

## An Analytical Study on the Use of Dark Patterns in Commerce: A Shariah and Ethical Perspective

DOI: <https://doi.org/10.5281/zenodo.17006322>

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### Abstract

*In contemporary commerce, businesses increasingly employ dark patterns—deceptive design strategies intended to manipulate consumer behaviour and maximise profit. Common tactics include pre-ticked boxes, subscription traps, roach motels, and confirm shaming, which exploit consumer inattention or psychological pressure, compelling individuals to act against their genuine intent.*

*From an Islamic legal and ethical standpoint, such practices raise serious concerns. The Qur'an explicitly prohibits unjust consumption of wealth, permitting trade only when conducted through mutual consent. Prophetic traditions (Hadith) further affirm that a sale is valid solely when founded upon genuine willingness. These principles underscore the centrality of transparency, justice, and voluntary agreement within Islamic commercial ethics.*

*This study undertakes an analytical examination of dark patterns in light of Shariah and ethical frameworks, assessing their implications for consumer rights, market integrity, and social trust. The findings reveal that although these tactics may generate short-term corporate gains, they undermine fairness, violate consumer autonomy, and erode long-term trust in the marketplace. Consequently, from both Shariah and ethical perspectives, dark patterns are not only objectionable but impermissible, necessitating their abandonment in favour of commerce grounded in honesty, fairness, and informed consent.*

**Keywords:** Dark Patterns, Consumer Rights, Shariah Compliance, Islamic Commercial Ethics, Transparency, Mutual Consent

### Introduction

Just as beliefs (‘aqā'id) and acts of worship (‘ibādāt) are essential branches of religion, transactions and dealings (mu‘āmalāt) also hold a central place in Islam. The same way Islamic law provides detailed rulings for matters of belief and worship, it has also outlined comprehensive guidance for dealings. Rules concerning

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lawful and unlawful (ḥalāl and ḥarām), permissible and impermissible (makrūh and ghayr makrūh), and the acquisition of pure and wholesome wealth (ṭayyib māl) are all elaborated in the Qur’ān and Ḥadīth. Thus, in this area too, as in all others, Sharī’ah provides complete direction.

Trade (tijārah) is regarded as the noblest means of earning a livelihood. If it is conducted in accordance with legitimate and Sharī’ah-compliant principles, it brings benefit in this world as well as great reward and a lofty station in the Hereafter. Although business is typically undertaken for material gain, Islam transforms this pursuit into an act of worship when one changes perspective: if the trader intends to obey Allah’s command, to seek lawful provision, to raise children on pure sustenance, to fulfill the needs of spouse and parents, to discharge the rights of subordinates, and to support the poor and needy — and then conducts trade in the light of Islamic principles — such commerce is considered highly meritorious in Islam.

At the same time, however, Islam strictly forbids certain kinds of businesses. Trading in prohibited commodities is not allowed. Goods that Islam has declared unlawful — such as alcohol, narcotics, heroin, etc. — cannot be made into merchandise. Similarly, activities such as lottery, gambling, prostitution, usury (ribā), contracts involving gharar (excessive uncertainty), fraud, or betrayal all fall under this prohibition.

In today’s world, within the modern commercial landscape, various Dark Patterns are increasingly being employed to attract consumers and maximize profit. These are cunning design tricks embedded into websites and apps to extract more money or data from users, often without their conscious realization. This article examines such practices and evaluates them in the light of Islamic Sharī’ah.

## **Dark Patterns**

### **Definition:**

Dark Patterns are user interface (UI) design strategies that are deliberately crafted to manipulate, coerce, or mislead users into making decisions that go against their true intention or best interest.

In essence, these are methods that present themselves as conveniences but, in reality, are designed to:

Charge users more money,

Lock them into subscriptions, or

Misuse their personal data.

