



ANL201
Data Visualisation for Business

Group-based Assignment
July 2024 Presentation

GROUP-BASED ASSIGNMENT (GBA)

This assignment is worth 20% of the final mark for ANL201 Data Visualisation for Business.

The cut-off date for this assignment is 10 October 2024, 2355hrs.

This is a group-based assignment. You should form a group of **4 members** from your seminar group. Each group is required to upload a single report via your respective seminar group site in Canvas. Please elect a group leader. The responsibility of the group leader is to upload the report on behalf of the group. Those submitting individually will be given a 10 marks deduction.

It is important for each group member to contribute substantially to the final submitted work. All group members are equally responsible for the entire submitted assignment. If you feel that the work distribution is inequitable to either yourself or your group mates, please highlight this to your instructor as soon as possible. Your instructor will then investigate and decide on any action that needs to be taken. It is not necessary for all group members to be awarded the same mark.

Up to 25 marks of penalties will be imposed for inappropriate or poor paraphrasing. For serious cases, they will be investigated by the examination department. More information on effective paraphrasing strategies can be found on <https://academicguides.waldenu.edu/writingcenter/evidence/paraphrase/effective>.

Note to Students:

Compose your report using Microsoft Office Word and save either as .doc or **.docx (preferred)**.

You are to include the following particulars in your submission: Course Code, Title of the GBA, SUSS PI No., Your Name, and Submission Date.

For this GBA, it is mandatory that questions are not divided among group members. Each member must independently address and work on a question before engaging in group discussions of the question. In the event of a peer evaluation, each member is expected to submit their own original answers along with justifications for their individual contributions.

All peer evaluation requests must be submitted to the school at least three working days before the GBA due date. Late requests will not be considered.

Use of Generative AI Tools (Allowed)

The use of generative AI tools is allowed for this assignment.

- You are expected to provide proper attribution if you use generative AI tools while completing the assignment, including appropriate and discipline-specific citation, a table detailing the name of the AI tool used, the approach to using the tool (e.g. what prompts were used), the full output provided by the tool, and which part of the output was adapted for the assignment.
 - To take note of section 3, paragraph 3.2 and section 5.2, paragraph 2A.1 (Viva Voce) of the Student Handbook.
 - The University has the right to exercise the viva voce option to determine the authorship of a student's submission should there be reasonable grounds to suspect that the submission may not be fully the student's own work.
 - For more details on academic integrity and guidance on responsible use of generative AI tools in assignments, please refer to the TLC website for more details.
 - The University will continue to review the use of generative AI tools based on feedback and in light of developments in AI and related technologies.
-

Question 1

Choose an organisation to serve as the context for your answers in this assignment. Then, address the following questions:

You may refer to the corporate website of the organisation chosen above for information.

- (a) Suggest *two (2)* strategic objectives for each of the four Balanced Scorecard perspectives (financial, customer, internal business process, and learning & growth) for the chosen organisation. Identify the corresponding measures and targets for each strategic objective. Please present the answer in tabular format, as illustrated below. (Maximum word count: 200 words)

Balanced scorecard perspective	Strategic objective	Measure	Target

(16 marks)

- (b) Use Tableau to create a visualisation chart for each of the measures suggested in part (a) (i.e., create a total of 8 charts), and provide a screenshot of each chart with a meaningful title. Discuss why each chart is appropriate for its corresponding measure and provide a conclusion in 4-5 lines below each respective chart screenshot. (Maximum word count: 500 words)

You will need to create your own datasets using the information from the corporate website as a starting point. Additional relevant data can be obtained from other online sources if necessary.

(40 marks)

Question 2

Please refer to the given dataset < HR_job satisfaction_dataset_GBA.xlsx> to answer the following questions:

- (a) Examine the data and determine the data type (nominal, ordinal, interval, and ratio) for each variable. Calculate the number of observations and summary statistics (mean, median, mode, min, max and std dev) for each variable where applicable. Present your answers in tabular format as per the template given below (use Microsoft Excel):

Variable	Data type	Number of observations	Summary statistics
----------	-----------	------------------------	--------------------

XX	XX	XX	Mean Median Mode Min Max Std dev
XX	XX	XX	Mean Median Mode Min Max Std dev

(8 marks)

- (b) Identify quality issues in the data and apply appropriate treatment methods for each issue found. Prepare the data for visualisation using Microsoft Excel. Provide a screenshot highlighting each data quality issue and a screenshot of the treated data after the corresponding data treatment. (Maximum word count: 250 words)

(16 marks)

Your group shall submit original work. Do not plagiarize any content in your submission from any source, whether public or private. The GBA submission should not exceed 1200 words.

The word count does not include references, cover page, and figure/chart/table titles.

20 marks will be allocated to the professional presentation and writing of your GBA report.

This includes the following aspects,

- Organisation
- Clarity in communication of ideas
- Grammar
- Proper citation and referencing

Make sure the different questions and parts are clearly labelled in your report. Your report should be self-contained with all relevant Tableau and MS Excel screenshots.

(20 marks)

---- END OF ASSIGNMENT ----