Raw material price Forecasting

Under the Supervision of
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Objectives

Collect recent and historical price data of spice raw materials.

Data collection is crucial for understanding market dynamics and trends.

Analyze key factors affecting price changes.

Factors include arrivals, seasonality, and quality, which influence market pricing.

Build a model to forecast prices for the next 30 days.

Forecasting helps stakeholders plan and make informed decisions based on predicted price trends.

Why Forecasting Spice Prices Matters

Enables Informed Decision-Making for All Stakeholders

Accurate forecasting helps farmers, traders, manufacturers, and exporters make smart choices about when to buy, sell, or hold spices, reducing uncertainty in a volatile market.

Cost Optimization

Forecasting helps identify the best times to purchase raw materials

Reduces the risk of losses due to price volatility.

Understanding price trends minimizes financial exposure to fluctuations.

Dataset Sources

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Agmarket

Spices Board of India

Kaggle

Attributes

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text
State Name
District Name
Market Name
Variety
Arrivals
Price Columns
Date
Grade

Methodology Adopted

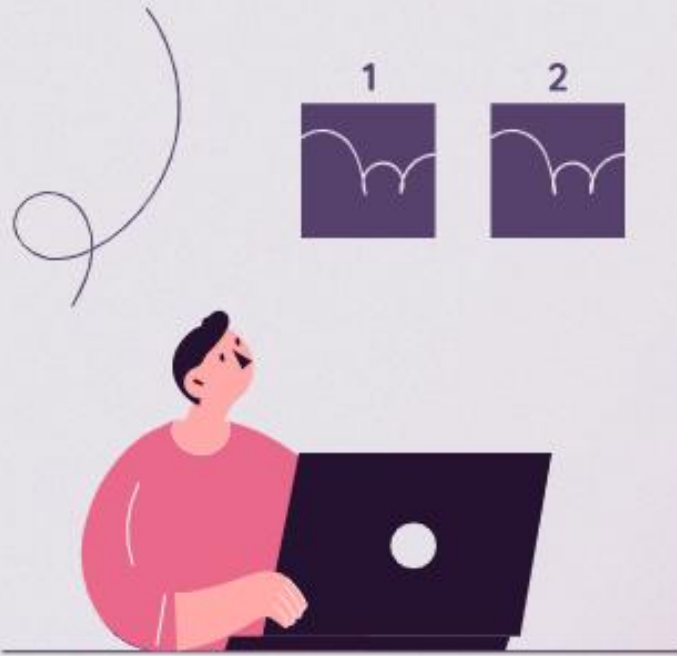**Data Preparation Steps**

Cleaning

Encoding

Handling missing data

Forecasting Techniques Planned

Prophet

XG Boost

Light GBM

Holts Winter model

Ensemble Learning

Target variable

Minimum Price

Maximum Price

Expected Outcomes

1. 30-day ahead price forecasts for each market

Forecasts will provide insights for better decision-making in spice procurement.

2. Insights into key drivers of price change.

Understanding the factors influencing price trends is crucial for strategic planning.