

E-Commerce Marketing Analysis

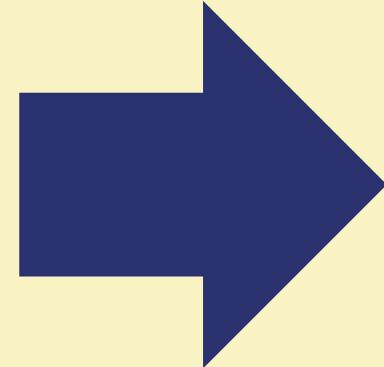
By - Samiksha





Contents

01. Introduction
02. Objectives
03. Dashboard
04. Exploratory Data Analysis (EDA)
05. Analysis
06. Recommendation
07. Conclusion



Introduction

In this dynamic e-commerce marketing Analysis, understanding customer behavior and market trends is paramount for success. This comprehensive analysis delves into various facets of e-commerce operations, from customer orders to seller performance, offering invaluable insights. By leveraging these insights, businesses can craft targeted marketing strategies, optimize revenue streams, and elevate the overall customer experience, positioning themselves for sustained growth and competitive advantage in the e-commerce market.



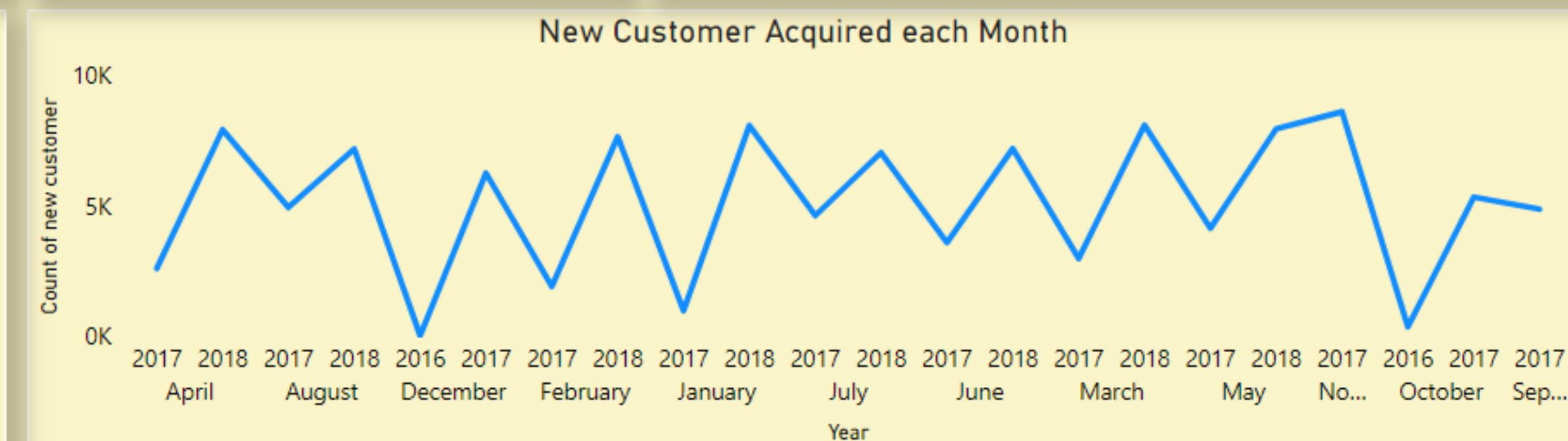
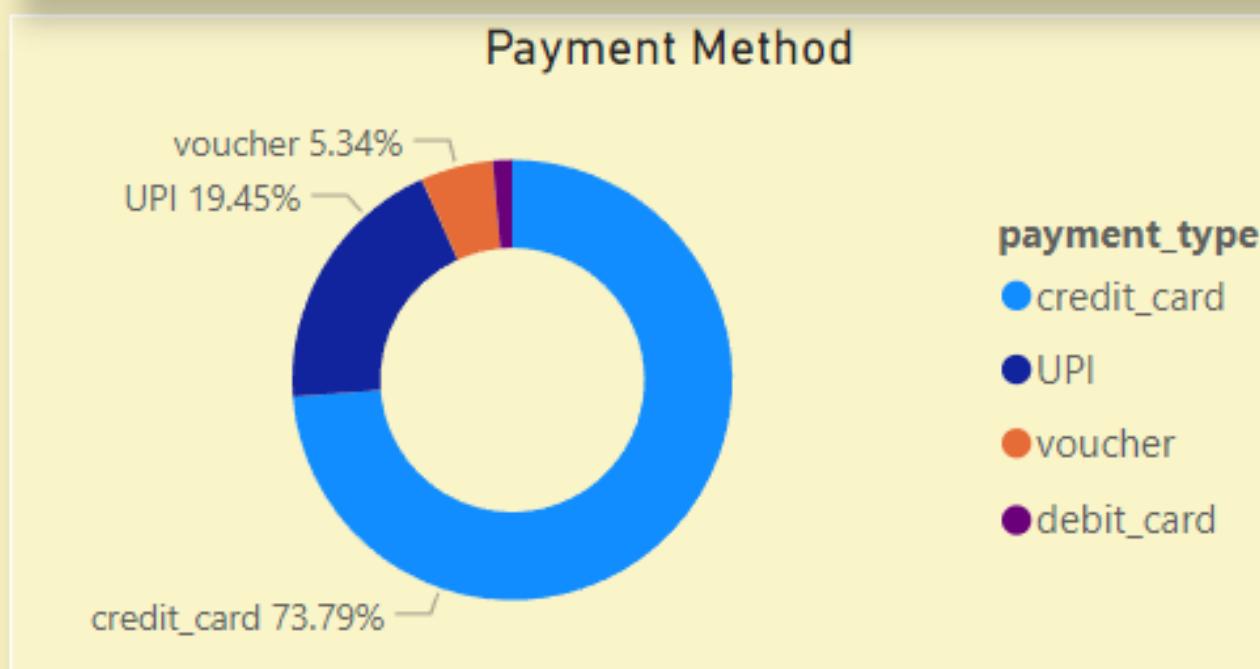
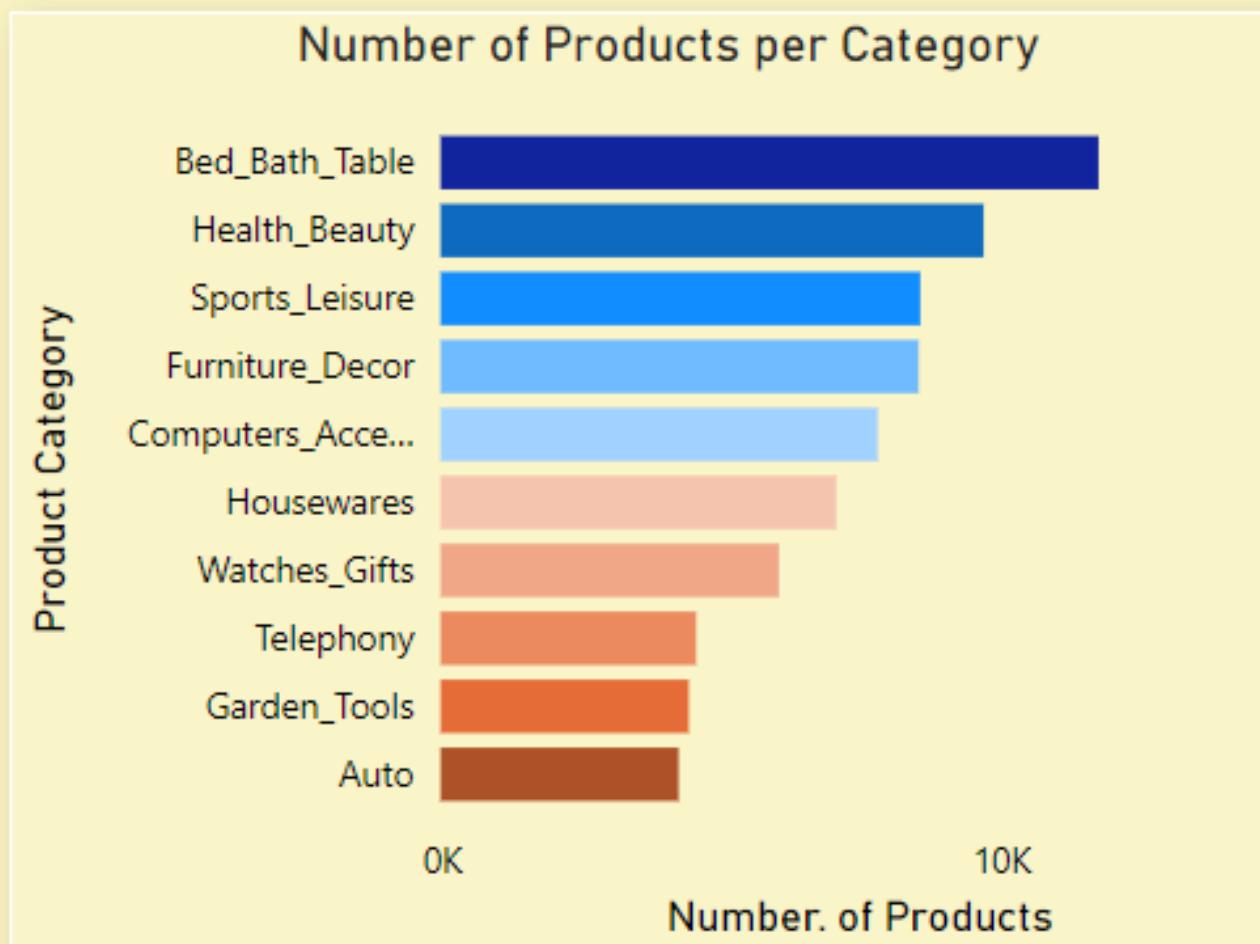
Objectives

