

## Task Assignment & Roles – Defined responsibilities for team members:

### ➤ The project team (Data Witchers) and their assigned roles:

- **Ahmed:** Data Cleaning & EDA
- **Aya:** Customer Segmentation
- **Inas:** Product Performance Analysis
- **Lina:** Regional Analysis
- **Samah:** Sales Trends Analysis
- **All team members:** Reporting & Visualization

### ➤ Risk Assessment & Mitigation Plan

#### ***Risks:***

- **Data Quality Issues:** Missing or inconsistent data.

*Mitigation:* Perform thorough data cleaning and preprocessing.

- **Scope Creep:** Adding too many analysis questions.

*Mitigation:* Stick to the predefined scope and prioritize key questions.

- **Tool Limitations:** Difficulty using Tableau or Python libraries.

*Mitigation:* Provide training or seek online resources.

- **Time Constraints:** Delays in completing tasks.

*Mitigation:* Allocate buffer time and monitor progress regularly.

#### ***Contingency Plan***

If a team member falls behind, redistribute tasks or extend deadlines if possible.

➤ **KPIs (Key Performance Indicators):**

- **Data Quality:** Ensures the dataset is clean and reliable for analysis.
- **Customer Segmentation Accuracy:** Helps in targeted marketing and personalized customer engagement.
- **Product Performance Metrics:** Identifies opportunities to optimize inventory and boost sales.
- **Regional Sales Growth:** Highlights areas for business expansion and improvement.
- **Sales Trend Accuracy:** Validates the reliability of sales forecasts and insights.
- **Report Quality:** Ensures the final deliverables meet stakeholder expectations.
- **Project Timeliness:** Keeps the project on track and within deadlines.
- **Visualization Effectiveness:** Makes insights easy to understand and actionable.
- **Actionable Recommendations:** Drives real-world impact and business growth.
- **Stakeholder Satisfaction:** Measures the overall success of the project from the stakeholders' perspective.

➤ **Feedback & Evaluation**

*The lecturer's assessment of the project will focus on the following key areas:*

1. **Quality of Analysis:** Depth and accuracy of insights derived from the data.
2. **Clarity of Documentation:** How well the project is documented, including the report, code, and visualizations.
3. **Implementation:** Effectiveness of the data cleaning, analysis, and visualization processes.
4. **Testing:** Validation of findings through statistical tests and peer reviews.
5. **Presentation:** How well the findings and recommendations are communicated to stakeholders.

## ➤ **Suggested Improvements**

*Here are some areas where the project can be enhanced:*

### **1. Interactive Dashboards:**

- Create interactive dashboards using tools like Tableau or Power BI for better stakeholder engagement.
- Include filters and drill-down options for more detailed exploration.

### **2. Real-Time Analysis:**

- Implement real-time data processing to provide up-to-date insights.

### **3. Stakeholder Collaboration:**

- Conduct regular check-ins with stakeholders to gather feedback and refine the analysis.
- Include a feedback loop to ensure the final deliverables meet stakeholder expectations.