Business Insights from eCommerce Transactions Data

1. No Missing or Duplicate Data: The dataset is well-structured, with no missing values or duplicate records. This ensures that the analysis is accurate without requiring additional data cleaning. A clean dataset allows businesses to make informed decisions without concerns about data integrity issues.

2. Best-Selling Products & Pricing Trends: The average product price is around $272, while the highest-priced product costs about $497. Most popular products fall within the mid-to-high price range. This suggests that customers are willing to pay more for certain products, particularly in high-demand categories. Businesses should ensure that these products remain in stock to maximize revenue. Additionally, introducing promotional discounts on mid-range products can attract budget-conscious buyers and further boost sales.

3. Customer Spending & Order Quantity: Most customers buy between 2 to 4 items per transaction, with a median quantity of 3. This indicates that customers are comfortable purchasing multiple items at once. To capitalize on this, businesses can implement bulk purchase discounts, such as "Buy 3, Get 1 Free" offers or tiered pricing strategies. Such incentives could encourage larger orders and improve overall sales volume.

4. Sales Revenue Distribution & Purchase Behaviour: Total transaction values range from as low as $16 to nearly $2000, with an average transaction value of about $690. This suggests that a mix of small and large transactions contributes to total revenue. High-value transactions indicate the presence of premium product buyers, while lower-value purchases highlight a segment of budget-conscious shoppers. Businesses can create targeted marketing strategies for each segment, offering luxury promotions for high-spenders and bundle deals for price-sensitive customers.

5. Sales Trends & Inventory Management: Most transactions fall between $295 and $1011, meaning that a significant portion of revenue comes from mid-range purchases. By focusing on inventory optimization within this pricing range, businesses can align their supply with demand. Additionally, tracking seasonal trends can help in forecasting demand spikes. Running limited-time discounts during off-peak periods can help maintain steady sales throughout the year, while ensuring ample stock during high-demand seasons prevents lost revenue opportunities.

Conclusion: The dataset provides valuable insights into customer preferences, pricing trends, and purchasing behaviours. By leveraging this data, businesses can enhance product availability, introduce strategic pricing models, and create tailored promotions. Implementing data-driven strategies will not only improve customer satisfaction but also drive long-term profitability. A balanced approach between high-value customers and budget-conscious buyers can help businesses sustain consistent growth in the competitive eCommerce space.