1. Customer Segmentation: Segment customers based on revenue to tailor marketing strategies effectively.
2. Revenue Optimization: Explore opportunities to increase revenue through targeted marketing and product offerings.
3. Operational Efficiency: Identify inefficiencies and address canceled orders for streamlined operations.
4. Customer Experience Enhancement: Enhance customer experience through personalized offers and efficient order processing.
5. Market Expansion: Explore new markets based on geographical insights and customer demographics.



E-Commerce Marketing Analysis

Total Revenue	Total Quantity	Total ID	Total Category	Total State
19.16M	248K	31.04K	71	20



Exploratory Data Analysis (EDA)

01.

Data Loading and Merging

- Data from multiple sources (e.g., customers, orders, products, sellers, payments, reviews, and geographical locations) are loaded into DataFrames.
- DataFrames are merged based on common columns to create a comprehensive dataset



02.

Data Cleaning

- Missing values are handled by dropping rows with any null values.
- Date and time columns are converted to datetime format for analysis.



03.

Trend Analysis

- Trends and seasonality of sales, quantity by category, location, month, time, and payment method are explored.



04.

Descriptive Statistics

- Various descriptive statistics are calculated, such as total revenue, total quantity, total products, total categories, total sellers, and total locations.



05.

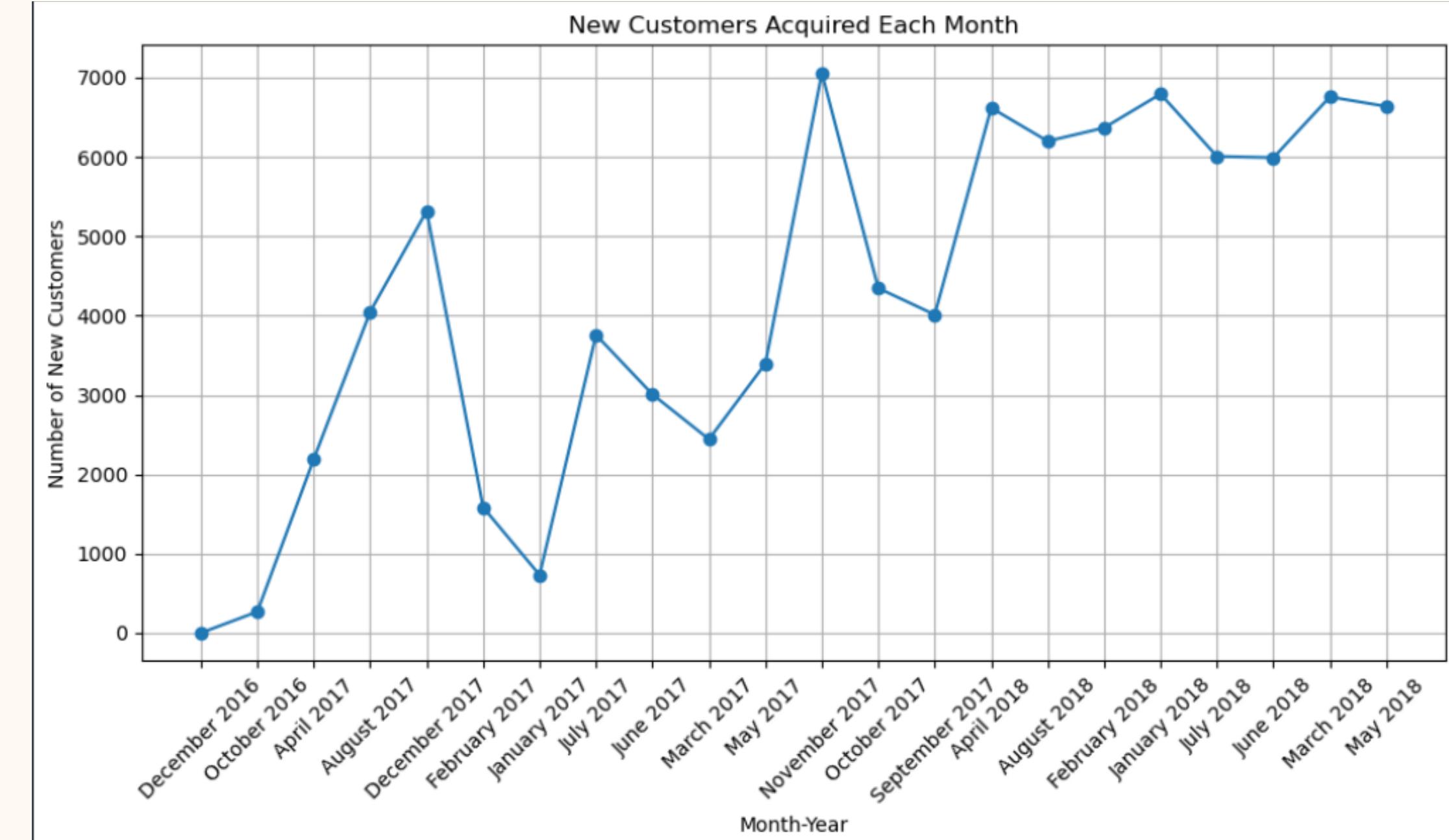
Customer Analysis

- New customers acquired each month are tracked to understand customer acquisition trends.
- Customer segmentation based on revenue generated is performed to categorize customers into different groups.

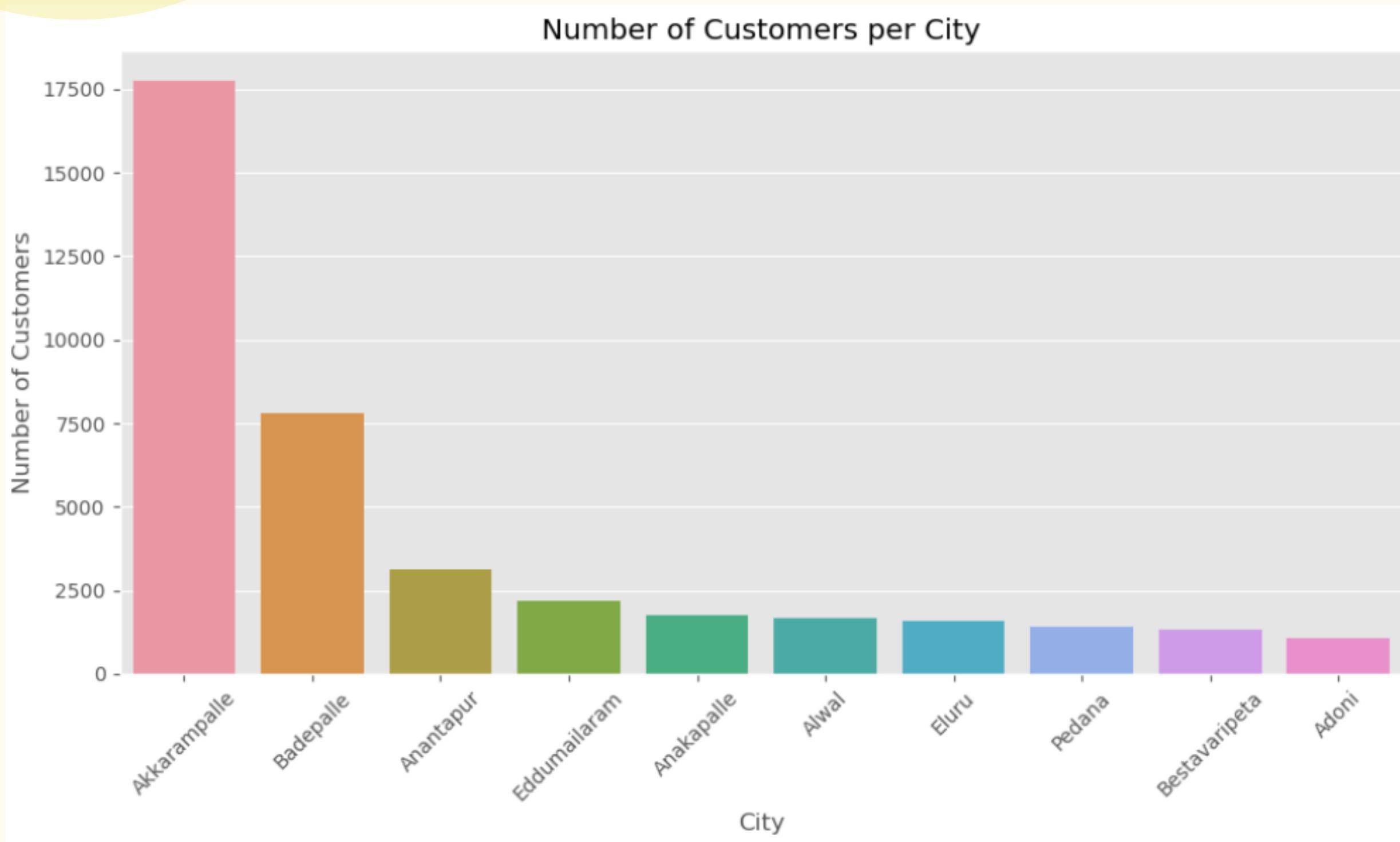


New Customers Acquired Each Month

November 2017 saw the highest influx of new customers, indicating a potential surge in demand or effective marketing initiatives during that period



