1	3.160	1.046	4.536	0.401
Price	0.237	0.375	0.316	1	0.251	2.169	0.164
Product	0.608	3.129	0.956	3.981	1	4.453	0.234
Reputation	0.178	0.219	0.220	0.461	0.225	1	0.162
Delivery Accuracy	1.644	4.478	2.491	6.093	4.282	6.188	1
Amount	4.369	14.594	7.922	21.586	8.767	28.537	2.792

Normalization is carried out by dividing each entry in the table above by the number of each criteria column. The following table will explain the results of the normalization calculation.

Table 6 Normalization Matrix Between Criteria

Criteria	Quality	Flexibility	Location	Price	Product	Reputation	Delivery Accuracy	Amount	Weight	%
Quality	0.229	0.277	0.277	0.196	0.187	0.197	0.218	1.581	0.226	22,6%
Flexibility	0.057	0.069	0.093	0.124	0.036	0.160	0.080	0.619	0.084	8,4%
Location	0.104	0.093	0.126	0.146	0.119	0.159	0.144	0.891	0.126	12,6%
Price	0.054	0.026	0.040	0.046	0.029	0.076	0.059	0.330	0.045	4,5%
Product	0.139	0.214	0.121	0.184	0.114	0.156	0.084	1.013	0.146	14,6%
Reputation	0.041	0.015	0.028	0.021	0.026	0.035	0.058	0.223	0.031	3,1%
Delivery Accuracy	0.376	0.307	0.314	0.282	0.488	0.217	0.358	2.343	0.342	34,2%
Amount	1	1	1	1	1	1	1	7	1	100%

After the table has been normalized, the sum is carried out for each row, then the sum of each row will be divided by the number of criteria we have to produce the criteria weight (Vector Priority).

In the table it can be seen that in the quality row the number is 1.581, this result is obtained from the addition of 0.229 + 0.277 + 0.277 + 0.196 + 0.187 + 0.197 + 0.218 = 1.581. The criteria weight 0.226 is obtained from the results of the number of rows divided by the total criteria, 1.581/7 = 0.226.

In Figure 4 the weights illustrate the influence of choosing an alternative *supplier* of imported glasses. Delivery Accuracy (0.342) has the highest weight, which underlines its important role in the decision-making process, delivery on the specified date is the most important thing. Quality (0.227) has the second highest weight, emphasizing the importance of quality in the decision-making process. These criteria ensure that goods meet standards, are defect-free, and demonstrate consistent quality.

Product (0.146) is a criterion related to the number of imported glasses that are sent correctly having a large enough weight. This emphasizes the importance of accurate product delivery quantities. Location (0.125) is considered an important factor, with weights reflecting its importance. The distance between the supplier and Metro Optics and the associated shipping costs are key considerations. Flexibility (0.085) in the form of ease of contact, responsiveness to requests, and speed of complaint resolution contributes to the overall supplier assessment, a moderate weight indicates its importance without being the main focus. Pricing (0.045) is important but not very influential. This is evaluated concerning price according to the quality of the goods and the availability of discounts. Reputation (0.031) is lower, indicating that reputation is a consideration but not the primary focus. The supplier's general reputation level contributes to the decision but is less influential than other criteria.

3. Synthesis Priority *(Synthesis of Priorities)*

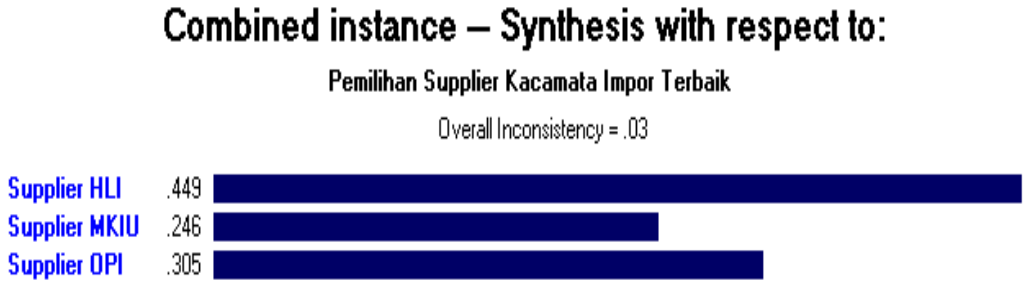


Figure 5 Priority model And results synthesis with distributive mode
Source: Processed Researcher (2024)

In Figure 5, you can see the model priorities and synthesis results. Then, the overall alternative weights are calculated by multiplying each alternative weight by the criteria weight; then the multiplication results are added up (Table 7).

