

## ABSTRACT

Telecommunication technology always developing front guard following the newest research, and it often become the pioneer of technology. The competition of information technology development makes every telecommunication businessman gives full attention about service and quality of the product because they have important role in the competition. Every company goal is to win that competition. Fully attention in the quality will give positive impact by two ways: the impact of the operational cost decreasing and the impact of the income increasing. These things make PT. Telkom keep increase the performance and success by focused on customers as the real form of the service, result and give the best image to the costumers and also as the effort of PT. Telkom to survive in the competition. One of PT.Telkom ways is to increase the quality of TELKOMFlexi, which TELOMFlexi is voice and data telecommunication services based on fixed wireless technology using CDMA 2000 1X on frequency 1900 MHz.

There are several steps to solve this problem, started with problem identification, goal of the research and collecting data which consist of interview with the intern and extern costumers, and collecting data of the problem which happened in TELKOMFlexi Bandung. After this, the process of define proceeded which consist of choosing the target and goal of the research, identifying of TELKOMFlexi network process and performance, identifying of the key process and customers, customers needs definition, choosing the key and potential CTQ. There are several steps in the measuring step: quality of service performance measuring, measuring system analyzing, and process capability. Analyzing step consists of process analyzing and choosing root cause analyzing. The next step is improvement step: offer the quality of service improvement.

The result shows that there are four factors that cause the main problem from RF loss: environment, technical, machine and human factor. Repairing efforts is done by put micro cell in low signal area, put pico cell so the user inside of the building still can be served even in the blank spot macro cell.

**Key words : Defect, DPMO, Sigma, Critical To Quality, CTQ potential, RF Loss**