Sales Insights Project Report

Purpose:- To uncover previously hidden sales insights that support better decision-making for sales teams, while automating the process to minimize time spent on manual data collection.

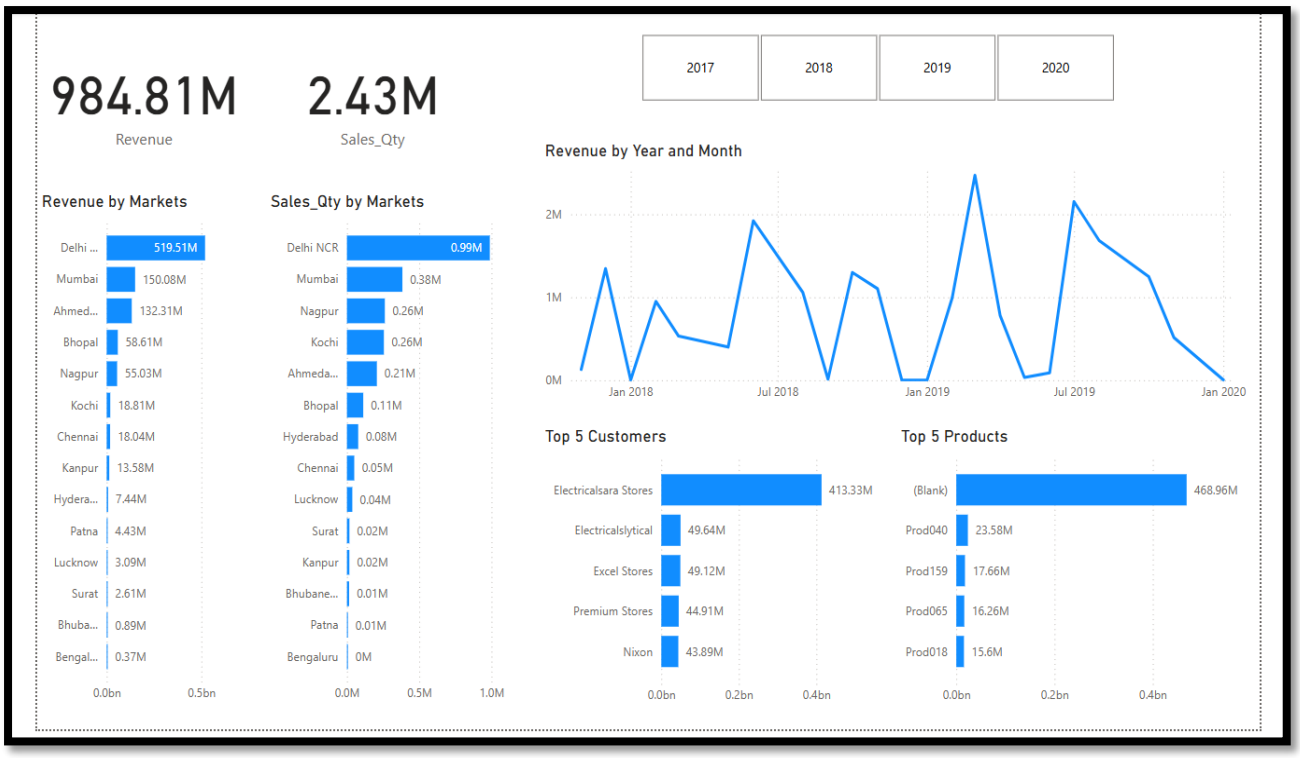
Stakeholders:- Sales Director, Marketing Team, Customer Service Team, Data & Analytics Team, IT

End Result:- An automated dashboard providing quick and latest sales insights in order to support data driven decision making.

Success Criteria:-

1. Dashboard uncovering sales order insights with latest data available.
2. Sales team able to take better decision and prove 10% cost savings of total spend.
3. Sales analyst stop data gathering manually in order to save 20% of their business time and reinvest it in value added activity.

Conclusions Drawn from Analysis



*Sales_insights Dashboard, developed using Power BI

- **Delhi NCR** is the top-performing market, contributing over **519.5M** in revenue and nearly **1M** in sales quantity, highlighting strong regional demand.

- There's a clear **seasonal sales trend**, with peak revenue observed during mid-2018 and mid-2019.

- **Electricalsara Stores** and **Product040** are among the top-performing customer-product pairs, whereas a large portion of sales revenue **(~469M**) is attributed to missing product names **("Blank"**), *(suggesting data quality issues.)*

- Lower-performing regions such as **Bengaluru, Bhubaneshwar**, and **Surat** indicate potential areas for **sales strategy improvement or reallocation**.