Table 7
Alternative weights

Criteria	*Suppliers HLI*	*Suppliers MKIU*	*Suppliers OPI*
Quality (22.6%)	10.5 %	6.8 %	8.4 %
Flexibility (8.4%;)	3.6 %	2.2 %	3.9 %
Location (12.6%)	5.8 %	2.6 %	3.8 %
Price (4.5 %)	1.2 %	1.2 %	2.1 %
Product (14.6 %;)	6.7 %	4.3 %	6.2 %
Reputation (3.1 %;)	1.4 %	1.2 %	1.2 %
Accuracy Delivery (34.2%)	15.8 %	6.3 %	5 %

Source: Processed Researcher (2024)

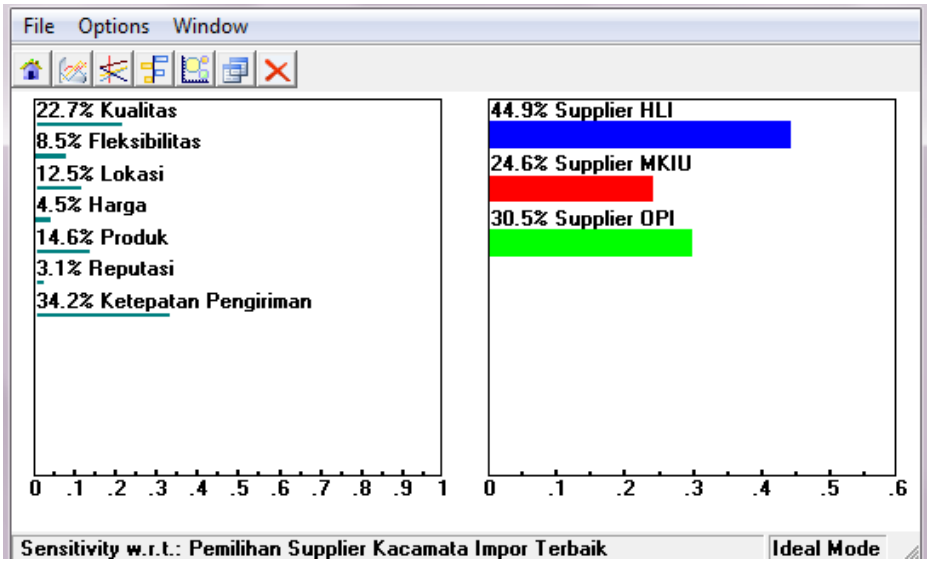


Figure 6 Analysis of sensitivity
Source: Processed Researcher (2024)

Sensitivity analysis was carried out to examine the hierarchical model that was built. The existing sensitivity analysis is obtained by inputting small changes to the *performance graph* (Yulianto, 2017). The results of the changes will provide a fixed alternative sequence, as depicted

in Figure 6. The weight of the change results in Quality (22.6% to 22.7%). An increase in the Quality weight indicates an increased emphasis on this criterion in the decision-making process. The increase in Quality weighting reinforces the importance of HLI *Suppliers*, which already excel in this criterion. The impact strengthens HLI *Supplier's position as the main choice.* Flexibility (8.4% to 8.5%) A slight increase in Flexibility weighting can impact the overall ranking. HLI *suppliers*, which perform slightly better in Flexibility, can benefit from this adjustment. Location (12.6% to 12.5%) Decreased Location weighting may affect the significance of this criterion. *Supplier* OPI, which was performing well on Location, experienced slight losses.

