

ABSTRACT

PT TELKOM as one of telecommunication providers has a variety of Internet service products; one of which is "SPEEDY". The present performance of Speedy in Divre II is still graded below standard, due to the fact that the process of accessing Speedy still has many defects, which causes complaints from customers. With this kind of performance, PT Telkom will have difficulties in reaching its target to increase customer count, hence there is the need of repairing attempts and improvements of quality to minimalize the existing defects.

From the problem above, the researcher tries to control the existing defects with one of the methods of quality control, which is The Six Sigma. Six Sigma is a systematic, scientific method of quality control, which each of its decision is based on facts and data. The main principle of Six Sigma is to achieve perfection (3,4 DPMO) with controlling the recurring processes. The stages of implementating Six Sigma are *Define, Measure, Analyze, Improve, Control* (DMAIC). This research is limited at the *Improve* stage. In the *Define* stage, identification is done towards the influencing factors to the product quality of Speedy. Then on the *Measure* stage, an evaluation towards the performance in the output dan process levels. After the existing condition is evaluated, the *Analyze* stage is done, which an identification of sources and the main cause of the defects of Speedy quality is done, together with the stability analysis and process capability. In the *Improve* stage will be given sugesstion for technical and process repairment to minimalize the defects on Speedy.

Based on the evaluation done with the datum of Speedy quality from January to September 2006, the potential cause of defect (potential CTQ) is the defects happening to the CPE apparatus, DSLAM/ATM Switch, BBRAS, RADIUS server, transport network, ISP, and GTS. Afterwards, the existing Speedy performance in known as shown in the tabel below :

Pengukuran pada :	Nilai DPMO Proses		Kapabilitas Sigma Proses
Level Output	23.103		3,49
Level Proses Jaringan Akses Pelanggan	JAKTIM	78002,03	2,92
	JAKUT	56696,56	3,08
	JAKPUS	50288,09	3,14
	JAKSEL	78587,15	2,91
	JAKBAR	6784,691	3,97
	BOGOR	38746,4	3,27
	TANGERANG	49513,02	3,15
	BEKASI	43853,39	3,21
	JAKTIM	11862,8	3,76
	JAKUT	10394,4	3,81
Level Proses Jaringan Backbone	JAKPUS	9908,7	3,83
	JAKSEL	13366,4	3,72
	JAKBAR	11563,7	3,77
	BOGOR	3360,17	4,21
	TANGERANG	5185,1	4,07
	BEKASI	3114,72	4,24

The result of DPMO and the achieved capability of Sigma are far from the expected from the *six sigma* method, which is hoped to achieve 3,4 DPMO and 6 sigma (*zero defect*). With this result, a continuous repairing and quality-controlling towards Speedy are needed. The performance of Speedy after the repaiment is done showed an increase of Sigma value and a decrease in DPMO value, which are 5,01 Sigma and 228 DPMO at the output level. This increase of quality would happen if PT Telkom took the nessesary repairment based on the proposal of 99%.

Key words : defects, Speedy, DPMO Sigma, Critical to Quality (CTQ), potential CTQ