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Research Proposal Presentation.

Project proposal on the Case analysis of Dark UX Patterns

Transcript

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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

Dark patterns need careful consideration of corporate interests and ethical design. Today's competitive corporate climate prioritises profit over user welfare. Dark patterns may develop when design decisions secretly force people to sign up for subscriptions or reveal sensitive data. Critique of these methods helps researchers and practitioners understand the motivations and incentives that make organisations employ them effectively. This focuses on balancing business aims with ethical and user well-being. Dark UX patterns show how deceptive UX affects user satisfaction and company profits (Hannula, 2023). Deception might benefit businesses in the near term but damage them later. Deceived users may distrust the brand, eroding trust and loyalty. It might hurt the company's reputation and profitability. Dark patterns harm user experiences and corporate performance, as shown by case studies. Clear and honest design strategies increase user experiences and performance.

- Investigating dark UX patterns teaches designers and developers ethics. UX designers must emphasise user autonomy while designing beautiful, useful interfaces (Unger and Chandler, 2023).

- Education regarding designers' moral duties improves ethical understanding and accountability.

By studying dark patterns, designers may understand their ethical consequences. This may lead to more ethical design that empowers rather than exploits customers. Dark pattern analysis supports UX design laws and ethics. The lack of established ethical norms in UX design makes ethical and unethical design unclear (Pillai et al., 2022). The field may generate more concrete ethical frameworks for designers and developers through case studies. Design approaches may be assessed against these principles to ensure honesty, openness, and user respect. The research of dark UX patterns emphasises personal accountability in businesses (Nelissen and Funk, 2022). Ethical design is a corporate and personal responsibility. Each design and development team member promotes and implements ethics. Case analysis can encourage personal accountability by revealing ethical violations. This fosters a culture where ethics are ingrained in organisational procedures, ensuring that every design decision benefits users.

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.

The intersection of ethics and corporate interests in UX design

- Research on the intersection of ethical and commercial considerations in user experience design is crucial because it reveals the inherent tension between two frequently competing values: maximisation of profit for the company and maximisation of user health and pleasure.

Manufacturers may employ "dark patterns," or devious design tactics, to persuade consumers to connect with their websites and spend more to maximise profits. These strategies may increase the revenues and profits in the near term, but they may damage the trust of others and the faith of customers in the long run. However, the moral UX design emphasises honesty, enabling users to make independent decisions, and caring for their needs. This strategy aims to please users and develop long-term connections (Langner, 2023). Business strategy needs to incorporate ethics to balance these objectives. Therefore corporate motivations would not interfere with designers' moral

commitment to users. The digital world can be made secure and more user-centred by promoting design techniques that strike a balance between generating earnings and doing the appropriate thing, and thereby, this can be achieved by looking at this junction.

- Ensuring the privacy and security of user information is a core ethical obligation in the field of UX design.

- Designers must guarantee that user data is gathered, stored, and utilised in a safe and transparent manner, while also respecting user privacy and complying with any data protection requirements.

Accessibility is a design approach that involves creating products and services in a way that includes everyone (Langner, 2023). Creating designs that are accessible and inclusive is a moral obligation. In essence, inclusive design refers to the process of creating products that cater to the needs of all individuals, including those with specific requirements, by ensuring that their needs are addressed in the overall product experience and interface. UX designers are responsible for developing user experiences that accommodate individuals with varying abilities, backgrounds, and cultural settings, guaranteeing equitable access and opportunity for all. In essence, the users are entitled to comprehend the manner in which their data is being utilised and the specific objectives for which it is employed. UX designers must give priority to transparency by offering explicit and thorough details on data collection, processing, and utilisation, enabling users to make well-informed choices. UX design must be devoid of prejudices and discrimination stemming from characteristics such as gender, colour, age, or socioeconomic background. Furthermore, the designers should be cognizant of their own prejudices and make an effort to provide inclusive experiences that foster equality and

reverence for all users. The elimination on the prejudice entirely, particularly in consumer items may be quite challenging. However, as designers, it is imperative that we ensure the design aspect of the product or service is, at the very least, impartial. Although persuasive design approaches can be successful in influencing user behaviour, it is crucial to utilise them properly and ethically. UX designers should refrain from employing manipulative or deceitful techniques that exploit the weaknesses of consumers or undermine their autonomy (Langner, 2023).

