Practical Assessment

Background

The Western Cape Provincial Treasury (WCPT) is mandated to provide strategic financial leadership and support to the provincial government, including departments, public entities, and municipalities.

To fulfill this mandate, WCPT actively fosters a culture of innovation and governance excellence, positioning itself as a key enabler of accurate, timely, and insightful financial information.

One of WCPT's critical roles is ensuring the availability of reliable, high-quality data that supports informed decision-making across various stakeholders. As part of its ongoing commitment to continuous improvement, WCPT consistently explores new methods, tools, and data-driven solutions to enhance service delivery.

Task Instructions

You have been provided with a spend analysis dataset extracted from WCPT's internal reporting systems.

Please complete the following tasks as part of your assessment:

1. Clean and Prepare the Dataset

- 1.1 Handle missing and inconsistent values
- 1.2 Standardise data formats where necessary
- 1.3 Identify and remove any obvious duplicate records

2. Perform Exploratory Data Analysis

- 2.1 What are the top five MIIN codes by total spending amount?
- 2.2 Which supplier class or subclassification accounts for the highest average spend?
- 2.3 Identify any inconsistencies or outliers in the spent amounts. Suggest potential reasons for their occurrence.
- 2.4 Provide a breakdown of spending by store (store number and description).
- 2.5 Which cost centers have the highest and lowest total spending?

3. Insights and Recommendations

- 3.1 Based on your analysis, what opportunities or risks can you identify?
- 3.2 Recommend three data-driven actions that the procurement or finance team could take to improve efficiency or reduce risk.

4. Deliverables

Submit the following:

- **Cleaned Dataset:** The dataset after all cleaning steps, including handling missing values, standardising formats, and removing duplicates.
- **Summary Report**: A concise 1–2 page/slides report including:
 - Key findings from your exploratory analysis
 - o Insights and recommendations
 - Visuals (charts or tables) supporting your conclusions