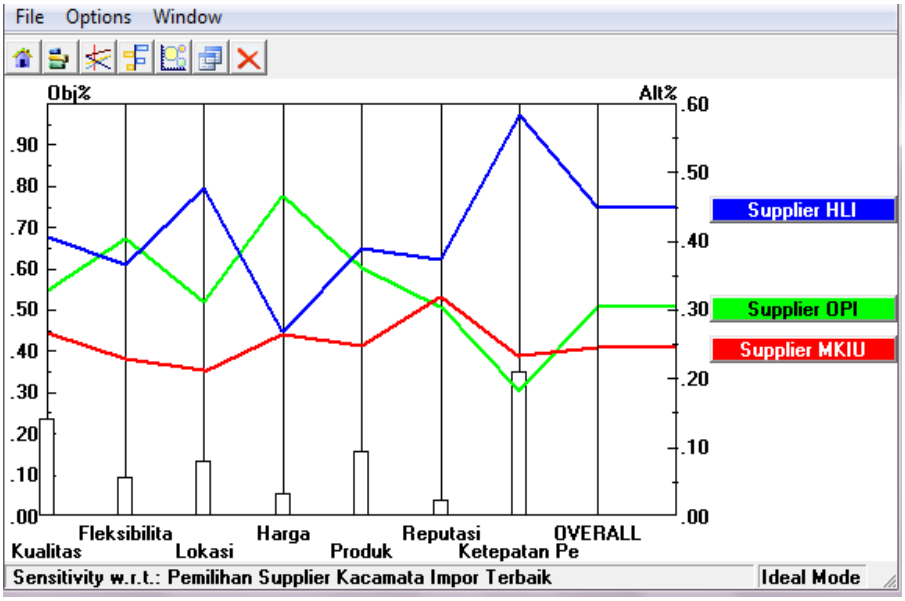


Figure 7 Analysis of sensitivity
Source: Researcher Process (2024)

Apart from that, the order of alternatives remains the same, namely: *Supplier* HLI 44.9%; OPI *Supplier 30.5%;* and *Supplier* MKIU 24.6%, it can be concluded that this is the result of a strong analysis so that the results can be valid. The increased emphasis on Quality, as shown by sensitivity analysis, underlines its importance in supplier selection. The analysis shows that HLI Supplier strengthened its position as the main choice, considering its existing strengths in Delivery Accuracy and Quality. Sensitivity analysis provides valuable insight into the impact of varying criteria weights on supplier rankings. This reinforces the importance of critical criteria and highlights how adjustments can influence the overall decision-making process.

4. Consistency / Accuracy *(Consistency)*

Consistency ratios (CR) are calculated to assess pairwise comparisons made during decision-making. CR is obtained from the Consistency Index (CI) by normalizing the random index. A consistent set of assessments will result in a CR close to zero. In contrast, inconsistency may result in a higher CR. In general, a CR below 0.1 is considered acceptable. Higher CR values indicate potential inconsistencies in pairwise comparisons. CR values for all criteria and overall levels were within the acceptable range, indicating a reasonable level of consistency in pairwise comparisons.

Table 8
Comparison (Inconsistency Ratio) of expert data merging matrix elements

No	Matrix Comparison Element	CR value
1	Comparison of level I criteria elements based on *Supplier Selection targets* Glasses Import Best	0.04
2	Quality criteria	0.04
3	Flexibility criteria	0.06
4	Location Criteria	0.009
5	Criteria price	0.00048

No	Matrix Comparison Element	CR value
6	Product Criteria	0.00174
7	Reputation criteria	0.01
8	Criteria accuracy delivery	0.02

Source: Processed Researcher (2024)

After getting the criteria weight for each criterion, data consistency will then be checked. To calculate the Consistency Ratio (CR), λmax (Maximum Eigen) and Consistency Index (CI) are needed.

