ABSTRACT

Yanti Shop is one of the grocery stores in Brebes Regency, Central Java Province. This Yanti shop has an area of 5 x 5 meters accompanied by a warehouse with an area of 2.5 x 2 meters. At the Yanti Shop there is a problem, namely waste waiting in the form of a buildup of queues which is caused by the condition of the shop not being well organized, starting from the layout, service, working habits and other things which make this Yanti Shop have these problems. Based on the proposal and also the application of the 5S method in the work area, observation results were obtained regarding the existing queues, where the queue calculation results were reduced, namely before the implementation of 5S the result of ρ (utilization) was 1.297 or more than one, which means there was a buildup of queues and the results could not be known. Lq, Ls, Wq, and also Ws. Meanwhile, after the proposal and implementation of 5S in the work area there were changes where the results of the queue calculation were ρ, namely 0.925 with a value of Lq of 11.547 or 12 customers in the queue, Ls of 12.5 or 13 customers, for Wq of 41.67 minutes and for Ws 45 minutes, which means the service time is only 3.33 minutes. From these results it can be concluded that implementing 5S in the Yanti Shop work area can minimize waste waiting, namely in the form of queue build-up.

Keywords: *Grocery Store, waste waiting, queue buildup, 5S method, ρ (utilization)*