



# **ABS Industry Information Paper on Dark Patterns**

*April 2023*

## 1. Introduction

- 1.1 In an increasingly digitalized environment, banks often encourage customers to use online apps and websites to carry out banking transactions and investment. In recognizing this trend, banks and their team of User Experience (“UX”) and User Interface (“UI”) designers always strive to design their apps and websites to create and deliver the best user experience possible. However, has your bank encountered customer feedback that it is difficult to unsubscribe from a mailing list? If the bank has encountered such feedback, it has likely stumbled onto a Dark Pattern.
- 1.2 The term Dark Pattern was first coined by UX specialist Harry Brignull to describe the way in which software can trick users into doing things they might not want to do, but which benefit the business in question.
- 1.3 In general, Dark Patterns can be classified into the following five categories:

### **User interface design/techniques:**

- **Type 1:** Redirection of expected functionality that persists beyond one or more interactions, such as frequent ‘banners’ and ‘pop ups’ to nudge user’s sign ups/purchase.
- **Type 2:** Complex processes or interface designs to dissuade certain user action(s), such as terminating subscriptions/membership or product comparisons.
- **Type 3:** Interface designs which cause user’s inadvertent purchase (e.g., auto add items to cart), unforeseen late-stage charges applied, or indirectly causing a user’s unintended/undesired action.
- **Type 4:** Interface designs which could cause user’s unintended response:
  - a. Online forms which, when carefully read, could elicit another response; or
  - b. Interface design to garner ‘clicks’, default/pre-selection not in user’s interest, hard to access full product details, or unverifiable product testimonies reflected; or
  - c. Influencing users to accept/purchase through an impression of scarcity or fear/guilt/shame of missing out.
- **Type 5:** Interface designs which strongly influences user’s action (e.g., sharing more personal information than intended, or granting application’s access to email or social media contacts) for continued access to certain functions.

**1.4** Not all Dark Patterns are designed maliciously, and some UX designers might not even be aware that they have built a system that is adversely influencing users. In many cases, designers may simply be meeting the functional requirements without being aware of how interface design impacts the human thought process.

**1.5** Financial institutions need to be mindful that the incorporation of these manipulative techniques, intentionally or not, will have an impact on customer fair dealing and customer privacy. It may ultimately erode customer trust, a cornerstone of banking. Financial institutions may also face regulatory and reputational risk.

## **2. Purpose**

**2.1** The purpose of this Industry Information Paper (“IIP”) is to raise awareness of the different Dark Pattern typologies as well as to share some current practices relating to the management of UX design. It forms part of the efforts by the Association of Banks in Singapore (“ABS”) Culture and Conduct Steering Group (“CCSG”) to promote sound culture and raise conduct standards among banks in Singapore. The CCSG was set up in May 2019, comprises 14 banks, and serves as a platform for industry participants to:

- a. Identify best practices and share them with the wider industry to facilitate adoption;
- b. Monitor trends and identify emerging conduct and culture issues within the industry; and
- c. Collaborate with MAS on such initiatives.

**2.2** It is not the intent of this IIP to prescribe an approach to managing Dark Patterns. Rather, it serves to share some ABS members practices to help guide banks to avoid Dark Patterns along their digitalization journey. Each financial institution will need to assess the risks and determine priorities by considering the profile of products and customers, and the nature of their digital interfaces.

## **3. Approach**

**3.1** The CCSG took the following approach in the development of this IIP:

- a. Conduct a survey with the CCSG member banks on this topic;
- b. Solicit members’ experience in developing framework and controls to manage Dark Patterns; and
- c. Collate CCSG member banks’ existing practices to share with the industry.

#### **4. An Overview of the Survey Result**

- 4.1** The survey first asked financial institutions their level of understanding of Dark Patterns, and it showed that financial institutions in general do not have high awareness of Dark Patterns. Half the respondents shared that their organizations might have inadvertently incorporated Dark Patterns in their user interface. Notwithstanding this, there is concern about its impact especially among the retail banks and hence we are drafting this IIP to raise awareness of the different Dark Pattern typologies as well as to share some current practices relating to the management of UX design.

