

# Digital Arms for Digital Consumer Harms

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## Impact paragraph

Since 2010, experts in Human–Computer Interaction have been sounding the alarm about online businesses’ use of dark patterns – the latest iteration of marketeers’ attempts to behaviourally manipulate us – in consumer-facing user interfaces, including those of e-commerce websites. In recent years, civil society organisations, consumer law scholars, enforcement authorities and policymakers at both the EU and Member State levels have entered the discussion about the need to regulate their use and the best way to go about this. This is an ongoing – and spirited – debate: while I was writing this thesis (September 2019–April 2024), the number of articles on Google Scholar that mentioned the terms ‘dark patterns’ and ‘consumer protection’ or ‘consumer law’ grew in number from 99 to 1390.<sup>1</sup> This avid scholarly attention has translated into concern on the part of policymakers. At the time when this thesis was completed (April 2024), the European Commission was still conducting a Digital Fairness Fitness Check, in which the way in which EU consumer law instruments should regulate the use of dark patterns took centre stage.

From an academic perspective, this thesis tunes into the academic debate on the regulation of dark patterns in EU consumer law and connects it with discussions on technology regulation in law and technology scholarship. In doing so, it offers a comprehensive overview of the opportunities for – and the problems that may arise in the process of – regulating dark patterns, which are not just vehicles for the behavioural manipulation of consumers, but also socio-technical artefacts: a potential product of user experience optimisation, a process subject to technical, economic and organisational considerations. Framing dark patterns as a socio-technical artefact allows me to offer a novel possible explanation for the low levels of compliance with EU consumer law instruments in digital environments – the technology-neutral shape of our current policies, which may lead well-resourced and ill-intended regulatees to test the limits of the law in the way they design their consumer-facing user interfaces, while not offering enough guidance to less-resourced, well-intended regulatees to help them to design compliant digital products. Technology-neutral laws may also make enforcers more hesitant to act, exposing the legal system to the risk of a vicious circle of non-compliance, whereby low levels of enforcement lead some regulatees to see digital environments as lawless spaces. While enforcement authorities could turn to computational market monitoring methods to ramp up their efforts to police digital markets, technology-neutral policies also pose obstacles to the development of these tools. This is a novel argument in favour of technology specificity in technology regulation: the necessity of digital enforcement in digital markets. The thesis thus presents a host of arguments for more

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<sup>1</sup> As of 9 May 2024.

technology-specific regulation of socio-technical artefacts, challenging the traditional assumption in favour of technology neutrality in both policy and (law and technology) academic circles. Overall, the thesis could inspire a more contextual and nuanced analysis of adequate regulatory design in the face of socio-technical change in legal scholarship, that is, an analysis free of unquestioned assumptions in favour of technology neutrality.

From a societal perspective, the findings of this thesis offer pointers for policymakers and enforcement authorities in terms of how to address the proliferation of dark patterns on e-commerce websites. It is hoped that the policy solutions suggested herein will feed into the ongoing Digital Fairness Fitness Check and inform the review of the analysed EU consumer law instruments (the Unfair Commercial Practices and Consumer Rights Directives). The analysis of the lawfulness of specific dark patterns under the current legal framework offered in this thesis could help national enforcement authorities target their investigations towards the most legally problematic practices, while the overview of the opportunities and challenges associated with automated data collection and the analysis methods developed by web measurement researchers could provide methodological guidance for authorities interested in going digital by developing their own market monitoring methods. Any and all of these steps could ultimately lead to more consumer-friendly digital markets.