Price Decision Support System for FMCG

🚀 Optimizing Prices for Maximum Revenue & Efficiency

Team Overfitters

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Problem Statement

Traditional Pricing Challenges in FMCG

Static pricing fails to adapt to market demand

Overpricing reduces sales, underpricing leads to losses

Inventory mismanagement due to inefficient revenue

Lack of real-time decision-making tools

Why Did We Choose This Project?

Traditional pricing models rely on intuition rather than data

Increasing demand for decision support systems

Helps FMCG companies improve profitability and stock efficiency
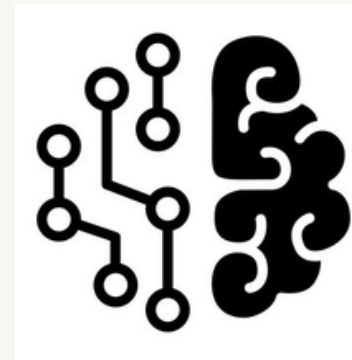
Who Benefits?

Retailers & FMCG Brands

Consumers

Supply Chain Teams

Tools & Technologies Used

Data processing & ETL

Machine Learning (XGB, TD3)

Storing Data and Deploying Model

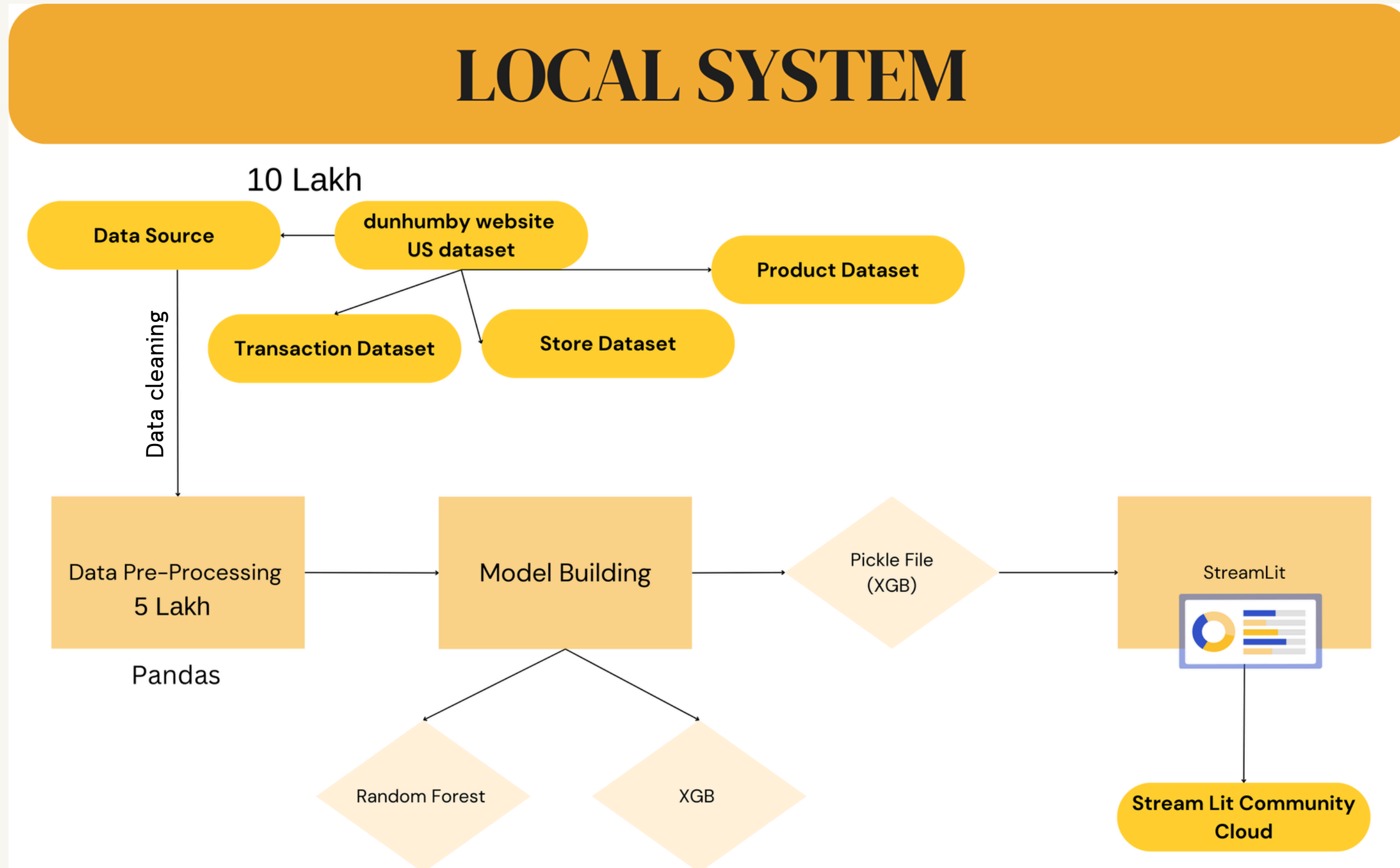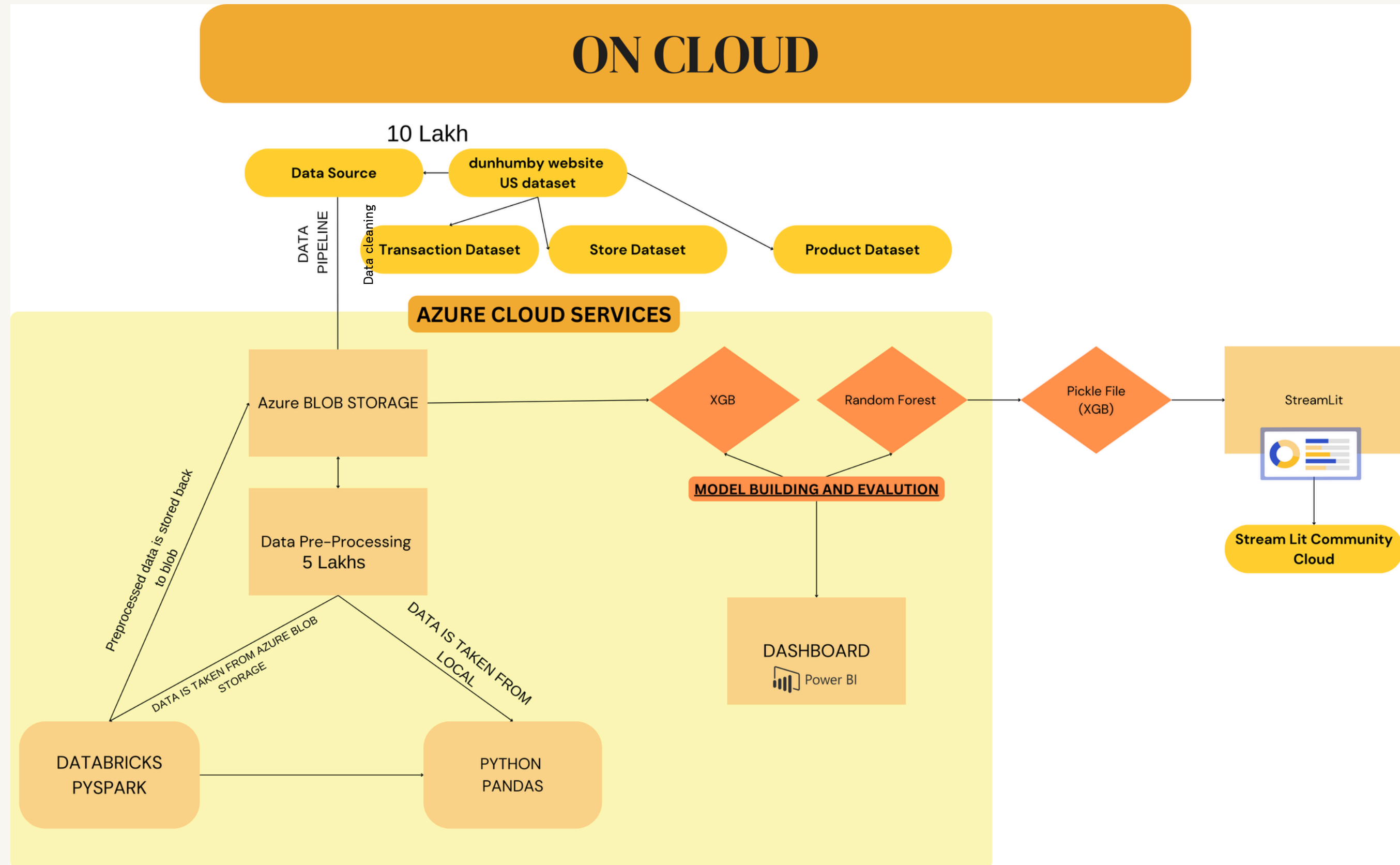Data visualization & dashboards