Please refer to Appendix 1 for details of the survey result.

#### **5. Industry Practices**

- 5.1** This section aims to provide some of the industry practices currently deployed by various financial institutions covering governance, framework, UI/UX design and customer communication.

##### **a. Governance**

One bank established a Design Council to provide experience assessment and quality assurance of selected customer journey, including the early identification and elimination of Dark Patterns.

Another bank established a Pre-Information and Technology Committee where it acts as a governance body to review customer digital journey primarily to improve customer experience and to ensure any use of Dark Patterns is identified and corrected at the early stage prior to implementation.

Multiple banks use the Customer Experience Committee, or equivalent to provide oversight on customer feedback and complaints received via various channels to monitor any use of Dark Patterns.

These Committees are represented by senior members of cross-functional and multi-disciplinary teams with senior representatives from business, product, technology, compliance, UX/UI, branding and segment specialists etc.

**b. Framework**

One Bank mitigates the risk of undesired Dark Patterns mostly through a framework that advocates the responsible use of data. This framework focuses on data ethics, which embeds principles and related process requirements to protect the bank's reputation in the use of data.

The set of principles looks broadly at three key areas, i.e., the data used by the Bank, the insights derived from the data and communication with customers. This is to understand the purpose of data use, avoid unsurprising effects on customers, respect social norms and ensure that outcomes are explainable.

Another bank developed a principle-based guidance adapted from the MAS Fair Dealing Outcomes where fairness, suitability and transparency form the key pillars of the framework.

Banks' marketing Guidelines set out general principles and guidance for the review and publication of marketing materials for various products distributed to their customers. Fair dealing principles are embedded in these Guidelines, including provision of clear, relevant and timely information for customers to make informed decisions.

**c. UI/UX Design**

UX principles should engender trust. Training is given to staff to ensure awareness. Regular self-assessment or independent reviews are carried out to ensure designs do not contain intentional Dark Patterns. Banks also restrict the types of features to be embedded in a product, especially if the products are targeted at retail and/or the vulnerable consumer groups.

**d. Customer Communication and Engagement**

One bank established internal service standards, which articulated the expected service standards in their interactions with stakeholders and customers.

Customers receive clear, relevant and timely information on their use of the digital platform products and services. For example, all key product terms and benefits are written in simple language for ease of understanding. They are not hidden in the Terms and Conditions. The Bank proactively informs customers every time charges are made.

