

Customer Behaviour Analysis for an E-Commerce Store: A Case Study

Introduction

In today's highly competitive e-commerce landscape, understanding customer behaviour is crucial for businesses seeking to enhance their retention strategies and overall performance. This case study delves into an analysis of customer behaviour for an e-commerce store, focusing on key performance indicators (KPIs) such as customer satisfaction, churn rate, and customer tenure. By examining these metrics, we can identify opportunities for improvement that will lead to increased customer loyalty and business success.

Key Metrics

Our analysis identified several key metrics that provide valuable insights into customer behaviour:

- **Average Customer Satisfaction Score:** 3.07
- **Total Number of Complaints:** 1,600
- **Average Customer Tenure (Months):** 10
- **Coupon Usage Rate:** 37%
- **Churn Rate:** 16.89%

Churn Rate

One of the most critical metrics, the churn rate, measures the percentage of customers who discontinue shopping at the store. Currently, the churn rate stands at **16.89%**, which highlights a potential risk in customer retention. Understanding this metric underscores the necessity of monitoring customer satisfaction and addressing issues to reduce attrition.

Churn Rate by City Tier

- **Tier 1:** 14.51%
- **Tier 2:** 19.83%
- **Tier 3:** 21.37%

Average Satisfaction Score by Category

- **Fashion:** 3.11
- **Mobile Phone:** 3.08
- **Grocery:** 3.08

- **Others:** 3.08
- **Laptop & Accessory:** 3.03

Average Customer Satisfaction Score by Gender

- **Female:** 3.13
- **Male:** 3.03

Complaints Made by Payment Mode

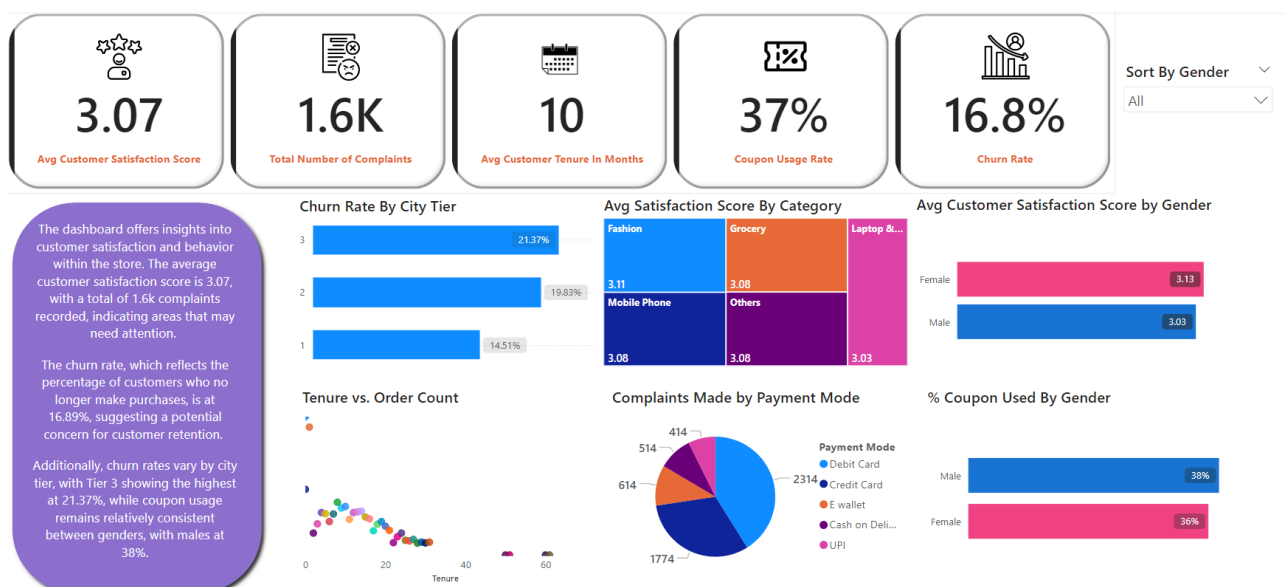
The data revealed insights into customer complaints based on payment methods:

- **Debit Card:** 2,314 complaints
- **Credit Card:** 1,774 complaints
- **E-Wallet:** 614 complaints
- **Cash On Delivery:** 514 complaints
- **UPI:** 414 complaints

Coupon Usage Rate by Gender

Understanding coupon usage can inform marketing strategies:

- **Male:** 38%
- **Female:** 36%



Tenure Analysis

The analysis of customer tenure provides significant insights into purchasing behaviour and retention strategies. Customer tenure, defined as the length of time customers have engaged with the store, ranges from 0 to over 60 months. Our examination of order counts based on tenure reveals interesting trends:

- **Initial Engagement:** Customers with a tenure of **1 month** exhibit the highest order count, with **1,859 orders**. This indicates strong initial interest and activity shortly after acquisition.
- **Decreasing Engagement:** As tenure increases, we observe a noticeable decline in order count. For example, customers with a tenure of **2 months** placed **321 orders**, while those with **10 months** showed an order count of **706**. This trend suggests that, although some engagement remains, the frequency of purchases diminishes over time.
- **Long-Term Customers:** The data indicates a sharp drop in order count as tenure reaches **50 months or more**, with only **2 orders** for customers at **50 months**, **1 order** for **60 months**, and **2 orders** for **61 months**. This decline points to challenges in retaining long-term customers and highlights the need for strategies to maintain interest and encourage repeat purchases.

The analysis suggests that while new customers demonstrate strong engagement initially, their interest may wane over time. Therefore, it's imperative to develop targeted retention strategies that focus on maintaining long-term customer relationships through ongoing engagement, personalised marketing efforts, and loyalty programs.

Conclusion

The insights derived from this analysis offer a comprehensive overview of customer behaviour and satisfaction within the e-commerce store. By addressing the factors contributing to churn and enhancing the overall customer experience, the store can improve retention rates and foster long-term loyalty. Implementing strategies based on these findings will be crucial for sustained growth and success in the competitive e-commerce landscape.

What I Learned

Throughout this project, I honed my skills in DAX functions and data cleaning with Excel. These tools allowed me to manipulate and analyse data effectively, enabling me to draw meaningful insights that can drive strategic decisions for improving customer satisfaction and retention. By applying these skills, I gained a deeper understanding of the importance of data-driven decision-making in the e-commerce industry, laying a solid foundation for future analysis and projects.