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DARK PATTERNS IN DIGITAL MARKETING: CONSUMER AWARENESS AND ETHICAL IMPLICATIONS

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Abstract

This research examines the ethical application of manipulative design patterns in digital platform, how compelling this dark patterns are and breaks the authenticity in digital platforms. The investigation scrutinizes the crossroads of AI, aimed behaviour and UX design where consumer point out and link to such convincing approach. The proof shows that consumers can identify these dark patterns like false alarms, countdown timings and misleading ads but they can't prevent themselves from these deceptive cues as the unintentionally fall into these pits. The review indicates AI creates modified manipulative cues in regard to consumer's exposure which creates imbalance between companies and consumers, thereby intimidating consumers trust, authenticity and fairness in virtual landscapes. As the result, this paper advocates moral and transparent architectural framework which boost authenticity and stable decisions, in addition educational initiatives to make aware of people about deceptive cues which results in avoidance of manipulative patterns. Moreover, it highlights the need for legal compliance against AI integrated marketing which includes manipulative tactics. Eventually, this study adds to academic and ethical digital governance which ensures transparency, authenticity, fairness and accountability.

Keywords: User Transparency, Ethical And Moral Governance, Behaviour Designs, Digital Ethics, Accountability, Authenticity, Consumer Autonomy, AI Mediated Persuasion, Regulatory Accountability

INTRODUCTION

In swiftly changing present digital world, marketing is virtually no more people driven, it is more of tech based. Marketers equip the potential of artificial intelligence (AI), data analytics of customer and services that attract audiences. Significant aspect that come with tech based world is ethics. One of the primary issue is the boom of artificial intelligence where design ploy are used in website and apps that misdirects or influence audience to make choice that they wouldn't make on their own. (ⁱAmit Zac et al., 2025; ⁱⁱMaier & Harr, 2020) These compelling designs can boost sales in very short period but in long term this can reduce consumer trust, transparency and interrogate the moral standards of e-marketing. (ⁱⁱⁱAbbasoglu et al., 2025

Dark patterns are in many form. For instance, they use tactics like demonstrating false demand for example "hurry! Just a few are left", showing the extra charges included at the payment process, making difficult to unsubscribe from a specific autopay of a service. (^{iv}Mathur et al., 2021; ^vCurley et al., 2021) This act may make use of the audience by implying unconscious biases like FOMO (fear of missing out). Some tactics are easily identified, while some are difficult to spot. This scenario makes hard for customers to advocate options in buying. (Maier & Harr, 2020; ^{vi}Sharmila, 2025)

The findings of the study indicates that consumer intelligence and the knowledge of dark patterns are generally limited and varying. A considerable number of users can identify manipulative interfaces. However, they are still trapped by their day to day behaviours, lack of digital skills, or just by not paying attention (Mathur et al., 2021). In other words, to be aware does not equate to being opposing. The rising use of AI-based marketing strategies has made the matter worse since AI is



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capable of being dishonest more powerful and less visible by tailoring it to the specific vulnerabilities or likes of each person (Abbasoğlu et al., 2025). Different patterns of manipulation in UI/UX design have started attracting the interest of people from various fields like ethicists, lawyers, and regulators. The moral and legal dimensions of the issue are mostly the same, namely: fairness, transparency, and consumer rights. Still, some countries are radically dividing manipulative practices from deceptive laws, while the majority of the existing legislation left the door ajar for dark patterns (Yi & Li, 2024). Researchers dealing with ethical issues call for marketers and designers to bear more responsibility in the creation of the systems that will be fair, transparent, and user-friendly (Ruohonen et al., 2025).

India is one of the countries where this issue is developing parallel to the growing habit of the population to shop online. Surveys indicate that a wide array of Indian customers encounter hidden charges, fake urgency notifications, and site designs that confuse them, yet most of them do not even know what “dark patterns” mean (Asst. Prof. Kishnani D, 2025; Gupta & Sharma, 2025). Consequently, the practices not only lead to consumers losing money and getting frustrated but also to a general decline of trust in e-commerce that is hard to recover from and a simultaneously damaged brand reputation in a long-term perspective.

This study is aimed at finding out more about consumers' ability to discern these patterns, the decision-making and trust issues caused by the dark patterns, and the ethical debates the strategies raise. Also, the project aspires to come up with the answers for the transparency and accountability in the digital marketing. By the use of both the global and Indian viewpoints, the study endeavours to increase the comprehension about the dark patterns' impact on the consumers and what the businesses and the policymakers can do for ethical digital marketing practices.

