5 STEPS

TO PROCESS DATA FOR YOUR PROJECTS

1 DEFINE YOUR GOALS FOR DATA PROCESSING

Identify Problems: Define the types of problems you want to solve, and consider whether data analysis is a proper approach to solve your problems.

Assess Your Problems: Evaluate the difficulties of solving the problems and the benefits that solving them can bring to your project.

Know Your Stakeholders: List and map the internal and external stakeholders related to your project.

Establish Key Indicators: Define key measures to evaluate your problems.

2 ASSESS DATA YOU ALREADY HAVE AND COLLECT THE DATA YOU NEED
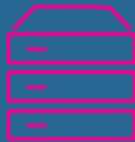
Concretize Your Workflow: Sketch out the workflow of your daily work, such as how you deliver services or how you advocate your ideas to the people.
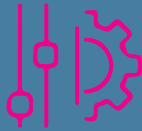
Data Inventory: List the data sets and data tables you need.

Define the Table Schema for Your Data: Examine your data tables to identify the relationship between each data table.

Data Collection: Define what type of data format (e.g. Excel, JSON) you need before you start collecting data.
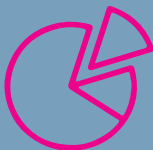
3 TRANSFORM YOUR DATA

Improve Data Quality: Examine the quality of data, such as identifying and dealing with missing or inaccurate data etc.

Clean Data: Clean data by ensuring that the format of all the data is consistent.

Integrate Data: Transform, merge, reallocate, or adjust data fields according to your needs.

4 ANALYZE YOUR DATA

Conduct Descriptive Analysis: Visualise your data by using a software to create charts. This allows you to see trends in the distribution of your data.

Explore Multidimensional Correlation: If you have more than two data sets or data fields (variables), see whtether a relationship exists between them.

Analyze Data: Select appropriate approaches to analyse your data, such as hypothesis testing, classification, or regression.

5 USE YOUR DATA ANALYSIS TO SUPPORT DECISION-MAKING
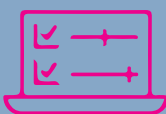
Check the Result of Data Analysis: Interpret the results of the analysis according to the requirements and goals you set at the beginning.

Establish an Action Plan: Link the results of the analysis with your domain knowledge to generate, define, and implement your action plan.

Risk assessment: Assess how effective and beneficial your decision will be and how likely your action plan is to achieve the goal.

Redesign Your Workflow: Optimize and adjust your workflow based on the result of your data analysis.