**Stage 0**

Hello Analysts welcome!!

Data Analytics Track – Stage 0

• Task Explainer video

Task: Introduction to Data Analytics

Objective

This task introduces you to the data analytics workflow. You will find a dataset, explore and clean it, answer meaningful questions, and present your findings clearly and professionally using Excel only.

Task Instructions

Step 1: Find a Dataset

• Choose a Sales, Marketing, or Business-related dataset you can share publicly.

• Use open sources like Kaggle, UCI Machine Learning Repository, World Bank, or government open data portals.

• Optionally, you may combine datasets (ensure they can be merged by a common column like Date, Country, or Customer ID).

Step 2: Explore Your Data

• Understand your dataset’s structure (columns, data types, missing values).

• Identify and fix:

◦ Missing or inconsistent data

◦ Outliers

◦ Typographical errors

• Summarize your findings briefly.

Step 3: Define 1–3 Research Questions

Your questions should be:

• Clear and answerable with your dataset.

• Interesting and relevant to business or policy decisions.

Examples:

• “How does customer discount affect total sales revenue?”

• “Which region generated the highest sales in Q1?”

• “Is there a relationship between marketing spend and product returns?”

Step 4: Document Your Dataset and Questions

• Write down:

◦ Dataset name and source link.

◦ Number of rows/columns.

◦ Key variables (features).

◦ Your research question(s).

Step 5: Choose Your Analysis Methods

• Decide how you will answer your questions using Excel tools:

◦ Descriptive → averages, sums, counts, percentages.

◦ Comparative → pivot tables, grouped bar charts.

◦ Correlation → scatter plots, trendlines.

◦ Trend analysis → line charts over time.

Step 6: Present Your Findings

• Summarize your insights using clear charts and tables.

• Tell a story:  What did you find? Why does it matter? What’s your conclusion?

Step 7: Identify Limitations

Examples:

• Small dataset.

• Missing time period.

• Biased or incomplete records.

Step 8 (Optional): Suggest Future Work

Mention how this project could be improved:

• Collect more data.

• Use a visualization tool (Power BI, Tableau).

• Explore predictive methods later.

Tool Requirement

Use Excel only for data cleaning, analysis, and visualization.  (No Python, SQL, or BI tools at this stage.)

Submission Guidelines: Stage 0 Project

Deliverable

A maximum 10-slide presentation in PDF format.

What to Include

1 Dataset Overview

◦ Brief description of the dataset

◦ Source or origin

2 Research Questions

◦ Clearly defined questions guiding your analysis

3 Data Cleaning Summary

◦ Steps taken to clean and prepare the data

◦ Tools or techniques used

4 Key Analysis and Visuals

◦ Charts, graphs, and tables (preferably from Excel)

◦ Highlight trends, patterns, or insights

5 Insights and Conclusions

◦ What did you discover?

◦ How do your findings answer the research questions?

6 Limitations and Future Work

◦ Challenges or constraints

◦ Suggestions for further exploration

Attachments Required

• Dataset Link

◦ Source or download URL

• PDF Presentation Upload

◦ Submit via the provided form

• Social Media Post

◦ Share your project on Twitter or LinkedIn

◦ Tag @HNG

◦ Submit the link to your post in the form

Naming Convention

Your PDF file should be named as follows:

• Stage0\_FirstnameLastname\_ProjectTitle.pdf

Example:  Stage0\_AdaezeIfeanyi\_SalesTrends.pdf

Deadline: 18th of October, 2025 by 11:59 pm WAT

Submission Link: Submit here