

CHAPTER V

CONCLUSION And SUGGESTION

A. Conclusion

Based on the results of research conducted, results be concluded are as follows:

1. At the BRI Lokasari sub-branch office, the queue model applied is single-channel single-phase or $M/M/1$, which is a queuing model that only uses one teller. There is another server, namely customer service, but this research focuses on tellers. The characteristics of the queue used are FIFO or FCFS, where customers who come first, those who are served first.
2. The performance of the system currently used is a single channel-single phase model, where there is only one server and only one path. The performance results of the single channel-single phase queuing model at the BRI Lokasari branch office are known in one month of research or 20 working days for 5 hours of operation to serve customers, there are 2730 customers. Average customer arrival time (λ) is 27.3 or 27 people per hour, average customer service (μ) is 28 people per hour, server utilization is (ρ) 0.96 or 96%, average number in queue (L_q) is 26 people, average number in system (L_s) 27, average waiting time in queue (W_q) is 0.96 hours or 57.86 minutes, the

average waiting in the system (W_s) is 60 minutes or 1 hour, work efficiency level at 103%, and capital efficiency at 103%. The simulation of queue and efficiency level with the increase to 5 tellers using a multi channel-single phase model, shows a significant reduction in the number of queues and customer time in queue. The performance results of the multi channel-single phase queuing model at the BRI Lokasari branch office are known in one month of research or 20 working days for 5 hours of operation to serve customers, there are 2304 customers. Average customer arrival time (λ) is 27.3 or 27 people per hour, average customer service (μ) is 6 people per hour, server utilization is (ρ) 0.9 or 90%, average number in queue (L_q) is 7 person, average number in system (L_s) 10 person, average waiting time in queue (W_q) is 16 minute, the average waiting in the system (W_s) is 22 minute, work efficiency level at 111%, and capital efficiency at 111%.

3. The addition of 3 tellers with the simulation method, shows that queue time, queue lines, and utilization can be maximized. The questionnaires that have been collected show that the majority of BRI customers are over 35 years old who want speed in queuing and maximum time when receiving services. If the company perspective is combined with simulations and responses from BRI Lokasari bank customers, a meeting point is found where the addition of tellers is an

effective step. The company can survive with 1 teller to save on labor and operational costs, but a bank as big as BRI, which has the largest number of customers in Indonesia, does not provide the best service, will be displaced by other bank competitors who pay more attention to consumer desires, and have better queue management.

B. Suggestion

Based on the conclusion obtained, the inputs recommended regarding the queuing system performance and efficiency level of BRI Lokasari sub-branch are below:

The sub-branch office of BRI Lokasari is advised to add more tellers to 3. This is because the number of tellers available is only 1 and the number of visitors is relatively large, with an average of 27 customers arriving per day. Relying only on 1 teller has an impact on the number of customers queuing both in the system and in the queue. This is supported by customer responses that expect additional tellers. The addition of tellers provides server performance, work efficiency levels and increased capital efficiency. therefore the addition of 3 tellers can provide faster and more convenient service to customers. The results of the questionnaire data also show that using one teller makes customers give unpleasant responses. The results of the questionnaire show that customers are satisfied with BRI bank services, however, there must be an additional server as an expectation for BRI bank due to long waiting times.

The results of the data collected also show that using one teller makes customers give unpleasant responses. The data showed that customers are satisfied with BRI bank services, however, there must be an additional server as an expectation for BRI bank due to long waiting times. Although it is considered efficient with 103% of the efficiency value by using one teller, adding to 5 tellers does not reduce the efficiency of the BRI Lokasari sub-branch office. The efficiency value increased to 111% and the addition to 3 tellers would have an impact on better service improvements for customers.

For the management of the BRI Lokasari branch office, Mangga Besar, which has a relatively large number of customer arrivals, a strategy of adding tellers is needed in order to form a good image for customers. BRI's teller services have not met customer expectations. Especially at the BRI Lokasari branch office, action is needed to build customer trust with maximum and efficient service. In adding the number of tellers to 3, the researchers found that this did not significantly affect the efficiency level of the BRI Lokasari branch office, Mangga Besar, but needed to be reviewed from the financial management and human resources sectors.