

CHAPTER 6

CONCLUSION AND RECOMMENDATION

6.1.1 Conclusion and Recommendation

After being calculated and analyzed, the ideas can be inferred as following:

1. Based on the analysis of participatory for the project in producing product Z, it is found that there are five intrusive factors being voted by eleven experts. The five intrusive factors are new complex design, lack of training, rough pedal on machine, type of material used, and pressure target with number of total voters 5, 6, 5, 5, 15 respectively. These five intrusive factors are considered as the root causes of the problem based on participatory approach. Therefore, there must be an assessment to evaluate the considered factors if they truly harm the company business process.
2. Based on fishbone diagram for the project in producing product Z, it is found that there are four attributes in the root causes of the defect problem for product Z in sewing area at PT SGI. The four attributes are man, equipment, method, and material. These four methods become the systematic thinking for overcoming the problem in the case of this research. On hand, it means that this systematic thinking affects the direction of mitigating risk taken by the manager.
3. Based on the risk assessment of the most five intrusive factors proposed by the experts, it is found that there is one extreme, two medium, and two low risks. The extreme risk is the type of material used or namely D4 that it states the likelihood level is five and severity is four. The medium risks are lack of training or D2 that states the likelihood level is five and severity is three, and pressure target or D5 that it states the likelihood level is five and severity is three. Lastly, the low risks are new complex design or D1 that states the likelihood level is five and severity is two, and rough pedal machine or D3 that states the likelihood level is four and severity is two. Thus, the risks that only need to be mitigated are D4, D2, and D5.

4. After being mitigated the risks for product Z in the sewing area, it is found that the risk for D4, type of material used, is in green zone or namely low risk with the likelihood level is 3 and severity level is two. The risk for D2 and D5, lack of training and pressure target, shifted from medium into low risk. D2's likelihood is five and severity is two.

The recommendation for the further research may follow the following notes:

1. This research can add new extension analysis of cost-benefit. This will deliver more meaningful information for the decision making by a manager in the company.
2. This research can be added by assessing the cost from changing the standard operating procedure.
3. This research can be extended in the cost analysis from the perspective, not only production, but expenses of material, distribution, and shipping.
4. Waste of defect from this research is not calculated yet in which it can be an opportunity for further improvement to analyze about the lean manufacture for the same project order.
5. Further research can extend to calculate the severity that occurs to human and environmental aspect.