

A Study of Peak Day Operations at Jaya's Kitchen – A South Indian Restaurant

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Abstract

This simulation study aims to analyze the average time spent by employees at Jaya's Kitchen, a South Indian restaurant in Wallingford, CT, when handling dine-in, to-go, and online orders during peak operational hours. The project does not involve process optimization but focuses on gathering data to understand the current efficiency of order processing across the three order modes. The simulation will be conducted using Arena software to model the restaurant's operations realistically. Key performance metrics such as average order handling times, resource utilization rates, and queue lengths will be tracked. The simulation inputs will be based on real-world data collected from the restaurant, including order arrival rates, service time distributions, and resource capacities. By simulating weekly scenarios and analyzing the outputs, the study aims to identify potential metrics, and resource utilizations in order handling times during peak periods. The findings can provide valuable insights to the restaurant management, enabling data-driven decisions for improving operational efficiency and enhancing customer experience.

Keywords

Jaya's Kitchen, Restaurant, Simulations