IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 4, November 2025
Impact Factor: 7.67

Coffee Rush Prediction System

Gunjan Rajeshwar Pote and Prof. Renuka Naukarkar
Student, Department of Data Science
Guide, Department of Data Science
Tulsiramji Gaikwad Patil College of Engineering and Technology, Nagpur, Maharashtra, India
tp9706840@gmail.com

Abstract: *Understanding peak rush hours in beverage retail stores is essential for optimizing staff allocation, reducing waiting time, and improving customer satisfaction. This research proposes a machine-learning-based prediction system that analyzes historic sales data to identify high-demand time intervals. The system uses Random Forest Regression to forecast hourly demand by considering time-based, seasonal, and transactional variables. The model achieves high accuracy and supports real-time decision-making for store management.*

Keywords: *retail stores*

DOI: 10.48175/568