Task 2: Experimentation and Uplift Testing

Objective: Evaluate the performance of the store trial conducted in stores 77, 86, and 88 by comparing them with suitable control stores using Python-based analytics and visualisation.

Key Metrics Used

• Total Sales Revenue
• Total Number of Customers
• Average Transactions per Customer

Control Store Selection Method

Control stores were selected using Pearson correlation on pre-trial monthly total sales. The store with the highest correlation was selected as the control for each trial store.

Selected Control Stores

• Store 77 → Control Store 41
• Store 86 → Control Store 159
• Store 88 → Control Store 206

Results & Insights

All trial stores showed higher total sales during the trial period compared to their respective control stores. The uplift was driven primarily by an increase in the number of customers, with a secondary contribution from increased transactions per customer.

Business Recommendation

Based on the observed uplift, it is recommended to roll out the trial strategy to other stores with similar pre-trial performance characteristics.

Conclusion

The trial was successful in increasing sales performance. Early-stage results support scaling the initiative while continuing to monitor customer and transaction-level drivers.