Customer Shopping Trends Analysis

Uncovering purchasing patterns, revenue drivers, and discount usage trends

The Challenge

Hidden Insights

Large volumes of transactional data remain unanalyzed

Objective

Transform raw purchase data into actionable insights

Focus Areas

Age groups, product categories, discount behavior

Project Goals

Analyze Behavior

Python & SQL analysis

Top Products

Identify best sellers

Revenue by Age

Evaluate contributions

Discount Impact

Measure purchase effects

Dataset Overview

3.9K

Rows

18

Columns

Key Fields

- Customer ID, Age, Gender
- Category, Item Purchased
- Purchase Amount, Review Rating
- Discount Applied, Subscription Status

Tech Stack

Python

Pandas, NumPy

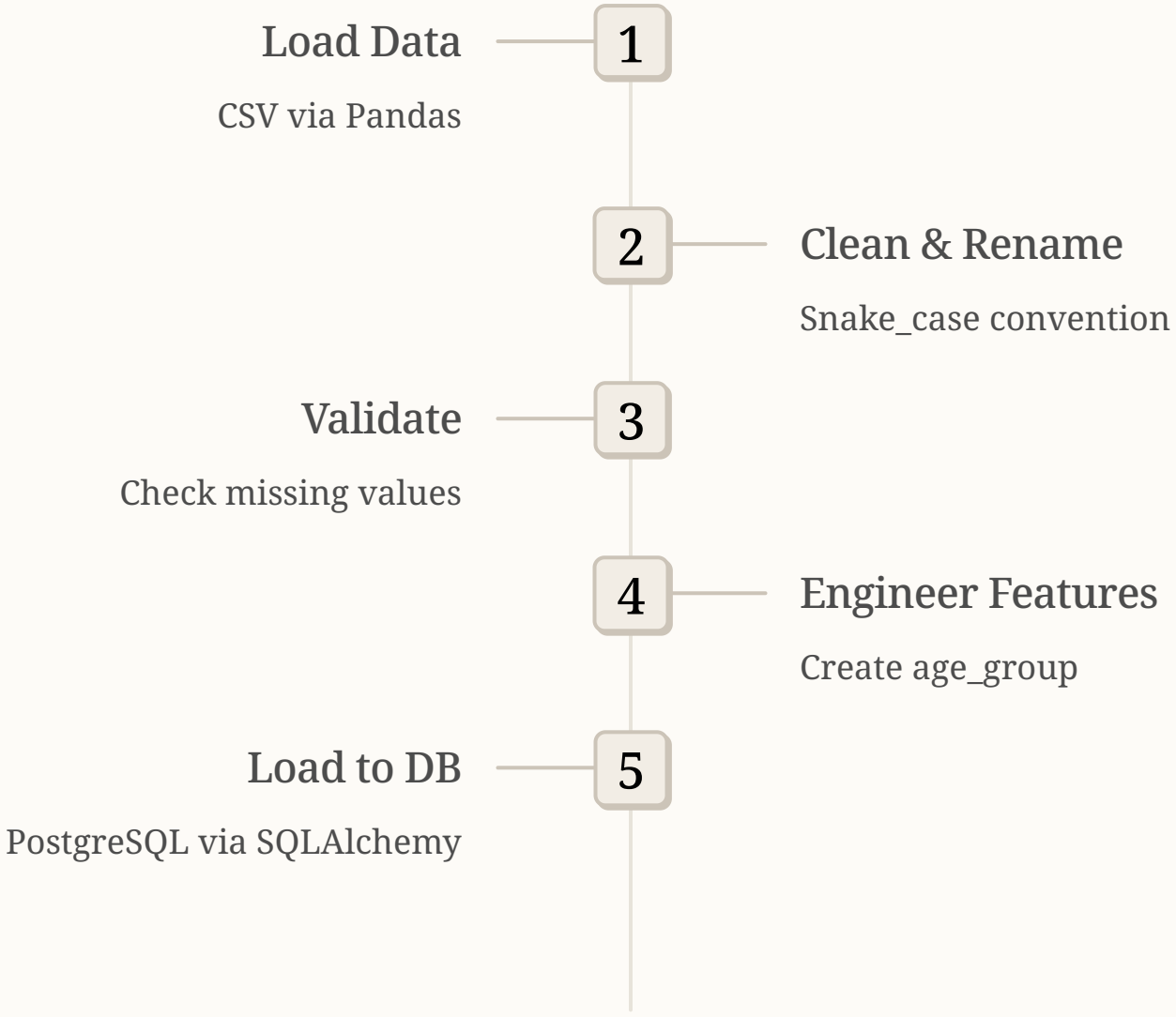
PostgreSQL

SQL Analysis

Power BI

Visualization

Data Preparation Process



Power BI Dashboard

3.9K

Customers

$59.76

Avg Purchase

3.75

Avg Rating

Interactive Filters

- Subscription Status
- Gender
- Product Category

Key Findings

Revenue Leaders

Clothing and Accessories generate highest revenue

Subscription Gap

Majority are non-subscribers — growth opportunity

Age Impact

Certain age groups contribute significantly more revenue

Seasonal Trends

Buying behavior influenced by seasons

Business Recommendations

1 **Prioritize Top Categories**

Focus inventory and promotions on Clothing & Accessories

2 **Boost Subscriptions**

Introduce loyalty benefits and exclusive discounts

3 **Target High-Value Segments**

Personalized marketing for subscribers and repeat buyers

4 **Leverage Demographics**

Customize campaigns by gender and age group

Future Enhancements

Predictive Modeling

Forecast customer behavior

Customer Segmentation

Clustering analysis

Time-Series Analysis

Seasonal forecasting

Cloud Deployment

Power BI Service