

IMPLIMENTATION OF SINGLE CHANEL QUEUING MODEL TO ENHANCE BANKING SERVICES

CHITRAKANT SAHU¹ & SHATENDRA SAHU²

¹Dissertation Scholar, Department of Mechanical Engineering,
Bhilai Institute of Technology, Durg, Chhattisgarh, India

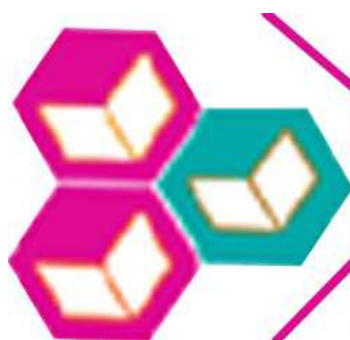
²Assistant Professor, Department of Mechanical Engineering,
Bhilai Institute of Technology, Durg, Chhattisgarh, India

ABSTRACT

Lines of waiting customers are always very long in most of the banks. Queuing is the common activity of customers or people to avail the desired service, which could be processed or distributed one at a time. Bank would avoid losing their customers due to a long wait on the line. Some of bank initially provides one service counter in every branch. But, one counter would not serve a purpose when customers arrive to use banking service and try to use other banking service. Thus the service time needs to be improved to maintain the customers.

This paper focuses on the bank lines system. To implement queuing management system in a bank single channel queuing system $[M/M/1 : FCFS/\infty/\infty]$ is proposed. The model illustrated in this Bank for customers on a level with service is the single-channel queuing model with Poisson Arrival and Exponential Service Times (M/M/1). For this the data was obtained from a bank in the city. Then arrival rate, service rate, utilization rate, waiting time in the queue and the average number of customers in the queue based on the data using Little's theorem and M/M/I queuing model was derived. To implement single server queuing model and analyses the result for optimum queuing management system in a single window bank. Four week average customer arrival is taken as the input data for both the queuing model and the service rate is obtained by the average service rate per customer they have given

KEYWORDS: Queuing System, Single Server Queuing Model, Service Efficiency, First Come First Serve



Best Journals
Knowledge to Wisdom

Submit your manucrypt at editor.bestjournals@gmail.com

Online Submission at http://www.bestjournals.in/submit_paper.php