

Dry Fruits Data Analysis Using Python

Statistical & Visual Analysis of Dry Fruits Products Synthetic E-commerce Dataset

By _Your Name_



Understanding E-commerce Dry Fruits Market



Problem Statement

E-commerce platforms offer a vast array of dry fruit products. Manually analysing pricing, ratings, and reviews is a monumental and time-consuming task.

Our Approach

We utilise a [synthetic dry fruits dataset](#), mimicking real-world e-commerce data. This enables robust analysis without the constraints of web scraping.



DATA INSIGHTS

Dry Fruits Dataset: Snapshot

This dataset accurately represents common dry fruits sold online, featuring realistic attributes for comprehensive analysis.

Dataset Size

300 products

Data Source

Synthetic e-commerce style

File Format

CSV

Purpose

Statistical analysis & visualisation

STRUCTURE

Decoding the Dataset Columns

Product_ID: Unique identifier

Product_Name: Dry fruit product name

Brand: Supplier or brand

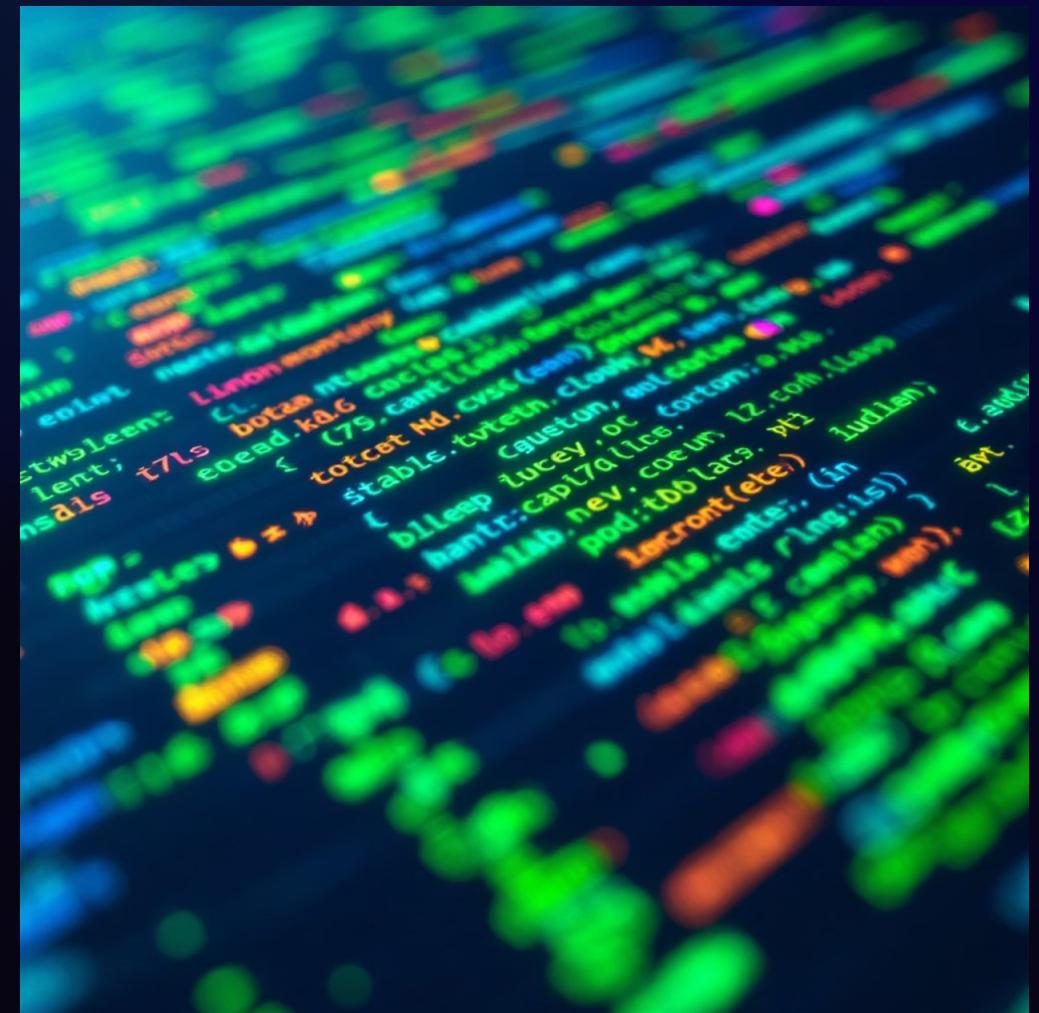
Dry_Fruit_Type: E.g., Almonds, Cashew, Raisins