Customer per city

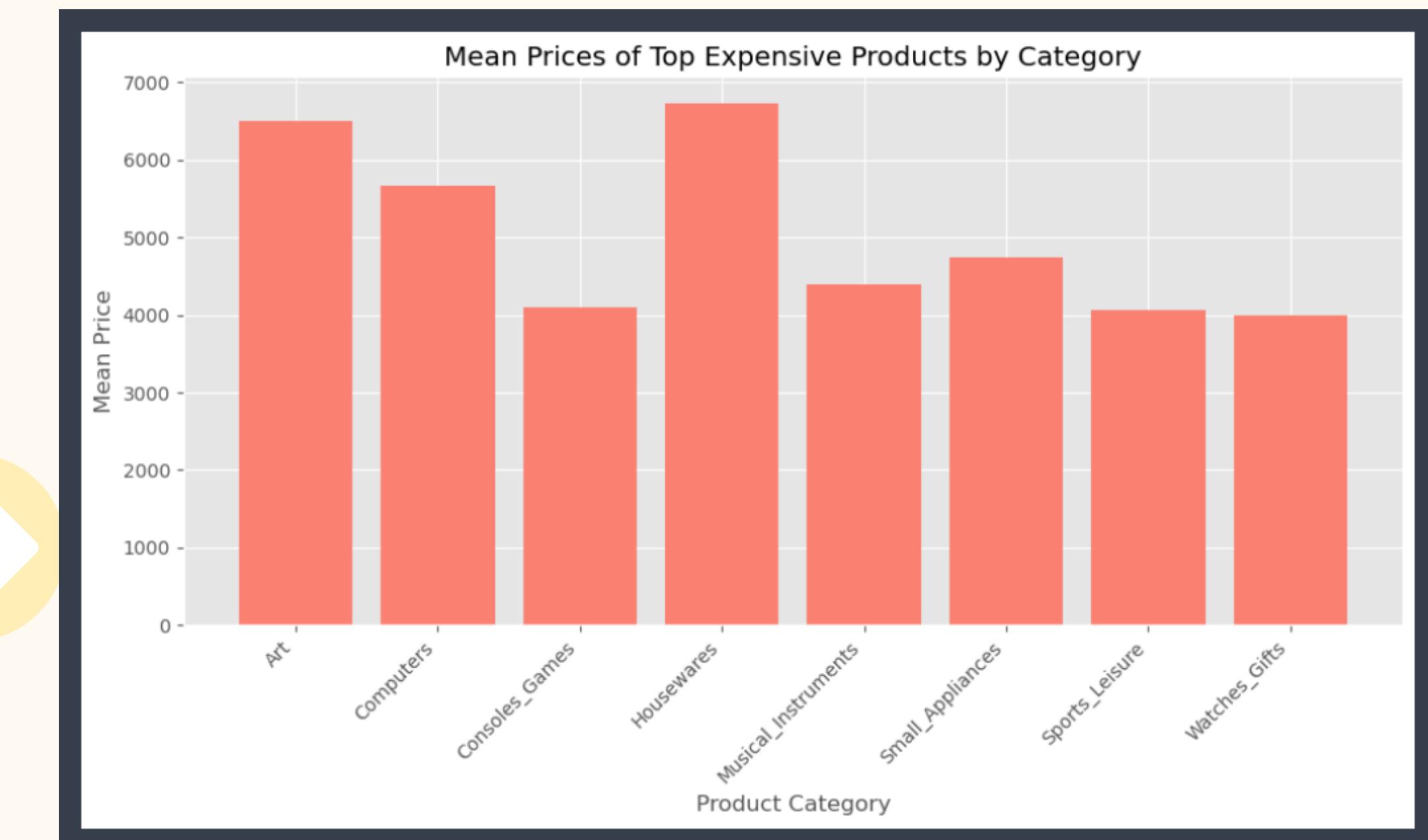


"Akkarampalle and Badepalle" are prominent cities with a significant customer base, suggesting potential areas for localized marketing strategies and service optimization to cater to their needs effectively.

