# Assignment 2 Report

**Team and Member Contribution**

Indicate what part of the assignment submission each team member has contributed to.

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| **Student Name** | **Murdoch ID** | **Contribution Description** | **Actual Signature of Team Member (digital is fine)** |
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### Assignment Task

This portion of the Assignment is **worth 70% (marked out of 100%)**

What are you required to do and submit for the assignment?

#### A brief Executive Summary and Introduction to the Assignment Problem 5%

* Here you will provide a list of the data you have procured and the URL from which the data was sources (Use APA style referencing).
* Highlight the key objectives, chosen SDG and anticipated impact of your analysis.
* Also briefly cover the approach and methodology used for data analysis.
* And briefly describe why each chosen dataset is relevant to their SDG to reinforce the importance of thoughtful data selection.

#### Data Procurement (required but marks are allocated across different Tasks)

While marks are not directly allocated to this section, the quality and relevance of the data procured will impact the marks in other sections where analysis is presented.

Your team must locate, access and procure publicly available datasets that provide metrics and indicators relevant to your chosen SDG. For example, if your team has chosen SDG 8, data on employment rates, industry growth and workplace conditions might be worth looking at.

Here you will provide a list of the data you have procured and the URL from which the data was sources (Use APA style referencing)

#### Dimensional Model Design (required) 20%

For this section you will submit

1. Implement Dimensional Modeling in Power BI
2. A write up identifying the dimension model you have designed for your analysis. (For example, “The model we have designed is a Snowflake model”)
3. **Identify the dimension model** you have designed for your analysis (For example, “The model we have designed is a XYZ type for dimensional model”) and **explain** in a few sentences, why this is the most appropriate dimension model. (For example, “We have used a XYZ dimensional model because… ”)
4. Describe how the relationships between the fact and dimension tables were specifically designed to support the analytical requirements of your formulated BI questions. *(Note: This question is asking you to explain why you set up the relationships in your model the way you did. Specifically, discuss how these relationships help to answer the BI questions effectively, support the analysis you intend to perform and ensure that the data is connected in a way that enables meaningful exploration and insight extraction.)*
5. List all Dimensions and Fact table(s) included in your dimension model.
6. A screenshot of your dimension model with the appropriate relationships.

#### Power BI Insights and Visualizations using Interactive reports. (55%)

1. **Descriptive Analytics and Insights** – Here you will submit you **Descriptive** Analytics and provide **Descriptive** Insights required for this task. Including

All required tasks for a – e, all Visualizations, write ups, and list of applied Gestalt principles

Minimum 4 visualizations

20 Marks

1. **Diagnostic Analytics and Insights** - Here you will perform **Diagnostic** Analytics and provide **Diagnostic** Insights required for this task. Including

All required tasks for a – e, all Visualizations, write ups, and list of applied Gestalt principles

Minimum 4 visualizations

20 Marks

1. **Predictive Analytics and Insights** - Here you will perform Prescriptive Analytics and provide Prescriptive Insights required for this task. Including

All required tasks for a – e, all Visualizations, write ups, and list of applied Gestalt principles

Minimum 3 visualizations

15 Marks

#### Appendix and References (20%)

1. **Data Dictionary 10%**

Lists all data sources. Your team will create a comprehensive data dictionary detailing all the datasets you have procured. This should include metadata, source descriptions, data types and any transformations or cleaning steps applied to the datasets. This should be organized in a table.

1. **References 5%**

Details where the data was obtained using APA style referencing

1. **Other 5%**

A Sub Section for all other requirement and additional information your team see fit e.g. screenshots of all modeling done within Power BI, including the relationships, custom DAX measures you created and any additional advanced analytics components used in the assignment.