DRESS SALES

The domain of the Project: SQL & POWERBI

Team Mentor : Mr. Sravan Nemana

Team Member: S.Ashmitha G19 SQL & POWERBI

Period of the project

JUNE 2025 to DECEMBER 2025

Declaration

The project titled "Dress Sales" has been mentored by N Sravan sir, organised by SURE Trust, from June 2025 to December 2025, for the benefit of the educated unemployed rural youth for gaining hands-on experience in working on industry relevant projects that would take them closer to the prospective employer. I declare that to the best of my knowledge the members of the team mentioned below, have worked on it successfully and enhanced their practical knowledge in the domain.

Team Member:

Ms. Ashmitha
Signature

Mentor's Name :

Mr.Sravan N
Signature

Prof. Radhakumari
Executive Director & Founder
SURE Trust

Executive Summary

The Dress Sales Analysis Dashboard project was developed using the Power BI platform as part of a virtual internship at Sure Trust. The main aim of this project is to analyze dress sales data and present valuable business insights through an interactive and visually appealing dashboard. In today's data-driven business environment, organizations require quick and accurate insights to make informed decisions. This project addresses that need by converting raw sales data into meaningful visual reports.

The dashboard highlights the top five Key Performance Indicators (KPIs): Total Sales, Average Sales, Highest Sales Day, Sales Growth, and Top-Selling Dress. These KPIs help stakeholders quickly understand overall sales performance, identify trends, and evaluate product demand. SQL was used to extract and prepare data, while Power BI was used to clean, transform, and visualize the data.

The final output is an interactive dashboard that enables users to analyze sales trends efficiently without manual calculations. This project not only demonstrates technical skills in Power BI and SQL but also reflects the ability to apply data analytics concepts to real-world business scenarios. The insights generated from this dashboard can help businesses improve sales strategies, inventory planning, and decision-making processes.

Introduction

The fashion and retail industry generates a large amount of sales data daily. Proper analysis of this data is essential for understanding customer preferences, identifying best-selling products, and tracking overall business performance. However, traditional data analysis methods such as spreadsheets and static reports are often inefficient and time-consuming. This project was undertaken to overcome these challenges by building an interactive Dress Sales Dashboard using Power BI.

The primary problem addressed in this project is the lack of a centralized and visual system to analyze dress sales performance effectively. Raw data alone does not provide actionable insights unless it is processed and presented in a meaningful way. The goal of this project is to simplify complex sales data and make it easily understandable for users, including managers and stakeholders.

The scope of this project is limited to analyzing historical dress sales data provided in structured format. External factors such as market trends, customer demographics, and promotional campaigns are not included in this analysis. Despite these limitations, the project successfully delivers valuable insights through predefined KPIs.

The innovative aspect of this project lies in the use of Power BI's interactive features such as filters, slicers, and visual charts, which allow users to explore data dynamically instead of relying on static reports.

Project Objectives

- The primary objective of this project is to design and develop an interactive Dress Sales Dashboard using Power BI. The project aims to analyze sales data effectively and present insights in a visually appealing format.
- Specific objectives of the project include:
- To clean and transform raw sales data for analysis
- To calculate and display the top five KPIs related to dress sales
- To analyze sales trends and performance over time
- To identify the top-selling dress and highest sales day
- To create a user-friendly dashboard that supports decision-making
- The expected outcome of this project is a fully functional Power BI dashboard that provides a clear overview of dress sales performance. The project also aims to enhance practical knowledge of data visualization, KPI analysis, and business intelligence tools.

Methodology and Results

The project was developed using a structured data analytics approach. Initially, the sales data was reviewed to understand its format and key attributes. Data cleaning and transformation were performed to remove inconsistencies, duplicates, and missing values. SQL was used to query and validate the data, while Power BI was used to calculate KPIs and create visualizations. Business intelligence techniques were applied to convert raw sales data into meaningful insights. The focus was on KPI-based analysis and interactive dashboard development.

Tools / Software Used

- **Power BI** – For data transformation, visualization, and dashboard creation
- **SQL** – For querying, filtering, and validating sales data
- **Microsoft Excel / CSV** – Used as the data source
- **Windows OS** – Development environment

Data Collection Approach

The dataset used in this project was collected in a structured format (Excel/CSV). It contains historical dress sales information such as order date, dress category, quantity sold, price, and total sales. Since this is an analytical project, no real-time data collection was performed. The dataset was directly imported into Power BI for further processing and analysis.

