



### THE RISE OF "DARK PATTERNS" IN ONLINE ADVERTISING: THE AWARENESS GAP

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#### Abstract:

*The digital marketplace has revolutionized consumer experiences, but with this transformation comes a hidden menace—"Dark Patterns." These deceptive design tactics in online advertising manipulate consumer behavior, making it difficult for users to make informed decisions. From misleading urgency countdowns and forced subscriptions to hidden fees and sneaky pre-checked boxes, dark patterns subtly push consumers into choices they might not otherwise make. While these tactics benefit businesses, they pose serious threats to consumer rights, financial security, and privacy. This research delves into the awareness levels of Indian consumers regarding dark patterns, their experiences with deceptive online advertising, and the legal and regulatory challenges in India.*

*To assess the real-world impact of dark patterns, a structured survey was conducted to collect first-hand insights from Indian consumers. The results reveal that a significant majority of users remain unaware of the existence of dark patterns, despite being subjected to them frequently. Many consumers unknowingly fall into traps, such as auto-renewing subscriptions, false scarcity messages, and disguised ads that appear as genuine content. The psychological impact of these manipulative tactics creates frustration, financial losses, and erodes trust in digital platforms. Interestingly, younger consumers, who are more tech-savvy, tend to be more aware of dark patterns but still struggle to avoid them due to the overwhelming nature of digital interfaces.*

*A deep dive into India's legal and regulatory framework reveals that, while consumer protection laws exist, they do not explicitly address dark patterns in digital advertising. The Consumer Protection Act, 2019, the Information Technology Rules, 2021, and the Advertising Standards Council of India (ASCI) guidelines aim to curb unfair trade practices but lack direct provisions against manipulative UI designs. This regulatory blind spot allows businesses to exploit digital loopholes, making enforcement difficult. Moreover, the lack of awareness among consumers and limited legal precedents make it challenging to hold companies accountable for deceptive practices.*

*Given the growing dominance of digital commerce in India, there is an urgent need for regulatory intervention, stronger enforcement mechanisms, and consumer education initiatives. This study highlights the necessity of stringent legal reforms that clearly define and prohibit dark patterns, ensuring businesses adhere to ethical advertising standards. Additionally, empowering consumers with knowledge about deceptive tactics can equip them to make more informed choices, thereby reducing their susceptibility to manipulative strategies.*

*As online advertising continues to evolve, the battle between ethical commerce and deceptive manipulation intensifies. Addressing dark patterns is not just about regulating digital marketing; it is about restoring consumer trust, promoting fair trade practices, and safeguarding digital rights. This research aims to contribute to this mission by shedding light on deceptive advertising tactics, pushing for legal clarity, and advocating for a more transparent and consumer-friendly digital ecosystem in India.*

**Keywords:** *Dark Patterns, Online Deception, Consumer Awareness, Ethical Advertising, Indian Legal Framework*

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### Introduction:

In the digital era, where online platforms dominate shopping, entertainment, and social interactions, consumer choices are no longer entirely their own. Many companies use deceptive design techniques, known as “dark patterns,” to subtly manipulate user behavior, leading to unintended purchases, privacy invasions, and financial losses. These tactics exploit cognitive biases, making users act in ways they would not if they had complete information and genuine control over their decisions. While businesses defend these strategies as tools to enhance engagement and sales, dark patterns undermine consumer autonomy, erode trust, and raise serious ethical and legal concerns.

### The Many Faces of Dark Patterns:

Dark patterns take various forms, each designed to confuse, mislead, or pressure users into actions they may not have taken voluntarily. Some of the common types include:

- **Sneaking** – Companies hide crucial information or costs until the final step of a transaction. Example: Hidden service fees in online ticket booking platforms.
- **Roach Motel** – Easy to sign up for a service but extremely difficult to cancel. Example: Subscriptions that require calling customer support to cancel while signing up is just a click away.
- **Forced Continuity** – Free trials that automatically convert into paid subscriptions without clear reminders. Example: Streaming platforms that charge users after a free trial without an easy cancellation option.
- **False Scarcity & Urgency** – Websites show fake low-stock warnings or countdown timers to rush purchases. Example: E-commerce sites displaying “Only 2 left in stock!” even when the product is widely available.