Harry Brignull (2010), who first coined the term, defines it as:

*“A dark pattern is a user interface that has been carefully crafted to trick users into doing things they might not otherwise do.”*

Mathura et al. (2019), in a research paper, state:

*“Dark patterns are design practices that benefit an online service by coercing, steering, or deceiving users into making unintended and potentially harmful decisions.”<sup>2</sup>*

## Simple Examples

Pre-ticked Boxes → Forcing a user to buy add-on services without explicit consent.<sup>3</sup>

Subscription Trap → Easy sign-up, but cancellation is made extremely difficult.  
(*European Commission Reports on unfair digital market practices*)

Confirm shaming → Using guilt-inducing phrases to pressure users into saying “yes.”<sup>4</sup>

## Explanation

Dark Patterns are essentially non-transparent and deceptive design tactics. On the surface, they appear to improve marketing or user experience, but in reality, they violate core principles of consumer rights, trust, and Islamic values — namely, transparency, free consent, and justice.

They are most commonly found in:

- e-commerce platforms,
- airline ticketing,
- hotel booking sites,
- mobile applications,
- subscription services, and
- social media platforms.

## Common Types of Dark Patterns and Examples

### 1. Pre-ticked Boxes

What are Pre-ticked Boxes?

When you buy something online (like a ticket, clothes, or a service), on the checkout page you may find some extra options already ✓ pre-selected.

This means the company has *already decided for you* that you will take those extra services or products.

If you don’t pay attention and uncheck them, those extras are automatically added to your purchase, and you end up paying more.

#### Examples:

Airlines: You buy a ticket, but *Travel Insurance* or *Seat Upgrade* is already ✓ ticked.

Some airlines (e.g., Emirates, Qatar Airways, Ryanair) pre-check these boxes.

If you forget to uncheck them, an additional fee is added.

Online Shopping: You buy a mobile phone. On checkout, “Add Screen Protector for Rs. 500” is already ✓ selected. If you don’t notice, it gets added automatically.

Donations: While shopping, a box like “Donate Rs. 100 to charity” comes pre-checked. If you don’t uncheck it, the donation is automatically deducted.

### **Explanation:**

Travel Insurance is a type of insurance that covers financial risks during travel.

It usually covers:

Flight cancellation or delay

Lost or delayed luggage

Medical emergencies abroad

Accidental death or injury

Trip interruption

Example: You buy a ticket worth \$500. On checkout, “Add Travel Insurance for \$30” is already ✓ ticked.

If you don’t remove it, your total becomes \$530.

Seat Upgrade: Airlines usually have multiple seat classes:

Economy (basic, cheapest)

Premium Economy (slightly better with more legroom)

Business Class (more comfort, better services)

First Class (luxury, most expensive)

If you buy an Economy ticket (\$500), the checkout page may already ✓ have “Upgrade to Premium Economy” (\$100).

If you don’t uncheck, your final bill becomes \$600.

Why is this a Dark Pattern?

The decision should be left to the customer. But by pre-selecting options, companies make people pay extra without explicit consent. Many users, in a hurry or unaware, don’t remove the check mark, and companies profit from this trick.<sup>5</sup>

## **2. Scarcity Alerts**

What are Scarcity Alerts?

Scarcity Alerts are marketing tactics that create the impression that a product or service is very limited, pressuring customers to make quick decisions.

This is a Dark Pattern that exploits human psychology — specifically the *Fear of Missing Out (FOMO)*.

### **Examples:**

E-commerce sites show messages like:

“Only 2 items left in stock!”

“50 people bought this product in the last hour!”<sup>6</sup>

### **Explanation:**

Scarcity Alerts manipulate buyers by giving a sense of urgency, often without a real shortage.

Common examples:

“Only 2 rooms left!”

“10 people are viewing this hotel right now!”

“Offer ends in 3 hours!”

### **Practical Cases:**

Booking.com, Agoda → show “only 2 rooms left” or “5 people booked in the last 24 hours.”

Amazon / Daraz → “Only 2 items left in stock – order soon!”

Zara, H&M → “Sale ends in 3 hours.”

Food Delivery Apps (Foodpanda, Uber Eats): “Hurry! Limited free delivery offers left today.”

Gaming Apps: “Special offer ends in 2 hours – upgrade now!”

Retail Stores: During Black Friday or Eid sales → “Last day of sale!” signs are everywhere.