Pack_Size: Quantity of product

Price_INR: Price in Indian Rupees

Rating: Customer rating (1–5)

Number_of_Reviews: Total customer reviews



TECHNOLOGY

Our Analytical Toolkit



Python

Core programming language



Pandas

Data manipulation, analysis



NumPy

Numerical calculations



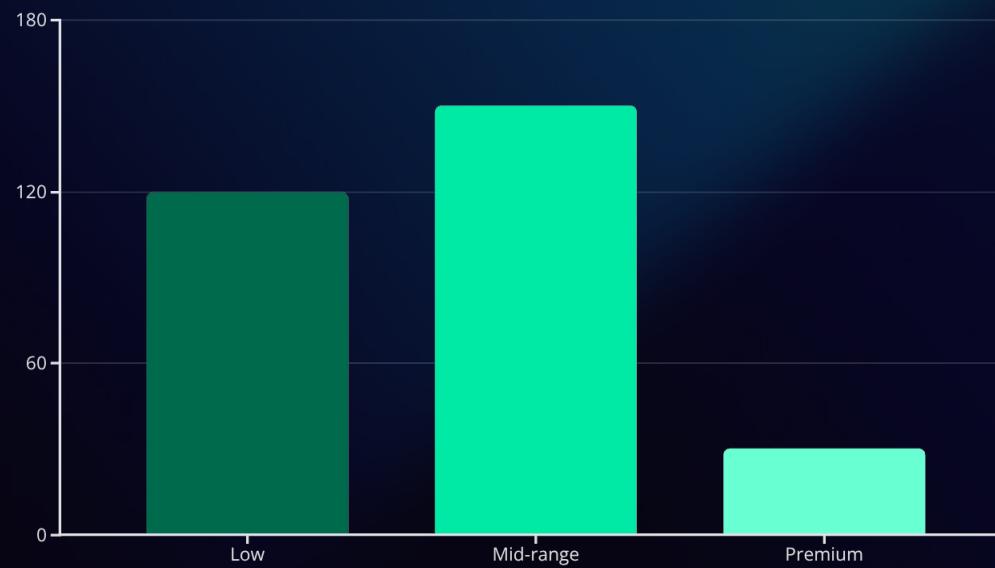
Matplotlib

Data visualisation

These robust tools facilitate efficient data processing and insightful analysis.



Price Dynamics: An Overview



Low & Mid-range: Dominant in dataset

Premium: Fewer, higher priced

Mid-range: Attracts more customers due to affordability

Consumer preference leans towards value-for-money products.

Ratings & Reviews: Customer Engagement



Analysing customer feedback reveals key patterns in product reception.

Average Rating: Around 4.2 stars

Review Counts: Mostly moderate

High Ratings: Correlate with more reviews

Customer satisfaction significantly drives product engagement.

Key Findings: Unpacking Consumer Behaviour



Premium Quality

Higher ratings for premium dry fruits



Volume Sales

Mid-range products drive higher sales volumes



Rating Influence

Ratings impact reviews more than price

Quality perception is a crucial factor in shaping customer purchasing decisions.



LOOKING AHEAD

Conclusion & Future Directions

01

Effective Data Analysis

Python proves its worth in robust data analysis.

02

Dataset Versatility

Dry fruits dataset ideal for academic & ML practice.

03

Predictive Modelling

Future work includes price and demand forecasting.

04

Recommendation Systems

Developing intelligent product recommendations.

05

Real-time Insights

Integrating live e-commerce data analysis.

Thank you!

Any Questions?