- **Bait and Switch** – Users expect one action to happen, but another takes place instead. Example: Clicking a “Close” button on a pop-up ad, only for it to redirect to a different page.
- **Privacy Zuckering** – Tricking users into sharing more personal data than they intended. Example: Social media platforms automatically opting users into extensive data collection settings.
- **Disguised Ads** – Advertisements that look like real content, misleading users into clicking them. Example: “Download” buttons that are actually ads for unrelated software.
- **Confirm shaming** – Guilt-tripping users into making a decision they might not have otherwise. Example: “No, I don’t want to save money” as an option when declining a discount offer.

### The Current Landscape of Dark Patterns in India:

Dark patterns are not just a global issue—they are increasingly prevalent in India’s booming digital economy. With millions of users engaging with e-commerce, social media, and digital financial services daily, dark patterns have infiltrated nearly every aspect of the online experience.

Recent cases highlight the aggressive use of deceptive tactics by various Indian and multinational companies:

- **E-Commerce Platforms:** Several Indian online marketplaces have been accused of using false discount claims by inflating original prices to make discounts look more attractive.
- **Food Delivery & Ride-Hailing Apps:** These platforms frequently add hidden charges (such as convenience fees or surge pricing) that only appear at checkout.
- **Subscription Traps:** OTT platforms like Netflix and Amazon Prime have been criticized for auto-renewing subscriptions without clear

reminders, making cancellations unnecessarily complex.

- Online Lending & FinTech Apps: Many digital loan providers use misleading approval processes, where users believe they are getting a loan but later discover hidden processing fees and exorbitant interest rates.

Despite consumer backlash, many companies continue these deceptive practices due to weak legal enforcement and the lack of specific regulations against dark patterns in India.

### The Hidden Agenda of Dark Patterns:

The motivation behind dark patterns is simple yet powerful—profit. These manipulative design techniques help companies:

- Boost Conversions – A user who feels pressured by a false scarcity tactic is more likely to make a purchase immediately.
- Maximize Subscription Retention – Complicated cancellation processes reduce the number of users unsubscribing.
- Harvest Consumer Data – Privacy-intrusive settings disguised as standard preferences allow platforms to collect more user data for targeted advertising.
- Increase Ad Revenue – Disguised ads trick users into engaging with paid content, generating higher click-through rates and revenue.

The problem lies in the fine line between marketing strategy and consumer deception. While businesses justify these tactics as enhancing user engagement, the reality is that they violate consumer rights and create an unfair marketplace.

### Review of Literature:

- Brignull (2013) identifies the emergence of dark patterns as deceptive user interface designs that manipulate consumer decisions, highlighting

the need for increased awareness and stricter regulations to combat such unethical practices.

- Mathur et al. (2019) emphasize the prevalence of dark patterns in e-commerce, revealing that major online platforms employ tactics such as misleading urgency cues, hidden costs, and forced continuity to drive sales and engagement.
- Luguri & Strahilevitz (2021) examine the psychological impact of dark patterns, demonstrating that users often fail to recognize manipulation in real time, leading to unintended purchases and privacy concerns.
- Gray et al. (2020) explore how behavioral biases like default bias, loss aversion, and decision fatigue make consumers more susceptible to dark patterns, urging the need for ethical design standards in digital marketing.
- Prasad & Mehta (2023) analyze India's Consumer Protection Act, 2019, and IT Rules, 2021, pointing out regulatory gaps in explicitly addressing dark patterns and calling for stricter enforcement measures.
- Kumar & Patel (2023) highlight the use of dark patterns by Indian e-commerce giants like Flipkart and Amazon, where consumers encounter deceptive countdown timers, pre-checked subscription boxes, and ambiguous refund policies.
- Chopra & Singh (2023) focus on the role of misleading consent mechanisms, where users unknowingly share personal data due to confusing opt-in/opt-out options, raising ethical and legal concerns about digital privacy.
- Mukherjee & Das (2024) propose consumer literacy programs and AI-driven detection tools as effective solutions to mitigate the impact of



dark patterns, emphasizing proactive consumer protection strategies.