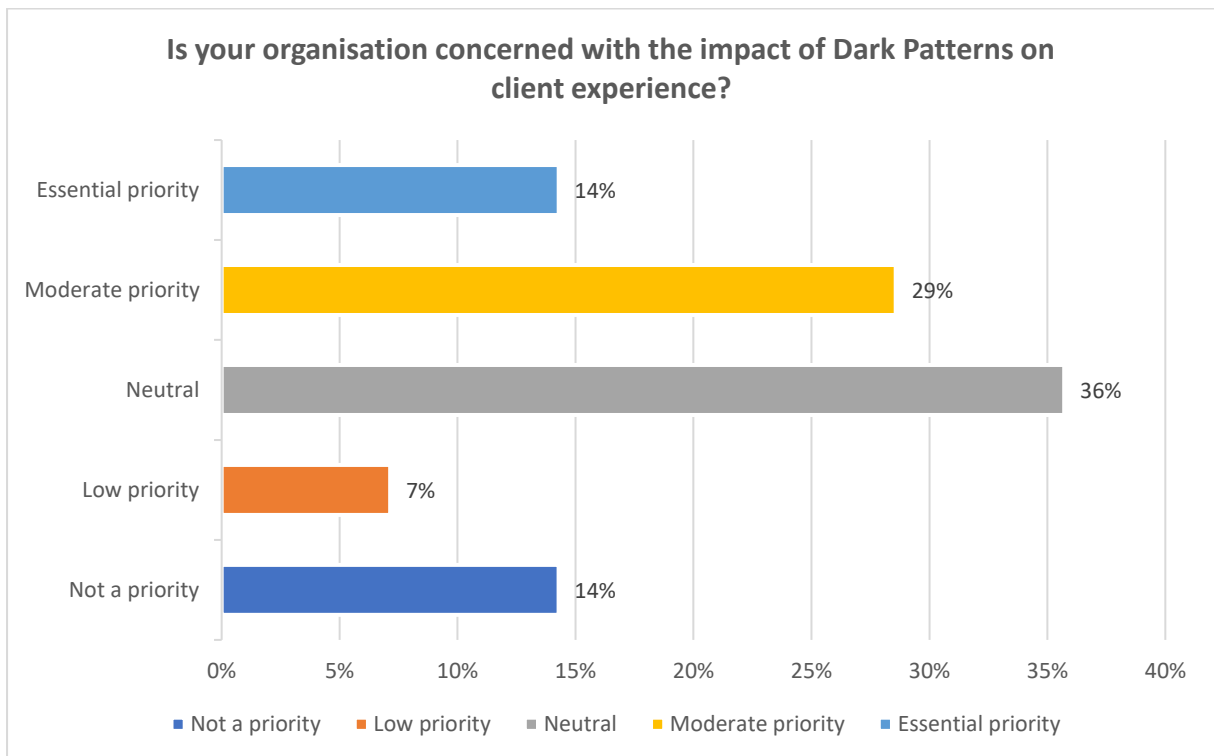
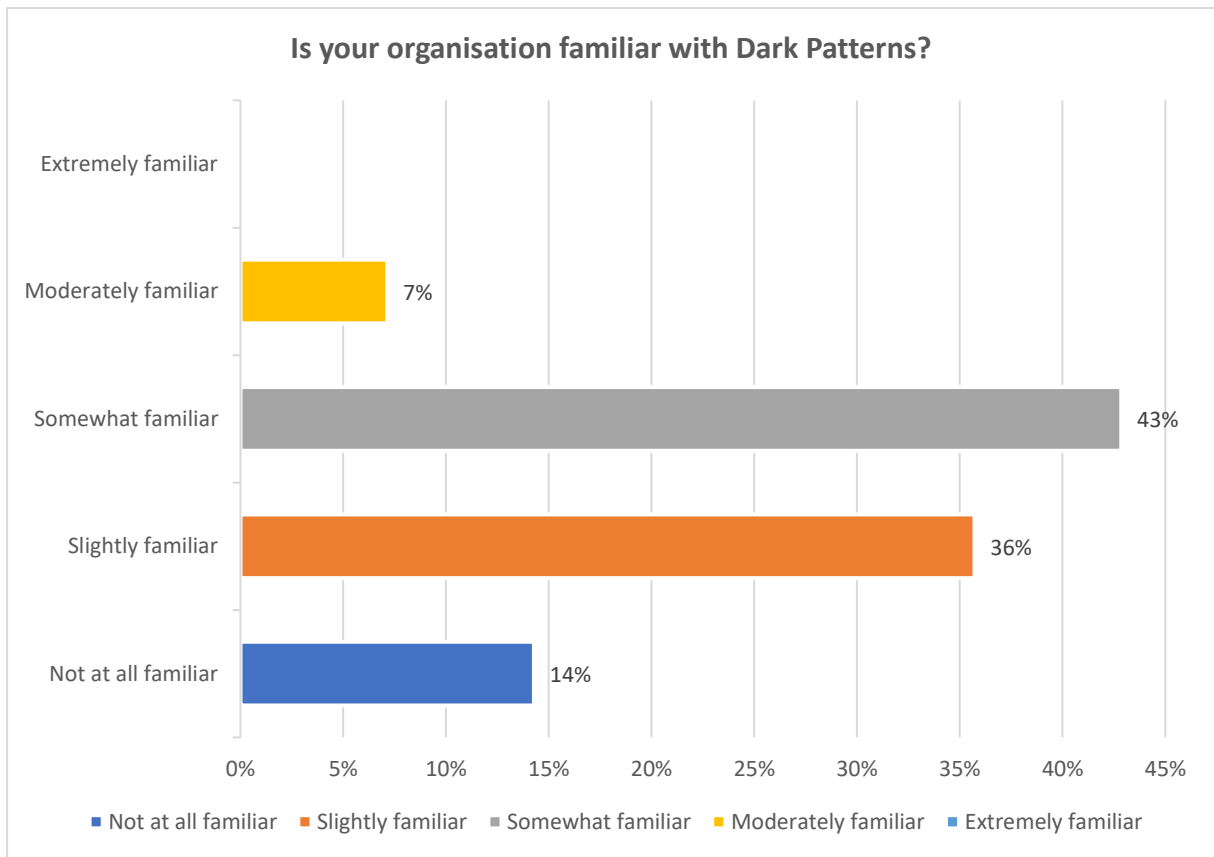
Most banks handle customer complaints in an independent and prompt manner with a focus to monitor the nature of the feedback and complaints to ensure no inadvertent usage of Dark Patterns.

