

Business Insights from the Exploratory Data Analysis (EDA) on eCommerce Transactions Data

Data Overview

- Company - Online retailers
- Product-Categories for selling – Electronics, Books, Home Décor, Clothing
- Customers – Customers registered during the years 2022,2023 and 2024
- Transactions Period – 30th Dec 2023 - 28th Dec 2024 (363 days)

Objectives

Exploratory Data Analysis (EDA) is performed on the eCommerce transactions data obtained online retail to discover interesting transactional patterns of different customers and regions.

Results

1. The only customer who signed up but didn't make any transaction is Amy Carpenter whose region is Asisa. More advertisements and signed up customer feedback have a chance to provide solution for this type of situation.
2. The highest number of orders were taken on January 2024.
3. Number of users who brought the lowest-priced items are 8 as well as users who brought the highest-priced items are 10, which means quality and trend matters the most rather than price.
4. The customer with the highest number of orders comes from South America.
5. The customer with the highest money spent on purchases also comes from South America.
6. Top most purchased item's Productid: P059 from clothing category with 19 transactions and least purchased are with Productid: P014, P031, P099, P044. Most purchases are done from the Categories-Home Décor and Books. Least purchased products status is better to be rechecked.
7. Highest number of customers are signed up during 2024 compared to 2022 and 2023.
8. Highest purchase hour is recorded as 2pm also afternoon have more orders Compared to morning.
9. Highest number of orders are placed on Tuesday, Wednesday and Thursday.