ABSTRACT

PT XYZ is the market leader of printing newspaper in West Java. PT XYZ expects their newspaper defect rate below 3% of total demand per day. By June – December 2017, PT XYZ cannot meet the expectation at 2 periods out of 7 period month spans. By problem explanation, this research discusses defect minimization at PT XYZ by six sigma approach, following DMAIC (define, measure, analyse, improve, control) phases. In define phase by using SIPOC, CTQ, and pareto diagram, the defect of newspaper printing is chosen as the main problem. In measure phase, the existing production process is assessed by its stability and capability. The roots of the problem are analysed by Improvement Story by 5 Why method, resulting the dampening system of the printing machine as the root cause. The final improvement suggestion results the application of RCM. This research does not include the feasibility study of final improvement suggestion.

Keywords: Six sigma, DMAIC, RCM, defect of newspaper printing, improvement story by 5 why