

ABSTRACT

Kandang Ingkung Resto & Kopi Pawon Cibubur is a restaurant that offers a traditional Javanese culinary experience with a calm, rural atmosphere surrounded by nature. The restaurant faces challenges in managing workforce scheduling, particularly due to significant fluctuations in the number of customers between weekdays and weekends. The previous scheduling system, which was done manually without considering sales predictions, led to inefficiencies such as overstaffing and understaffing. Therefore, this final project focuses on designing a shift scheduling system based on sales forecasting to improve operational efficiency. The forecasting methods used are Holt's Winter and Decomposition Multiplicative, applied to project future demand using historical sales data. Forecasting results with MAPE values below 15% served as the basis for determining daily labor needs. The work schedule was then arranged using the Tibrewala, Phillipe, and Browne (TPB) algorithm, which applies the principle of five working days and two consecutive days off in accordance with labor regulations. The scheduling system has been verified and validated, demonstrating that the proposed design accurately meets labor requirements, complies with regulations, and enhances service quality. With this system, managerial decision-making becomes more data-driven, and the distribution of workload is more proportional to actual demand volume.

Keywords: *Shift Scheduling, Sales Forecasting, Workforce, Tibrewala Phillipe and Browne Algorithm, Restaurant.*