1. Determining the maximum Eigen value (λmax)
   λ max = (4.369 x 0.226) + (14.584 x 0.084) + (7.922 x 00.126) + (21.586 x 0.045) + (8.767 x 0.146) + (28.537 x 0.031) + (2.792 x 0.342)
   λ max = 7.3023
2. Calculating the Consistency Index (CI)
   $CI = \frac{\lambda \max - n}{n - 1}$
   n = number of criteria
   $$CI = \frac{(7.3023 - 7)}{7 - 1}$$
3. Calculating Consistency Ratio (CR)
   CR = CI/RI, the RI value for n=7 is 1.32 (see table 3.4 for the Random Consistency Index list)
   $CR = \frac{CI}{RI}$
   $CR = \frac{0{,}05}{1{,}32}$
   CR = 0,04 (Consistent)

A CR value of 0.04 for Criterion Level 1 indicates a low level of inconsistency, indicating that the assessments made at this level are consistent. Quality, Flexibility, Location, Price, Product, Reputation, and Delivery Accuracy all have CR values below 0.1, which represents a satisfactory level of consistency in comparing each criterion. (Hidayat, 2018). A low CR value indicates that the decision maker's judgment is internally consistent, thereby increasing the reliability of the AHP model (Savitri & Pinem, 2022). Given the low CR values, interpreting pairwise comparisons is done carefully and consistently. However, it is important to interpret these values within the context of the specific decision problem and the level of rigor required. The inconsistency values in the table above are obtained from data from the *Expert Choice application*, and the AHP method is produced in the form of an inconsistency ratio value smaller than 0.1; with this result, the calculation is consistent. Checking the AHP data's consistency ratio shows a reasonable consistency level in pairwise comparisons. , thereby increasing the credibility of the decision-making process.

Analysis and Interpretation

Based on the presentation of the data above, it can be analyzed and interpreted as follows (Table. 8)

Table 8
***Supplier* Selection Best**

Criteria	*Suppliers HLI*	*Suppliers MKIU*	*Suppliers OPI*
Quality (22.6%)	10.5 %	6.8 %	8.4 %
Flexibility (8.4%;)	3.6 %	2.2 %	3.9 %
Location (12.6%)	5.8 %	2.6 %	3.8 %
Price (4.5 %)	1.2 %	1.2 %	2.1 %
Product (14.6 %;)	6.7 %	4.3 %	6.2 %

Criteria	*Suppliers HLI*	*Suppliers MKIU*	*Suppliers OPI*
Reputation (3.1 %;)	1.4 %	1.2 %	1.2 %
Accuracy Delivery (34.2%)	15.8 %	6.3 %	5 %

Source: Processed Researcher (2024)

Based on Table 8. It can be seen that the delivery accuracy criterion obtained the largest value among the other criteria, namely 34.2%. In contrast, the HLI *Supplier* has the largest delivery accuracy value among other *suppliers*, 15.8%. Apart from that, HLI *suppliers* are also superior in terms of quality (10.5%), location (5.8%), products (6.7%), and reputation (1.4%), so they were chosen as the best *suppliers* because they excelled in 5 of 7 criteria compared to other *suppliers*.

The supplier was selected as the second alternative because it was superior in flexibility (3.9%) and price (2.1%) criteria. Meanwhile, OPI *Supplier is the last alternative supplier* because it has lower criteria than other *suppliers*.

Based on previous research, research by Lukmandono, et al (2019) conducted research on selecting suppliers for the manufacturing industry using the AHP approach. have similarities in several criteria on price (18.2%), quality (28.7%), delivery (11.1%) and flexibility (9.9%). This shows that shipping weight and quality are important criteria that must be prioritized in supplier selection.

Conclusion

In this final chapter, the author concludes that the selection of imported eyewear *suppliers* using the *Analytical Hierarchy Process (AHP*) method at Optik Metro is as follows:

1. The criteria determined in selecting a supplier *of* imported glasses are quality, flexibility, location, price, product, reputation, and accuracy of delivery, whereas alternative *suppliers* are HLI *Supplier, MKIU Supplier*, and OPL *Supplier*. Based on the calculation results, the most important criterion is *the supplier's* delivery accuracy to avoid delays. The next criterion is quality with a value of 0.227, then the product criterion with a value of 0.146, the location criterion with a value of 0.125, then the flexibility criterion with a value of 0.085, the price criterion with a value of 0.045 and finally the reputation criterion with a value of 0.031.
2. Based on the score results, it was determined that *Supplier* HLI was ranked 1st as the best *supplier of* imported glasses with a weight of 0.449. It had superior criteria in 5 out of 7 criteria, especially in the accuracy of delivery, quality of goods, products, location, and reputation at Optik Metro.

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