**1. Business Problem:**

Companies often struggle to understand sales performance, customer behavior, and product demand across different regions and demographics. Without clear insights, decision-makers may face challenges in:

* Identifying sales trends and forecasting future demand.
* Understanding which products contribute the most to revenue and profitability.
* Recognizing regional and customer segment variations in purchasing behavior.
* Making data-driven decisions for inventory management, pricing strategies, and marketing efforts.

**2. Business Statement:**

This project aims to develop a Sales Analytics Dashboard that provides actionable insights into sales performance, customer behavior, and product trends. By leveraging historical sales data, the dashboard will help business executives and sales managers:

* Monitor key sales metrics such as revenue, profit, and order quantities.
* Identify top-selling products and underperforming categories to optimize inventory and pricing.
* Analyze customer demographics (age, gender, location) to improve marketing strategies.
* Track monthly and yearly trends to make informed decisions on future sales and demand planning.

This dashboard will enable stakeholders to drive sales growth, improve operational efficiency, and enhance customer targeting strategies through data-driven insights.

**3. Data Sorce:**  
  
https://www.kaggle.com/datasets/jehanzaibbhatti/sales-data

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| PROJECT NAME | Sales Analytics Dashboard | PROJECT MANAGER | Joy Phadte |
| PROJECT DELIVERABLE | The project will result in the following key deliverables:  ✅ **Sales Dashboard (Interactive Visuals & Reports)**   * A **Power BI and Streamlit dashboard** displaying key sales insights. * Visualizations covering **sales trends, revenue breakdown, product performance, and customer demographics**. * Filters for **time periods, product categories, and regions** to drill down insights.   ✅ **Data Processing & Analysis**   * **Data cleaning and transformation** to ensure accuracy. * Handling **missing values, duplicates, and inconsistencies** in sales data. * Aggregating data at **daily, monthly, and yearly levels** for meaningful insights.   ✅ **KPIs & Business Insights Report**   * Identifying **top-performing products, most profitable regions, and key customer segments**. * Analyzing **seasonal sales trends** and forecasting future demand. * Recommending **sales and marketing strategies** based on data insights.   ✅ **Technical Documentation & Codebase**   * **Project documentation** outlining dataset details, analysis methodology, and visualization techniques. * **Well-structured Python code (Pandas, Matplotlib, Seaborn, Dash, etc.)** for data processing and visualization. | | |
| SCOPE STATEMENT | 📌 **In Scope (What the project will cover)** ✔️ Developing an **interactive dashboard** for sales analysis. ✔️ Cleaning and processing sales data for insights. ✔️ Implementing **data visualizations (trends, distributions, top products, customer segmentation, etc.).** ✔️ Calculating and tracking **KPIs like revenue, profit, and order volume**. ✔️ Providing a report with **business insights and recommendations**. ✔️ Creating **technical documentation and a user guide**.  🚫 **Out of Scope (What the project will NOT cover)** ❌ Real-time data streaming or live updates (will use historical data only). ❌ Machine Learning-based predictive sales forecasting (unless planned in future phases). ❌ Integration with external sales/CRM systems (e.g., Salesforce, SAP). | | |

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| START DATE | 02/25/2025 | END DATE | 03/26/2025 | PROJECT DURATION in days | 29 | OVERALL PROGRESS | 80% |

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| **WBS No.** | **TASK NAME** | **RESOURCE ASSIGNED** | **START  DATE** | **END  DATE** | **DURATION**  in days | **STATUS** |
| **1** | **PROJECT CONCEPTION AND INITIATION** |  |  |  |  |  |
| 1.1 | – Identify the key business challenges related to sales. |  |  |  |  |  |
| 1.1.1 | –– Define the goals of the dashboard |  |  |  |  |  |
| 1.2 | – Understand what insights stakeholders need from the dashboard |  |  |  |  |  |
| 1.3 | – Identify key performance indicators (KPIs) to track |  |  |  |  |  |
| 1.4 | – Collect initial datasets and review structure |  |  |  |  |  |
| 1.5 | – Identify missing values, duplicates, and inconsistencies |  |  |  |  |  |
| 1.6 | – Select tools/technologies (Python, Power BI, or Streamlit) |  |  |  |  |  |
| **2** | **PROJECT DEFINITION AND PLANNING** |  |  |  |  |  |
| 2.1 | – Identify necessary transformations (e.g., handling missing values, standardizing formats) |  |  |  |  |  |
| 2.2 | – Define the process for aggregating data (daily, monthly, yearly) |  |  |  |  |  |
| 2.3 | – Plan dashboard structure (filters, charts, KPIs) |  |  |  |  |  |