**Coffee Shop Retail Sales Analysis Project**

This project involves analyzing retail sales data from a coffee shop to gain actionable insights that can improve the shop's performance. The dataset includes transactional details like product categories, quantities sold, store locations, and the time of transactions. Using Excel, we performed a comprehensive analysis to identify sales patterns, peak business hours, popular products, and store specific performance metrics. The goal is to understand customer behaviour, optimize inventory, and improve operational efficiency.

# **Analysis and Findings**

**1. Peak Sales Hours:**

**Key Insight:** Sales peak during late morning to early afternoon, particularly between 11 AM and 1 PM.

**Actionable Insight:** Focus on promotions and efficient staffing during lunchtime, as this is when the coffee shop sees the most traffic. Introducing lunch combos or exclusive deals during these hours can increase average transaction value.

**2. Day of the Week Trends:**

**Key Insight:** Thursday and Friday are the busiest days, with steady performance continuing into the weekend.

**Actionable Insight:** Use weekday promotions, particularly early in the week (e.g., Monday), to balance out sales. Promoting events or special offers on slower days can help maintain consistent traffic throughout the week.

**3. Top Selling Products:**

**Key Insight:** Coffee leads the sales, followed by Tea and Bakery items.

Brewed Coffee and Herbal Teas are the most popular product types.

**Actionable Insight**: Enhance cross selling strategies by bundling coffee with bakery items. Create special promotions around popular products and experiment with introducing new seasonal flavors to keep the menu exciting for regular customers.

**4. Slow Moving Products**:

**Key Insight:** Branded products and Packaged Chocolate are the least sold items.

**Actionable Insight**: Consider running promotions or discounts to move these products or reassess their stock levels based on their performance. Additionally, improving their in-store placement could help attract more attention from customers.

**5. Store Location Performance**:

**Key Insight: All three locations**— Astoria, Hell’s Kitchen, and Lower Manhattan —show similar sales volumes and revenue.

**Actionable Insight:** Maintain consistent promotional strategies across all locations but consider localized marketing efforts based on each neighbourhood’s demographic. Further analysis can help refine offerings that suit the local customer base.

**6. Popular Product Types:**

**Key Insight:** Customers prefer brewed coffee and brewed tea, while other beverages and add ons like Flavours see moderate sales.

**Actionable Insight:** Expand on the variety of coffee and tea offerings, possibly introducing more seasonal options or exclusive brews. Offering loyalty programs for frequent buyers could help retain the regular customer base and boost sales.

**7. Inventory Optimization:**

**Key Insight**: Peak sales hours and best-selling products should guide stock replenishment. The dataset shows that coffee and tea are in highest demand.

**Actionable Insight**: Ensure that inventory levels for popular products are maintained, particularly during peak hours and days. On the other hand, reduce stock for slow moving items to optimize costs and avoid wastage.

**8. Staffing Adjustments:**

**Key Insight: The highest sales occur during lunchtime hours and toward the end of the week (**Thursday and Friday).

**Actionable Insight:** Adjust staffing levels accordingly, increasing the number of staff during peak times and reducing staff during off peak periods to optimize labour costs without compromising service quality.

# **Additional Insights and Recommendations**

**9. Cross Selling Opportunities:** Bundling high demand items like coffee and tea with slower selling products such as bakery items can encourage higher overall spend per transaction.

**10. Time Based Promotions:** Introduce early morning (before 10 AM) or late afternoon (after 3 PM) discounts to encourage more traffic during slower hours of the day.

**11. Seasonal Specials:** Offering limited time products or deals, especially for coffee and tea, can attract new customers and retain regulars with fresh menu options.