Dear Students,

For this project, you'll work with an HR dataset containing the following columns:

- **Eid:** Unique employee ID.
- **Full Name**
- **Job Title:** (e.g., Account Rep, Analyst 1, Analyst 2).
- **Department:** (e.g., Accounting, Engineering, Finance, HR, IT, Marketing, Sales).
- **Business Unit:** (Corporate, Manufacturing, Research and Development, Specialty Products).
- **Gender:** Male, Female.
- **Ethnicity:** (Asian, Black, Caucasian, Latino).
- **Age:** Ranges from 25 to 65.
- **Hiring Date:** Years from 1992 to 2021.
- **Annual Salary:** $40k to $250k+.
- **Bonus:** 0% to 40%.
- **Country and City**
- **Exit Date:** When applicable.

Your Task

Using this dataset, your objectives are to:

1. **Create Pivot Tables** to analyze key HR metrics.
2. **Design Pivot Charts** for clear visualization of trends.
3. **Develop an Interactive Dashboard** that summarizes insights dynamically.
4. **Add extra columns** (e.g., Hire Year, Tenure) for enhanced analysis using formulas like `YEAR()`, `IF()`, or `IFS()`.

Business Questions to Answer

Pivot Tables

1. What is the total number of employees in each department and business unit?
2. What is the average salary and bonus percentage for employees by job title?
3. How many employees were hired in each year (based on their hiring date)?
4. What is the distribution of employees by gender and ethnicity across departments?
5. What is the total salary expenditure for each department, and which contributes the most?

Pivot Charts

6. What are the age demographics of employees by department?
7. What is the trend of employee exits over the years, and how does it vary by business unit?
8. Which country has the highest average annual salary, and how does it compare by department?

Interactive Dashboard

9. Create a dashboard that shows:
    - Total employees by department and gender.
    - Average tenure (years from hiring date to exit date or current year) for employees by department.
10. Include a salary comparison chart by ethnicity and job title. What insights can you derive from this?

Extra Columns for Analysis

11. Add a column for **Hire Year** to analyze hiring trends.
12. Create a column for **Tenure** (current year or exit year minus hire year) to assess employee retention.
13. Use `IFS()` to categorize employees by salary bands (e.g., <$50k, $50k-$100k, >$100k).

Categories:

- **Low ($<50k):** Employees earning less than $50,000 annually.
- **Mid ($50k-$100k):** Employees earning between $50,000 and $100,000 annually.
- **High ($>100k):** Employees earning more than $100,000 annually.

14. Use `IF()` to flag employees who have been with the company for more than 10 years.

Categories:

- **Long Tenure:** Employees who have been with the company for more than 10 years.
- **Short Tenure:** Employees with 10 years or fewer at the company.

Expectations

- Provide actionable recommendations based on your findings, such as diversity improvements, salary adjustments, or retention strategies.
- Keep your analysis clean, well-structured, and visually appealing.
- Take this opportunity to experiment and explore new Excel techniques to deepen your understanding.

Submission Guidelines

1. Upload your completed Excel workbook to GitHub
2. Write a brief LinkedIn post summarizing your learning experience, the insights gained, and how you plan to use these skills in real-world scenarios. Attach screenshots of your dashboards to the post and link to your github projects and tag me **(@Cyril Ogbolu)**

A Word of Encouragement

This project is a great chance to showcase your analytical skills and creativity. Don’t be afraid to try new formulas, explore advanced features, and push yourself to deliver your best work. Remember, learning happens when you challenge yourself!

I’m excited to see the amazing solutions and dashboards you create. Best of luck, and enjoy the process!

Have Fun!

Cyril Ogbolu