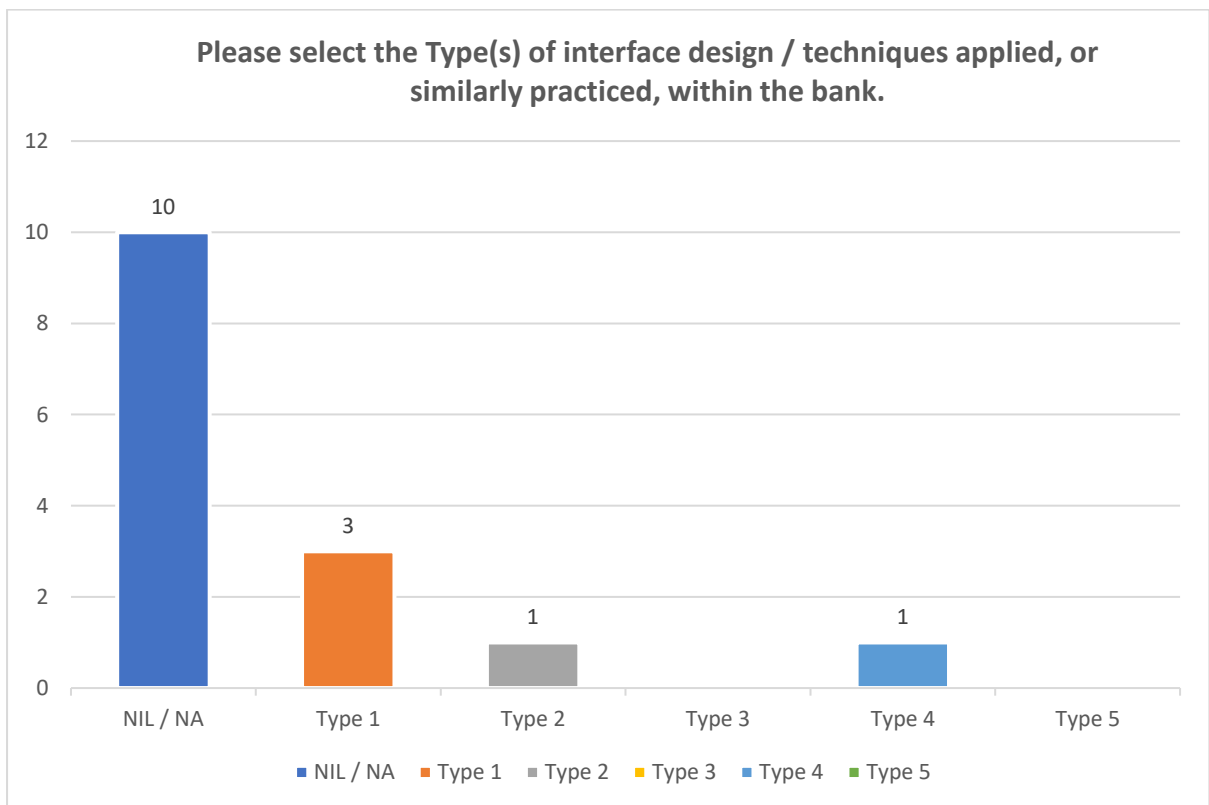
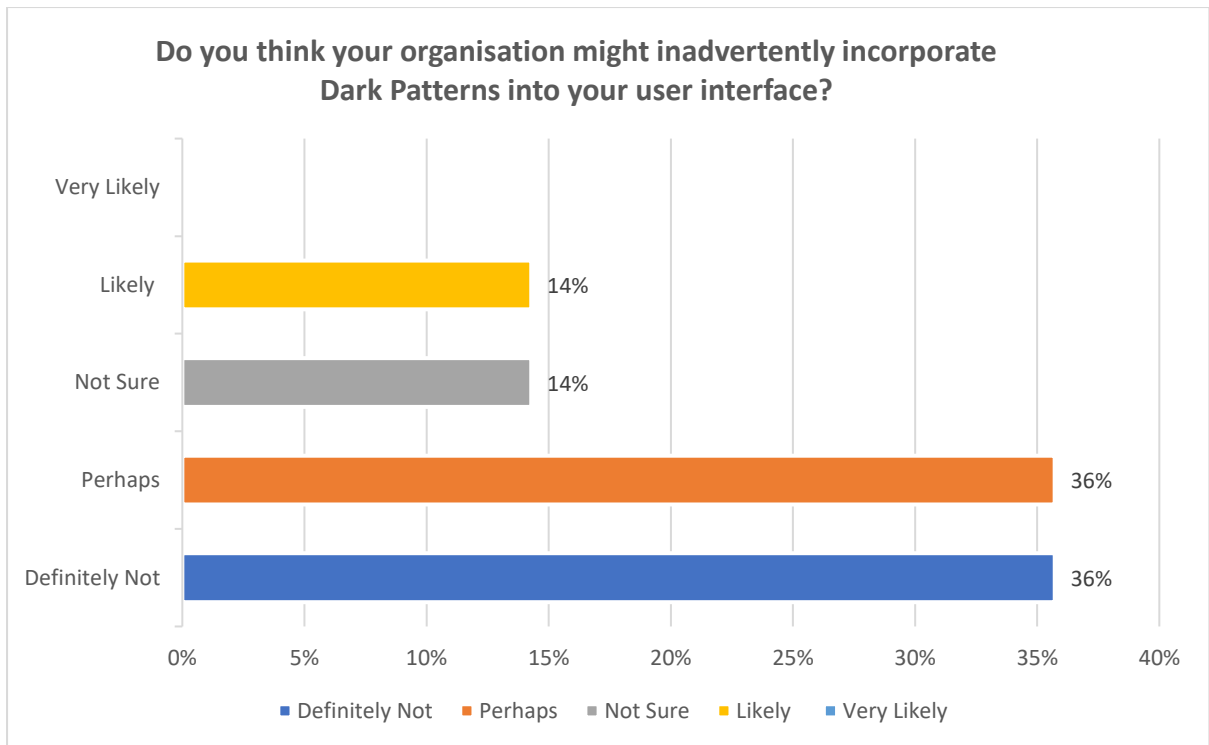
Active engagement with customers to create awareness on Dark Patterns such as publishing educational materials on website or conducting (regular) survey as a feedback loop to actively detect the inadvertent use of Dark Patterns on a continuous basis.

