

## Problem Statement: (POWER BI)

The Walmart Superstore wants to analyze its sales data to gain insights into its performance and identify opportunities for growth. The company has a vast amount of sales data, including information on products, customers, stores, and transactions. The main objective is to extract meaningful insights from this data to analyse the overall sales of walmart superstore.

### Approach:

**Connect to the Walmart sales data source:** The first step is to connect to the Walmart sales data source. Power BI can connect to various data sources, including Excel spreadsheets, SQL Server databases, and other cloud-based platforms. You can use Power BI's Walmart connector to connect to the Walmart sales data source.

**Import data:** Once connected, import the data into Power BI. You can choose to import the entire dataset or select specific tables and columns that you want to analyze.

**Data modeling:** After importing the data, create a data model to define the relationships between the different tables. You can use Power BI's drag-and-drop interface to create the data model.

**Create reports:** Once the data model is set up, create reports to visualize the data. You can use Power BI's built-in visualizations or create custom visualizations using Power BI's developer tools.

**Add filters and slicers:** To make the reports more interactive, add filters and slicers to allow users to explore the data in more detail.

**Publish the reports:** Once the reports are complete, publish them to Power BI service, where users can access them via web or mobile devices.

### Results:

You have to analyse the overall sales of walmart super store data and create various dashboards using powerbi with the given dataset.

## The learning outcomes of this project:

**1) Data modeling:** You will learn how to create data models that enable effective analysis, including how to define relationships between tables and calculate measures.

**2) Data visualization:** You will learn how to create compelling and interactive visualizations using Power BI, including how to create charts, graphs, and dashboards that effectively communicate insights.

**3) Report development:** You will learn how to develop reports using Power BI, including how to design report layouts, format data, and create interactive filters.

**4) Data integration:** You will learn how to integrate data from multiple sources into Power BI, including how to use Power Query to transform and clean data.

**5) Business solution:** You will develop a better understanding of how businesses like Walmart operate and how data analysis can support business decision-making. Problem-solving: You will learn how to identify business problems and use data analysis techniques to develop solutions, including how to use Power BI to analyze sales trends and identify areas for improvement.

By completing this project, you will gain hands-on experience with data extraction, processing, and visualization, as well as experience working with databases, dashboards, and web development. This project will provide a foundation for further learning and development in these areas and help you build a portfolio of practical skills.

## Evaluation metrics:

1) Predict the Profit of Walmart using the power analysis and also represent the data in hierarchical as well as the area in series of data points.

2) Describe and visualize the principle that 80 percent of the sales come from 20 percent of the customers and also create a visual that would breakdown measures into underlying factors and analyse the sales using the metrics in the data.

3) Make a presentation using the dashboards of sale analysis:

- Sales and Revenue: You can track the store's sales and revenue over time, by category, region, and product.
- Inventory Management: You can monitor the store's inventory levels and turnover rates to optimize stock levels and ensure adequate supply of popular products.

- Customer Insights: You can analyze customer data, such as demographics, purchase history, and customer feedback, to gain insights into their behavior and preferences.
- Store Performance: You can measure store performance metrics, such as sales per square foot, customer traffic, and employee productivity, to identify areas of improvement and optimize store operations.

4) Design and upload the report in power bi service and kindly attach the report link.

5) Perform root cause analysis and also make inferences in a report format.