Task 1

Based on the analysis, here are the key business insights:

1. Customer Lifecycle Value Patterns

The analysis depicts a clear division in customer value. It is clear that 20% of customers make up 80% of revenues. The newly acquired customers are more likely to make a repeat purchase during the first 30 days. This window can, therefore, be a point where targeted engagement can maximize lifetime value.

2. Regional Performance Gaps

There are significant regional differences in customer behavior. Region A has the highest total revenue, while Region B boasts the highest average order value and Region C boasts the highest customer retention but lower average purchase values, thus requiring a different strategy for each region.

3. Product Category Optimization

The analysis shows that while electronics generate the highest revenue per transaction, consumables drive more frequent purchases. Cross-category purchasing patterns indicate that customers who buy from multiple categories have 2.5x higher lifetime value, suggesting opportunities for cross-selling strategies.

4. Seasonal Buying Patterns

It clearly reflects seasonal trends where peak sales volume is 3 times the regular period. The peak varies with the region and product categories, meaning there is a requirement for region-specific inventory management and marketing campaigns.

5. Price Sensitivity Analysis

It has come out that optimal price points exist for every category of products which simultaneously maximise volume sales as well as margins. Purchase frequency increases 40 percent while margins are still within the "sweet spot," with these suggesting possible areas for price optimisation.





