## **Project Instructions**

For each selected case study, you will carry out a comprehensive Exploratory Data Analysis (EDA) using the appropriate analytical tools and techniques relevant to the context of each dataset.

# **†** Case Study 3: Palmora Group HR Analysis

The Palmoria Group, a manufacturing company based in Nigeria, is embroiled in issues bordering on gender inequality in its 3 regions. Unfortunately, the media recently published the news with the headline "Palmoria, the Manufacturing Patriarchy". This doesn't look good for the owners of the business, based on their ambition to scale the business to other regions and even overseas. Cases like this can only spiral downwards, revealing other issues like the gender pay gap, amongst other possible issues.

The CEO of Palmoria, Mr Ayodeji Chukwuma, is keen to address these issues before they get out of hand. The CHRO, Mr Yunus Shofoluwe, has been assigned the task to identify key areas within the business that could give rise to issues and address them immediately. Mr Shofoluwe decided to recruit you as an HR Analytics expert to analyse the company's HR data and come up with recommendations for management's attention. "Now, the future of gender equality in Palmoria lies in your hands" – the exact words of Mr Shofoluwe before he handed the data to you.

#### **CASE SCENARIO**

- Analyse the company data and generate insights that the Palmoria management team would need to address
- Your analysis should be visualized using appropriate charts
- Your focus should be on gender-related issues within the organization and its regions
- The insights required are based on your discretion. However, Mr Gamma, as an insider, has offered to give you pointers on areas you need to pay attention to

#### **Required:**

- Generally, there are two genders in the organization. However, some employees refused to disclose their gender. You would need to assign a generic gender status to these employees
- Some employees are without a salary because they are no longer with the company. You will need to take those employees out
- Lastly, some departments are indicated as "NULL". These departments would also need to be taken out.

#### **Pointers from Mr Gamma**

- 1. What is the gender distribution in the organization? Distil to regions and departments
- 2. Show insights on ratings based on gender
- 3. Analyze the company's salary structure. Identify if there is a gender pay gap. If there is, identify the department and regions that should be the focus of management
- 4. A recent regulation was adopted which requires manufacturing companies to pay employees a minimum of \$90,000
- Does Palmoria meet this requirement?
- Show the pay distribution of employees grouped by a band of \$10,000. For example:
- How many employees fall into a band of \$10,000 \$20,000, \$20,000 \$30,000, etc.?
- Also visualize this by regions

## **Case Questions**

- 5. Mr Gamma thought to himself that since you were already working on the employee data, you could help out with allocating the annual bonus pay to employees based on the performance rating. He handed you another data set that contains rules for making bonus payments and asked you to:
- Calculate the amount to be paid as a bonus to individual employees
- Calculate the total amount to be paid to individual employees (salary inclusive of bonus)
- Total amount to be paid out per region and company-wide