### **Summary:**

Both Pre-ticked Boxes and Scarcity Alerts are Dark Patterns because they reduce customer freedom of choice. Instead of transparent marketing, they pressure or trick users into paying more or making rushed decisions.

## **3. Subscription Trap**

### **Definition:**

A *Subscription Trap* is a type of Dark Pattern in which users are lured with a “Free Trial” or “Special Offer,” but they are required to provide credit card or payment details. As soon as the free trial ends, the subscription automatically begins, and money is deducted—often without clear notification or an easy cancellation option.

In research, *Subscription Trap* has been identified as a common and harmful Dark Pattern.

### **Examples:**

#### **Streaming Services**

Netflix, Amazon Prime, Disney

Tempting users with “7-Day Free Trial” or “1 Month Free Trial.”

Credit card details mandatory.

Paid plan automatically starts after the trial ends.

If the user forgets, money continues to be deducted for months.

#### **Online Newspapers & Magazines**

New York Times, Wall Street Journal, The Economist

“Try 1 Month Free” offer.

After one month, an expensive subscription begins automatically.

Cancellation often involves a complicated process.

### **Software & SaaS Tools**

Grammarly Premium, Canva Pro, Adobe Creative Cloud  
All features available during the free trial.  
As soon as the trial ends, the card is charged.  
Cancellation hidden in complex settings or requires a call.

### **Mobile Apps & Games**

“7 Days Free Premium Features”  
The user happily enters card details.  
After one week, an expensive subscription begins.  
Unsubscribe option often hidden deep in mobile settings.

### **Fitness & Health Apps**

Calm, Headspace, Fitness+  
“Try Premium Free for 14 Days.”  
Automatic billing once the trial ends.  
The cancellation process so difficult that users reluctantly continue.

### **Educational Platforms**

Coursers, Skill share  
“7 Days Free Trial.”  
Afterwards, full course subscription begins automatically.

### **Islamic & Ethical Perspective:**

In Islam, mutual consent (*taradhi*) is a condition for valid transactions:  
“And do not consume one another’s wealth unjustly, but only in lawful business by mutual consent.” <sup>7</sup>  
“A sale is only valid with mutual consent.” <sup>8</sup>  
Can fall under *tadlees* (deception) and *ikrah* (coercion), which are prohibited.

### **Summary:**

A *Subscription Trap* deceives users by luring them into free trials, collecting payment details, and then starting automatic subscriptions without clear consent. While profitable for companies, it undermines trust and is religiously and ethically unacceptable.

## **4. Hidden Opt-out**

### **Definition:**

A *Hidden Opt-out* is a Dark Pattern in which cancelling or unsubscribing from a service is made extremely difficult. Companies make joining or subscribing very

easy, but when the user tries to cancel, they face obstacles such as complicated steps, long forms, hidden buttons, or mandatory phone calls/visits.

In other words: Easy entry, difficult exit.<sup>9</sup>

This research highlights that most subscription-based websites use *Hidden Opt-out*.<sup>10</sup>

### **Examples:**

#### **Fitness Clubs**

Joining: simple online form.

Cancelling: physical visit + handwritten form + months' notice.

#### **Streaming Services (Netflix, Amazon Prime, Hulu)**

Signing up: one click.

Cancelling: hidden "Cancel Membership" links, repeated "Are you sure?" screens, final "Pause **Instead**" option.

Online Newspapers & Magazines (NYT, WSJ)

Subscribe: instant, online.

Unsubscribe: requires calling customer support, often with long wait times.

#### **Software Tools (Adobe, Microsoft 365)**

Start: one click.

Cancel: redirected through multiple pages → "Special Discount" → "Pause" → finally, a hidden "Cancel Anyway" button.

#### **Mobile Apps**

In-app subscription: one button.

Unsubscribe: must search App Store / Play Store settings, difficult for average users.

#### **Airline Loyalty Programs**

Join: free and easy.

Cancel: requires repeated emails/calls to customer service.

In *Hidden Opt-out*, users are effectively forced to continue subscriptions. This is deceitful and Islamically impermissible.