REVIEW OF LITERATURE:

- The study revealed that consumers are usually aware of manipulative design tactics but sometimes their awareness does not lead to no resistance, as many customers still give in to these dark patterns. It has been rather evident that these dishonest hiring practices such as secretly added rates, obligatory subscription, and misleading approval layouts affect the bargaining power of the customers and their trust to a very large extent negatively. The outcomes call for the urgent imposition of more stringent ethical standards and regulatory measures for the digital marketing sector (Maier & Harr, 2020)
- The research states that the majority of consumers easily spot the dark patterns in the digital platform, but each pattern was varied in each platform based on the following patterns. Most direct scheming plans, like countdown timers, false alarms and deals were easily detected. But the complex ones like pre checked boxes and redirecting advertisements are most probably brushed aside. The findings shows that audiences having knowledge about the following patterns are not enough thus fostering the wants for moral design practices is important.(Mathur et al., 2021)
- The study revealed that acquisition of artificial intelligence in virtual space allows dark patterns to the maximum level and comply strategies that exploit the weakness of the customers. Therefore, even though the consumer are not entirely aware of such practices, the ethical consequences are most important as the implications of such patterns disrupts the trust, credibility and autonomy. (Abbasoğlu et al., 2025)
- The research stated that the application of dark patterns in online platforms is becoming common in many ways to attract the consumer into making unconscious decisions. Overall structure was deigned to identify and group these patterns according to their practices. The study highlights the ethical risk of these patterns and by offering detection tools with knowledgeable features will probably increase awareness among the consumer. (Curley et al., 2021)



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- The study states that dark patterns make use of consumer's weakness by domination and specifically the technologically illiterate ones. Pointing out of such patterns can be done by some consumers but majority of the people fall into the pit which results in reduction of trust and authenticity. The out-turn bring to the spotlight not only the moral concerns related with these patterns but also the significance of a rigid rules and regulations similar to truthfulness of the digital designs.(Amit Zac et al., 2025)
- Dark patterns have a significant impact on e-commerce as the study disclosed that 81% of the buyers encountered hidden fees, 78% automatic renewals, and 76% misleading urgency tactics, the whole thing resulting in the consumer's frustration, regret, and a lack of trust. Even though a lot of consumers assert that they possess a moderate level of awareness of the manipulative designs, the very fact that they have low legal literacy considerably hampers their ability to resist. The research highlights the fact that ethical UX design and effective regulatory enforcement are significant to safeguarding user autonomy and regaining confidence in online markets. (Sharmila, 2025)
- The research found that in e-commerce in India, deception at a higher level through the practices of hidden costs, insufficient information about urgency, forced subscription, and misdirection are all used to influence customers' decisions, which result in losing money, being annoyed, and losing trust. However, while the consciousness of some consumers is at a medium level, the lack of digital skills makes most of them unprotected, particularly the beginner online buyers. The findings highlight the required ethical necessity of open design, regulatory compliance with strong background, and better consumer education as strategies to safeguard the autonomy and trust in online markets. (Gupta & Sharma, 2025)
- The study indicated that usage of dark patterns is an almost standard and universal practice in online shopping and that 87% of the studied sites engaged in such practices are through hidden fees and mandatory actions. Consumers, in a way, acknowledge the manipulation since 68% of them have reported connections to deceptive design but most of them do not know the term "dark patterns". The researchers state that these manipulative strategies, though possibly lucrative in the short run, result in consumer discontent and suspicion which in turn adversely affect branding and even stir serious ethical and legal issues (ⁱRauniyar et al., 2025)
- The study indicates that, even though Indian consumers often fall prey to such deceitful practices as fake urgency (73.8%), hidden costs (58.8%), and disguised ads (42.5%), a large number of them (i.e., a significant portion) are still not familiar with dark patterns. Moreover, while hem of the respondents (90%) were in favor of tighter controls, the situation did not change because the existing legal framework of the country was silent on these practices. The revelations have brought the topics of consumer education, ethical UI/UX standards, and regulatory measures stronger to the discussion of the adverse effects of dark patterns on consumer trust and financial security (Asst. Prof. Kishnani D, 2025)
- The research shows that digital marketing's ethical issues, including dark patterns, are worsened by the consumers' lack of awareness regarding their privacy rights (60% are not aware of GDPR/CCPA) and the general distrust in companies (only 30% of the consumers trust brands with their data). However, in reality, the "privacy paradox" occurs when consumers frequently exchange their privacy for convenience. According to the article, "this is the scenario in which the use of deceptive practices is reduced and the customers' trust is regained," and the transparency, the good ethical practices in handling data, and the strict regulation enforcement are the key factors (^{xiii}Mohanty, 2025)

Currently, the psychological aspects of the Indian consumers in developing countries that lead to their being susceptible to dark patterns as false urgency and FOMO are still unclear in the literature. While certain studies reveal a very strong negative



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influence of such patterns, still there are many questions unanswered about the level of consumers' awareness, the slow-burning effect of trust erosion, and the applicability of regulations in Eastern societies. Moreover, cultural factors and people's level of digital skills have not been adequately considered in research nor have they come up with solutions tailored to the context that are acceptable from both ethical and commercial points of view. Thus, in different digital economy scenarios, the provision of insights for consumer protection moves to the back row.

