Business IT & Spreadsheet Application

# Assignment Outline

# Case Assignment

1. The business data is provided in the format of a Microsoft Excel file and consists of 2 worksheets. (The extra excel file provided includes the data)
2. The business data consists of 2 worksheets. The worksheet with more data will be referred to as the **PRIMARY Worksheet** and the worksheet with less data will be referred to as the **SECONDARY Worksheet** in this document.
3. The assigned business data is TelcoTech

# Assignment Objectives

* + 1. Produce an Excel report that fulfills the following:
       1. Analyzes the assigned data for information with business value using
          - 1 Excel Chart
          - 1 Interactive Dashboard containing 2 Pivot Charts
       2. Projects changes in the business outcomes using
          - 1 What-if Analysis Scenario containing 3 Business Scenarios
       3. Is well-formatted consistently across all worksheets to enhance readability and highlight important values
    2. Present the information in your Excel report using an accompanying deck of PowerPoint slides to fulfill the following:
       1. Highlight the purpose and business significance / value of your work (e.g.: why you create this chart and what it is saying about the business).
       2. Provide rationale for your work where necessary (e.g.: why you select certain fields / use certain summary calculation to perform your analysis).

# Requirements

The scope and requirements of the assignment are as follows:

# Preparing the Excel Workbook File

Create your Excel report using the assigned business data. Save your Excel report with the following naming convention: “**ICA2\_modulegroup\_caseX**”, where “modulegroup” is your Module Group and X is your group / case number. For example, “**ICA2\_AA\_case1.xlsx**”.

# Preparing the PRIMARY Worksheet for Reporting

Generate useful information in the PRIMARY Worksheet.

* + 1. Add 1 or more **new columns** that contain formulas in this worksheet to calculate / generate new data.
    2. At least 1 of these new columns must be used to **reference the data in the SECONDARY worksheet meaningfully** using suitable Excel function(s).
    3. The data in **all the new column(s)** must be **used directly or indirectly**

in the analysis or scenarios that fulfill requirements 4.3, 4.4 and 4.5.

* + 1. Do **not** copy the data in the SECONDARY worksheet into the PRIMARY worksheet.
    2. **Label** these new columns with appropriate and meaningful headers.

# Generate Summary Information and Chart

Summarize / aggregate **information with business value and visualize**

the information in a chart.

* + 1. In empty cells **in the SECONDARY worksheet**, create a **new table** containing summarized / aggregated information of **data from the PRIMARY worksheet**.
    2. The summarized / aggregated information must be generated using **one of the new columns** you added in PRIMARY worksheet that references **data in the SECONDARY worksheet** directly or indirectly in its formula.
    3. **Utilize one or more** of the following excel functions to generate the summarized / aggregated information.
       - SUMIF or SUMIFS
       - AVERAGEIF or AVERAGEIFS
       - COUNTIF or COUNTIFS
    4. Visualize the summarized / aggregated information by creating a chart that best represents the information in the new table.
    5. **ALL the data** in the new table must be presented in the chart.
    6. Use a **suitable chart type** and **format** the chart appropriately such that it is self-explanatory (appropriate chart title, axis titles and legend if necessary) and presents the summary information clearly.
    7. Move this chart to a new **chart sheet** and **name** the chart sheet “**Summary Chart**”.

## In your verbal presentation and elaborated in the submitted slides, explain the business value of this chart.

* 1. **Create a Dashboard**

Create a dashboard in your report that performs meaningful analysis of the data in the PRIMARY worksheet to produce **information with business significance and value**.

1. Create this dashboard in a new worksheet called “**Dashboard**”.
2. The dashboard must consist of **2 Pivot Charts**, generated from **2 different Pivot Tables** that use **data from the PRIMARY Worksheet**. These 2 Pivot Chats must present business information that are different from each other (at least 1 of the fields used in the Rows, Columns or Values areas, or the function used in the Values area must be different between these 2 Pivot Tables).
3. All Pivot Charts and Pivot Tables must be created in the Dashboard worksheet.
4. Use suitable chart types for the Pivot Charts to best represent the information and format them appropriately such that they are self- explanatory and effective in visualizing the information.
5. All Pivot Charts must present **unique** business information that are **different**

from the SUMMARY chart.

