

Case study

Instructions:

1. **Read the Problem Statement and Requirements** carefully.
2. **Analyse the Provided Dataset**, identifying key insights and trends.
3. **Create Visualizations** using Power BI to support your findings.
4. **Prepare a Written Report** summarizing the steps you took, your analysis, insights, and recommendations.
5. **Submit your Work** within 72 hours.
6. **Prepare a 15-Minute Presentation**: Be ready to present your analysis and findings during the on-site meeting with the hiring manager.
7. **Participate in a 15-Minute Q&A Session**: After your presentation, be prepared to answer questions and discuss your analysis in depth.

Problem Statement:

The dataset provided includes data on revenues by customer. Analyse this data and provide actionable insights that can help to improve these companies.

Key Objectives:

- **Identify Trends and Patterns** in the data.
- **Highlight Areas for Improvement** for the portfolio
- **Propose Data-Driven Solutions** that can enhance business outcomes.

Tasks:

1. **Data Cleaning and Preprocessing:**
 - Identify and handle missing values and data inconsistencies.
 - Prepare data for analysis.
2. **Exploratory Data Analysis (EDA):**
 - Use Python, SQL or Excel for data analysis.
 - Perform descriptive statistics and data exploration.
 - Identify key trends and anomalies.
3. **Data Modelling:**
 - Describe which are fact tables and which table are dimensions
 - Prepare the data with SQL, Python, or Excel for import into Power BI
 - Import the data in Power BI and create necessary relationships between tables
4. **Data Visualization:**
 - Use Power BI to create dashboards.
 - Visualize sales trends and customer segmentation
 - Create a Recurring Revenue Waterfall, both as a chart and a table.
 - See Appendix 1 for more details
5. **Reporting:**
 - Draft a report summarizing findings.
 - Include visualizations and actionable recommendations.

Appendix 1 – Design requirements for RR Waterfall

Requirement 1 – Table:

Category Group	Jun 2023	Jul 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Apr 2024	May 2024	Jun 2024
Opening													
New name													
Back to base													
Attrition													
Churn													
Downsell													
Temporary churn													
Total													
Delta													
Total													

Requirement 2 – Chart:



Note: Numbers in the dataset may be different, this is only to indicate the desired visual representation.