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Research Proposal Outline

**Optimizing User Experience and Business Goals While
Minimizing Dark Patterns**

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Significance/Contribution to the discipline

The use of manipulative design approaches called dark patterns raises ethical issues in user experience design. It improves the field:

- Considering how corporate interests intersect with ethical design principles
- Demonstrating how false user experience methods affect user happiness and company finances (Ehsan and Riedl, 2024).
- Educating UX designers and developers about their moral duties
- Promoting clear ethical values and regulations in UX design
- The importance of personal accountability in organisations

Research Question

"How can companies balance business objectives with ethical UX design practices to minimise the use of dark patterns while maintaining user trust and long-term profitability?"

Aims and Objectives

Aim: The goal is to study dark UX trends in digital goods and services, their effects, and ethical implications, and propose ethical UX design guidelines.

Objectives:

- Analyse and categorise false UX tactics in modern digital products and services.
- Assess the immediate and long-term impact of misleading user experience (UX) strategies on user pleasure, confidence, and the firm's reputation (Ritonummi, 2020).

- Assess UX designers' and developers' ethical decision-making when asked to use dark patterns.
- Dark patterns and firm success measures like revenue, user retention, and customer pleasure should be examined (Day and Stemler, 2020).
- Develop an ethical user experience design approach that balances commercial goals with user rights and accessibility.
- Provide advice on how companies may implement ethical user experience design policies.
- Examine how regulatory bodies and industry standards discourage dark UX trends.

Key literature related to the project

Dark patterns, misleading user interface designs, are used due to organisational restrictions and decision-making processes. Business ethics literature suggests examining this factor from the standpoint of corporate ethics and accountability. The thesis admits the short-term income gain, but a complete study would examine how dark patterns affect user confidence and company success. The case study emphasises visually impaired user difficulties that relate to UX design accessibility. The study mentions a Code of Ethics, possibly related to computing professional norms (Semerikov *et al.*, 2020). A full grasp of professional ethics in technical fields can be gained by studying current academic publications. Given the ethical difficulties raised, current and proposed laws to prevent deceptive design practices in digital interfaces should be examined.

Methodology/Development strategy/Research Design

This research should use mixed methodologies to understand dark UX trends and their impacts. This study examines dark UX trends using many methods. In order to evaluate current knowledge and identify topics for additional research, the procedure begins with a systematic literature review. A user experience study will utilise controlled testing, eye-tracking, and think-aloud techniques to measure how dark patterns affect user behaviour and decision-making. In order to comprehend dark pattern implementation motivations and pressures, 10 UX professionals will be interviewed qualitatively (Sandberg, 2023). Actual case studies will examine the long-term consequences on businesses. An accessibility review will assess the impact on disabled people. Based on these results, an ethical UX design framework will include principles and best practices. Expert advice and pilot research will validate and develop the framework (Di Geronimo *et al.* 2020). This strategy combines qualitative data on dark UX pattern frequency and effects with qualitative insights on decision-making. This helps understand these trends, which can affect academic research and industrial standards.

Ethical considerations and risk assessment

- The research examines deceitful methods, which raises ethical concerns about participants being exposed to harmful or misleading interfaces.
- Participants must get complete information about the study's goal, which may contain dark patterns, while ensuring that research objectives are not harmed.
- Dark patterns may cause stress or annoyance. Participants should be protected from psychological harm.

- User behaviour data collection and analysis must meet strict privacy and data protection regulations (Thapa and Camtepe, 2021).
- The study must guarantee equitable participation for persons with disabilities, especially given the focus on dark pattern accessibility.
- Interviewing industry professionals may reveal private corporate processes. Anonymity and secrecy are essential.
- Researchers must remain objective and not influence participants' responses or dark pattern perceptions (Mathur *et al.*, 2021).
- Ethical concepts must incorporate several perspectives and address unanticipated results.
- When including vulnerable populations like the elderly or those with little computer literacy, more care should be taken.
- When displaying statistics, take careful not to encourage dark patterns.

Timeline of proposed activities

This dark UX patterns research project's 20-month programme covers all study areas carefully. Two months are spent methodically reviewing literature and developing study methodologies, including ethical approval. Our key goals for the next two months are to construct and test the web crawler and recruit people for user experience research and qualitative interviews (Gray *et al.* 2021). Qualitative UX specialist interviews will also occur. The next four months (9-12) will involve analysing the data, studying businesses that have eradicated dark patterns, and performing accessibility evaluations with specialists and disabled people. Integrate study findings and create a first ethical framework and standards in months 13-14. Months 15-16 see industry experts and ethicists comment on the framework, which is then refined. Pilot testing

will assess the framework's efficacy, the final report and publications will be created, and academic papers and industry presentations will be presented in the last four months. The effort produces legislative and industry standards recommendations. This timeline allows for a comprehensive inquiry and extra time for data collection if needed.

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