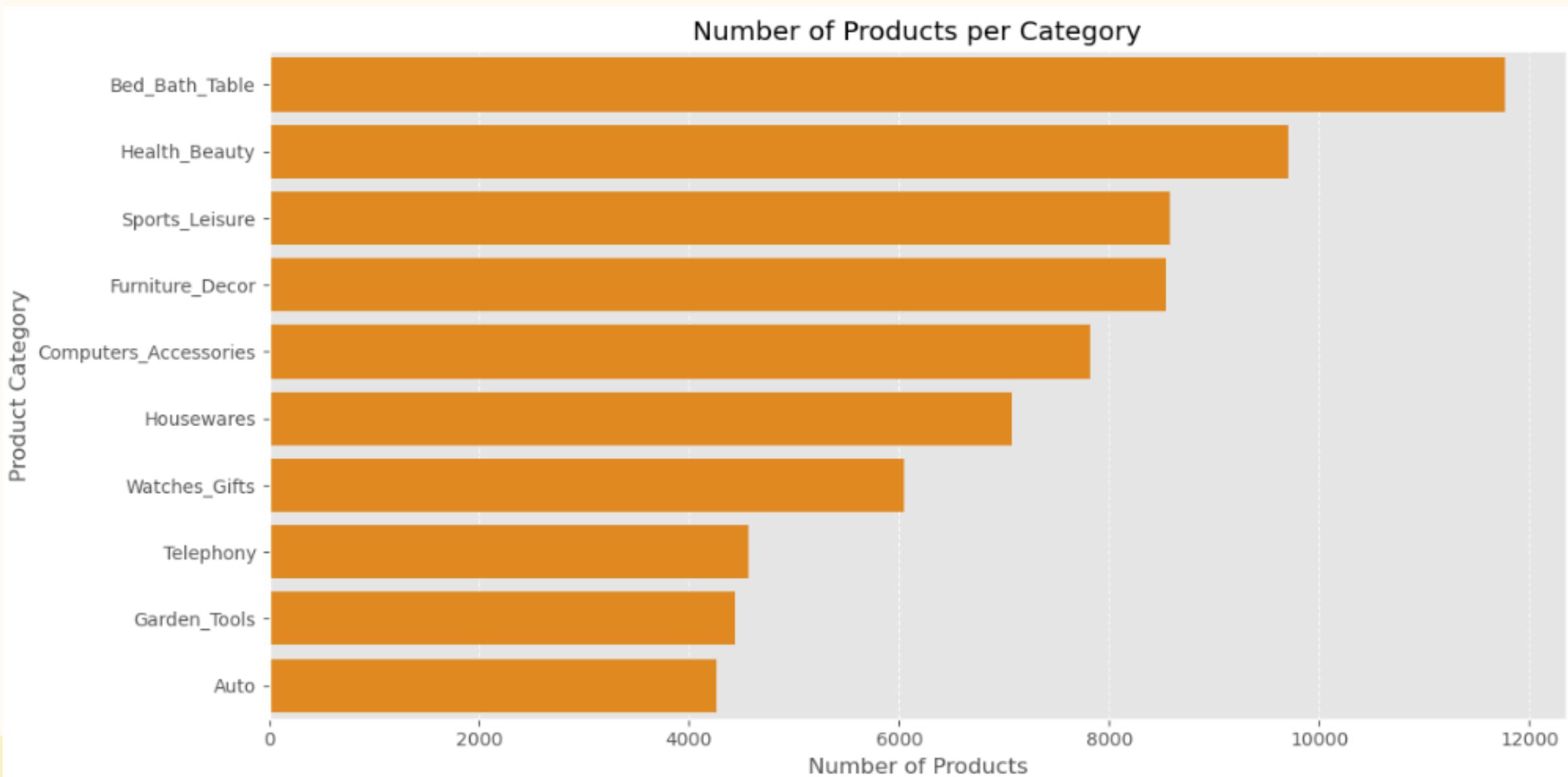


Top Expensive Products

Housewares exhibit a notably high average price of \$6735.00, suggesting premium quality and potential market demand for luxury home-related products within this category.



No. of products

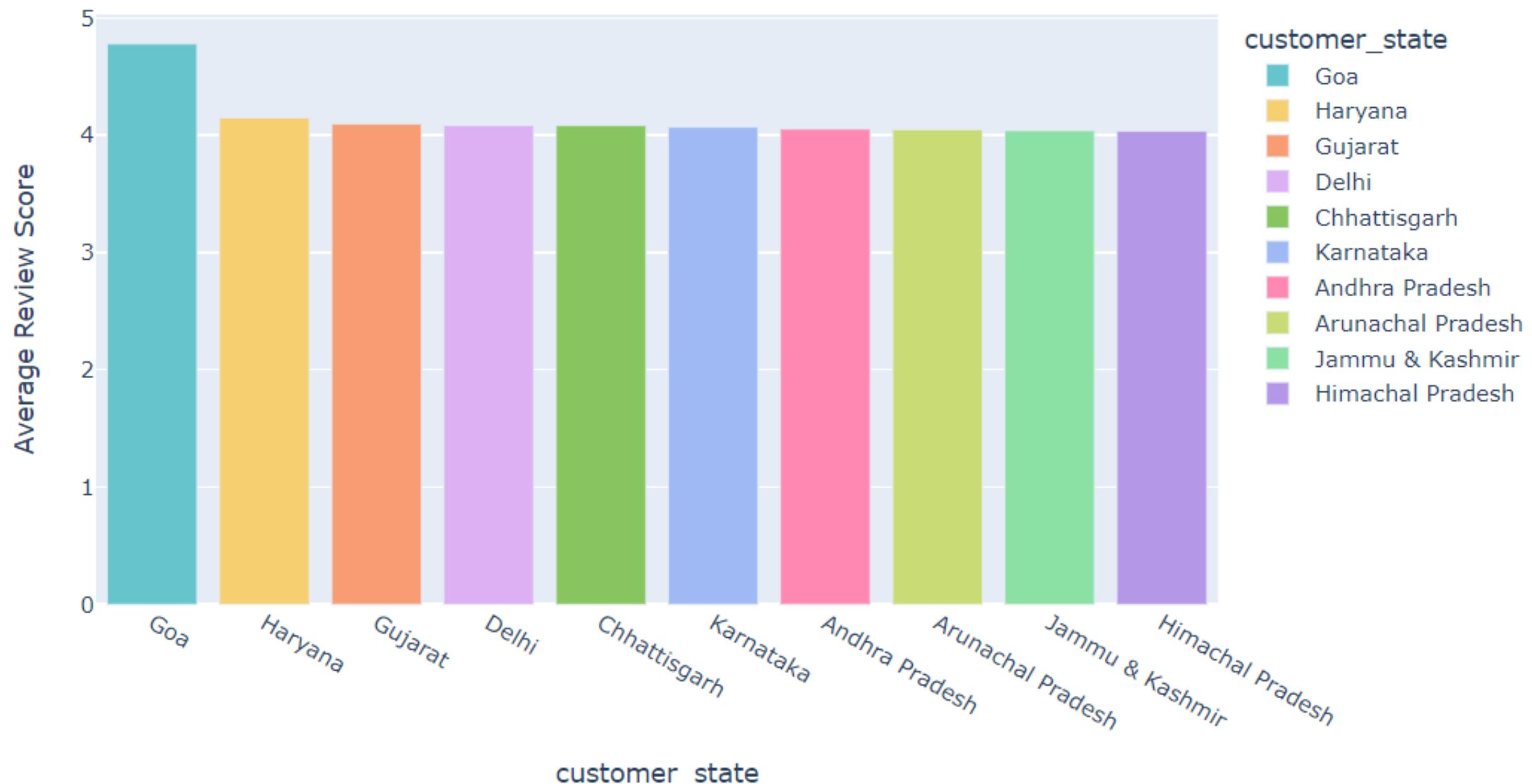


"Bed Bath Table" emerges as a popular product category, suggesting opportunities for targeted marketing and efficient inventory management to capitalize on customer demand.



