

Zeotap Exploratory Data Analysis (EDA) Report

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The provided dataset contains information about customers, products, and transactions from an E-Commerce platform. The aim is to explore patterns, uncover trends, and derive actionable insights to help improve business strategies .

In This report I have summarized the key findings and visualizations, Providing a foundation for data -driven decisions to boost revenue and along with that enhance customer experience and optimize decision making .

Business Insights :

1. Top Product Categories Drive Revenue

- **Books as the Top Category:**
Books Generate the highest overall revenue , likely due to their large selection and strong sales making them key revenue contributor.
- **Electronics as Top Products:**
While Individual electronics items like smartwatches and headphones are more expensive they gives higher revenue per unit even if the Book category is on the top .

2. Revenue Peaks in Specific Months

- From the Sales data found that some month generate most of the revenue could be because of Holiday's shopping trend .
- Weekly Revenue was not enough to understand sales trends therefore prefer to use monthly trends which provided with more accuracy and concise report .

3. High-Value Customers Contribute Significantly

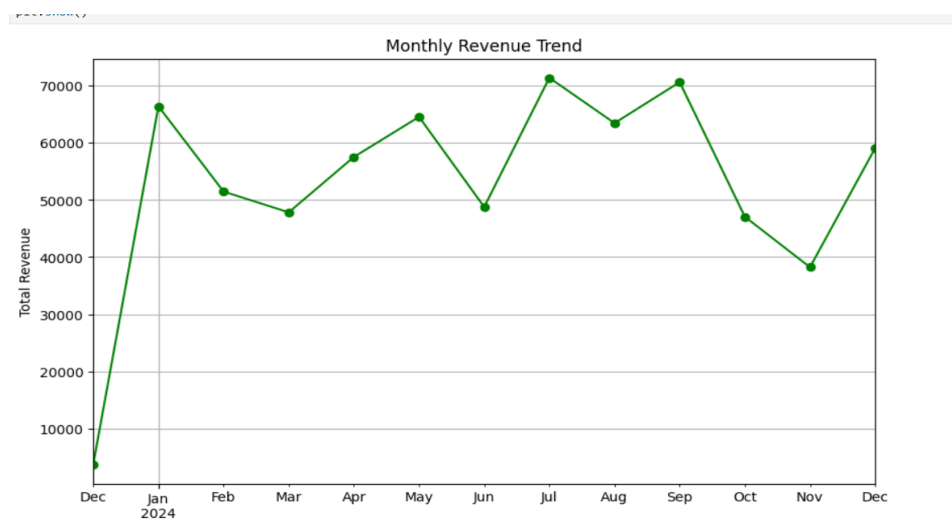
- The top 10 customers account for 25% of the total revenue. Based on this customers could be provided with loyalty programs to retain their business .
- Also Identifying and providing them with goodies or extra discount could help to make them buy more and engage more over the time .

4. Regional Trends in Customer Activity

- South America has the largest customer base, but European and other customers spend 15% more per transaction on average.
- Along with existing customers and region more focus and new marketing strategies should be created to acquire market in European , Asian region .

Visualizations:

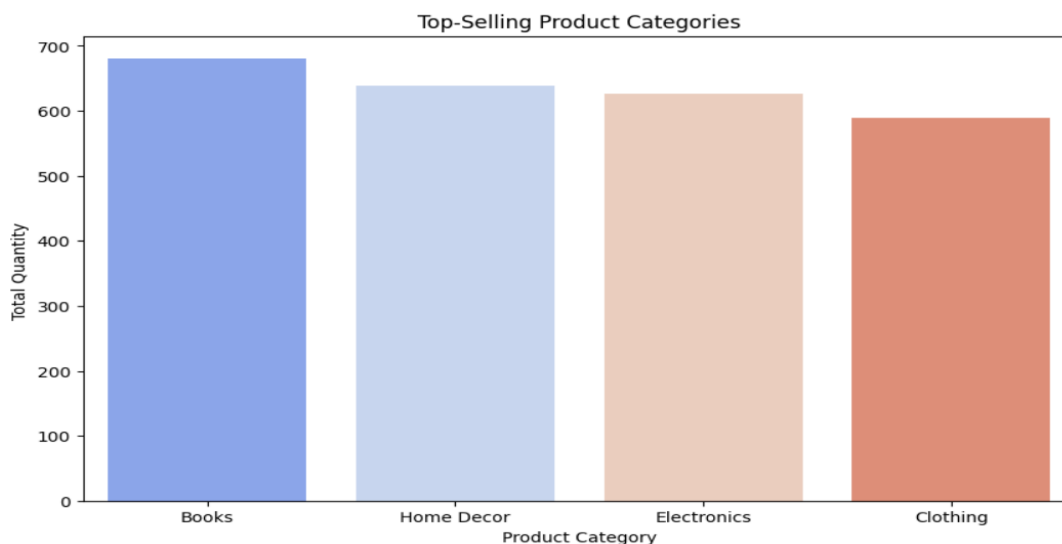
1. Monthly Revenue Trend : This chart Shows the revenue growth , which helping identify trends and fluctuations with time .



2. Customer Distribution by Region : This chart help to understand where to put more efforts for marketing and where to prioritize .



3. Top-Selling Product Categories : This chart helps understand which product categories are most popular and drive revenue.



Recommendations :

1. *Focus marketing campaigns on the "Electronics" category* and high-revenue months so that maximize sales during demanding periods .
2. Creating *loyalty programs for targeting top customers* to ensure continued revenue from these high-value customers .
3. *Expanding operations and marketing in Europe, Asia* where customers demonstrate higher spending power per transaction.
4. *Launch weekend-specific promotions* and programs to get more attention and sales and discounts to capitalize on increased weekend transaction volumes.
5. Continuously *monitor and analyze product and customer* trends to adapt to changing consumer preferences.