Dark Patterns: Deception & Manipulation in User Experience Design



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What are dark patterns?

Dark patterns are a set of strategies that manipulate user behavior. Implemented by digital marketing and human-computer interaction experts, these design choices deceive users into making decisions against their best interests. Examples of common patterns include disguised ads, confusing steps when deleting an account, free trials turning into paid subscriptions without warning, and more.

Harry Brignull, who coined the term in 2010, defines dark patterns as "a user interface that has been carefully crafted to trick people into doing things."

Historical Context

Modern scholarship assumes dark patterns are a new phenomenon made possible by Web 2.0, and often focuses on video games or online gambling. Our research indicates a long history of dark patterns present in post-war marketing.

For example, a 1990 study found that alcohol and tobacco billboards in Chicago disproportionately targeted poor and minority neighborhoods (1). This tactic is present in current marketing and design strategies, including targeted ads on social media and search engines or online marketplaces using price discrimination based on a user's location (2).

Research Question

How can we best communicate the connections between contemporary "dark patterns" in user experience (UX) design and historical forms of merchandising & marketing manipulation?

Methods

We created a pedagogical tool that visually demonstrates current dark patterns and provides interactive examples that train users in recognizing common patterns (www.deceptivebydesign.com).

Conclusion

The aim of this project, and our website, is to teach students how to think critically about the design patterns they use on a daily basis and recognize when manipulative strategies are influencing their decisions. Paired with snippets of a pattern's history, students are visually guided through how older marketing and data collection strategies have been transposed into modern digital design.

The Deceptive by Design website is part of the curriculum for **CCT109**: **Contemporary Communication Technologies**, one of the University of Toronto Mississauga's largest undergraduate courses. It will be presented to students within the context of a larger unit on the political economy of online platforms and labor.



An element of our website demonstrating a common dark pattern

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¹ Tobacco and Alcohol Billboards in 50 Chicago Neighborhoods: Market Segmentation to Sell Dangerous Products to the Poor, https://doi.org/10.2307/3342593

² Websites Vary Prices, Deals Based on Users' Information, https://wsj.com/articles/SB1000142412788732377720457818 9391813881534