Data-Driven Strategy for Coffee Shop Performance

The Analysis Journey

I was given sales data from a coffee shop with the goal of transforming raw numbers into meaningful business insights.

The first thing I observed in the dataset was that the week starts on Monday. This strongly suggested that the shop is located in Europe, where Monday is the official start of the week. Based on this, I also considered the local context:

- The four meteorological seasons (Spring, Summer, Autumn, Winter).
- The hours of the day when customers buy their drinks.

To uncover insights, I used SQL step by step:

1. **Products & Revenue** – I analyzed how much each drink contributes to total revenue and identified the top three best-selling drinks.
2. **Daily Spending** – I calculated the daily average sales to understand how much customers typically spend in a day.
3. **Price Categories** – I explored the products based on their price levels (Low, Medium, High) to see where most of the sales come from.
4. **Seasonality** – I checked which months and seasons bring the highest sales volumes.
5. **Weekdays vs Weekends** – I compared how sales change between weekdays and weekends.
6. **Peak Hours** – I identified the busiest hours of the day when most sales happen.

This structured approach turned a complex dataset into clear patterns about customer behavior.

Insights, Recommendations & Business Value

From the analysis, I was able to translate numbers into practical actions that can help the business grow:

Key Insights

- Peak hours are between **9:00 and 12:00 AM**, when most sales occur.
- Sales are strongest during **Spring, Autumn, and Winter** seasons.
- High-priced drinks contribute a significant share of the revenue.
- Some products are underperforming and not contributing enough.
- Weekdays generate steady sales, while weekends show different customer behaviors.
- Customers pay with both cash and cards, but certain methods influence higher spending.

Recommendations

- **Peak Hours & Staffing:** Add more staff between 9 AM – 12 PM to reduce waiting times and improve customer service.
- **Seasonal Inventory Planning:** Prepare extra stock for strong seasons to avoid shortages.
- **Profitable Products:** Invest in promoting top-selling drinks with marketing campaigns and new variations.
- **Weak Products:** Re-market low-performing items to high-end customers or consider removing them.
- **Payment Options:** Introduce and promote more payment methods to encourage higher spending.
- **Weekdays vs Weekends:**
    - Focus on inventory management during weekdays.
    - Use special promotions to attract more customers during weekends.

Business Value

By applying this analysis, the coffee shop owner can now clearly see:

- **When customers buy** (time and season).
- **What customers prefer** (best and worst products).
- **How customers pay** (cash vs card).

This empowers the business to make smarter decisions, reduce costs, improve customer experience, and increase profits.