Artificial Intelligence Ethics and Applications

Assignment #2: A report with 2,000 words (the end of Week 12)

A data analysis report

You can also collect more data or new data by yourself if you prefer. Make sure not to replicate the simple data analysis conducted for the previous assignments. Rather, for this assignment you need to re-analyse the data using advanced techniques and to synthesise the results into a mixed methods study. You can choose any research question that requires a mixed method methodology and you will need to demonstrate how you have answered the question by employing suitable methods for advanced data analysis. The focus of the assignment should be on methodology/method in terms of data analysis. Please limit yourself to one single research question and to the most important (and recent) literature (with a strong focus on mixed method research). Be brief and concise and observe the word limit, but make sure to explain how you decided on the balance between quantitative and qualitative research approaches in your mixed methods design.

Please ensure you can strengthen the relationship between AI/Data Science and ethics, and make the right emphasis and balance in your report. Please do not plagiarise and explain in your own words.

The report should cover the following aspects and contain the following sub-sections (NB: the order may slightly differ based on preference and need). The word counts given in parentheses are rough estimates and serve as guidance only.
- Title page, including title and abstract.
- Table of contents.
- Introduction and background to the research topic.
- Brief literature review including research question and hypotheses (where needed).
- Methodology, sampling, data collection/selection and analysis approach.
- Analysis and Findings.
- Evaluation and discussion of findings in light of the literature.
- Conclusion and implications (theoretical and practical).
- References.

- Appendices (including research materials such as questionnaires, etc.).

Detailed instructions and guidance will be given in class.
They will be announced. Please attend each time. Attendance will be recorded. Please also work as a team. Choose a big topic and divide your work. Focus on your area of specialisation. This will make life easier – you can present your area of specialisation during the team presentation and can write a report on this.

While not assessed for content, you are required to participate in the feedback/coaching session. Failure to participate in the session will result in a penalty of 5 marks.

The presentations are intended to provide the opportunity to communicate research findings in ways that help others understand. Key issues to cover include:
- What was the research question?
- What was the approach adopted for sampling, collecting/selecting and analyzing data?
- How were quantitative and qualitative methods combined to form a mixed method study?
- How did you decide on the balance between quantitative and qualitative research approaches in your mixed methods design?
- What are the main findings?
- How does the 'new' knowledge generated through research add value in advancing research and business practice – So What? What is the impact and significance of the research and its findings?
- What are the main reflections and learning you have gained from the process of conducting the research project?

Please note, to develop your critical thinking, brainstorming, discussion and writing skills, you can consider points above, or points that are relevant to your case, and justify them. Please choose the ones that are relevant and strongly justify them to your findings.

Presentation of this topic can help you clarify some doubts. Please write in your own words.

The length of the report is **2,000 words** (excluding cover page, abstract, table of contents, graphs, figures, appendices and reference list). This word count is an absolute upper limit and no 'leeway' is given for students who exceed these limits (e.g. it is not acceptable to deviate by 10% above the limit). Three marks or pro rata per part thereof will be deducted for every 100 words by which the work exceeds the maximum length.
The report will be marked as follows:

FAIL 0-49
PASS 50-59
MERIT 60-69
DISTINCTION 70+

Marking is based on three equally weighted components based on the guidelines and requirements given above: a) clarity of presentation and logic of argument, b) degree of completeness (whether all key points have been sufficiently covered), and c) degree of application of key concepts, technical terms and statistical analyses taught in class and through the textbook.

Marks will be awarded for a report that satisfactorily meets the guidelines for the assignment as described above. That is, your report should:

- Include the main components described in the assignment brief.
- Critically evaluate extant research from a methodological and statistical perspective.
- Use statistical software packages for quantitative and qualitative data analysis.
- Accurately and succinctly summarize your research project (starting with background, literature review, sampling, data collection/ selection, analysis and discussion).
- Follow academic writing and conventions to complete the report.
- Use the Harvard system of referencing.

Allocation of marks to the different components of the report:

- Introduction and background to the research topic: 5 *marks*
- Brief literature review including research question and hypotheses (where needed): *10 marks*
- Methodology, sampling, data collection/selection and analysis approach: *30 marks*
- Analysis and Findings: *30 marks*
- Evaluation and discussion of findings in light of the literature: *15 marks*
- Conclusion and implications (theoretical and practical): *10 marks*

NB: *You will receive detailed coaching and feedback in class.*