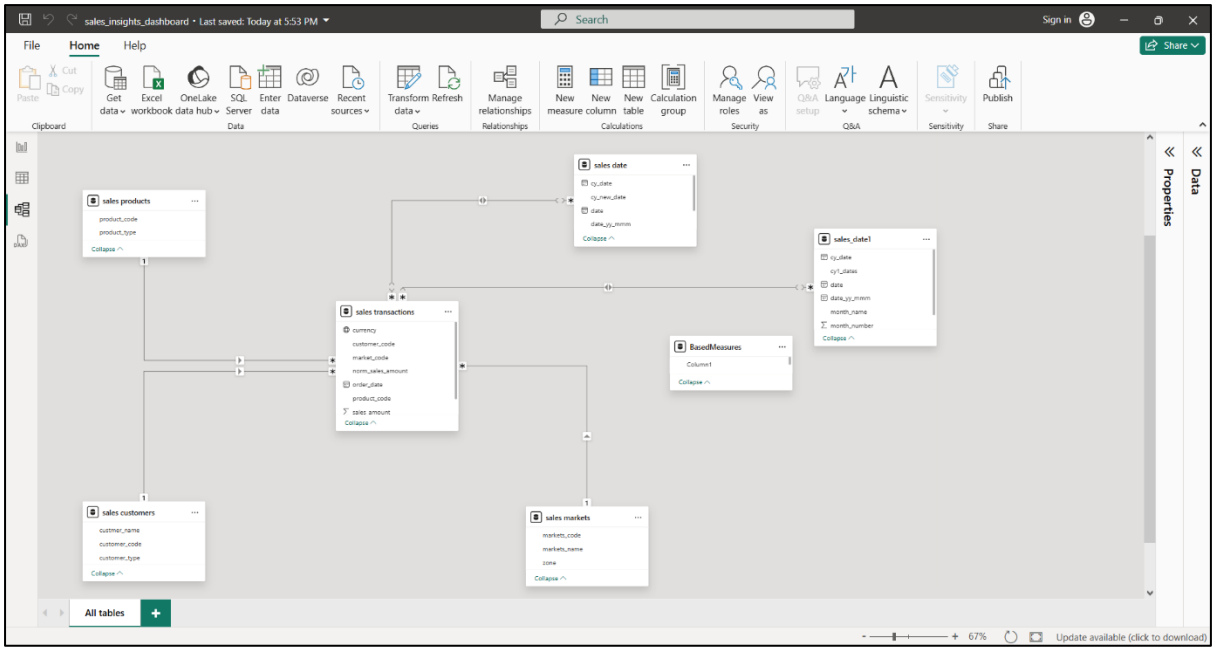
Technical Aspects of Project

Tech-Stack used:-

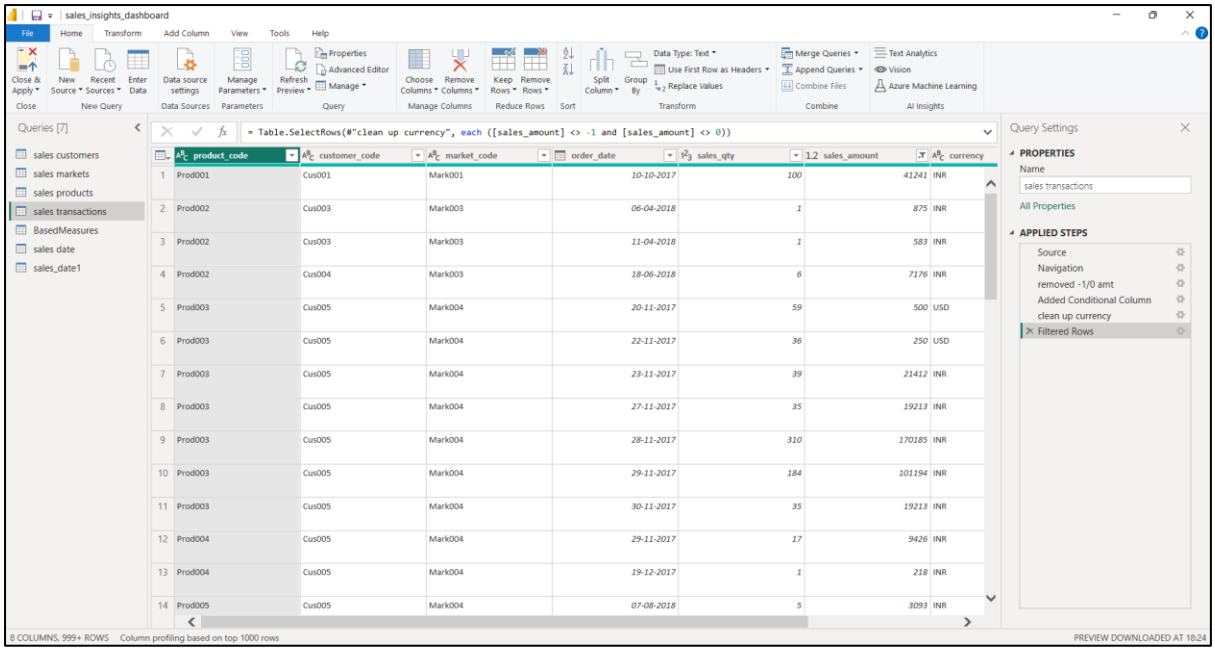
1. MySQL
2. Power BI Desktop and Query editor

