



Customer Behavior Analysis

Exploring customer behavior across product categories to uncover purchasing patterns, subscription trends, and review sentiments for strategic business growth.

Project Objective



Analyze Demographics

Understand how customer demographics influence purchasing behavior and satisfaction levels.



Subscription Trends

Examine subscription status impact on customer engagement and loyalty patterns.



Growth Opportunities

Identify actionable insights to support marketing, product strategy, and customer engagement.



Dataset Overview

Data Source

Platform: Kaggle

Size: 19 rows × 3,901 columns

Scope: Comprehensive customer transaction and behavior data

Key Fields

- Customer ID
- Purchase Amount
- Review Rating
- Subscription Status
- Gender
- Product Category



Tools & Technologies



Power BI

Interactive dashboard creation and data visualization.



Excel

Initial data exploration and validation.



SQL

Data extraction and transformation queries.

Data Preparation Process



Data Cleaning

Removed null values, duplicates, and standardized category labels for consistency.



Calculated Measures

Created Average Purchase Amount, Average Review Rating, and Revenue by Category metrics.



Applied Filters

Implemented filters for Subscription Status, Gender, and Product Category analysis.



Dashboard at a Glance

3.9K

\$59.76

3.75

Total Customers

Active customer base
analyzed

Avg Purchase

Average purchase
amount per transaction

Avg Rating

Average customer
review rating



Dashboard Features

1

Subscription Distribution

Pie chart showing subscription status breakdown: 27% subscribed, 73% non-subscribed customers.

2

Revenue Analysis

Bar charts displaying revenue performance across different product categories.

3

Sales Trends

Area chart visualizing sales patterns by category over time.

4

Interactive Filters

Dynamic filtering by Subscription Status, Gender, and Product Category for deeper insights.



Key Insights

Subscription Gap

73% of customers are non-subscribers, revealing significant untapped potential for loyalty programs and recurring revenue.

Category Dominance

Clothing leads in revenue generation, followed by Accessories, indicating strong customer preference in these segments.

Moderate Satisfaction

Average review rating of 3.75 suggests opportunities for improvement in product quality or service experience.

Subscription Status Breakdown



The majority of customers (73%) are not subscribed, presenting a major opportunity to convert them into loyal, recurring customers through targeted subscription campaigns.

Strategic Recommendations

01

Launch Subscription Campaign

Target the 73% non-subscribed customers with compelling loyalty program benefits and exclusive perks.

02

Enhance Product Quality

Address the 3.75 average rating by improving product quality and customer service experience.

03

Expand Top Categories

Invest in Clothing and Accessories inventory and marketing to capitalize on strong customer demand.

04

Personalize Marketing

Use demographic insights to create targeted campaigns that resonate with specific customer segments.

