

## **CHAPTER VI**

### **CONCLUSIONS**

The following chapter contains the conclusions of the research results obtained and suggestions for further research.

#### **6.1 Conclusions**

The conclusions obtained from this research are as follows

1. Based on the results of waste identification using the Waste Relationship Matrix (WRM) method, it is found that process and process waste is a waste that has a major influence in triggering the emergence of other wastes, which is 22.11%. In addition, it is also found that motion is a waste that is heavily influenced by other types of waste, which is 17.89%. Based on the WAQ results, it is found that the waste with the highest percentage in the production process at Ganto Bakery is Transportation, with a percentage of 16.70%, and the second waste with the percentages are not much different I waste of motion with percentage is 16.42%. The identification results obtained are in accordance with the actual conditions found during the initial observation, where the current layout of the production area is considered inefficient because some of the production processes carried out in line are in a fairly far area, therefore improvements are needed to minimize waste in the production process at Ganto Bakery.
2. Identification of causal factors affecting waste is carried out on the highest waste, namely transportation waste and motion of waste. Four categories of identification were obtained, namely man material, environment, and method for each waste. From these four categories, it can be concluded that the root cause of transportation waste is due to the ineffective layout of the Ganto Bakery production area and not paying attention to the relationship between work stations in line, and the cause of motion waste is by the absence of standard operating procedures and work instructions as guides in

3. the production process at Ganto Bakery. Therefore, the appropriate improvement proposal is the creation of SOPs and work instructions for each work station and relayout of the current production area
4. Based on the result of proposed the improvement, it can be seen that the comparison of lead time before and after improvement has decreased to 38.67 minutes. So that the leadtime before the improvement is 283.04 minutes to 244.28 minutes for 1 batch of production.
5. Changes in the efficiency of the production process have also changed, where the percentage comparison of the efficiency of the production process before the improvement of 67.03% has increased to 77.67%. When compared with before and after improvement, it can be seen that there is an increase in efficiency of 10.64%. So it can be assessed that the production process is more efficient after the improvement.

## **6.2 Suggestions**

Suggestions that can be given from this research are as follows

1. It is hoped that Ganto Bakery can apply the proposed improvements that have been proposed, so as to minimize production time.
2. It is hoped that further researchers can provide suggestions for improvements for other types of waste.