**INTERMIDIATE 1.2 DATA ANALYSIS PROCESS**

**Step 1: Defining the Problem/ Questions / Task**

This initial step involves understanding and articulating the specific problem or question that the data analysis seeks to address. This could involve setting clear objectives and identifying key questions that need answers.

**Step 2: Data Collection**

This stage involves gathering the necessary data from various sources. The sources could be internal (like company records) or external (like public databases or surveys). The focus is on collecting relevant and high-quality data that will be useful for analysis.

**Step 3: Data Cleaning and Preparation**

Once the data is collected, it needs to be prepared for analysis. This involves cleaning the data (fixing errors, handling missing values, removing duplicates) and transforming it into a suitable format for analysis. This step is critical to ensure the integrity and reliability of the data.

**Step 4: Data Analysis**

In this step, various methods and tools are applied to analyze the prepared data. This could involve statistical methods, predictive analytics, machine learning techniques, and other analytical approaches, depending on the nature of the data and the questions being addressed.

**Step 5: Data Visualizations**

Here, the analyzed data is presented in a visual format, like graphs, charts, and dashboards. Visualizations make it easier to see patterns, trends, and outliers, and can help in making the data more understandable to a broader audience.

**Step 6: Sharing you Findings**

The final step involves interpreting the results of the analysis and communicating them effectively. This could be in the form of a written report, presentation, or a combination of both. The goal is to translate the data insights into actionable recommendations or conclusions that address the initial problem or question.

Looking at the sample response from Cecilia, the HR Manager of Giggle Inc, what are the key questions to answer.



**From Cecilia’s responses, we have 5 key questions to answer:**

1. Which department has the highest turnover in the last year?
2. What is the employee turnover for this quarter as compared to the previous quarters of the year?
3. What is the employee satisfaction score for this quarter as compared to the previous quarters of the year?
4. Is there a correlation between regular training and turn-over rate?
5. Is there a correlation between manager feedback and employee satisfaction.

**Dataset you will use**

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