### Research Objectives:

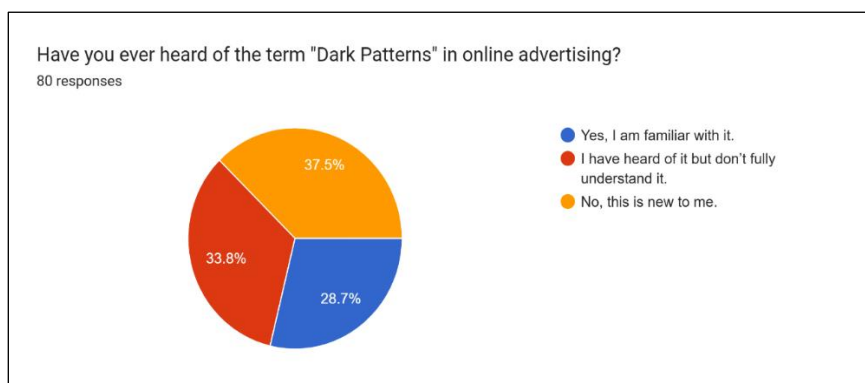
1. To explore consumer awareness of dark patterns in online advertising and assess their influence on purchasing decisions.
2. To identify the most commonly used deceptive design tactics and analyze their psychological impact on consumer behaviour.
3. To examine the challenges within India's legal framework in regulating and addressing misleading advertising strategies.
4. To propose innovative, consumer-centric solutions that promote ethical advertising and enhance digital transparency.

### Scope of the study:

This study delves into the rising prevalence of dark patterns in online advertising, examining their psychological influence on consumer behavior and the challenges they pose to regulatory frameworks in India. While digital marketing continues to evolve, this research offers a focused analysis rather than an exhaustive exploration of every dimension. By assessing consumer awareness and experiences through a targeted sample group, the study highlights

### Data Analysis and Interpretation:

#### • Awareness of Dark Patterns



The data reveals a significant knowledge gap, with 37.5% of respondents being totally unaware and 33.8% having partial understanding. Only 28.7% are familiar with the topic. This suggests a need for targeted education and awareness efforts to address the knowledge gap.

key areas of concern, providing valuable insights into deceptive design strategies. The ultimate objective is to foster awareness, encourage informed decision-making among consumers, and ignite critical discussions on strengthening digital consumer protection in India's rapidly expanding online marketplace.

### Research Methodology:

This study employs a mixed-method approach, integrating primary and secondary data to explore the rise of dark patterns in online advertising and consumer awareness. Primary data was collected through a structured questionnaire with 14 questions, gathering 80 responses via random sampling, supplemented by personal interviews for deeper insights.

For secondary data, relevant academic papers, peer-reviewed journals, industry reports, and legal frameworks were analyzed to understand deceptive design tactics, psychological influence, and regulatory gaps in India.

The collected data was examined using the percentage method, with findings visually represented through bar graphs, tables, and charts to identify key patterns and trends.