1. In your verbal presentation and elaborated in the submitted slides, explain the business value of these 2 Pivot Charts.
2. Create **2 Pivot Slicers** in the Dashboard Worksheet.
3. Each of the 2 Pivot Slicers must be **connected to both** Pivot Tables.
4. Choice of data fields to be used as Pivot Slicers should be selected carefully such that the Pivot Slicers **facilitate further analysis of the business information** presented in the Pivot Tables and Pivot Charts. Explain this in **your verbal presentation and elaborate it in the submitted slides.**
5. **Lay out and resize the elements** in the Dashboard worksheet such that the business information is visually presented to your audience in an effective and clear manner.

# Create Business Scenarios

Create **3 Business Scenarios** in the **SECONDARY** worksheet using Excel’s What-If Analysis feature to project changes in the business information when key data is changed. Create scenarios that **represent plausible business situations or target outcomes.**

* + 1. The first business scenario should be used to store the original (unchanged) data. Create 2 other business scenarios to store other “versions” where key data is altered.
    2. Select suitable cells in the data in the **SECONDARY** worksheet to be the

**Changing Cells** of your business scenarios.

* + 1. Select suitable cells in the table of **summarized / aggregated information** that you created have for requirement 4.3 to be the **Result Cells** of your business scenarios.
    2. **Name** your 3 business scenarios appropriately.
    3. Generate the **scenario summary** of your business scenarios in a new worksheet called “**Scenario Summary**”.
    4. The Scenario Summary worksheet should present the Changing Cell and Result Cell values of the 3 business scenarios.
    5. **Modify the labels** in the Scenario Summary worksheet so that is easy to read and understand what the Changing Cells and Result Cells represent in the business scenarios.
    6. **Remove any redundant elements** in the scenario summary that may be generated by default by the scenario manager.

## In your verbal presentation and elaborated in the submitted slides, explain the business value of this Scenario Summary.

* 1. **Workbook Report Formatting**

1. Add a **Title** and **Logo Image** in the **Primary Worksheet**.
   * The **Title** should include the Business’s Name. The title should be

## adequately formatted.

* + A **Logo Image** that appropriately represents the business should be included. Size it adequately and placed **near** the Title

1. Add a **Subtitle** to **all your worksheets**
   * The subtitle of each worksheet should provide **brief information** about the worksheet or **present the purpose** of the worksheet content. All subtitles should be **adequately formatted**.
2. Apply **consistent formatting** that fulfills the following purposes to all your worksheets:
   * Make your data and business information easy to read and understand, following number formatting conventions for different data types.
3. Highlight **an** important column of data / information in the **Primary Worksheet** using **rule-based methods that are** capable of changing the formatting dynamically according to the data.
   * Explain in your **verbal presentation and elaborated in the submitted slides**, the significance of this rule-based formatting that you have applied (what are you highlighting, and why).

# Assessment

This project carries a total of **134 marks** and **constitutes 40% of the overall grade**

for the module. The breakdown of marks is as follows:

## Group Component (94 marks Total)

1. Preparing the Excel Workbook File (1 mark)
2. Preparing the PRIMARY Worksheet for Reporting (2 marks)
3. Generate Summary Information and Chart (13 marks)
4. Create a Dashboard (37 marks)
5. Create Business Scenarios (18 marks)
6. Workbook Report Formatting (15 marks)
7. Create Presentation Slides (8 marks)

## ANNEX A

**Background of Business Category**

**CASE 3:** TelcoTech

TelcoTech offers different types of subscription plans to its customers. TelcoTech is interested to understand customer loyalty and also wants to know if different subscription plans provide different value to the business.

END