

Abstract

This research is empirically designed to implement Value Stream Mapping to PT. XYZ's ride-on cars production line as well as showing effectiveness of Value Stream Mapping to manufacturing lead time and wastes reduction. This research examines ride-on cars production process in PT. XYZ where data were obtained mainly from direct observation in January 2018 and some from plant's data. Former data showed fluctuation in manufacturing lead time. Furthermore, only one out of seven wastes was firstly detected by production team which was defect rate shown in November and December 2017 data. Value Stream Mapping is one of lean manufacturing tools used to reduce wastes which also leads to manufacturing lead time reduction. The result of this research finds that Value Stream Mapping is efficient in identifying wastes of motion, transportation, and waiting as well as reducing most of wastes after implementation in PT. XYZ is done and finally impacted on manufacturing lead time reduction.

Keywords: lean manufacturing, flow process chart, process activity, value stream mapping, wastes, manufacturing lead time.