Unit 8: Data Analysis and Visualisation

Peer Response 1:

Collaborative Discussion 2: Case Study: Accuracy of information

In reply to Amrol Miah

Peer response

by Andrius Busilas - Thursday, 20 March 2025, 6:14 PM

Hi Amrol,

I appreciate your initial post regarding the case study. Your analysis addresses the ethical duties that professionals must adhere to, particularly concerning data collection and public health. The scenario involving Abi, a statistical programmer responsible for evaluating the nutritional content of Whizzz cereal, presents a significant ethical challenge. While the ethical guidelines of the Association for Nutrition (2024) and the British Dietetic Association (2021) stress transparency and public safety, Abi's situation also underscores the broader ethical responsibilities of computing professionals to ensure data accuracy and integrity.

From the standpoint of computing ethics, Abi's task extends beyond data analysis to ensure that the results are accurately conveyed without bias. The ACM Code of Ethics (2018) highlights the necessity of avoiding harm and maintaining honesty in all professional endeavors. If Abi selectively analyzes the data to favor Whizzz, he risks breaching these principles. Even if the data itself are not falsified, manipulating analytical methods to skew results compromises the integrity of the research and could have serious public health implications. For example, if Whizzz is indeed harmful and the manufacturer shares only positive findings, consumers could face health risks, potentially leading to legal liabilities for both the manufacturer and Abi's institution.

Legally, Abi must consider jurisdictional laws such as the UK's Consumer Protection Act 1987, which holds manufacturers accountable for selling unsafe products. If Abi's analysis is misleading, it could be argued that he contributed to the violation of this act. Socially, the erosion of public trust in nutritional research and computing professionals can be catastrophic. The public depends on experts for accurate

information, and any breach of this trust could result in widespread skepticism, as seen in past scandals, such as the Volkswagen emissions case (Rhodes, 2016).

Professionally, Abi is obligated to present data accurately and transparently, even if it contradicts the manufacturer's claims. The BCS Code of Conduct (2022) stresses the importance of honesty and accountability in computing practice. By presenting both positive and negative analyses, Abi demonstrates his commitment to ethical integrity even if the manufacturer opts to publicize only favorable results. This approach aligns with the principles of the IEEE Code of Ethics (2020), which advocates transparency and accountability for professional work.

In conclusion, Abi must prioritize public safety and ethical integrity over stakeholder interests. By adhering to ethical codes and legal standards, they can uphold the professionalism of computing and nutritional research, ensuring that public trust is maintained.

References

ACM (2018). ACM Code of Ethics and Professional Conduct. Available at: https://www.acm.org/code-of-ethics [Accessed 20 Mar. 2025].

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Rhodes, C. (2016). The Volkswagen Emissions Scandal and Its Implications. Journal of Business Ethics, 145(1), pp.1-15.