Average Review by State

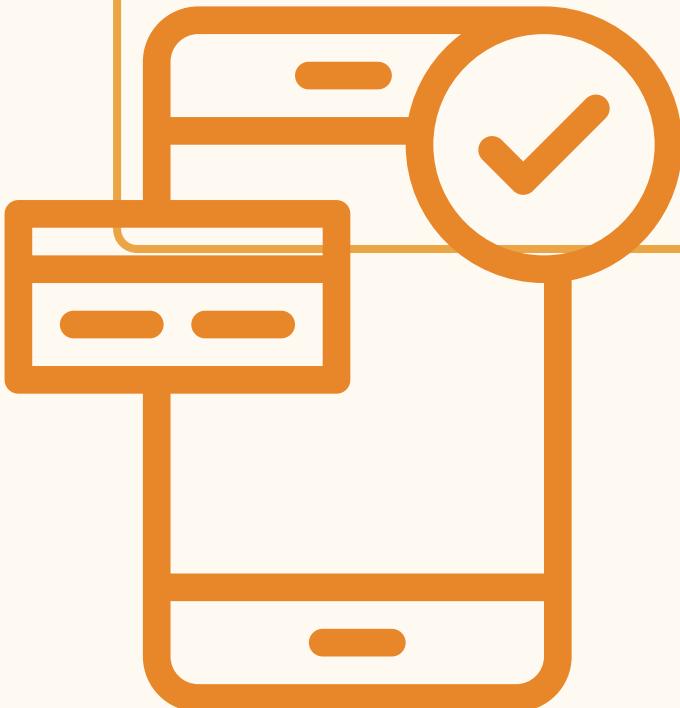
Average Review Score by Customer State



Goa boasts high average review scores, signaling exceptional customer satisfaction. This reflects the region's commitment to quality service and enriching customer experiences, cementing its reputation as a premier destination.

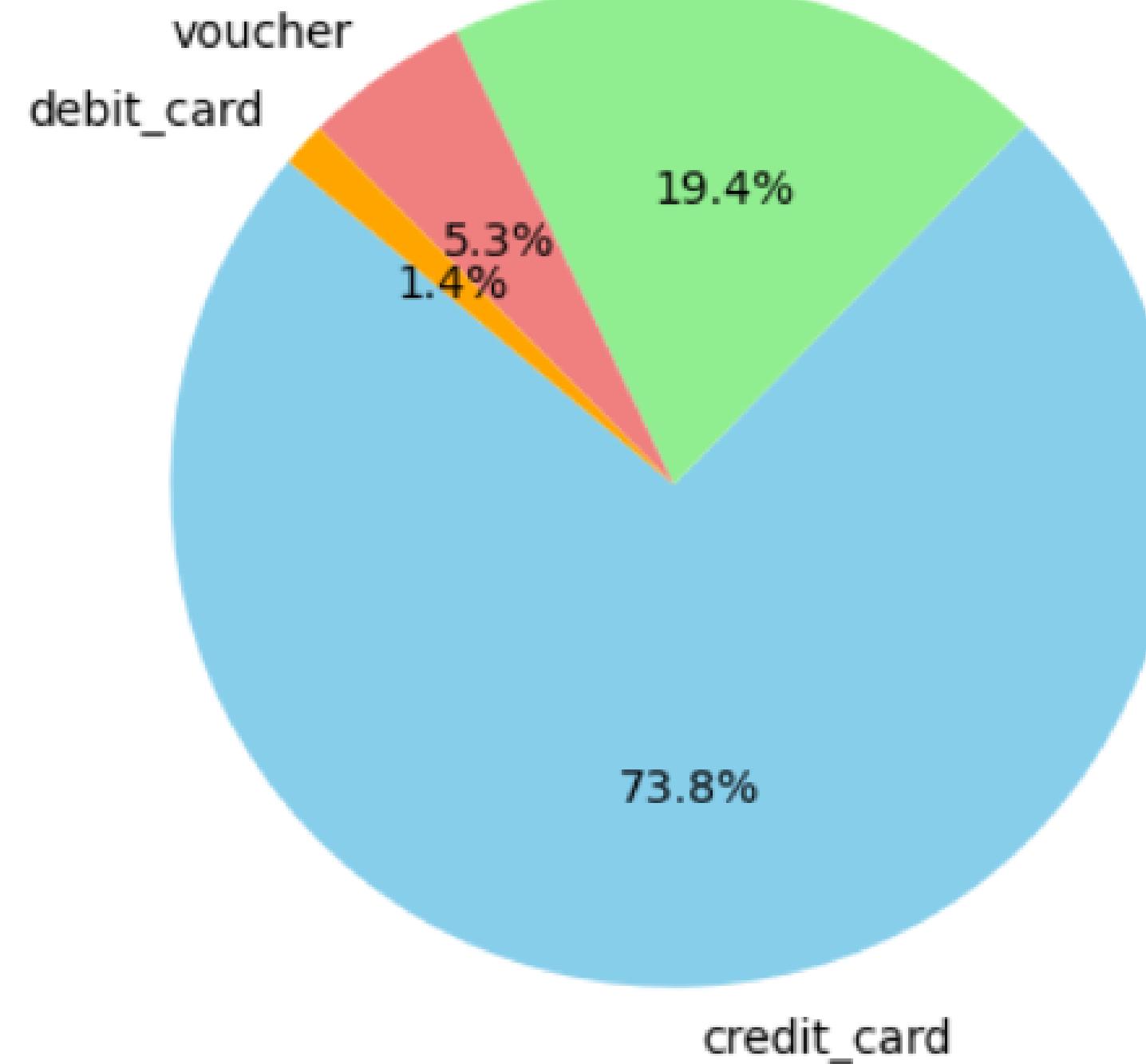
Payment Method

Credit card facility was predominantly utilized for payments, indicating its popularity among customers as the preferred payment method during transactions.



