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Analyzing the Service Performance of a Post Office in Kurunegala District: A Case Study

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The postal service is an essential service organization that provides a quality service leading to customer satisfaction. However, long queues were observed at a post office in the Kurunegala district. Since it affects the service quality, this study aims to suggest an improved configuration for the selected post office by analyzing its queuing performance. This study collected 300 data from two counters in the post office during three hours from 10.00 am on two consecutive weekdays. The system was modelled using the Rockwell ARENA 16 software. The queues for the observed registered post and speed post counters were named queue 01 and queue 02, respectively. The existing system resulted in 19.03 and 18.43 minutes of waiting time in queues 01 and 02. The number waiting in queues 01 and 02 were 25 and 24. The percentage of customers served by the system was 58.23 percent. Since the existing system showed a low performance rate, the study recommended doubling the staff at the counters. Therefore, three models were suggested as models 01, 02, and 03. The suggestions were to double the resources at counter 1, double the resources at counter 2, and double the resources at both counters. Compared to models 01 and 02, model 03 shows less waiting time and number waiting. Therefore, the study recommends model 03 as the best-fitted model. It reduced waiting times to 3.52 and 1.27 minutes, and the numbers waiting to 6 and 2 in queues 01 and 02. Moreover, the proposed system could increase its performance by 33.72 percent.

Keywords: *computer-based, simulation model, post office, service quality*