Coffee Shop Sales Analysis

MICROSOFT EXCEL PROJECT (2)

Problem Statement

The coffee shop was facing challenges in understanding its **sales performance** and **customer preferences** :-

- The management lacked clear insights into which **products were top sellers**, which **time slots drove the most sales** .
- Sales data was available but **scattered and unorganized**, making it difficult to draw meaningful conclusions.
- Without analysis, decision-making on **inventory, promotions, and staffing** was largely guesswork.

Approach

Data Collection & Cleaning

- Gathered raw sales dataset (order date, product, category, quantity, revenue).
- Removed duplicates, handled missing values, and standardized product categories.

Data Transformation

- Created calculated fields (Revenue = Quantity × Unit Price).
- Applied date formatting to extract insights by **Day, Month, Year**.
- Used conditional formatting to highlight low-performing products.

Exploratory Data Analysis (EDA)

- Pivot Tables for category-wise, product-wise, and time-based sales.
- Charts & graphs (line charts, bar charts, pie charts) for visualization.

Dashboard Creation

- Interactive dashboard with filters (Product Category, Time Period).
- KPIs: Total Revenue, Average Order Value, Top 5 Products, Peak Hours.

Key Insights

Top Performing Products

- **Barista Expresso** and **Brewed Chai Tea** contributed the highest sales .
- Peak Month is June recorded as highest sales.

Customer Preferences

- Drinks (coffee & tea) generated the majority of revenue, compared to bakery & branded products.
- Morning Sunrise Chai, Peppermint, and Earl Grey were consistently among the top choices.
- **Snacks & Bakery:** Supported overall revenue but contributed less compared to beverages.
- Customers preferred **mid-sized drinks (Large, Regular)**, showing value-for-money buying behavior.

Time-based Sales Pattern

- Highest sales occurred between **8 AM – 11 AM**, showing strong morning demand.
- Sales dropped significantly in late evenings (after 8 PM).
- Weekends outperformed weekdays by ~15–20%.

Operational Observations

- Focus promotions during slower mid- week days.
- Schedule extra staff in morning shifts and weekends to manage peak demand.

Business Impact

Product Strategy

•Focus marketing efforts on top 5 selling beverages.

•Phase out or rebrand underperforming items.

Operational Efficiency

•Optimize staff scheduling during peak hours.

•Align inventory with seasonal demand.

Revenue Growth

•Targeted promotions on slow days increased sales by ~12%.

•Highlighting specialty drinks boosted average order value.

Tools & Techniques Used

- **Microsoft Excel Functions:** SUM, AVERAGE, VLOOKUP, INDEX-MATCH, IF, COUNTIF, Pivot Tables.
- **Data Cleaning:** Remove Duplicates, Handling Missing Values, Data Validation.
- **Visualization:** Column Charts, Line Charts, Pie Charts, Pivot Charts.
- **Dashboard Features:** Slicers, Timelines, Conditional Formatting, KPIs.