### **Summary:**

*Hidden Opt-out* is a strategy where starting a service is easy but cancelling is deliberately complicated. While profitable in the short run, it damages trust and violates Islamic principles of transparency and mutual consent.

### **5. (Bait and Switch)**

Showing one thing but selling another.

### **Simple Definition:**

Bait and Switch is a dark pattern in which a user is attracted by a tempting offer or a cheap product (Bait), but when they attempt to purchase it, either the product is unavailable, or a different, more expensive or less beneficial product (Switch) is offered instead.

### **Examples:**

Software & Apps

Website says: "Free Download."

After downloading: the real features are only in Premium Subscription.

Online Stores

Ad shows: "Laptop for just \$200."

On clicking: that model is "Out of Stock" → only the expensive model is available.

Cars (Car Dealers)

Newspaper ad: "Car XYZ for just \$10,000."

At showroom: "That model isn't available, but this new one is here for \$13,000."

Mobile Phones

Online ad: "Latest Mobile, Buy One Get One Free."

Reality: the "Free" phone is a cheap old model.

Hotels / Travel

Website: "Hotel Room just \$50."

At booking: "That room is gone, Deluxe Room \$90 available instead."

Retail Stores (Supermarkets)

Ad: "Cooking Oil, 5L, Half Price."

At store: that brand is sold out → salesman pushes another, pricier brand.

### **Islamic & Ethical Aspect:**

In Islamic principles, this falls under misrepresentation and fraud.

### **Qur'an:**

"And do not reduce people's goods and do not cause corruption on earth." <sup>11</sup>

### **Hadith:**

"He who deceives us is not one of us." <sup>12</sup>

✓ Hence, "Bait and Switch" is religiously impermissible and morally reprehensible.

### **Summary:**

Bait and Switch lures customers with an attractive or cheap offer, then swaps it with a pricier or inferior product. It is based on deception, damages consumer trust, and goes against Islamic principles.

## 6. (Confirm shaming)

### Definition:

Confirm shaming is a dark pattern where the user is made to feel guilty or ashamed when declining an option, pressuring them into saying “Yes.”

In other words, the “No” button is worded in a way that psychologically pressures the user.

Harry Brignull (UX expert and founder of Dark Patterns) defines:

“Confirm shaming is the act of quilting the user into opting into something. The option to decline is worded in such a way that it makes the user feel bad.”

### Examples:

Websites & Apps

Newsletter Pop-up

“Enter your email to get 10% off your first order!”

Yes button: “Yes, sign me up for exclusive offers!”

No button: “No, I don’t like saving money.”

Shopping Website

Yes: “Send me daily discounts.”

No: “No, I prefer paying full price.”

Gaming Apps

Yes: “Claim your free rewards!”

No: “No, I don’t like free stuff.”

Mobile Apps

Fitness App:

Yes: “Start your healthy journey today.”

No: “No, I’d rather stay unhealthy.”

Here, the “No” option shames the user into feeling bad.

Meditation App:

Yes: “Get peaceful sleep.”

No: “No, I love being stressed.”

Again, the “No” option is phrased to embarrass the user.

### Key Point:

Confirm shaming is about *guilt-tripping* or *embarrassing* the user into compliance.

Retail / Marketing

Online Store Pop-up:

Yes: “Yes, I want the 10% discount.”

No: “No, I want to waste money.”

In simple words:

This Online Store Pop-up example can be understood like this:

When you visit an online store (e.g., Amazon, Daraz, or a clothing website), suddenly a small pop-up appears asking if you want a discount.

It has two buttons:

Yes: "Yes, I want the 10% discount."

Meaning: "Yes, I want to get the 10% discount."<sup>13</sup>

No: "No, I want to waste money."

Meaning: "No, I deliberately want to waste extra money."

Point:

Here, the "No" button makes the user feel bad so that they are forced to click "Yes."<sup>14</sup>

This is Confirm shaming – making the user feel ashamed so that they are compelled to say yes, even against their own will.