Steps followed:-

1. **Data Sourcing:-** Extracted dataset from MySQL Database by connecting Power BI desktop to MySQL server, and organized connections by creating Relational Schema in Power BI Desktop.



2. **Data Wrangling:-** Performed Data Wrangling using Power Query Editor to clean and format raw fetched data, in order to improve efficiency of output.

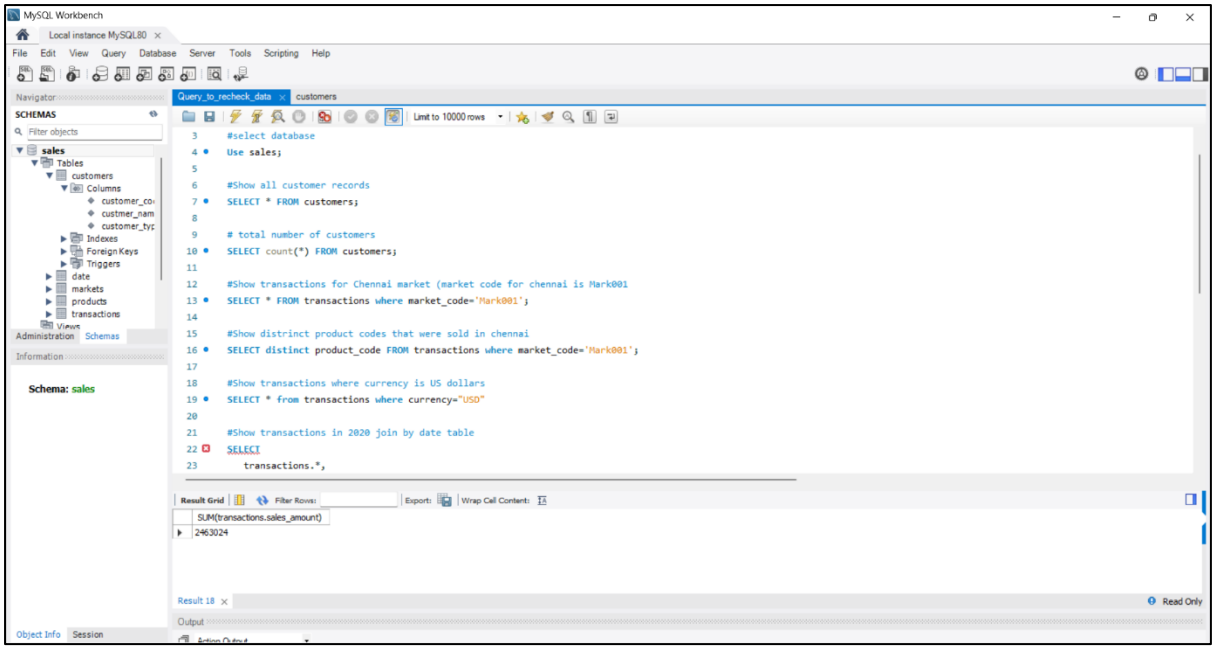


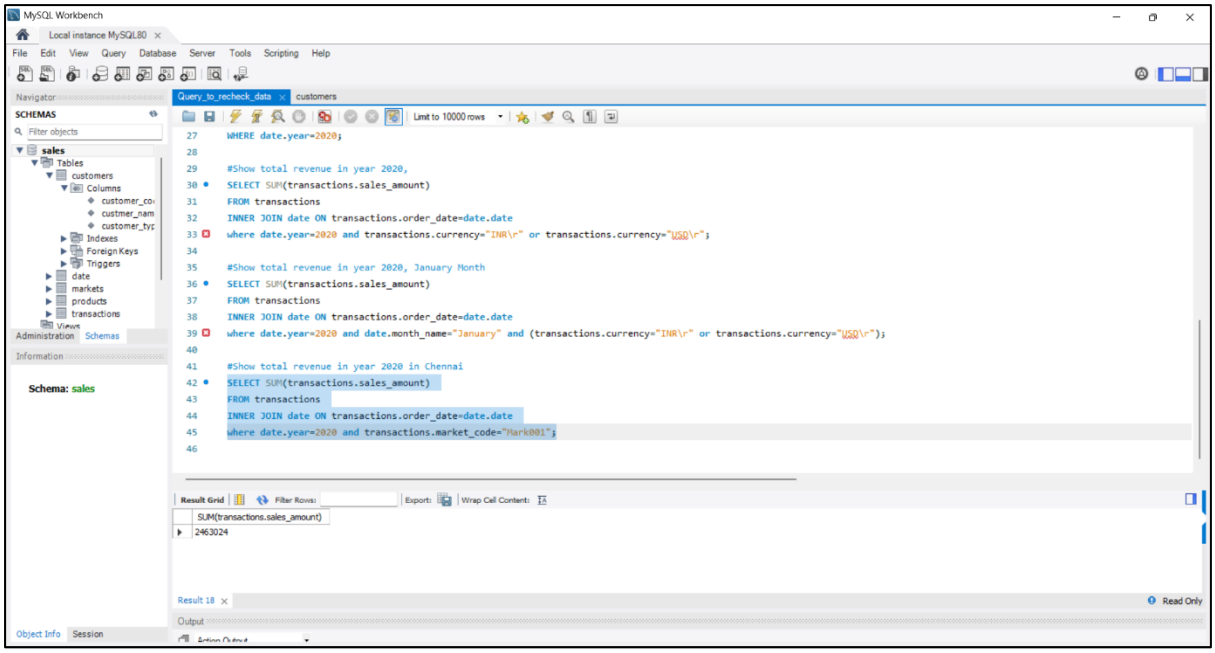
3. **Data Visualization:-** Used Power BI desktop to create Dashboard which mainly includes:-

    - KPIs for total revenue and sales quantity
    - Dynamic year filters (2017–2020)
    - Bar charts for regional and customer/product-level analysis
    - Time series visualization for sales trends

4. **Data Validation/Output Reverification:-** Performed data validation and output reverification by cross-checking the results generated in Power BI dashboards with SQL queries to ensure accuracy and consistency.

    Link to MySQL queries:- https://drive.google.com/file/d/1QCCjLH8_hTvY-TVmB8l9ZtbSd1rXeZgr/view?usp=sharing


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
sales
Tables
customers
Columns
Indexes
Foreign Keys
Triggers
date
markets
products
transactions
Views
Administration Schemas
Information
Schema: sales
Object Info Session
Query_to_recheck_data customers
Limit to 10000 rows
#select database
Use sales;
#Show all customer records
SELECT * FROM customers;
total number of customers
SELECT count(*) FROM customers;
