

## POLICY PAPER

# Dark Patterns

Details such as the colour of a button, the tone of a phrase in the checkout process, or the size of individual elements on a website can influence the decisions consumers make online, encouraging us to share more data or spend more money. These practices are known as Dark Patterns.

Whether in traditional retail or online, the mechanisms behind Dark Patterns are not new.

However, digitalisation extends and amplifies these psychological tricks.

In 2010, user experience (UX) designer Harry Brignull introduced the term *Dark Patterns*.<sup>1</sup> Since then, Dark Patterns have been used as an umbrella term to describe and critique a variety of practices that influence the decision-making of users through the design of websites. UX designers are encouraged to design interfaces and processes to make processes seamless for users, and benefit companies behind the website. For example, to persuade consumers to buy more, provide more personal information or sign a contract, certain phrases or colour schemes may be used.

## Historical Development

Dark Patterns is a new term, but not a new phenomenon. The development was accelerated by the discovery of nudges for marketing purposes using tools beyond pricing mechanisms, offers, and A/B testing, where thousands of people are exposed to different versions of a website at the same time. In this way, designers discovered that even trivial changes in website design, such as changing a color or replacing a button, could significantly alter user behavior.

This insight is rooted in the emergence of behavioral economics: Classical economic theory suggests that the more choices consumers have, the better off they are. In the 1970s, however, economists discovered that too many choices can lead to decision fatigue due to cognitive limitations. This discovery of *cognitive shortcuts* also led to the development of the concept of *nudges* - psychological tricks originally designed to nudge people toward socially desirable behavior.<sup>2</sup> Dark Patterns, however, nudge customers to make decisions that are not always in their favor. The tricks they rely on are not completely new. In brick-and-mortar retail rounding prices (e.g. €9.99 instead of €10) or suggestive product placement (cheaper products not at eye level) are fully accepted by customers. Dark Patterns often refer to these old tactics, but the advent of e-commerce has enabled the proliferation of strategies not traditionally available to offline retailers.<sup>3</sup>

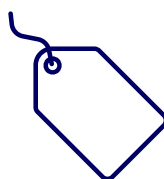
**Dark Patterns & Cookie Banners:** Theorists, like Kahneman, suggest that human thinking is based on two distinct cognitive systems: System-1 for intuitive thinking and System-2 for conscious deliberation.<sup>4</sup> To illustrate, when users visit a website, they are presented with a cookie banner. Most users may accept cookies without much thought (System 1), while others may engage in a more deliberative process, considering the potential implications of accepting cookies (System 2). This process requires conscious effort and is therefore more demanding than system 1. Dark Patterns also rely on System 1: In the case of cookie banners, UX designers use default choices (e.g. „accept all cookies“) or overchoice (e.g. „accept all“ or you have to decide for each cookie individually) to get users to accept as many cookies as possible.

## Dark Patterns in practice

There are many different terms used for Dark Patterns. Here is a list of some known Dark Patterns with examples, based on Brignull's typology and extended by other researchers.<sup>5,6</sup>



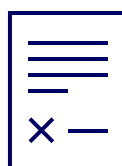
**Sneak into Basket.** An extra product is slipped into your shopping basket unnoticed. This often happens when a checkbox is overlooked during the check-out process.



**Price Comparison Prevention.** Tricks such as using different quantities, product names or different currencies make it difficult to compare prices.



**Privacy Zuckering.** Users are tricked into revealing more data than intended. The actual privacy settings are obscured by opaque terms and conditions, privacy settings, and complicated language.



**Forced Continuity.** A method of keeping subscriptions or registrations in progress – for example, entering payment details for a trial subscription and continuing the subscription after the trial period has expired.



**Confirmshaming.** An approach that aims to make users feel guilty about declining an offer by stating things like „No, I don't want to save money“ or „I'd rather pay full price“.



**Simulated Urgency.** To create a sense of urgency, countdowns or perceived product shortages are used. If only a few products are available, consumers are urged to buy – even if there is no shortage.



**Roach Motel.** It's tempting to get in, but difficult to get out like newsletters or subscriptions that are hard to unsubscribe from.

### Efficacy of Dark Patterns

Dark Patterns are effective due to the following strategies & tricks :

- **Social & emotional pressure** (e.g. „14 people are looking at this item right now“)
- **Obstruction** (e.g. pop-ups, distractions)
- **Opaque pricing** (e.g. in-game currency, hidden costs)
- **Confusing presentation** (e.g. highlighting or hiding information through design elements)
- **Preselection** (e.g. additional products or subscriptions are pre-selected by default)



**Overloading.** Websites are overloaded with options to encourage users to behave in a certain way. For example, by offering various additional products, hoping that certain settings will be overlooked.

## Analysis

Until now, certain types of so called „Dark Patterns“ have been regulated and prohibited by various EU legislations, such as the UCPD or the GDPR. However, the Digital Services Act names the phenomenon for the first time. Still, there are regulatory gaps and obstacles in terms of enforceability.

### DSA, UCPD & GDPR

Although Dark Patterns have been widely used online for years, the Digital Services Act (DSA)<sup>7</sup> is the first European legislation to describe the phenomenon. This does not mean that the use of Dark Patterns is and has been legally permitted.

In addition to the DSA, there are several existing EU legislations such as the Unfair Commercial Practices Directive (UCPD)<sup>8</sup>, the General Data Protection Regulation (GDPR)<sup>9</sup> and new legislation such as the Digital Markets Act<sup>10</sup>, the Data Act<sup>11</sup> and the Artificial Intelligence Act as well as the new directive on financial services contracts concluded at a distance<sup>12</sup> that prohibit under certain prerequisites the use of certain illegal design tricks. However, an analysis of the various legal provisions with regard to their applicability to Dark Patterns reveals that, despite the wide range of legal norms, there are regulatory gaps in EU key consumer law provisions and obstacles for the enforcement of the existing legal framework.

The DSA regulates that online platform providers may not design, organise or operate their online interfaces in a way that deceives or manipulates the recipients of their service or in a way that otherwise materially distorts or impairs the ability of the recipients of their service to make free and informed choices (Article 25 DSA).

The DSA also specifies that the prohibition on the use of Dark Patterns set out in this Regulation does not apply to practices covered by the UCPD or the GDPR. In other words, the provision of the DSA only applies if the commercial practice in question is not already covered by the UCPD or the GDPR. This restriction, that was included in the text of the DSA only at the very last minute of the EU trilogue negotiations, is very unclear and leaves much room for interpretation for providers, users, as well as for enforcers.<sup>13</sup>

### Outlook

The analysis also revealed that there is an uncertainty about the fine line between permissible advertising and manipulative design tricks, which might also be legally classified as misleading or aggressive commercial practices under the UCPD.

The consideration of the limited rationality of the average consumer is also a subject of an important ongoing debate in literature in the context of the public consultation of the EC's digital fairness fitness check of EU consumer law, which may provide further clarification as to what extent dark patterns can be considered misleading or aggressive practices under the UCPD.

There is also a lack of clarity in the definition of the term, which affects the legal context. Harry Bignull himself moved away from the term Dark Pattern and introduced the new term Deceptive Design, which is a broader description of the techniques used.<sup>14</sup> This fuzzy definition poses a regulatory challenge: Dark Patterns have been adopted in academic and legislative processes even though the terminology is still unclear and perhaps even outdated. In this respect, there will be a need for clarification in the future, both at the academic and at the regulatory level, of how to deal with the fluctuation in terminology and the vagueness of the definition of the phenomenon.

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