OBJECTIVES OF THE STUDY

- To assess consumer awareness of common dark patterns employed in digital marketing.
- To investigate how dark patterns influence consumer decision-making and behavior.
- To examine the ethical concerns raised by the use of deceptive digital strategies.
- To propose actionable recommendations for ethical improvements in online marketing practices.

DISCUSSION

The consumer knowledge of dark patterns presents a significant aspect: people can easily identify these tactics like “only two left” countdown times but they don’t know these patterns belong to the term called dark patterns, they lack the conceptual knowledge of these patterns or tricks. In markets like India many consumers are aware that something is wrong when there is misleading or when they get tricked by these tactics but they don’t know how to protect themselves from these patterns, they remain vulnerable. In the end consumers feel “pushed” into doing something unintentionally (like purchasing a product or sharing any information). This lack of knowledge about these patterns make people easily fall into the pit.

Dark patterns are deceptive designs, involve manipulating user decisions through cognitive bias and, in particular, using psychological triggers such as FOMO (fear of missing out). The major conclusion is that awareness of the user does not mean that he or she will resist; often, psychological pressure or inertia dominates recognition and forces the user to make the decision that he or she will regret. This manipulative influence causes significant negative consequences, including financial losses, frustration, and a pervasive erosion of trust in brands and platforms. These patterns may help to boost the brand revenue by using these tactics in short term, once the consumer realize that they are misled or manipulated their trust breaks and overall brand loyalty is reduced in long term. Furthermore, the integration of AI-based marketing intensifies this problem by personalizing manipulation to exploit individual weaknesses, making the deception more effective and harder to detect, leading to a fundamental loss of consumer autonomy.

Dark patterns are seen as an important moral issues as they break consumer trust and loyalty. Customer rights are perceived as privileges that do not permit them to have access to information or choice. This is achieved through manipulation of situations like digitally challenged.

AI-based personalization worsens this ethical issue because it changes deceptive design into very accurate algorithmic manipulation. The frequent employment of such tactics (with a prevalence of up to 87%) points to a profound and decisive ethical failure where the priority is given to commercial short-term gain at the expense of consumer welfare and market integrity. Furthermore, this practice contributes to the "privacy paradox," where a power imbalance compels consumers to trade their privacy for perceived convenience. As a matter of fact, the ethical research gives priority to the marketers and designers' responsibility to implement methods that are just and user-friendly in order to correct the existing imbalance.

Enhancing clarity among virtual world to break digital patterns require a well-built procedure focused to improve fairness, digital literacy among consumers and accountability. First, the need of these strategy must be strong force as this battels against the exploit of the interface design. Instead of automatic pre checkout website they must establish constructive patterns. Next, the marketers must offer fair patterns which encourage feasible website as it builds long term loyalty among consumers and provides genuine freedom of choice on purchasing a product. Further, digital literacy among consumer is significant as it helps to pin point these patterns easily and assist to avoid these misleading tricks. Increase in use of AI is



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increased, marketers collect certain data with the help of AI this breaks trust. So there must be transparency in collecting the data which helps in enhancing accountability. To conclude, the clarity is necessary as the danger of humanize manipulation is increased. The data collected from the consumer must be straightforward approach and marketers must provide positively operated website which improves accountability among consumer.

The research confirms that dark patterns are a critical ethical challenge in modern digital marketing. They flourish in the gap between customers' tactical awareness of manipulative signals and their absence of strategic resistance, exploiting psychological weaknesses for profit. These activities, while profitable in the short run, have long-term costs that are reflected in reduced consumer trust and the loss of a good company reputation. The whole industry has to change its ways and use ethical and transparent design techniques supported by rules and regulations as well as extensive consumer education, particularly in the digital regions like India that are getting larger every day.

IMPLICATIONS OF THE RESEARCH

The implications for brands, marketers, and UX/UI designers.

