

Assessment Brief

Module Title:	Data Visualization
Module Code:	B9DA106
Assessment Title:	Continuous Assessment Two
Assessment Number:	2
Assessment Type:	Practical Assignment – Tableau + Power BI
Individual/Group:	Group (3 or 4 members)
Assessment Weighting:	60%
Issue Date:	21/03/2025
Due Date/Time:	Deadline – 11.55 pm on Saturday 11/04/2025
Presentation Date/Time:	Week 12 Lecture Time
Feedback Date:	Same as presentation date
Feedback Strategy:	Feedback given after each presentation
Mode of Submission:	MOODLE

Learning Outcomes to be assessed:

- 1 Develop visualizations of complex data sets using appropriate tools and techniques.
- 2 Demonstrate the design of new and innovative visualization methods.
- 3 Develop programming constructs needed to encode information visualization algorithms.
- 4 Critically evaluate and apply data visualization design principles and interactive strategies.

Data Visualization Assignment

DATA

Find an interesting publicly available dataset. Your dataset must have 20 or more columns.

The following datasets are not permitted:

- Datasets identical or similar to datasets used in lectures
- Datasets related to video games, coffee, or renewable energy (the themes used in CA_One)

Note - If the dataset does not contain at least 20 columns, or if one of the prohibited datasets is used, then the submission would be subject to a FAIL grade.

Extra marks will be awarded to those who do not “play it safe” and are ambitious with their choice of dataset.

TASK

Design and create an interactive dashboard with five visualizations (and five visualizations only). This dashboard should help somebody get insights into a particular area. You need to pick who this “somebody” is, and this will depend on your dataset but could be e.g. a CEO of a company, head of HR, a government official or a member of the public.

IMPORTANT – This dashboard must be replicated in both Tableau and Power BI. This means that you will have to create the same (or almost the same) dashboard in Tableau as well as Power BI.

While creating this dashboard, you are required to –

1. Use at least two calculated fields (these could be dimensions or measures)
2. Incorporate interactivity elements like filters and parameters (at least one filter and one parameter)
3. Document the differences in your experience of working with Tableau and Power BI.

Deliverables & Assessment Rubric

1. Tableau workbook (.twbx) (25% Weighting)

Key assessment areas: Is the dashboard well designed? Is it easy to understand? Does it use colours/labels/titles effectively? Does it use at least two calculated fields? Is it interactive and make use of at least one filter and one parameter? Does it provide meaningful insights into a particular area? Is the associated dataset submitted?

2. Power BI workbook (.pbix) (25% Weighting)

Key assessment areas: Is the dashboard well designed? Is it easy to understand? Does it use colours/labels/titles effectively? Does it use at least two calculated fields? Is it interactive and make use of at least one filter and one parameter? Does it provide meaningful insights into a particular area? Is the associated dataset submitted?

3. Critical reflection report (.pdf) (25% Weighting)

A max four-page pdf document reflecting on the differences in your experience of working with Tableau and Power BI. You should discuss how similar or different you found the two tools, which features you found useful (or missing), which functionality you found easier (or harder) to implement, and which tool you found more intuitive.

Key assessment areas: Is there evidence of critical reflection? Are examples provided?

4. Oral presentation/viva (25% Weighting)

You will present your Tableau and Power BI workbooks. There is no need to prepare or submit any presentation slides. During your 5-minute presentation, you will be expected to talk about:

1. The dataset.
2. The intended user for the dashboard.
3. The insights provided by the dashboard.
4. The differences in your experience of working with Tableau and Power BI.

Key assessment areas: Can presenters provide meaningful insights using their dashboard(s)? Is their subject and tool knowledge emergent during the presentation?

IMPORTANT – Put Tableau workbook, Power BI workbook, dataset, and critical reflection report in a zipped folder and upload to Moodle. Presentations will take place in week 12. A presentation timeslot will be allocated to your group closer to the submission date.

General Requirements for Students:

1. All assignments must be submitted no later than the stated deadline (date and time).
2. Assignments submitted after the latest deadline specified (including any approved extension deadline) are considered late and penalised according to the [Quality Assurance Handbook \(QAH\) Part B Section 5.2.2.6](#) as follows:
 - a. A penalty of 2 marks will be applied per day or part thereof (including weekends and public holidays) for an ongoing failure to submit beyond the submission deadline.
 - b. An examiner has the right to refuse to mark the assignment if the submission instructions have not been observed.
 - c. Where a late assessment is submitted within 14 days of the deadline, and is of a passing standard, the late penalty is capped (such that the minimum grade that can be awarded is 40% for the late submission).
 - d. Where a late assessment is submitted more than 14 days after the deadline, it will receive 0%. The lecturer may, at their discretion, review the submission for feedback.
 - e. Where the assessment is undertaken in a group, the piece of work should be submitted in its complete entirety, and any penalty for late submission incurred applies to all group members.
2. Extensions to assignment submission deadlines will not be granted, other than in exceptional circumstances. To apply for an extension please go to <https://students.dbs.ie/dashboard/SCCM> and open a ticket.
3. All relevant provisions of the Assessment Regulations must be complied with (see [QAH B.5](#)).
 - a. Students are required to refer to the assessment regulations in their Programme Handbook, and on the [Student Website](#).
 - b. Dublin Business School penalises students who engage in academic impropriety (i.e. plagiarism, collusion and/or copying, ghost writing/ essay mills, improper use of Generative Artificial Intelligence software).
 - i. Refer to the College's [Generative AI Guidelines HERE](#) for further information.
 - c. Guides on referencing are available on the Library website: <https://libguides.dbs.ie/referencing>
 - d. Text-matching analysis software is integrated in Moodle to generate a report regarding the degree of text-matching in a submission.
4. Students are required to retain a copy of each assignment submitted, until the issuing of a transcript indicating the mark awarded and the closure of the Appeal period (2 weeks following the release of final results).
 - a. Results can only be appealed following the release of final results, and the Appeal form must be submitted to the Exams Office within the Appeal period.
 - b. An appeal must be based on valid grounds (see the Appeals Policy QAH B.3.5), dissatisfaction with a grade is not sufficient grounds for an appeal.
 - c. Assignments must be appropriately packaged and presented.
 - d. All assignments should be submitted to your subject/course page on Moodle by the deadline date.

- e. Where a submission involves digital media (i.e. formats other than Word, PowerPoint or PDF), it is the submitting students' responsibility to ensure the media is appropriately labelled, fully working and they must retain a copy.
 - f. Components of an assessment which are not included in the final submission cannot normally be subsequently accepted for grading. It is the student's responsibility to ensure their file is uploaded correctly.
5. When you submit your assignment, you will be asked to click on a button which will declare the following:

By ticking this box, I am confirming that this assignment/exam is all my own work. Any sources used have been referenced.

I have read the College rules regarding plagiarism in the QAH Part B Section 3 and understand that penalties will be applied accordingly if work is found not to be my own. All work uploaded is submitted via Ouriginal, whereby a text-matching report will show any similarities with other texts.