SUPER STORE SALES

FINAL PROJECT DOCUMENTATION

HELLO!

SUPER STORE SALES

Project Description:

This project, SuperStore Sales Analysis, focuses on analyzing sales trends, customer behavior, and performance metrics using Python, Jupyter Notebook, and Microsoft Power BI. The goal is to generate valuable insights to optimize business strategies.

GROUP MEMBERS & ROLES:

ABDELHAMEED REDA (TEAM LEADER):

- Project Management and Analyzing data and extracting key fraud insights.

HUDA GOMAA:

- Five on data analysis, initial exploration and ML.

NAGAH RAMADAN

- On designing reports and visualizations using Power BI.

REDA ADEL

- Responsible for cleaning and preparing data for analysis.

OBJECTIVE

ANALYZE

SALES PERFORMANCE ACROSS DIFFERENT PRODUCT CATEGORIES AND REGIONS

IDENTIFY

KEY CUSTOMER SEGMENTS AND PURCHASING BEHAVIORS.

EVALUATE

ORDER AND SHIPPING PERFORMANCE TO OPTIMIZE LOGISTICS.

ASSESS

PERFORMANCE TRENDS AND FORECASTING OPPORTUNITIES.

PROVIDE

INTERACTIVE VISUALIZATIONS FOR BUSINESS DECISION-MAKING.

PROPOSED TIMELINE

WEEK 1: DATA CLEANING AND PREPROCESSING

- **Tasks**:

1. Data Preprocessing: Clean and preprocess the data using Python and Power BI.
2. Tools: Python, Power BI.

- **Deliverables:**
- Cleaned dataset ready for analysis.
- Data preprocessing notebook.

WEEK 2: ANALYSIS QUESTIONS PHASE

- **Tasks**:

1. Determine Data Analysis Questions: Identify key business questions based on the dataset.
2. Tools: Python, Power BI.

- **Deliverables:**

3. A list of key analysis questions to be explored.

WEEK 3: DASHBOARD PHASE

- **Tasks:**

1. Build Dashboard: Create a Power BI dashboard that visualizes key insights.
2. Tools: Power BI.

- **Deliverables:**

3. Power BI interactive dashboard.

WEEK 4: FINAL PRESENTATION

- **Tasks**:

1. Prepare a final report and presentation summarizing findings, visualizations, and recommendations.
2. Tools: Power BI, PowerPoint.

- **Deliverables:**

3. Final project report.
4. Presentation slides.

KEY PERFORMANCE INDICATORS (KPIS):

DATA QUALITY SCORE:

Percentage of missing or incorrect data after cleaning.

DASHBOARD PERFORMANCE:

Load time and responsiveness of Power BI dashboards.

INTERACTIVITY & USABILITY:

Feedback from DEPI colleagues on clarity and usability.

KEY INSIGHTS GENERATED:

Number of meaningful business insights extracted.

REPORT ACCESSIBILITY

Ensuring seamless access to reports for stakeholders.

VISUALIZATION EFFECTIVENESS:

Readability and adherence to best data visualization practices

TOOLS & TECHNOLOGIES:

PYTHON (FOR DATA CLEANING AND ANALYSIS)

libraries like pandas , numpy , matblot and seaborn

JUPYTER NOTEBOOK

for exploratory data analysis

POWER BI

for data visualization and dashboards

SQL (SQL SERVER DBMS)

DATA MODELING (MODEL VIEWS + ERD)

FIGMA (FOR DESIGN)

NOTION (FOR WORK-FLOW)

SUPER STORE SALES

THANK YOU