

# Super Store Sales

## Project Plan

Mahmoud Mohamed Hany	21008389
Kareem Hossam Mohamed	21016056
Samir Wael Mohamed	21062918
Ramadan Mohammed Batea	21027444

## Overview

This project focuses on evaluating **sales performance** data from a retail superstore to identify trends and insights that can help with decision-making. The dataset contains order-specific information such as order and shipment dates, client segments, geographic regions, product categories, and sales figures. By investigating these variables, the research hopes to find factors that influence sales, geographical trends, and customer behavior.

## Objectives

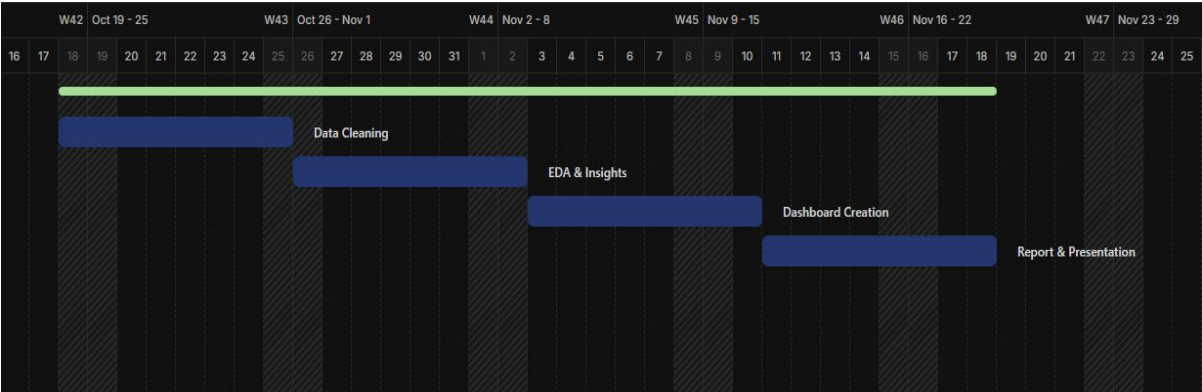
- **Understand Sales Performance:** Analyze total sales and order distribution across regions, categories, and customer segments.
- **Identify High-Value Products & Regions:** Determine which products, states, and cities drive the most revenue.
- **Evaluate Shipping Efficiency:** Study shipping modes, delivery times, and their effect on customer satisfaction.
- **Discover Temporal Trends:** Identify seasonal and yearly sales fluctuations to improve future planning.
- **Develop a Decision Dashboard:** Build an interactive dashboard for visual insights using Power BI or Tableau.

## Scope

- **Data Source:** Superstore Sales Dataset (9,800 records)
- **Geographical Scope:** Multiple U.S. states and cities
- **Time Frame:** Multi-year sales data
- **Tools Used:** Python (pandas, matplotlib, seaborn), Power BI or Tableau, MS Excel
- **Deliverables:** Cleaned dataset, exploratory data analysis (EDA), dashboard, and final report
- **Limitations:** Dataset does not include profit or cost columns; focus remains on sales metrics and operations.

Week	Activity	Milestone / Deliverable
Week 1	Data collection, exploration, and cleaning	Clean dataset ready
Week 2	Exploratory data analysis (EDA) and pattern discovery	Insight summary
Week 3	Dashboard creation (Power BI/Tableau)	Interactive dashboard
Week 4	Report writing and presentation prep	Final report & slides

# Timeline (Gantt Chart)



## Milestones

- M1: Dataset loaded and cleaned (end of Week 1)
- M2: Insights generated through EDA (end of Week 2)
- M3: Dashboard fully functional (end of Week 3)
- M4: Final report and presentation submitted (end of Week 4)

## Deliverables

- Cleaned dataset and preprocessing notebook
- Data visualization report
- Power BI/Tableau dashboard
- Final written report and presentation slides

## Resource Allocation

Resource	Purpose	Tool/Platform
Hardware	Data storage and processing	Personal computer
Software	Data analysis and visualization	Python, Power BI, Excel

Human Resource	Analysis, visualization, documentation	All Team
Time	4 weeks (estimated 40 hours)	Weekly milestones

## Task Assignment & Roles

Team Member	Role	Responsibilities
Mahmoud Hany	Project Lead / Data Analyst	Project coordination, EDA, insight generation
Samir Wael	Data Engineer	Data cleaning, handling missing values, transformation
Ramadan Mohamed	Dashboard Developer	Create Power BI or Tableau dashboard
Kareem Hossam	Technical Writer	Documentation, report writing, and presentation slides

## 4. Risk Assessment & Mitigation Plan

Risk	Impact	Likelihood	Mitigation Strategy
Incomplete or corrupted data	High	Medium	Perform detailed data cleaning and validation

Delayed progress	High	Medium	Follow weekly milestones and track progress
Tool or software issues	Medium	Low	Backup files and use alternative software
Misinterpretation of results	Medium	Medium	Peer review analysis and validate insights
Time management	High	Medium	Prioritize critical tasks early

## 5. Key Performance Indicators (KPIs)

KPI	Target	Measurement Method
Data Cleaning Accuracy	100% valid data	Comparison before/after cleaning
Dashboard Completion	Fully functional dashboard	Verified deliverable
Insights Quality	$\geq 5$ meaningful business insights	Documented in final report
Timely Delivery	100% on schedule	Weekly milestone check
Report Quality	Clear, professional, data-driven	Evaluator feedback