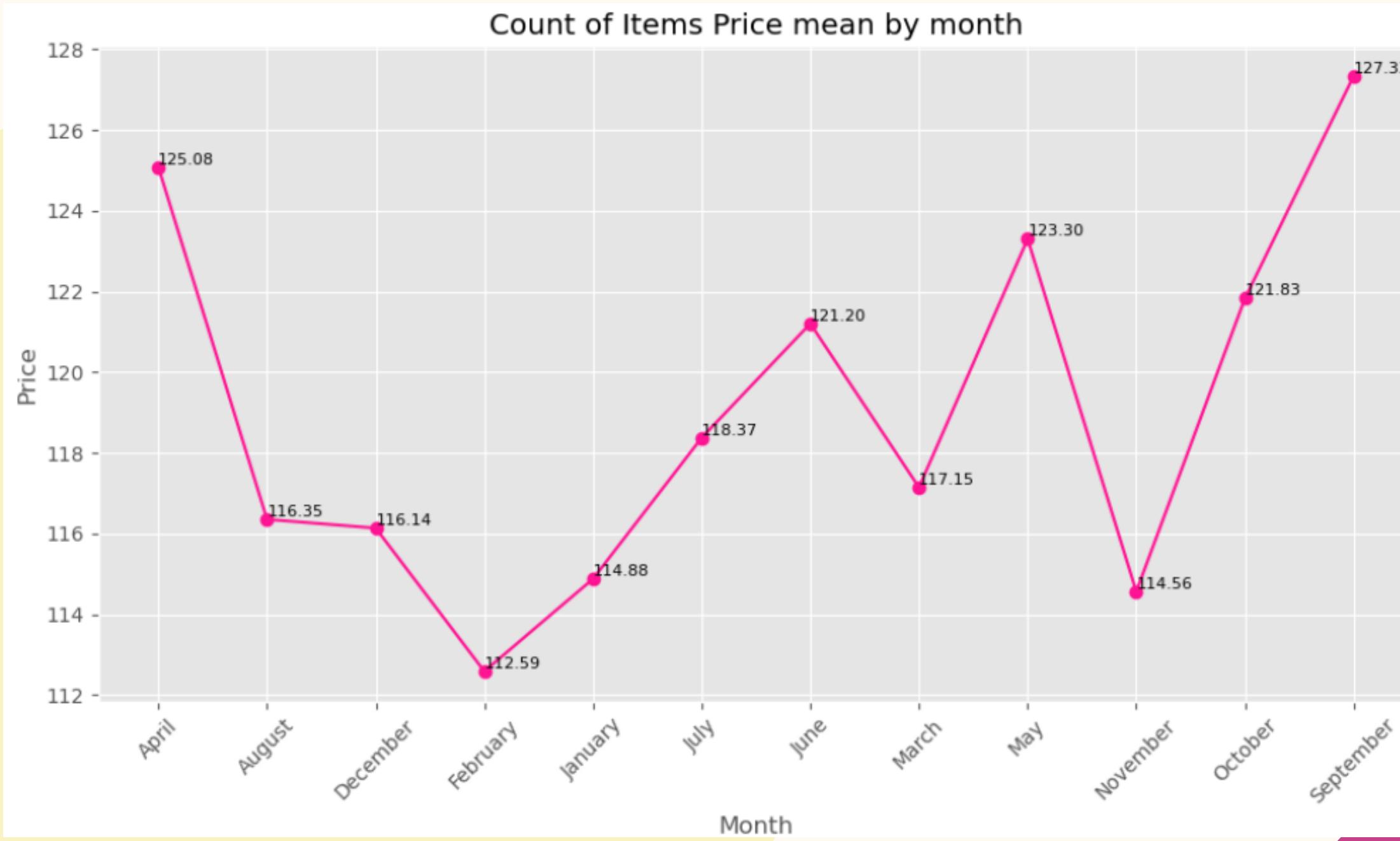
Payment Method Distribution

UPI



Monthly Prices

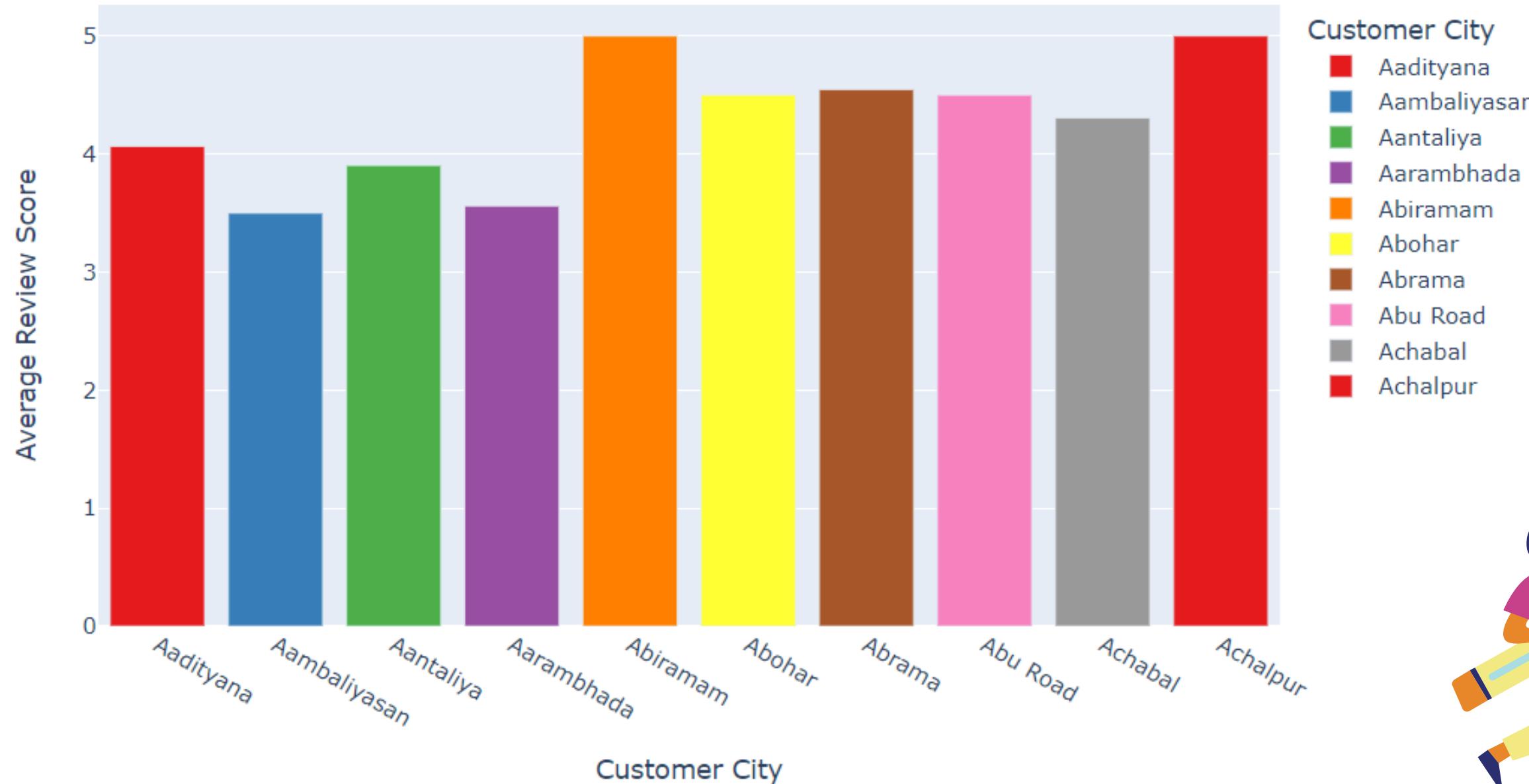
The average price of items exhibited a low in February but surged notably in September, reflecting potential seasonal fluctuations and consumer purchasing patterns throughout the year.



