Simple modifications to the web page design made by Stewart's team led to a significant increase in customer profits, despite complaints received by client managers, such as complaints from users with visual impairments that the combination of red and green in the text is tricky and confusing, in addition to the replacement of rectangular buttons With arrows with swapping their places, where the left arrow is to cancel and return to the previous page, while the right arrow moves the user to a more expensive category and adds protection without the prior confirmation of the customer (ACM Ethics, N.D.).

Dark patterns are situations in which designers and software engineers leverage their understanding of human behavior to construct misleading features (McLean, 2020). Gray et al. (2018) described interface interference as any alteration to the user interface that favors some actions over others, misleading the user or preventing them from discovering crucial action alternatives, where it is considered a visual trickery, such as making the text difficult to distinguish and manipulating in the places of functions.

Dark patterns considered as an unethical since their primary objective is to influence users' behavior for the advantage of the customer without fully revealing or getting users' genuine permission (Parrilli & Hernández-Ramírez, 2020).

In dark UX pattern case, according to (ACM code of ethics, 2018) the following principles were violated, where the use of red and green color contrast unfairly discriminated against people with visual impairments, which represents (principle 1.4). Also, the fact that the team was not honest and not trustworthy even if the modification request was made by the customer, but it is harmful (Principle 1.3), in addition to that the company's managers encouraged the team not to comply with the code of conduct with the justification that modifications according to the customer's desire constitute a violation of (principle 4.3).

Also compared to BCS, many aspects have been violated, such as, the practice of discrimination on the basis of disability by manipulating colors causing confusion to the product, moreover, non-compliance with the principle of professionalism in designing something deceptive and harmful to users by implementing services that they did not want and without their consent presets (BCS, 2022).

Stewart team and manager have violated principles of code of ethics by ACM and BCS by using dark UX pattern to conduct modification on a web site which led to trick users and increase the revenue, which is unethical.

References

ACM. (2018) ACM Code of Ethics and Professional Conduct. Available from: https://www.acm.org/code-of-ethics [Accessed 18 June 2023].

ACM Ethics. (N.D.) Case: Dark UX Patterns. Available from: https://ethics.acm.org/code-of-ethics/using-the-code/case-dark-ux-patterns/ [Accessed 16 June 2023].

BCS. (2022) BCS Code of Conduct. Available from: https://www.bcs.org/membership-and-registrations/become-a-member/bcs-code-of-conduct/ [Accessed 18 June 2023].

Gray, C.M., Kou, Y., Battles, B., Hoggatt, J. & Toombs, A.L. (2018) The Dark (Patterns) Side of UX Design. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems - CHI '18*: 1-14. Available from: https://doi.org/10.1145/3173574.3174108.

McLean, A. (2020) Dark Patterns. *Canadian Journal of Nursing Informatics* 15 (2). Available from: http://cjni.net/journal/?p=7182 [Accessed 17 June 2023].

Parrilli, D.M. & Hernández-Ramírez, R. (2020) Re-Designing Dark Patterns to Improve Privacy. *2020 IEEE International Symposium on Technology and Society (ISTAS)*: 253-254. Available from: https://doi.org/10.1109/istas50296.2020.9462197 [Accessed 16 June 2023].