Mini-Assignment 2: Briefing Research Paper

Data, Impact, Decisions and Policy

Oh, no! Your boss has been called to appear before a Senate Select Committee!

Not wanting to end up with a <u>Senate censure</u>, like Aged Care Minister Richard Colbeck, your boss has asked you to prepare a briefing paper on your portfolio area (data and its impact) to read, along with the other portfolio areas, the night before the hearing.

Your boss has to be across a range of issues, so their briefing papers must provide a good grounding in the issues while being concise and to the point. It is therefore vital that their briefing papers are well structured, in a way that allows them to understand each issue and its implications.

Your boss is not a Data Science expert, but knows how important it is to be abreast of the issues and the evidence. It's your team's job to make the issues understandable, and distill what concrete evidence is available.

Assignment Aim

This assignment provides an opportunity to research into a key issue where data impacts society. This will be used to inform decision-making and policy response.

Choice of Issue

You may select an issue of your choice, providing it is driven by data (at scale), its collection, storage and/or use. It should be an issue where choices have been made, or need to be made, that have a significant impact, or potential impact, on communities.

Some examples of issues might include:

- The introduction of increased collection and retention of personally identifying information (name recording and storage, assigning an identification code) allowing longitudinal tracking of people, that resulted in many people boycotting the 2016 Australian Census.
- The Facebook-Cambridge Analytica data breach 'scandal' and the 2016 US election.
- The Australian Government's *Online Compliance Intervention* ('*Robodept*') scheme, what went wrong, its impact on those affected, and the current state of play.
- The Department of Health's *CovidSAFE App*, data privacy concerns, debate over its effectiveness and performance (or otherwise), and the current state of play.
- The US President's ban on TikTok over data security concerns and the proposed, and ensuing, "sale" (or not) of its US operations.
- The recent controversy around racial bias in Twitter's (machine learning based) image cropping algorithm, how it occurred, and what can be done.

These are just some examples, and you are free to find an issue in an area that interests you.

Teams

It is no surprise to learn that small-group learning is <u>educationally beneficial</u> in STEM!

So this assignment may be done in **teams of up to three**.

The goal here is not, of course, to just 'split the writing' (which is likely to lead to a disjointed paper), but rather to pursue different paths of research, discuss and synthesise the results, and make a shared decision about what is important.

For those seeking to find people to work with, there will be a 'speed dating' channel provided on the CITS2402 *discord server*. If this does not prove fruitful and you would prefer to be allocated to a group (assuming there are more than one) please let me know.

The marking will not be affected by the number of team members.

Rubric

Format and Submission Details

This assignment is worth 15% of the final mark for the unit.

It is due at **10:00am on Tuesday 13th October**. The University's policy on late penalties will apply. The assignments will be automatically collected after the due 'datetime'. Therefore, should you need to make a late submission, you will need to contact the Unit Coordinator to arrange for the paper to be re-collected.

The Briefing Paper is limited to a maximum of 1200 words.

It must be submitted as a self-contained **PDF document** called Briefing.pdf, in the same CoCalc directory to which it was distributed.

The paper must be accompanied by a completed Engineering and Mathematical Sciences **Coversheet** in the same directory. This may be filled out electronically, or by hand and scanned or photographed.

The names and student numbers of all team members must follow the title.

This must in turn be followed by the **word Count**. The word count need not include the names and student numbers or the references.

All contibutions from other sources, and links to supporting evidence, must be cited using the <u>IEEE Referencing Style</u>.

Specification and Structure

Following the title, authors and word count, the paper should begin with an:

• **Executive Summary** - This should be not more than 200 words, and provide a brief synopsis of the paper.

This is followed by the body of the paper, which should include, with appropriate headings:

• The **Context** in which the issue occurred. That is, the background or 'state of play' prior to the issue coming to prominence. Identify the factors that allowed, or encouraged, the issue to occur. (What environmental factors made it "ripe" for this to occur?)

- **Key Players** Who were the key people, organisations, and communities involved.
- What Occurred What happened? Be sure to identify the role of data and its use.
- **Impacts** What were the impacts? Is there 'hard evidence' for these impacts, and if so, what? How reliable is the evidence?
- Policy Consequences and/or Options What (briefly) has been done, and/or could be done, to address the issue. (Note that it is not the role of a Briefing Paper to decide the policy outcomes, but rather to present options.)

Learning Outcomes

This assignment demonstrates competencies in:

- researching an issue where decisions around the use of data have significant public consequences
- distilling the essential details from a complex issue
- presenting details in a concise, coherent, structured and understandable way
- written presentation and referencing

Prof Cara MacNish September 2020