

CHAPTER VI

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Based on the research results, below is the several conclusions that obtained from this study:

1. The weight of supplier for supplier evaluation are defined as follows.
 - a. Supplier 1 = 0.097
 - b. Supplier 2 = 0.215
 - c. Supplier 3 = 0.232
 - d. Supplier 4 = 0.456

Therefore based on the evaluation, the rank of supplier is shown below.

- a. Rank 1 = Supplier 4
 - b. Rank 2 = Supplier 3
 - c. Rank 3 = Supplier 2
 - d. Rank 4 = Supplier 1

2. The initial order allocation considering the aspects of economic and environmental criteria is illustrated as follows. The initial order allocation for the 3 months has the same amount.
 - A. Supplier 1 :
 - Product A1 = 150 items/month
 - Product A2 = 450 items/month
 - Product A3 = 100 items/month
 - Product A4 = 1050 items/month

- Product A5 = 1000 items/month

B. Supplier 2 :

- Product A1 = 150 items/month
- Product A2 = 0 items/month
- Product A3 = 100 items/month
- Product A4 = 1000 items/month
- Product A5 = 600 items/month

C. Supplier 3 :

- Product A1 = 0 items/month
- Product A2 = 300 items/month
- Product A3 = 50 items/month
- Product A4 = 200 items/month
- Product A5 = 100 items/month

D. Supplier 4 :

- Product A1 = 150 items/month
- Product A2 = 400 items/month
- Product A3 = 0 items/month
- Product A4 = 1000 items/month
- Product A5 = 600 items/month

3. The revised order quantity allocation that corresponding to risk rating of each supplier are formulated as follows. The revised order allocation for the 3 months has the same amount.

A. Supplier 1 :

- Product A1 = 73 items/month
- Product A2 = 218 items/month
- Product A3 = 48 items/month
- Product A4 = 508 items/month
- Product A5 = 500 items/month

B. Supplier 2 :

- Product A1 = 150 items/month
- Product A2 = 338 items/month
- Product A3 = 87 items/month
- Product A4 = 1000 items/month
- Product A5 = 600 items/month

C. Supplier 3 :

- Product A1 = 77 items/month
- Product A2 = 194 items/month
- Product A3 = 37 items/month
- Product A4 = 742 items/month
- Product A5 = 600 items/month

D. Supplier 4 :

- Product A1 = 150 items/month
- Product A2 = 400 items/month
- Product A3 = 83 items/month
- Product A4 = 1000 items/month
- Product A5 = 600 items/month

6.2 Suggestions

The suggestion that can be given from the results of this research for the company and further researches are:

1. For the company, the research of supplier selection and order allocation considering environmental, economic, and supply risk criteria can be used as consideration and evaluation for the company in selecting the supplier to mitigate future supply risk and avoid disruption in supply chain.
2. For further research, the model of multi-objective linear programming could be extended by considering and integrating it with the inventory level.

