

ABSTRACT

Queuing problems often occur in everyday life, for example on ticket purchasing, car servicing and delivery of goods, etc. This problem will certainly make customers become boring by long queues that can not be solved by companies and they look for other companies which offers better service. Certainly it could make the income decrease.

This study aims to solve queuing problems that occur in most of daily activity. Therefore the research can be expected, service companies can provide better services without increasing facility cost in the future. This will create satisfied customers using the company service and they can be loyal because of the faster service.

The research was conducted by analyzing the queuing system then when results found after a simulation is done by altering the queue system before, becomes a better system that can reduce the average waiting time in queue and improve the company's service.

The results showed that the previous queuing system is a single channel single phase. By the simulation through multi-channel single-phase system and adds of 2 or 3 servers, found the most optimal server utilization is 2 servers. This system can reduce average time in queue which was originally 25 minutes to 2.4 minutes with utility rates 69% and found and the services can be finished at 9.34 am from the previous of 12.30PM on June 4th and on June 5th will be finished at 10.34 am.

Keywords : services, waiting line management, queuing theory