

Exploratory Data Analysis Report

Introduction

Exploratory Data Analysis (EDA) is a fundamental step in data science, where we examine datasets to summarize their main characteristics. The goal is to extract meaningful insights to inform business decisions.

This report focuses on analyzing customer demographics, product categories, and transaction trends in an e-commerce dataset.

Key Findings

1. **Customer Regions:**

- Customers are globally distributed, with South America leading (59 customers), followed by Europe (50 customers).

2. **Product Categories:**

- Books and Electronics dominate the catalog, each contributing 26% of the offerings.

3. **Transaction Trends:**

- Transactions peaked in January 2024, with over 100 recorded. December 2023 had the least activity (4 transactions).

Conclusion

The EDA highlights opportunities for regional marketing strategies and seasonal promotions. Insights into product popularity can guide inventory planning and targeted advertising.