Project Architecture

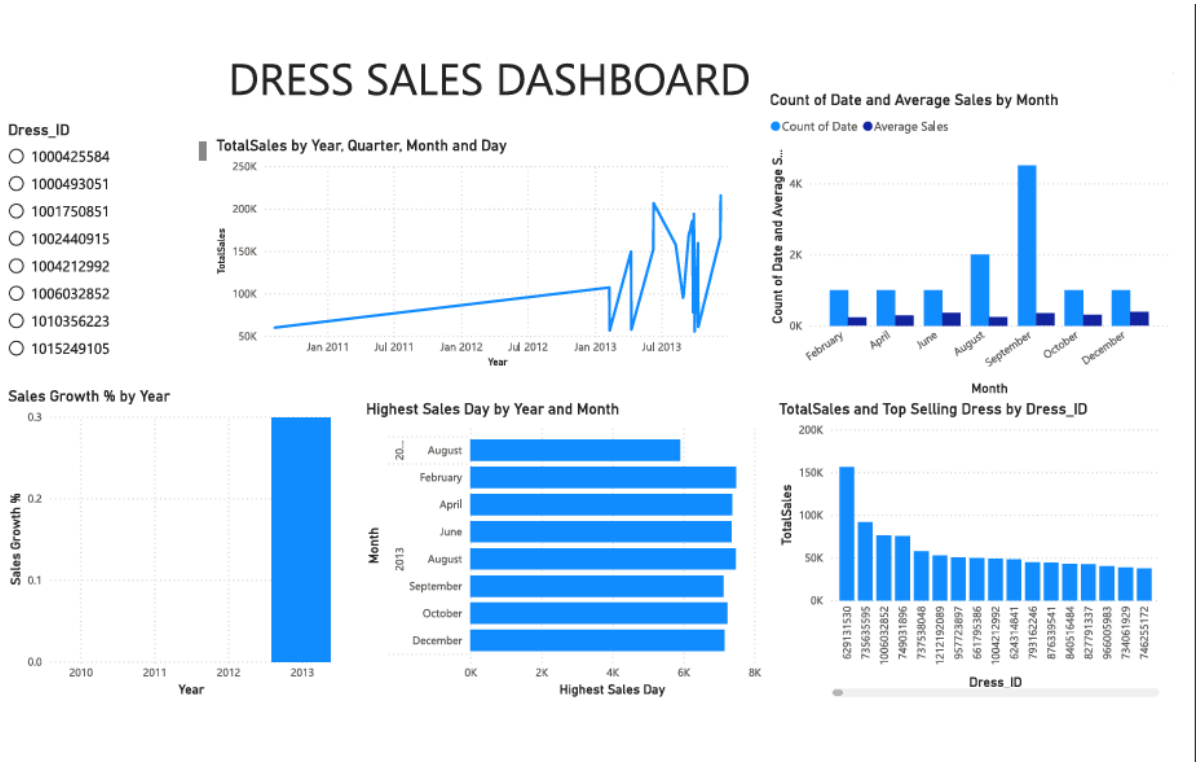
The project follows a simple and effective architecture:

1. **Data Source Layer**
   Sales data stored in Excel/CSV files.
2. **Data Processing Layer**
   Data cleaning, transformation, and validation using Power BI and SQL.
3. **Analytics Layer**
   KPI calculation including Total Sales, Average Sales, Highest Sales Day, Sales Growth, and Top-Selling Dress.

4. **Visualization Layer**
   Interactive dashboard created in Power BI using charts, cards, and filters.
5. **Presentation Layer**
   Final dashboard used for analysis and decision-making.

Final Project Working Screenshots

The final Power BI dashboard displays the Top 5 KPIs using cards and charts. Visuals such as bar charts and line graphs are used to represent sales trends and top-performing dresses. Filters and slicers allow users to interact with the dashboard and analyze data for different time periods or products.



Project GitHub Link

GitHub Repository Link:

https://github.com/Ashmitha-shivarathri26/Dress-Sales

Learning and Reflection

During this project, I gained valuable technical and analytical skills related to data analytics and business intelligence. I learned how to work with **Power BI** for data cleaning, transformation, and visualization. Creating interactive dashboards helped me understand how KPIs are designed and used in real business scenarios. I also improved my knowledge of **SQL**, especially in writing queries to filter, aggregate, and validate sales data.

Apart from technical skills, I learned how to approach a project systematically—from understanding the problem statement to delivering a final solution. I gained exposure to **data-driven decision-making**, KPI analysis, and dashboard storytelling. Time management and planning were also important learnings, as the project required completing tasks within defined timelines. Understanding how to present data clearly and meaningfully was one of the most important skills I developed during this project.

Overall Experience

The overall experience of working on the Dress Sales Analysis Dashboard was highly positive and enriching. This project gave me hands-on exposure to real-world data and helped bridge the gap between theoretical knowledge and practical application. Working with Power BI increased my confidence in handling data analytics tools and interpreting business insights.

The guidance provided during the internship helped me improve both my technical and professional skills. Completing this project enhanced my problem-solving abilities and prepared me for future roles in data analytics and business intelligence. Overall, the project was a valuable learning experience that strengthened my interest in data analysis and dashboard development.

Conclusion and Future Scope

The Dress Sales Analysis Dashboard project was successfully completed using the Power BI platform with the objective of analyzing sales data and presenting key insights through interactive visualizations. The main objectives of the project were to understand dress sales performance, calculate important Key Performance Indicators (KPIs), and create a user-friendly dashboard to support data-driven decision-making. All the defined objectives were achieved effectively.

Through this project, the top five KPIs—Total Sales, Average Sales, Highest Sales Day, Sales Growth, and Top-Selling Dress—were successfully calculated and visualized. The dashboard provides a clear overview of sales trends and performance, helping users quickly identify patterns and key insights. The project also demonstrated the effective use of SQL for data querying and Power BI for data transformation and visualization. Overall, this project enhanced practical knowledge in data analytics and business intelligence and provided real-world exposure to dashboard development.

Future Scope

The scope of this project can be further expanded in several ways to increase its effectiveness and usability. Real-time sales data can be integrated to provide up-to-date insights for businesses. Additional KPIs such as customer segmentation, seasonal sales analysis, and regional performance can be included for deeper analysis. Advanced features like sales forecasting and trend prediction can be implemented using machine learning techniques.

The dashboard can also be deployed on **Power BI Service** to enable online access and collaboration. Integration with other data sources such as customer feedback and inventory data can further enhance business insights. These improvements would make the project more scalable and suitable for real-world business applications.