- Considering ethical principles in UX design is becoming imperative rather than discretionary.
- With the increasing prevalence and impact of technology in our lives, it is crucial to take into account the ethical consequences of our design choices.

Ethical concerns in UX design guarantee the development of user experiences that are not only captivating and user-friendly, but also conscientious, inclusive, and in accordance with society ideals. Ensure adherence to the guidelines outlined in the article while developing your next design in order to uphold all ethical considerations in your UX design.

The impact of descriptive design on user satisfaction and business outcomes

- The impact of deceptive design on user satisfaction and corporate performance is substantial and multifaceted.
- Using "dark patterns," websites trick visitors into revealing personal information or subscribing up for services they might otherwise deny (Nevala, 2020).

These strategies may succeed in the near term, but they typically dissatisfied consumers. Users lack confidence and are frustrated when they feel misled and deceived. They may rate poorly, become less devoted, and exit the company more often. Since winning back unsatisfied customers is expensive, losing consumer confidence hurts a company's reputation and bottom line. A company's finances might suffer from regulator scrutiny and dishonesty lawsuits. Simple, honest design should be emphasised to maintain customer trust and company success.

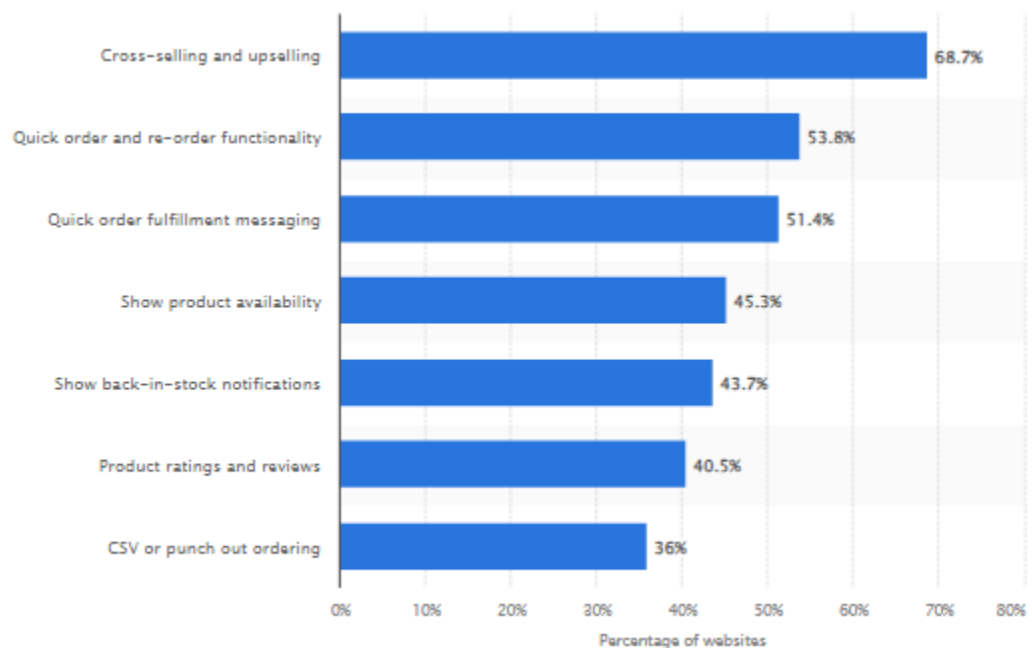
Figure 1: The B2B website offering the key UX functionality

(Source: Statista, 2022)

A survey was carried out in July and August 2019 and the results showed that 68.7% of business to business websites offered up-sells and cross-sells, while 53.8% of those same websites enabled quick order and reorder options.