## **6. Looking Ahead**

- 6.1** While the financial industry seems not to have a high level of understanding of Dark Patterns, they in general do not utilize Dark Patterns to influence consumers in making financial decisions. It is noteworthy to know that financial institutions are also paying close attention to this topic and taking steps to enhance their governance and risk management capability to mitigate the risk, thus giving consumers the continued confidence in using the banks' digital platform.
- 6.2** The industry will continue to monitor the development in this area as financial institutions continue their digitalization journey and offer more products on their digital platform.
- 6.3** As technology evolves, it brings more convenience to consumers and possibly risk too as they might be unduly influenced into buying a financial product that is not appropriate for them. CCSG plans to update this IIP to reflect more practices implemented by banks in the future on the management of Dark Patterns.

## Appendix 1 – Result of the Dark Patterns Survey



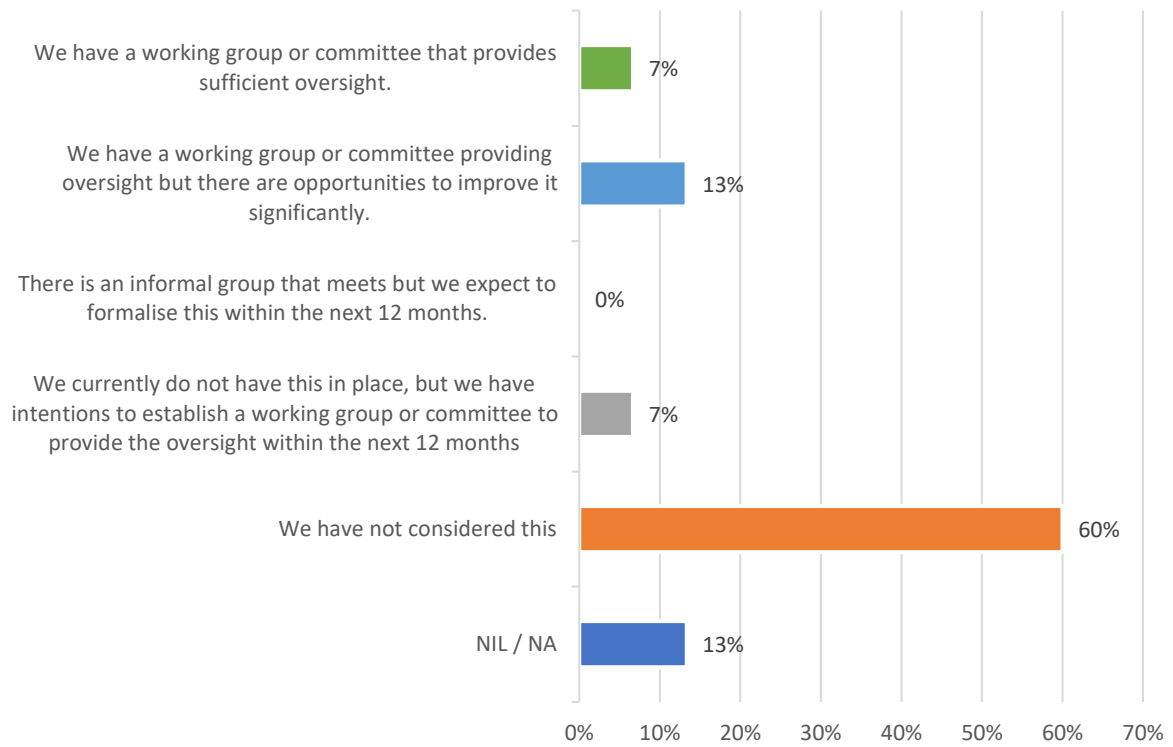


**Note:**

(1) Please refer to page 2 of the IIP for further details on the five types of interface design / techniques.



### Is there a working group or committee providing oversight on Dark Patterns?



### Is there a formalised framework to manage the risk of Dark Patterns?

