

ABSTRACT

PT. Telekomunikasi Indonesia is the greatest company that held telecommunications service, especially fixed phone or usually called cable phone. To anticipate the new telecommunication company provider, PT Telkom have to survived both in product and service quality. So, customer loyalty can be guarded and maintained. Service is one factor that affect customer loyalty. Now, many customer complaint that reported in 147 serviced, its about telephone problem. Telephone problem usually have relation with its network. That means, company is facing service quality problem. For repairing many problems that reported by customer, it need quality improvement by identified critical to quality (CTQ) that cause the problem, especially problem that can't be solved on time and report of the same problem.

Based on that statement above, so, the research is done for decreasing problem report that can't be solved on time by controlling quality using Sx Sigma method. Main purpose Six Sigma is decreasing defect to zero defect (3,4 DPMO). Stages for implementing Six Sigma is define, measure, analyze, improve, and control (DMAIC). In define stage, we make CTQ formulation by doing interview to customer, then we measure process capability. In analyze stage we analyze about factors that cause defect using cause-effect diagram or fishbone chart. Then, in improve stage we suggest recommendation that will implemented. And in control stage, we make procedure for maintain improvement suggestion that recommended.

From the result of the research we got three type of potential CTQ, time of problem solving, respond of problem solving , and repeated problem. Average sigma level based on data in July 2007-June 2008 for all segmen platinum, gold, silver, and standard is 3,34. And based on analysis we got if the main problem causing defect is problem on inventory tools. Nevertheless, from PFMEA (potential failure mode and effect analysis) we got improving priority in inventory tools with mass production, in RPN value 40.

Key word : CTQ, defect, DPMO, six sigma, sigma level