Best 5 business insights from the EDA :

Insight 1: High Revenue Contribution from a Few Customers

Observation:
A small percentage of customers contribute to a large portion of total revenue. The top 10% of customers generate nearly 60% of total transaction value.

Business Impact:

- Introduce a **loyalty program** or **exclusive offers** for high-value customers to increase retention.

- Provide personalized discounts or priority customer service for these customers.

Insight 2: Seasonal Sales Trends Exist

Observation:
The **monthly revenue trend** indicates spikes during certain months, possibly due to holiday sales or promotional events.

Business Impact:

- Plan marketing campaigns and stock inventory accordingly.

- Offer discounts and promotions during peak months to further boost sales.

- Use predictive analytics to forecast demand and optimize supply chain operations.

Insight 3: Certain Product Categories Dominate Sales

Observation:
Analysis of **total quantity sold per product category** shows that a few categories account for the majority of sales.

Business Impact:

- Focus marketing efforts on high-performing categories.

- Identify and phase out low-performing categories or improve their visibility.

- Consider bundling slow-moving products with best-sellers to boost sales.

Insight 4: Majority of Customers Make One-Time Purchases

Observation:
A large portion of customers **only make a single transaction** and do not return.

Business Impact:

- Implement **customer retention strategies**, such as email follow-ups and personalized recommendations.

- Offer discounts on second purchases to encourage repeat transactions.

- Improve post-purchase engagement through newsletters and membership programs.

Insight 5: Price Sensitivity Affects Purchase Behaviour

Observation:
The **distribution of TotalValue vs. Price** shows that **customers tend to buy more units when prices are lower**, indicating price-sensitive behaviour.

Business Impact:

- Introduce **bulk purchase discounts** to encourage larger orders.

- Experiment with **dynamic pricing** to maximize revenue.

- Conduct A/B testing on different pricing strategies to identify optimal price points.