

BOC Bank Service Queue Management System – Jaffna Branch

High-Level Problem Description

The Bank of Ceylon (BOC) Jaffna branch experiences long queues during peak hours due to limited service counters and variable customer arrival patterns. This causes customer dissatisfaction and inefficient resource utilization. The purpose of this study is to model and analyze the queue management system at the BOC Jaffna branch and focus on improving one key performance factor minimizing average customer waiting time.

System Overview

System Type: Queue-based Service System

Entities: Customers, Service Counters

Processes: Customer Arrival → Wait in Queue → Service at Counter → Exit

Resources: Number of counters (tellers), Service time per customer

Performance Objectives

The main performance objective of this study is to minimize the average waiting time for customers at the Bank of Ceylon (BOC) Jaffna branch. Reducing waiting time is essential to improving customer satisfaction and ensuring efficient service delivery. The system aims to identify patterns in customer arrivals and service durations, analyze queue behavior during peak and non-peak hours, and propose solutions such as optimizing the number of service counters or improving staff allocation. By focusing on minimizing waiting time, the bank can enhance overall operational efficiency and provide a better customer experience.