

ABSTRACT

ANALYSIS OF QUEUING SYSTEM WITH USING POM-QM FOR WINDOWS V5 (Case Study at Scorpio Washing Steam Motorcycles)

Scorpio Wash Motor Steam was established in 2005, is one of the businesses engaged in the field of motor washing. Scorpio Wash Motor Steam has four counters washing. In the washing service process, there is a long queue that causes the customer to wait. Long customers waiting from the process to come to finish washing can be 60 minutes or more. The length of the queue is due to the length of the process. To improve service in the process of motor washing, Scorpio Wash Motor Steam wants to make an improvement, one of them by reducing the waiting time or the number of queues in the washing process. Therefore the addition of the washing service system counters into five washing booths by adding human resources. Due to the existing washing place. This research presents the result of modeling system using simulation and analyze queuing system to reduce consumer time in system. System modeling built with POM-QM software for Windows V5. With the increasing number of booths into 5 counters of laundering then there was a decrease of the previous queue 35.93% to 23.54%, and the rate of cancellation by customers also decreased. In addition, with the addition of counting counters to 5 washing booths also reduce the level of customers who leave the washing in Scorpio Wash Motor Steam previous 7-10 people to be 3-5 people. Profit obtained from 4 washing booths Rp 28.900.000,00 with added to 5 counters to Rp 30.550.000,00 per month.

Keywords: queue, waiting time, profit, POM-QM for Windows V5