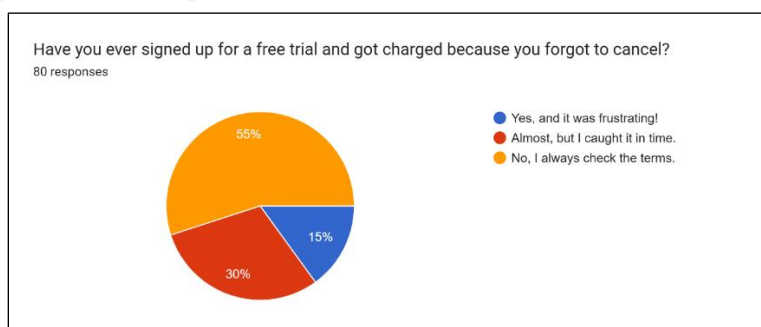


### • Consumer Experiences with Manipulative Tactics



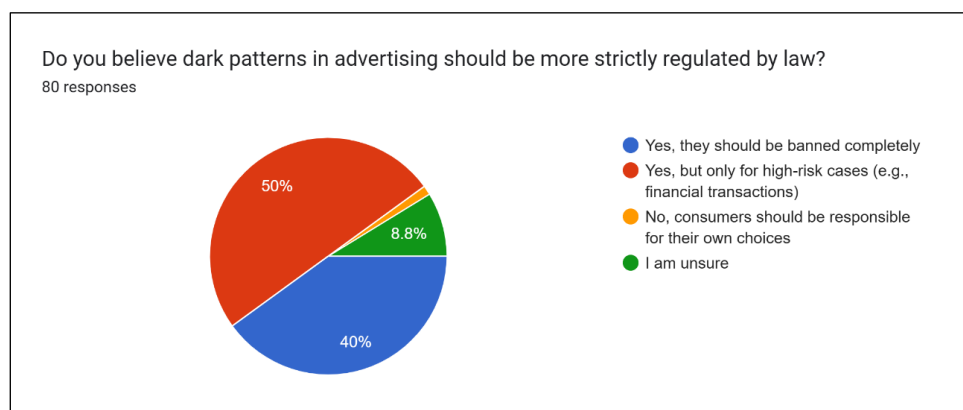
The survey responses reveal alarming trends in online consumer experiences. A significant majority (73.8%) reported falling prey to fake urgency tactics, while a quarter (25%) struggled to cancel subscriptions. Over half (58.8%) encountered hidden costs, and 42.5% were duped by disguised ads. Furthermore, 30% felt pressured into sharing excessive personal information, and 36.3% were auto-charged after free trials. These findings highlight widespread deceptive practices in online advertising and subscription services, emphasizing the need for greater transparency and consumer protection.

### • Financial Consequences of Deceptive Practices



A majority of people (55%) exercise caution when signing up for trials or schemes, carefully reviewing terms and conditions to avoid potential pitfalls. Meanwhile, 30% of individuals successfully navigate these offers without incurring unwanted charges. However, a notable 15% still experience frustration with unexpected charges, emphasizing the importance of clear and transparent terms to protect consumers.

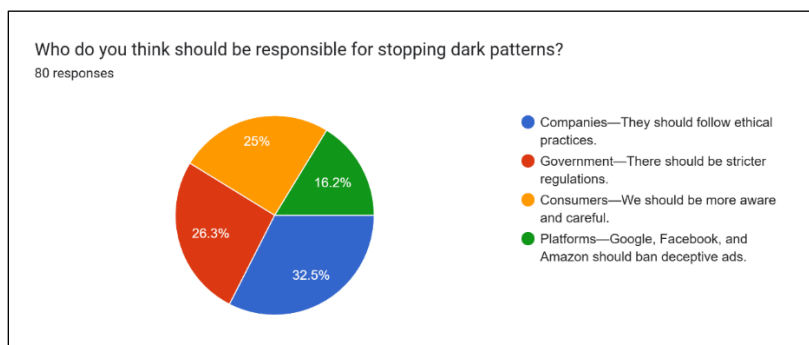
### • Regulatory Perspectives and Consumer Expectations





