# Report - 85% of module grade

## Report brief

You are an expert member of the Government’s Data Science Advisory Board (any country you choose). There is a lot of hype about ‘AI’ in the media, resulting in lots of requests for advice about using different types of AI e.g. Generative AI, predictive algorithms based on machine learning.

You need to write a 2500-word report advising ministers and policy makers about the strengths, weaknesses, opportunities and threats (SWOT analysis) of the a particular type of AI of your choosing. The type of AI you select **must** be ‘narrow AI’ (i.e. a form of AI that performs specific tasks under limited constraints) such as a Generative AI tool or a predictive algorithm, that might reasonably be considered for adoption in government and/or public services.

Your report **MUST** have an appendix which includes:

* Google Gemini’s response to the prompt “Provide a SWOT analysis of [the type of AI you selected]”. You can optionally cite this text for **critical analysis purposes only** in your report. This means you cannot just take what Gemini (or any similar system) says as correct and paraphrase it. You can only critically analyse the text Gemini provides (if you chose to engage with it). You can access Google Gemini via MUSE.

The report should be structured as follows:

* Title (not included in word count)
* Word count (not included in word count)
* Bullet pointed summary of key points (~150 words)
* Overview of the selected technology (~150 words)
* SWOT analysis
  + Overview of the claimed **s**trengths and **o**pportunities of your selected AI. (~400 words)
  + Critical discussion about the **w**eaknesses of the selected AI and **t**hreats it may pose to society based on module materials and your independent research (~1500 words)
* Recommendations for government policy regarding use of this AI technology (~300 words).
  + Bullet pointed list of recommendations that are clearly connected to the findings of your SWOT analysis.
* References (not included in word count)
  + Including a link to the INF6033 lecture slides Google Drive PDFs that you should reference (using citations) in the SWOT analysis.
* Appendix (not included in word count)
* Google Gemini response to “Provide a SWOT analysis of…” prompt. Your own SWOT analysis must be significantly different from this text. You can access Google Gemini via MUSE

Examples of policy advice reports can be found on the UK Parliament’s POSTnote website (<https://post.parliament.uk/type/postnote/>). While you can use these as an example of appropriate writing style and formatting, please note that we still expect to see the structure outline in the instructions above. See the full PDF reports, not the summary presented on the web page.

## What is a SWOT analysis

A SWOT analysis presents an analysis of the strengths, weaknesses, opportunities and threats (SWOTs) of the thing being analysed (in our case a particular type of AI). Often SWOT analyses are used by organisations to better understand the firm’s SWOTs, but it can also be used to analyse the SWOTs of an emerging technology such as generative AI among other things.

You need to conduct research drawing on module materials, reading list items and your own independent reading to identify a range of SWOTs for your selected AI. For opportunities and threats you need to keep your analysis focused on the societal level.

You then need to present your analysis as three sub-headed sections: (1) Strengths & opportunities (~450 words in total), (2) Weaknesses (~750 words), (3) Threats (~750 words). You need to include plenty of citations to your underlying research, which can include lecture slides, academic articles and Google Gemini’s response to the prompt.

|  |  |  |
| --- | --- | --- |
|  | Positives | Negatives |
| Internal to the generative AI | **Strengths** of your selected AI | **Weaknesses** of your selected AI |
| External to the generative AI | **Opportunities for society** from use of your selected AI | **Threats** to society from use of your selected AI |

Here is an example of a SWOT analysis conducted about ChatGPT in Education: <https://www.tandfonline.com/doi/full/10.1080/14703297.2023.2195846>

## Word count

2500 words (+/- 10%).

You must **add your word count** at the start of your report, otherwise the School’s word count penalty of 3 marks deduction will be applied.

## Submission

2pm Monday 23rd January 2025. Please submit to the Turnitin link in Blackboard.

## Guidance

* It is unlikely that we will examine the type of AI you have selected in depth in the module. You will need to take what you have learned from the different topics explored on INF6033 Data and Society and apply it to your specific case– this will involve a lot of your own independent research.
* You should use key social science concepts introduced in class and/or in the readings, for example, power, discrimination etc, **as relevant to your analysis.**
* The report should be properly referenced to APA standards.
* Your report should be analytical, rather than descriptive.
* The report should draw on **both** the module reading list and your own independent research using high quality academic sources such as journal articles and academic books. Starplus library catalogue is a good place to start.
* The report **must** address topics explored on the module – failure to do this suggests that the person that wrote the essay did not study the module.

## Further assessment support

There will be INF6033 assessment support sessions online in weeks 5 & 11 at which there will be an opportunity to ask questions.

Further to the assessment support sessions, students may **optionally** **get advice and feedback** as follows:

* 10-minute office hour appointments with Jo are available every [TBC]. You can book an appointment using this link. More than one student can attend an office hour appointment if you have similar questions to ask as a friend/group mate.
* The Academic Writing module, [ELTC](https://www.sheffield.ac.uk/eltc) and [301 Academic Skills Centre](https://www.sheffield.ac.uk/ssid/301/study-skills/index) provide a range of classes, workshops and resources related to writing and researching assessments.
* The Writing Advisory Service (ELTC) offers appointments for feedback on your written work including organising your ideas, structure, referencing, grammar etc. You can find out more and book an appointment here: <https://students.sheffield.ac.uk/eltc/was>

Please make good use of these services if you feel they could be of benefit.