

AI REFLECTION: Firstly, AI reflection underwent a rigorous 3 iteration review of AI to allow for gradual improvement, considered by Gemini 2.5 and CHATGPT to be sufficient. Importantly, this was to ensure that any issues identified in a previous review were adequately addressed and that changes were not superficial in implementation.

Initial review identified discrepancies within data sharing as there were contradictory statements regarding controlled or educational access. Following this, the plan adopted the strategy of allowing semi-public access through access upon request, to maximize public good, as per the goals of the research. Additionally, a misalignment of proposed storage and formal ethical review board expectations was highlighted given the idea to initially store data on Google Docs prior to anonymisation, consequently, this was adapted to have initial data storage through a university accepted platform, individually identified as **OneDrive for Business**. Lastly, a key oversight in addressing anonymisation was addressed, signifying a need to develop beyond the vague proposal of 'generalization and suppression' and move into a more rigid approach of identifying which techniques will be used.

After previous changes were made, a second review was made. Following this three primary hinderances were identified in both: data description, data collection and anonymisation. Firstly, it was proposed that data description required refinement to ensure explicit scale description. Consequently, it was explicitly stated that all financial and emotional data will follow a scale of **1-4** for how much a student agrees with the question or statement at hand, with one exception of income ranges to account for greater differences. As well as this, Gemini 2.5 suggested explicitly identifying a framework aligned with data collection process. Importantly, the issue was now flagged that specifications must be made for **k-anonymity** for near-research-quality standards. Therefore, a specific k value was identified, alongside justification, complemented with a brief description of quasi-identifiers that required protection. Through the final review the conclusion was made that no more iterations were required, with AI primarily identifying formatting or phrasing issues.

PEER REVIEW: After PEER review, it was addressed that topics of informed consent and sampling choice were not made explicit within the plan. Consequently, the discussion on both topics was expanded upon by including direct reference to how informed consent will be ensured among participants. Similarly, previous discussion on convenience sampling was expanded to introduce more precise justification for sampling selection.

FUTURE RESEARCH: FOCUS FOR SCRUTINY: To facilitate improvements in future research three key elements would particularly benefit from scrutiny:

Interpretation of Evaluative Metrics: The interpretation of evaluative metrics (McFadden R^2 , AUC, and Accuracy) should be assessed to ensure the model has accurately aligned with research aims, more specifically an actual development in the capability of identifying BNPL usage among students.

Hypothetical Implementation of k-Anonymity: The hypothetical implementation of k-anonymity requires review to ensure the selected k value aligns with the objectives: minimizing information loss and maximizing security.

Synthetic Data Generation: The generator provided requires fine-tuning to ensure synthetic data utilized accurately depicts real-world expected distributions and correlations. Crucially, once this has been optimized, the model's generalization should improve, allowing greater capability to infer causation.