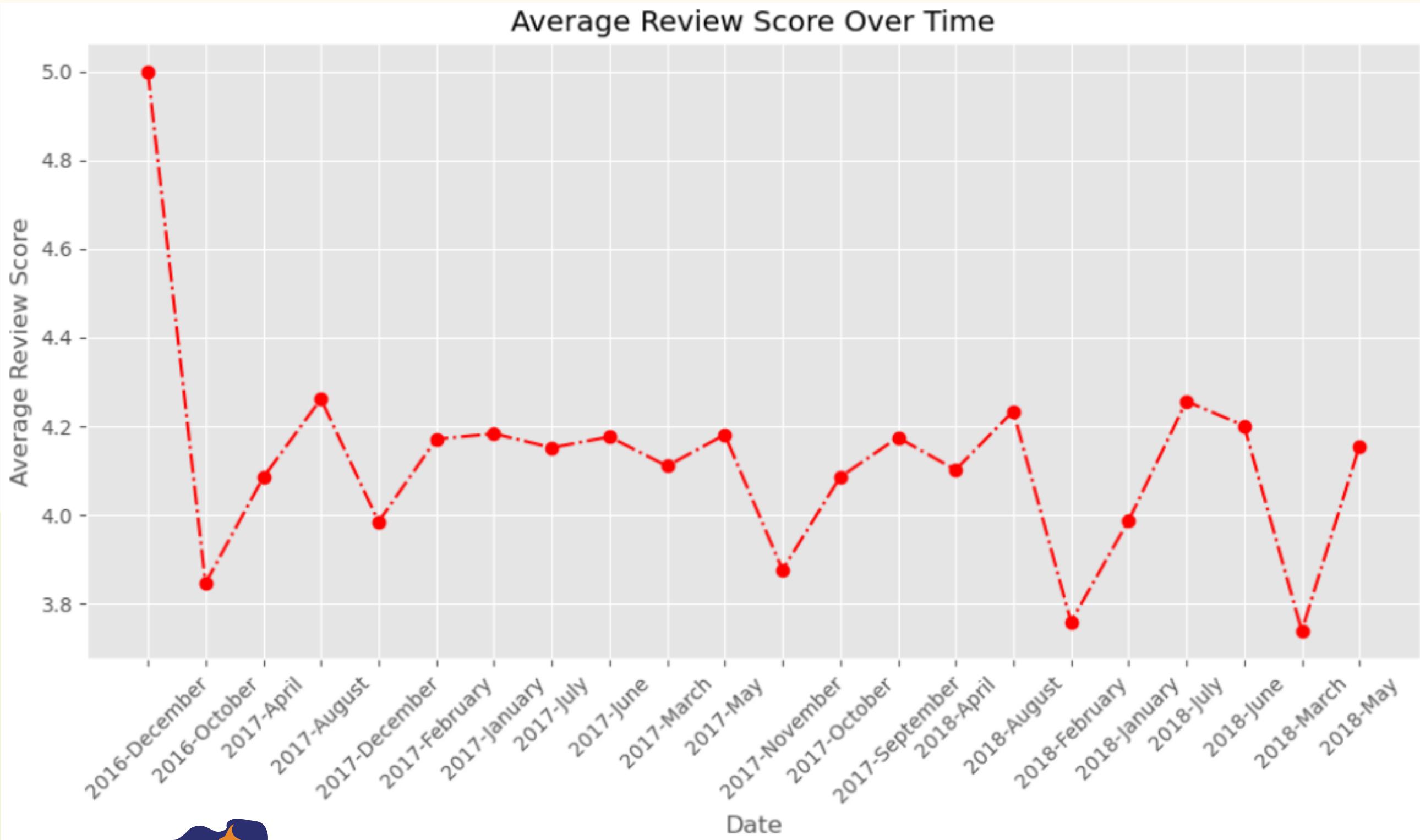
Review Score by City

Abiramam and Achalpur demonstrate the highest average review scores, implying exceptional customer satisfaction levels and potential areas for targeted marketing and service enhancements.

Average Review Score by Customer City



Average Review Score Over Time



Average Review Over Time



- In August 2017, the average review score reflects customer satisfaction levels during that period, providing insights into service quality and product satisfaction trends.
- Monitoring review ratings over time and across various dimensions allows for proactive management of customer satisfaction and brand reputation. Addressing negative trends promptly is crucial for maintaining customer loyalty and trust.



Recommendation

Diversify Payment Methods

Offer a variety of payment options to cater to diverse customer preferences and increase convenience.

Focus on Popular Product Categories

Allocate resources and marketing efforts towards promoting and expanding popular product categories to capitalize on existing demand.

Leverage Geographic Insights

Tailor marketing strategies and product offerings based on geographical data to effectively target specific regions and customer segments.

Optimize Supply Chain and Logistics

Streamline logistics for improved efficiency and delivery times.

Invest in Customer Relationship Management (CRM)

Utilize CRM tools for personalized customer interactions.

Monitor Reviews

Actively monitor customer reviews and feedback to address concerns, improve product offerings, and maintain a positive brand reputation.

Enhance Customer Service

Invest in customer support resources and processes to ensure timely resolution of issues and maximize satisfaction.

Embrace Technology

Stay updated with technological advancements and innovations to remain competitive and offer cutting-edge solutions to customers.

Conclusions

The analysis unveiled vital insights into customer behavior, revenue generation, and product popularity. Strategic recommendations, such as diversifying payment methods and prioritizing popular product categories, seek to bolster customer satisfaction and fuel revenue growth. These findings serve as the bedrock for enhancing operational efficiency and elevating the customer experience in the e-commerce realm. By implementing these recommendations, businesses can position themselves for sustained success, adapting to evolving consumer preferences and market dynamics while fostering long-term relationships with their clientele.



THANK YOU

<https://github.com/sam18s/E-Commerce-Analysis>

BY SAMIKSHA

