Rugs to Riches : Jaipur Living

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INTRODUCTION – Jaipur Living

❖ Founded in 1978 with 9 artisans

❖ Offers artisan rugs, pillows, poufs, & throws

❖ Currently employs 40000 artisans in 700 villages

❖ Customers : Stores , Sales Agents , Designers ,
        e-commerce

BUSINESS REQUIREMENT

| Business Requirement	To build a tool to predict a new product's success and target the customers accordingly

Problem breakdown

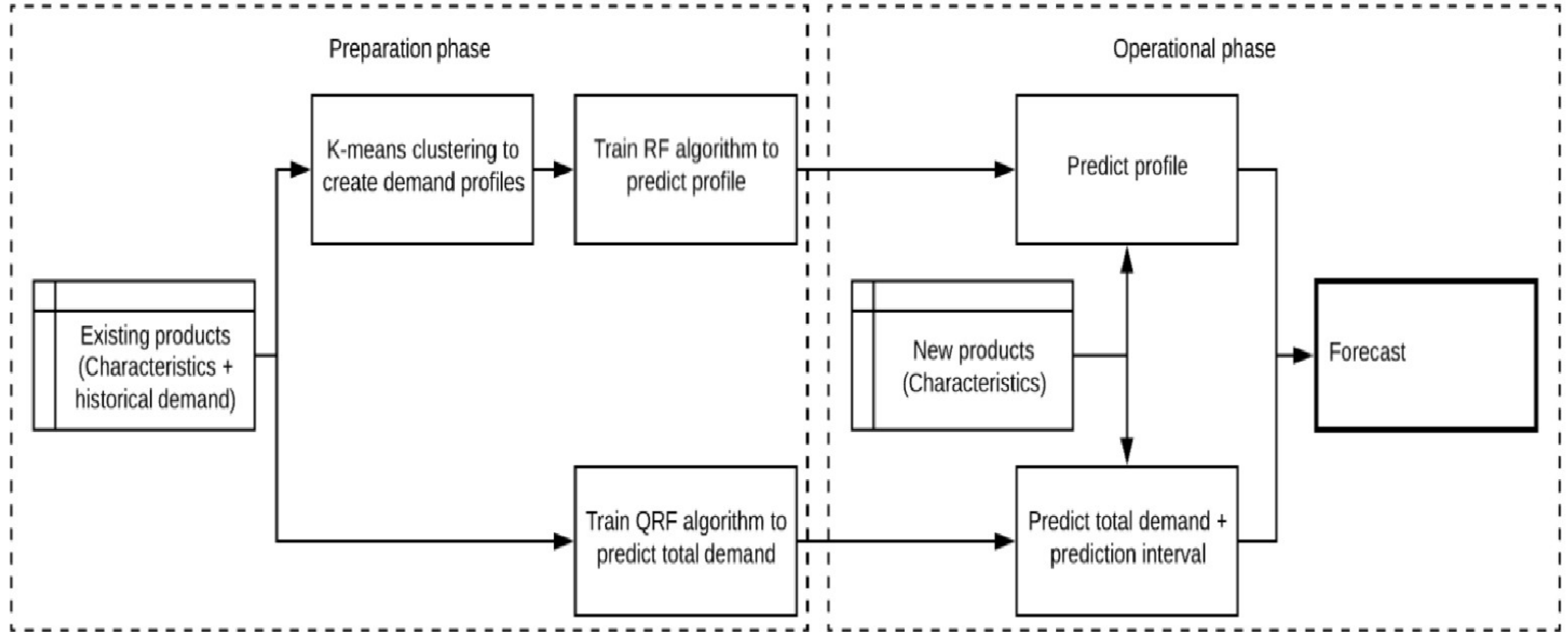Understand how a new product compares to historical products

Customer Segmentation

Understand how JL products would compare against trends found online

DATA SOURCING

❖ Product Dataset – 2 Years

❖ Customer Dataset - 1.1M rows

❖ Image Dataset - Rugs
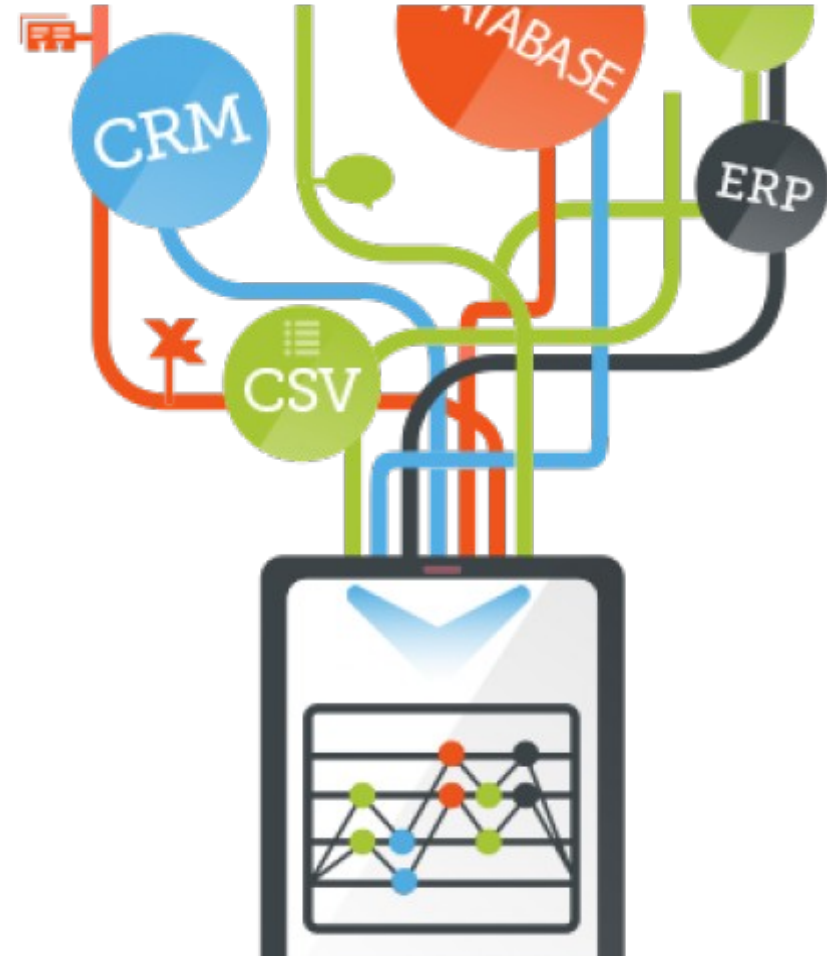
Proposed Solution - How a new product compares to historical products

Proposed Solution - Customer Segmentation

❖ The process of grouping customers into sections of individuals who share common characteristics

❖ Customer Segmentation using RFM analysis - Calculate R, F and M parameters

✓ Recency (R): Who have purchased recently? Number of days since last purchase (least recency)

✓ Frequency (F): Who has purchased frequently? It means the total number of purchases. (high frequency)

✓ Monetary Value(M): Who have high purchase amount? It means the total money customer spent (high monetary value)

❖ Apply k-means clustering algorithm on these parameters to group similar customers.

❖ Apply classification algorithms such as Logistic Regression and Decision Trees to predict future customer behavior

❖ Finally apply recommendation algorithms such as collaborative or content based filtering and Association Rules (Optional)

Proposed Solution - Understand how new products would compare against trends found online

- ❖ Carpet color and Pattern Detection

- ❖ Color Detection – K-means , Adaboost

- ❖ Pattern Detection – CNN