PROJECT ARCHITECTURE

PROJECT ARCHITECTURE

Input Your Data

Store Segment

Select Store Segment ▾

VALUE

MAINSTREAM

UPSCALE

Pricing Decision for Fast-Moving Consumer Goods (FMCG) $

About the App

This application provides the following data-driven insights for FMCG:

- Forecast next week's sales
- Estimate price elasticity of demand
- Recommend the optimal price to maximize revenue. The optimal price will be within ±20% of your inputted price

What does the store segment means ?

- Value - Customers focused most on price
- Mainstream - Serve the vast majority between those two extremes
- Upscale - Place their primary emphasis on customer service and finding the extra products they want

How To Use

Please provide the following inputs in the sidebar to see store, product, and price elasticity details:

- Optionally, select one or more store segments to filter Store IDs
- Select a Store ID (mandatory)
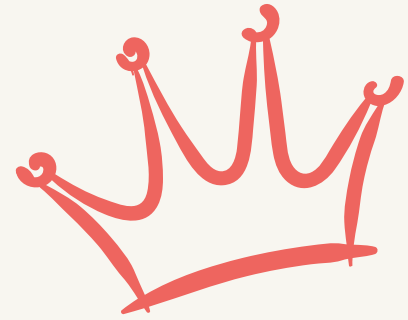
Enhancements & Scalability

Customer behavior prediction

E-commerce platforms & multi-channel retail

Real-time Inventory Tracking

Conclusion

- Data-driven pricing is crucial for FMCG success
- Models enhance pricing decisions & profitability
- Real-time dashboards provide actionable insights