Dark patterns and e-commerce

Rhetorical strategies, persuasive impact, and the extent of user acceptance

Summary

The thesis focuses on a highly relevant and topical subject in the field of e-commerce: dark patterns. These represent manipulative techniques used in the design of digital interfaces to influence users' decisions, often to their detriment and in favor of commercial interests. The thesis aims to provide a deeper understanding of these techniques, investigate their impact on users, and identify possible solutions to mitigate their negative effects. In the online environment, where decisions are often made quickly and without careful reflection, dark patterns become a subtle form of manipulation that can significantly affect consumer behavior and their relationship with e-commerce platforms.

The paper addresses the issue of ethics in e-commerce, highlighting how dark patterns affect user autonomy and trust in online platforms. Trust is a central element in e-commerce, and its erosion through manipulative techniques can have long-term negative effects on both consumers and companies. Therefore, the aim of the research is not only to analyze these patterns but also to offer a theoretical and practical framework for understanding and combating them.

The motivation for choosing this topic stems from the rapid evolution of e-commerce and the increasing recurrence of dark patterns in digital interfaces. With the growing number of online platform users and the expansion of e-commerce, these manipulative practices have become increasingly widespread. They exploit users' cognitive vulnerabilities to generate short-term profits at the expense of transparency and ethics. This research aims to explain in detail how dark patterns work, why they are effective, and how they can be regulated to protect consumers. The main objective is to elucidate the rhetorical dimensions of these patterns, explore their persuasive effectiveness, and analyze users' acceptance of them, thus contributing to a deeper understanding of the implications of these practices on consumer behavior and ethical design practices.

Dark patterns were initially defined by Harry Brignull in 2010 and include a range of design strategies intended to manipulate users' decisions in favor of the merchant. These are frequently encountered in digital interfaces, especially in e-commerce, and exploit users' cognitive biases to push them into making decisions they might not otherwise make. Unlike more obvious practices, dark patterns operate at a subtle level, taking advantage of the way people process information. They can take many forms, from hiding options that are unfavorable to the merchant to creating a false sense of urgency.

An important element of the research is the development of a taxonomy of dark patterns. This includes categories such as harassment, obstruction, infiltration, interference, and forced action. Each of these categories describes a series of techniques used on e-commerce platforms to influence users' behavior in subtle but highly effective ways. Harassment, for example, refers to the use of persistent notifications or other forms of pressure to push users into unwanted actions, such as completing a purchase. Obstruction involves creating artificial barriers when users attempt to perform actions unfavorable to the platform, such as canceling a subscription or opting out of a service. Infiltration refers to the concealment or ambiguous presentation of essential information, such as actual costs or service terms.

In addition to this taxonomy, the thesis also investigates the cognitive and behavioral impact of these patterns on users. Studies show that dark patterns profoundly influence users' decision-making processes by exploiting their cognitive weaknesses. For example, the fear of missing out is frequently used in online commerce through messages like "only a few items left in stock" or "offer expires soon." Other manipulative techniques include automatically pre-selecting more expensive options or complicating the process of opting out of a service. These methods exploit users' cognitive tendencies to choose the path of least resistance or to act impulsively under time pressure.

Legal and ethical considerations are another important aspect discussed in the research. Dark patterns raise significant integrity issues as they undermine users' autonomy and trust in online platforms. Trust is essential in e-commerce, and using manipulative practices erodes this trust, which can have long-term negative effects on both consumers and companies. Currently, consumer protection legislation, such as the GDPR in the European Union, has begun to address

the issue of informed consent, but many of the techniques used in e-commerce are difficult to regulate because they are subtle and rely on sophisticated psychological manipulation.

The research argues that an update to existing legislation and better enforcement are needed to protect users from such practices. Additionally, it emphasizes the need to educate users and develop ethical design practices that respect their autonomy and rights. Without these measures, dark patterns will continue to undermine trust in the online environment and affect the relationship between companies and consumers.

The study then moves on to explore persuasion strategies in e-commerce, focusing on visual and procedural rhetoric. Visual rhetoric refers to the use of images, colors, and shapes to guide users' attention and influence their behavior. For example, using bright, contrasting colors to highlight purchase buttons can induce users to act impulsively. Procedural rhetoric involves the interactive mechanisms in digital interfaces, such as gamification, which can increase user engagement and lead them to make decisions they would not make in a pressure-free context.

The thesis emphasizes that these persuasion techniques, while effective in generating short-term sales, can have a negative long-term effect on user satisfaction and loyalty to brands. Thus, while dark patterns may bring immediate gains, they can undermine consumer trust and their relationship with companies in the long run.

Cognitive biases play a crucial role in how dark patterns influence users' decisions. The study focuses on how these biases are exploited to manipulate user behavior. For example, the default bias, which makes people favor pre-selected or default options, is often used in e-commerce to convince users to accept unfavorable terms or additional products. Another exploited bias is loss aversion, which drives users to make impulsive decisions out of fear of missing an opportunity.

The research emphasizes that users are not always aware of these subtle manipulations, which raises major ethical concerns. Users should have control over their decisions and be provided with clear and transparent information. However, dark patterns often succeed in hiding important information or presenting options in a way that distorts users' perceptions.

The social and psychological impact of dark patterns is also analyzed in detail. The study shows that using these techniques can have negative consequences for users' mental health. Specifically, users may experience anxiety and frustration when they feel they lack control over

their online decisions. These feelings can lead to a deterioration in users' relationships with online platforms and a decrease in trust in them.

The effects of dark patterns are not limited to individual experiences but also have broader social implications. In an online environment dominated by manipulative techniques, the relationship between companies and consumers becomes strained, and trust is gradually eroded. This can lead to a decline in consumer loyalty and a deterioration of the brand image of companies that use these techniques. Moreover, an online environment where subtle manipulation is a common practice negatively affects the overall perception of e-commerce, which can have significant economic consequences.

In conclusion, the thesis highlights the need for stricter regulations and greater awareness among users regarding the existence and impact of dark patterns. Collaboration between the e-commerce industry and policymakers is necessary to create a more transparent and fair online environment. Furthermore, it is suggested that educating users and promoting user-centered ethical design are essential steps in combating these manipulative practices. In the long run, protecting consumer rights and restoring their trust in online platforms are crucial for sustainable e-commerce.

The main objective of the research is, therefore, to understand the impact of dark patterns on users' behavior and to propose solutions that support the development of a more ethical and transparent online environment. The study aims to contribute to the development of appropriate regulations that protect consumers from manipulative practices and promote e-commerce based on trust and mutual respect between companies and consumers.

The research emphasizes the importance of educating users to recognize these dark patterns and better protect their interests in online interactions. It is also important for policymakers to be involved in creating a regulatory framework that prevents the abusive use of these techniques. Ultimately, the thesis provides a significant contribution to understanding the ethical and psychological complexities of dark patterns in e-commerce, paving the way for future research in this area.