

**Dear Students,**

For your final Excel project, you will work with a dataset containing the following columns:

- **Account:** Commissions expense, consulting expense, cost of goods sold, marketing expense, R&D expense, sales, software/hardware expense, travel and entertainment expense.
- **Business Unit:** Advertising, Hardware, Software.
- **Year:** 2012 to 2023.
- **Scenario:** Actuals, Budgets, Forecast.
- **January to December:** Monthly values for various metrics.

## **Your Task**

You will create:

1. **Pivot Tables** to answer business questions.
2. **Pivot Charts** to visually present the insights.
3. **An Interactive Dashboard** to summarize your findings dynamically.

## **Business Questions to Answer**

### **Pivot Tables**

1. What are the total expenses for each business unit (Advertising, Hardware, Software)?
2. What is the total for each account (e.g., marketing expense, sales) across all years?
3. What is the average monthly cost for each account?
4. How do actual expenses compare to budgets for all business units?
5. What is the total sales amount for each scenario (Actuals, Budgets, Forecast)?

### **Pivot Charts**

6. What is the trend of total expenses for all business units over time?
7. Which months have the highest and lowest total expenses across all accounts?
8. How does spending differ for software/hardware expenses across the three business units?

### **Interactive Dashboard**

9. Create a dashboard that shows total expenses for each business unit and allows filtering by year, account, and scenario.
10. Include a chart comparing actual and budget values for all accounts. What patterns do you notice?

## **Expectations**

- Answer each question clearly using Excel's Pivot Tables, Pivot Charts, and Dashboard features.
- Keep your visualizations simple, clear, and professional with appropriate titles, legends, and labels.
- Use this as a chance to apply the concepts you've learned and even try out new Excel features to enhance your analysis.

## **Submission Guidelines**

1. Upload your completed Excel workbook to GitHub and provide the link.
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 is your chance to bring together everything you've learned in this course. The questions are designed to help you practice and build confidence in solving real-world business problems. Don't be afraid to experiment, ask questions, and explore.

I'm excited to see the amazing work you'll produce. Do your best and enjoy the process of creating something impactful!

Have Fun!

**Cyril ogbolu**