Deloitte Data Analytics Virtual Internship – Project Report

Internship Overview

This project simulates a data analyst role at Deloitte. I worked on real-world business scenarios involving data analysis, visualization, and insights presentation using tools like Excel, Tableau, and Power BI.

Factory Device Downtime Analysis using Tableau

Dataset:

- daikibo-telemetry-data.json

Objective:
Identify and visualize machinery downtime across factories and device types.
Steps Performed:

1. Installed Tableau and set up workspace.
2. Imported daikibo-telemetry-data.json dataset.
3. Created a calculated field “Unhealthy”:

IF [Status] = "Unhealthy" THEN 10 ELSE 0 END

4. Built 2 bar charts:
   - Down Time per Factory
   - Down Time per Device Type
5. Developed a Dashboard combining both charts.
6. Enabled Factory bar filter to reflect related device downtime.
7. Captured a screenshot highlighting the factory with the most downtime.

Tools Used:

- Tableau Public

Gender Pay Equality Classification in Excel

Dataset:

- Equality Table.xlsx

Objective:

Classify factories and job roles by fairness in gender pay.
Steps Performed:

1. Analyzed Equality Score data ranging from -100 to +100.
2. Created a new column: Equality Class
3. Applied logic:

- Fair if score is between -10 and +10
- Unfair if between -20 and -10 or 10 and 20
- Highly Discriminative if less than -20 or more than +20

Tools Used:

- Microsoft Excel (Formula-based classification)

Key Learnings:

- Data classification and calculated fields
- Dashboard design and interactivity in Tableau
- Business insight generation using equality metrics
- Hands-on exposure to real-world analytics workflows

Outcome:

Successfully visualized and analyzed business-critical data to aid in operational efficiency and gender equality assessment, simulating a professional data analytics environment.