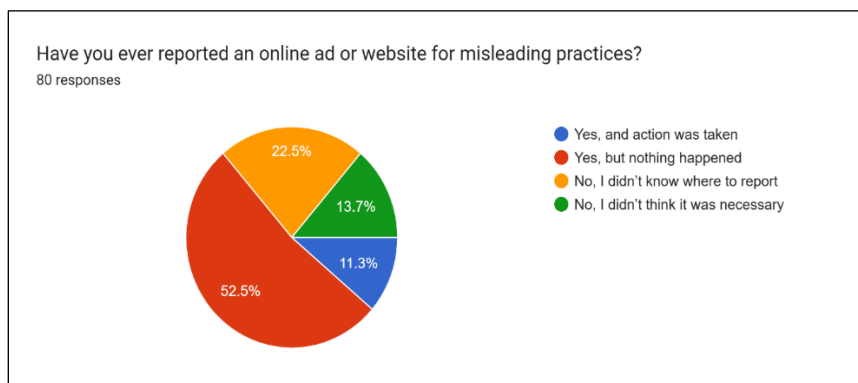
A vast majority (90%) of respondents believe dark patterns in advertising should be regulated, with 40% advocating for a complete ban and 50% supporting regulation only for high-risk cases like financial transactions. A small fraction (8.8%) are undecided, while approximately 1% (1 person) think consumers should be responsible for their own choices, indicating overwhelming support for stricter regulations.

### • The Role of Stakeholders in Addressing Dark Patterns



The responsibility for stopping dark patterns is a shared concern, according to respondents. While 35% emphasize the need for consumers to be more vigilant and aware, 32.5% hold companies accountable for adhering to ethical practices. Government intervention through stricter regulations is advocated by 26.3%, and 16.2% believe tech giants like Google, Facebook, and Amazon should take proactive steps to banish dark patterns altogether.

### • Reporting and Consumer Action



A significant 65% of respondents reported misleading online ads and websites. However, only 11.3% saw any action taken. Many were left unsure of what happened (52.5%), while others didn't know how to report (22.5%) or didn't think it was important (13.7%). This highlights a clear need for easier and more effective ways to report misleading online content.

### Conclusion:

Dark patterns in online advertising manipulate consumer behavior, leading to financial losses and a decline in trust toward digital platforms. Our research shows that many consumers remain unaware of these tactics, highlighting a need for greater awareness.

To address this, a multi-pronged approach is essential—stricter regulations, ethical corporate

practices, and consumer education. Companies should adopt transparent designs, regulators need to enhance oversight, and consumers must be empowered to recognize and resist deceptive practices. This combined effort will foster a fairer, more trustworthy digital marketplace.





### Suggestive Measures:

- **Digital Literacy Initiatives –**  
Educate consumers through awareness campaigns, schools, and online resources to help them recognize and resist deceptive online tactics.
- **Stronger Legal Protections –**  
Implement stricter regulations with clear penalties for misleading advertising, ensuring platforms are held accountable for unethical practices.
- **Ethical UI/UX Standards –**  
Encourage businesses to adopt transparent and consumer-friendly design practices, reducing manipulative elements in digital interfaces.
- **Mandatory Transparency –**  
Require clear labelling for ads, subscription renewals, and data collection to ensure consumers make informed decisions.
- **Efficient Complaint Mechanisms –**  
Establish fast and accessible consumer grievance platforms with swift redressal for those affected by dark patterns.
- **AI-Powered Detection –**  
Utilize artificial intelligence to identify and flag deceptive advertisements, preventing widespread consumer exploitation.
- **Corporate Accountability Reports –**  
Mandate businesses to disclose consumer complaints and resolutions, promoting transparency and ethical responsibility.
- **Encouraging Ethical Advertising Models –**  
Support sustainable marketing strategies that prioritize trust and consumer well-being over manipulative sales tactics.
- **Incentives for Fair Practices –** Offer tax benefits or certifications to companies that

adhere to ethical advertising and fair digital practices.

- **Consumer Advocacy –**  
Strengthen legal support for affected consumers.

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