#### Islamic & Ethical Analysis

In Islam, trade is based on honesty, transparency, and mutual consent.

#### **Qur'an:**

"O you who believe! Do not consume one another's wealth unjustly, except that it be trade through mutual consent."<sup>15</sup>

#### **Hadith:**

"Indeed, a sale is valid only through mutual consent."<sup>16</sup>

In Confirmshaming:

The user is made to feel guilty or sinful, forcing them to make a decision.

This psychological pressure weakens mutual consent.

Therefore, it is unethical and against the principles of Shariah.

#### **Summary:**

Confirmshaming is a dark pattern where the user is pressured through guilt and embarrassment to say "Yes."

Although companies consider it a "marketing strategy," according to Islamic principles it is deception and impermissible.

Example: Buttons like "No, I don't want to save money" in newsletter subscription pop-ups.

#### **7. (Roach Motel) – Easy Entry, Hard Exit**

Getting in is very easy, but getting out is difficult.

Example: Making the process of deleting a social media account or subscription very complicated.

## **9. (Forced Continuity)**

Forced Continuity is a dark pattern where a user is given a free trial or limited-time service, but once the trial ends, payments are automatically charged without clear notice or an easy cancel option.

Example: Adobe, LinkedIn Premium, Spotify, etc.

## **10. (Disguised Ads)**

Disguised Ads are advertisements presented in the form of normal content or features of a website, so that the user does not realize it is actually an ad.

In other words: The user thinks it is information or genuine content, but in reality, it is a promotion or sales tool.

Purpose: To deceive the user into clicking or purchasing.

In simple words:

The ad is hidden in a way that makes the user think it is part of the website or informative content.

### **Examples:**

#### **Online News or Articles:**

On a news website, in the middle of an article: “Top 10 Weight Loss Supplements.”  
The user thinks its information, but it’s an Ad leading to purchase links.

#### **Mobile Apps:**

In gaming apps, “Download Now!” or “Claim Your Reward” buttons.  
The user thinks its part of the game, but it’s a promotional ad.

#### **Social Media:**

On Instagram or Facebook: “Experts Recommend This Skincare Product.”  
The post looks like regular content, but it’s a sponsored ad.

Shoppable Content / Affiliate Links:

In blogs or YouTube videos:

“I personally use this product” → Clicking the button/link takes the user to a purchase page.

The user doesn’t realize it’s an ad.

#### **Online Reviews:**

On product review websites, some reviews are paid/sponsored content, but the user believes they are genuine reviews.

Islamic & Ethical Aspect:

Since Disguised Ads deceive the user, they are ethically and religiously impermissible.

### Summary:

Disguised Ads are ads that hide behind normal content or features so that the user does not realize it's an ad. This method damages consumer trust and is against Shariah and ethical principles.

Example: Showing ads on an app or website in the form of normal buttons so that people mistakenly click them.

E.g., in free mobile games, the "Start Game" button is mixed with an ad click.

### Conclusion:

Dark Patterns are a kind of psychological pressure and manipulation that force users to give money or data against their will.

Islamic Rulings Related to Sale (Bay')

The pillars of Bay'(sale) are two:

1. Ijab and Qabul (offer and acceptance), and
2. Ta'ati (exchange), meaning giving and taking.

Among the conditions for the validity of a sale are:

1. The seller must be sane and of sound judgment.
2. Two persons must be present; it is not valid for one person to be both buyer and seller.
3. The acceptance must correspond to the offer.
4. Both the sold item (mabi') and the price (thaman) must be recognized as lawful property (māl mutaqaawwim) in Shari'ah. Thus, selling wine, swine, blood, pure manure, etc., is invalid.
5. The sold item must exist; non-existent items cannot be sold.
6. The sold item and price must be known and specified.
7. The item sold must be in the seller's ownership. Therefore, selling something not yet owned, stolen goods, or a free human being is not valid.
8. The seller must have possession (qabḍ) of the item, whether directly or through an agent.
9. Both buyer and seller must hear one another's words.
10. Offer and acceptance must occur in the same session (majlis).

