

Methodology – Bright Coffee Shop Data Analysis

Key fields used include:

- `PRODUCT_TYPE`
- `NUMBER_OF_SALES`
- `TOTAL_AMOUNT`
- `TIME_BUCKET` (Morning, Afternoon, Evening, Night)
- `STORE_LOCATION`
- `DATE`

Data Cleaning & Preparation

- Removed duplicate or incomplete records (e.g., missing product types or zero sales).
- Verified numerical fields (`NUMBER_OF_SALES`, `TOTAL_AMOUNT`) for validity.
- Standardized time buckets and date formatting for consistent grouping.
- Ensured consistent naming for products and locations.

Data Modeling & Analysis Techniques

We applied a combination of **SQL queries** and **aggregation techniques** to create insights across two major areas:

Sales & Revenue Insights

- Grouped data by `PRODUCT_TYPE`, `STORE_LOCATION`, and `DATE` to compute:
 - Total sales volume and revenue.
 - Sales trends by time.
 - Best- and worst-performing product categories

Visualization & Reporting

- Data outputs were converted into structured slides in PowerPoint.
- Visual elements such as tables, graphs were used to:
 - Emphasize key trends.
 - Simplify interpretation for decision-makers.
 - Present both numerical data and inferred behaviors.

Tools Used

Snowflake SQL – for data querying and aggregation.

Python – for generating automated PowerPoint slides.

PowerPoint – for presenting final dashboards and summaries.