Educational imperatives and regulatory frameworks for UX ethical practices

- Educational and regulatory frameworks are needed to promote honesty and accountability in design, especially within UX ethical norms.

- UX designers need education to identify and avoid dark patterns, emphasising user-centred and ethical design (Lu *et al.*, 2024).

The industry may include ethics into design curricula and provide ongoing professional development to keep designers morally aware. Regulatory frameworks must also define clear principles and norms to hold businesses accountable for immoral behaviour. The combination of penalties for dishonest behaviour and incentives for transparency makes these regulations effective in discouraging their use. Education and laws create a solid foundation for ethical UX practices, encouraging designers and corporations to emphasise user well-being and confidence. The digital environment becomes more ethical and user-friendly.

Literature Gap

- While the immorality of dark UX patterns is gaining widespread attention, little is known about the long-term repercussions on user behaviour and company performance (Kuklenko, 2024).

- Few research examines how these deceptions affect user confidence and devotion over time.

Most research identifies and classifies dark patterns. Lack of research has also been accomplished on how successfully current training courses and policies reduce dark patterns. Large long term research are needed to determine how deceptive design impacts user enjoyment and a business's image. These studies can help evaluate ethical design courses. The gap shows that additional actual research will be necessary to

improve UX design ethics and ensure organisations are accountable in their design decisions.

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.

- Participants may encounter harmful or deceptive interfaces when exploring dishonest UX design techniques, therefore ethics and dangers must be considered.

- Participants must know the study's aims, especially dark patterns, to ensure honesty and scientific purity (Hung, 2021). In order to prevent psychological agony from worrying patterns, act. Data collection and analysis of user activity must comply with strong privacy and security regulations to protect users' identity. Participation by handicapped individuals in misleading design strategy evaluation increases justice and inclusion (Renaud and Coles-Kemp, 2022). To protect company data and encourage honesty, expert interviews should be secret. Researchers must stay impartial and not influence dark pattern reactions or ideas to maintain data accuracy. Considering potential dangers and looking at things from several sides is vital when studying. Protection from exploitation is crucial when working with vulnerable groups like the elderly or computer beginners. Avoid promoting dark colours when displaying data. This extensive ethical and risk analysis method assures that the study is done responsibly; protecting participants' privacy and well-being while teaching UX design principles. When studying dark UX patterns, a mixed-method approach including qualitative and quantitative methods is best (Califf et al., 2020). Dark patterns' frequency and impact on user behaviour can be determined via quantitative surveys and testing. Statistics may be used to analyse dark patterns and their implications on user satisfaction, trust, and conversion rates. Controlled studies may show people different interface designs and evaluate how dark patterns affect decision-making and user experience.

- Qualitative methods like focus groups and discussions illustrate how people encounter gloomy patterns.

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- These tactics provide delicate information that numbers may miss to help us understand dishonest design's emotional and mental effects.

Customers can be interviewed to see how dark patterns damage business trust. On the other hand, if the individuals speak to individuals who operate in the same industry as one do, and the research which can have a better grasp of the ethical considerations that go into these patterns' implementation. Qualitative data enhances quantitative findings, providing a more comprehensive picture. Combining the best of both methods to tackle each's difficulties is a fantastic concept. Qualitative insights provide a more detailed view of dark patterns by providing context. Quantitative data allow for population-wide conclusions. These tools may help researchers grasp dark UX patterns' complex aspects, impacts, and moral implications. Overall, this will lead to better, more equitable judgements and ethical UX design concepts.

Timeline of proposed activities

No.	Chapters	W 1-10	W 11-20	W 21-30	W 31-40	W 41-45	W 46-50	W 51-55	W 56-60	W 61-70	W 71-75	W 76-80	W 81-87
1	Introduction	■	■										
2.	Literature Review		■	■	■								
3.	Research Methodology					■	■						
4.	Findings and Analysis						■	■					
5.	Ethical framework standards							■	■	■			

6.	Final report publication											

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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