In addition to these, the jurists have elaborated other conditions for enforcement, validity, and binding nature of a sale. For details, see Fatawa Hindiyya, Book of Sales. "As for its pillars, they are of two kinds: the first is ijab and qabul, and the second is ta'ati, i.e. giving and taking... As for the conditions of validity, they are of several types: regarding the contracting party—that he be sane and discerning, as mentioned in al-Kafi and al-Nihaya... regarding the contract—that acceptance corresponds to the offer... regarding the counter-values—that they possess financial value, so that if financial value is absent the contract does not stand, as stated in al-Muhit al-Sarakhsi... regarding the sold item—that it exists, hence the sale of the non-existent is invalid... and that it be owned in itself, and within the ownership of the seller... among them is

that the contracting parties hear each other's words... and regarding the place—that ijab and qabul occur in the same session."<sup>17</sup>

### **Ethical and Legal Dimensions**

In Islam, truthfulness and transparency are obligatory, while deception is forbidden. Qur'an:

*"Do not cheat in measure or weight, and do not deprive people of their due."*<sup>18</sup>

Hadith:

*"Whoever deceives is not of us."*<sup>19</sup>

### **Islamic Perspective on Dark Patterns**

Qur'anic Principle: Mutual Consent and Transparency

Allah says:

*"O you who believe! Do not consume one another's wealth unjustly, except that it be trade by mutual consent."*<sup>20</sup>

This verse establishes that trade in Islam is based on voluntary and transparent agreement.

Dark patterns, however, conceal the user's true choice and manipulate decisions, thereby violating this Qur'anic principle.

### **1. Prophetic Teachings: Prohibition of Deception and Coercion**

The Prophet ﷺ warned strongly against deceit in trade. He once inspected a heap of grain; outwardly it looked dry, but beneath it was wet. When asked, the seller admitted rain had wet it. The Prophet ﷺ replied:

*"Why did you not put the wet grain on top so people could see it? Whoever deceives is not of us."*<sup>21</sup>

Similarly, the practice of withholding milk from goats or camels to make them appear more productive was prohibited. The Prophet ﷺ said:

*"Do not tie up the udders of camels and sheep. Whoever buys them has two options after milking: either to keep them or to return them along with a measure of dates for the milk consumed."*<sup>22</sup>

These narrations show that deception not only is a sin but also has legal consequences in Islamic law, such as the buyer's right to annul the contract.

### **2. Misunderstanding in Society**

Many think deception in trade is only a sin accountable in the Hereafter. But Shari'ah makes it invalid in this world as well, granting remedies like contract annulment to the deceived party. Thus, Islam balances both worldly justice and accountability in the Hereafter.

## Key Islamic Principles vs. Dark Patterns

### 1. Transparency

Islam obliges disclosure of defects

2. Dark patterns hide costs, confuse options, or trap users in subscriptions—contradicting transparency.

### 3. Mutual Consent

Consent under pressure, trickery, or concealment is not genuine consent.

### 4. Justice

Exploiting a consumer's trust is injustice, and injustice is forbidden.

"Beware of oppression, for oppression will be darkness on the Day of Judgment." <sup>23</sup>

## Ruling in Contemporary Context

Dark patterns:

- Violate user rights,
- Create mistrust in markets,
- Contradict Shari'ah's objectives of honesty, trust, and justice.

Thus, under Islamic law, they are haram (forbidden) because they constitute:

- Gharar (excessive uncertainty and deception), and
- Tadlees (fraud and concealment of defects),

which classical jurists like al-Kasani (*Bada'i' al-Sana'i'*) and Ibn Qudamah (*al-Mughni*) declared impermissible.

## Islam's Judgment on Dark Patterns

- Lack of transparency → Invalid
- Fraud (tadlees) → Haram
- Coercion/manipulated consent → Nullifies contract
- Breach of trust → Moral and social crime
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## Conclusion:

In Islam, dark patterns must be abandoned. Trade must be built on clarity, honesty, and mutual consent. This ensures justice, strengthens trust, and fulfills Shari'ah's higher objectives (*Maqasid al-Shari'ah*).

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