

TASK 1: Exploratory Data Analysis (EDA) and Business Insights

Here are five business insights that can be derived from an exploratory data analysis (EDA) for a customer transaction dataset.

1. High-Value Customers are Key

Customers who make more purchases and buy different products are the biggest contributors to sales. These top customers should be prioritized with special offers and loyalty programs.

2. Popular Products Go Together

Some products are often bought together, which shows opportunities for bundling. Businesses can recommend these pairs to increase sales.

3. Sales Follow Seasonal Trends

Sales spike during certain times, like holidays or weekends. Preparing for these busy periods helps meet demand and boost profits.

4. Some Customers Aren't Engaged

There are groups of customers who buy less or stop buying altogether. Targeting these customers with re-engagement strategies can bring them back.

5. Risk of Losing Customers

Customers who buy less over time are at risk of leaving. Offering discounts or special deals could keep these customers and reduce churn.