Queing Theory For Banking Application

Ravi Nasit
Student, Department of Industrial Engineering,
School Of Technology, Pandit Deendayal Petroleum University,
Gandhinagar, Gujarat- 382007, INDIA
nasitravi40@gmail.com, ravi.nie13@sot.pdpu.ac.in

Abstract

Queue length optimisation and service efficiency is an integral part for banks. Queuing theory helps in understanding the waiting lengths and times to correlate it with performance and customer satisfaction. The queuing models are worthwhile in evaluating the service efficiency of a counter. The research revolves around understanding the single server model to assess a counter in bank and calculate the utilisation parameters to analyse the efficiency of the counter. Queueing model is applied in order to check the frequency of the counter being busy and evaluate the service rate. The queuing theory is highly advantageous and can help optimise the queue lengths in the bank. The scrutiny of the bank queues through the single server models will assist in finding the flaws in the service and devising ways to improve the service rates in order to minimise the queues and have an efficient utilisation rate. The objective behind the experimentation is to optimise the queue lengths and revamp the working of the counter and enhance the service efficiency.

Keywords
Queue length optimization, service efficiency

Biography

Ravi Nasit is a final year student of Industrial Engineering at School Of Technology, Pandit Deendayal Petroleum University, Gandhinagar, Gujarat-382007, INDIA. He has done a project on ‘Process Optimization in CNC Mould Shop’ at Piramal Glass Pvt.Ltd., Kosamba, Gujarat, India. He is Member of American Society of Quality (ASQ).He has Successfully completed six Modules on Quality Management and achieved Six Sigma Yellow Belt Ceritificate from ASQ Ahmedabad LMC. He is currently doing his final year project on ‘Waiting Line Analysis Of Traffic Signal’.