

ABSTRACT

PT. XYZ is one of the industries that play role on the textile and garment industry in Indonesia . The company produces fabrics, which are originally made of polyester or better known as synthesis material. PT. XYZ doesn't produce woven fabric, but they transform the woven fabric into colored fabrics. Based on the customer lead time data, it shows that the time needed to produce the printed fabric type bubbly girl that will be sent to customer still below the target, 14 days. There are many factors that can affect customer lead time both from external and internal factors. One of the internal factor is quality. To reduce the risk defect waste, Lean Manufacturing is one of method can be done to reduce wastes.

This research phase begins with the making of VSM (Value Stream Mapping) which is useful to describe the production process in general. In addition, on VSM there is information about total lead time and value added time. then next step is PAM (Process Activity Mapping). After analyzed what activities are not value added, then analyze the influential factors using the Fishbone diagram. The root problem of each factor is then obtained by using the 5 why approach. In the selection of alternatives proposed improvement , The tools used are *pokayoke* and *andon* .

Keyword—Lean Manufacturing, seven wastes, Defect Waste, Value Stream Mapping(VSM), Process Activity Mapping(PAM), Fishbone, *Pokayoke* , *Andon*.