- Trust that is long-term rather than short-term metrics should be the main priority: The research results point out a strong association between deceitful tactics and the loss of brand loyalty. Therefore, the brands should change the area of focus from short-term conversion metrics to long-term Customer Lifetime Value (CLV). It means that the use of dark patterns should be completely washed out and there should be a true, user-centered design that draws trust and repeat sales
- The adoption of "Ethical Design" as a company's foundation: Firms will not be able to argue about the need to implement ethics in the UX and UI development life cycle if they consider ethics as an afterthought. It will mean the introduction of "light pattern" frameworks that guarantee clarity, honesty, and symmetrical choices (for example, it should be as easy to cancel a subscription as it is to sign up). The conduction of regular ethical audits of digital interfaces can become a norm.
- AI powered customization to be more explicit: high involvement of artificial intelligence in marketing is increasing. Hence, marketers have to build procedures and patterns that provides transparency to the consumers. This must state the evident patterns for consumer while visiting a specific website which in turn reduce the unethical context and build consumer loyalty.
- Marketing patterns to become education investment: By educating consumer, marketers will have unique selling proposition. They can educate consumer through awareness video or can directly tell their consumer the importance behind these regulations through their respective website. This helps in enhancing knowledge of the consumer where they can pin point these false alarms and improve their purchase behaviour. Therefore brands will be positioned as trustworthy among consumers.

Implications for policymakers and Regulators:

- Move from General Guidelines to Specific Prohibitions: The analysis indicates that the current legal systems are frequently so unclear that they do not even touch upon the issue of misleading design. Particularly in the Indian context, it is up to the government to lay down unambiguous and legally binding regulations clearly prohibiting the use of dark patterns like pre-checked consents, hidden charges, and purposely difficult navigation (e.g., "Roach Motel") that will make the market practices more consumer-friendly.
- Mandate Design Symmetry and Transparency of data: One of the major rules to be introduced will be the application of the "choice symmetry" concept, which will make it necessary for all negative actions such as unsubscribing, deleting an account, or refusing to share data to be as simple and accessible as positive ones like signing up or getting data shared. Therefore, it would be harder for users to sign up than to quit. However the marketers must provide clear information on how AI use consumer details that determine certain actions.



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- Implement of scrutinize application and sanctions: for the reason of sanctions, the regulatory agencies must be provided with authority to conduct audits and impose heavy penalties on the brands that use dark patterns or deceptive patterns. This will shift brands short term focus to long term.
- Encourage national digital literacy initiatives: As the absence of knowledge about dark patterns among consumers made them fall for the trap. So government can organize or take initiative to improve the digital literacy among consumers by hosting campaigns about these patterns. These education must be included in the public education as to make aware of consumers, so they can simply avoid these traps implemented by many brands while consuming certain services or purchasing of certain product.

Implications for Future Research:

- Researching the influence of AI-personalized dark patterns: AI has identified as a stimulus in this study, yet upcoming study must research and recognise the reach of the AI and its influence in dark patterns. In future many test can be conducted to identify various types of dark patterns interconnected with AI and offer solutions for these bugs.
- Longitudinal research on consumer resistance and reliability: there is a demand for this study to ascertain how consumer reliability and resistance varies gradually with frequent use of dark patterns by marketers. This study helps in pointing out varies factors that efficiently build the knowledge gap.
- Multicultural and socioeconomic analysis: this study majorly focused on the Indian market. Whereas the future study can cover the multi-dimensional and cross culture markets which include various different culture, age, economics, income and groups. This will benefit in academic support and helps in building strong strategies for multinational companies.
- Evaluating the feasibility study for moral design: by understand the long term return on investment and switch to light marketing patterns and ethical form of marketing from unethical and manipulative dark patterns used by marketers helps in building trust and retention rate of consumer by understanding brand reputation score and customer retention rates. Eventually upcoming study may focus on these aspects.

CONCLUSION

The study indicates that these dark patterns are major ethical problem in the virtual market. They intervene between consumers knowledge of being misled and withstand of avoiding these manipulations. The core idea of this study is consumer awareness-resistance paradox, usually consumers notice these tricks like “only few left” and count down times. Despite noticing it they still fall for this and later they regret it as it erodes their trust and loyalty as they unintentionally purchase it. So marketers must shift to more ethical practices. Most of the brands focus on short term benefits which result in long term deterioration of their customer trust and loyalty. Reworking in brands strategy which include ethical practices helps in building long term trust among consumers, enhance transparency and user friendly platform.

This study is a wakeup call for lawmakers as it triggers them to construct a guidelines that protects consumer from unethical actions and ban most frequently applied fraudulent practices. To prevent consumers from complex digital platform the brands must build a fair website which followa ethical norms and provide transparency and clarity to consumers to build trust among them.

This research has set various implications for the upcoming study. A digital platform must include transparency while dealing with consumers, as this fosters in building long term trust and loyalty between brands and consumers. Therefore every brands must prioritize on promoting ethical implications on marketing and construct a user friendly website which is transparent, clear and accessible for consumers.



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