

ABSTRACT

In general, distribution system in PT Enseval RDC Surabaya is less effective. It cause the distribution of goods are not on time and shipping costs to subdistributor to be high. This study was conducted to determine the existing distribution system, redesigned the distribution system and provide recommendations for improvement. The method used in this study is statistical process control that consists of check sheet, pareto diagrams, and fishbone analysis to find the root cause of the problems. The results showed that the most dominant problem (66.67%) is the delay in shipment of goods because the expedition waited the goods to be consolidation into one full container. Based fishbone analysis, the dominant contributing factor is the lack of system integration between the directorate and there is no synchronization of shipment schedule between RDC Surabaya and RDC Jakarta so that 70.69% of the shipment was sent partial/ LCL. While the second dominant factor (16.67%) is the monitoring of shipments to subdistributors less effective so that the goods had reached the customers does not immediately known by PT Enseval. That makes PT Enseval late to make a invoice for billing to the subdistributor. Some recommendations proposed improvement are PT Enseval RDC Surabaya should makes reference to the subdistributor shipment schedule, synchronizes the shipment schedule between RDC Surabaya and RDC Jakarta, makes monitoring system of shipment and vendor evaluation. The evaluation results show that the improvement of delivery partial (LCL) from 70.69% to 0.00%, on time of shipment increase from 88.96% to 100%, the shipping cost decrease 24.54% with the shipping cost to goods value ratio decrease from 3.13% to 1.85%.

Keywords: Effectivity, Distribution System, Statistical Process Control, Integrated Distribution System