#Show transactions for Chennai market (market code for chennai is Mark001
SELECT * FROM transactions where market_code='Mark001';
#Show distrinct product codes that were sold in chennai
SELECT distinct product_code FROM transactions where market_code='Mark001';
#Show transactions where currency is US dollars
SELECT * from transactions where currency="USD"
#Show transactions in 2020 join by date table
SELECT
transactions.*,
Result Grid Filter Rows: Export: Wrap Cell Content:
SUM(transactions.sales_amount)
2463024
Result 18
Read Only
Output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Schema: sales
Object Info Session
Query_to_recheck_data customers
Limit to 10000 rows
WHERE date.year=2020;
#Show total revenue in year 2020,
SELECT SUM(transactions.sales_amount)
FROM transactions
INNER JOIN date ON transactions.order_date=date.date
where date.year=2020 and transactions.currency="INR\r" or transactions.currency="USD\r";
#Show total revenue in year 2020, January Month
SELECT SUM(transactions.sales_amount)
FROM transactions
INNER JOIN date ON transactions.order_date=date.date
where date.year=2020 and date.month_name="January" and (transactions.currency="INR\r" or transactions.currency="USD\r");
#Show total revenue in year 2020 in Chennai
SELECT SUM(transactions.sales_amount)
FROM transactions
INNER JOIN date ON transactions.order_date=date.date
where date.year=2020 and transactions.market_code="Mark001";
Result Grid Filter Rows: Export: Wrap Cell Content:
SUM(transactions.sales_amount)
2463024
Result 18
Read Only
Output