

ABSTRACT

Defect product can create an economic loss for a manufacturing company. It can be traced by many attitudes, one of them is a fishbone diagram. With this approach, the company may identify the root of loss in a manufacturing process and a participatory from involved experts, like workers and involved manager, can present meaningful alternatives. This research integrates four disciplines of attitudes to conceptualize the problem of defects that is occurring to the product named Z at the area of sewing in PT Sport Glove Indonesia (SGI). The four attitudes are participatory, fishbone diagram, risk assessment, and cost analysis. This research results three types of outcomes are extreme, medium, and low. It begins with collecting workers and manager's opinions towards defect in the sewing area and continues to arrange the opinions in the structured fish frame. Afterwards, the listed opinions will be ranked by risk assessment approach in order to be visualized as color mapping. Eventually, the cost analysis will play a significant role in comparing the risk in the red zone map to the proposed comparison by the manager. The cost analysis will eventually calculate the mitigation towards extreme and medium risk.

Keywords: Participatory, Fishbone Diagram, Risk Assessment, Risk Map, Mitigation, Cost-Benefit.