Tailor-made Consumer Protection: Personalisation's Impact on the Granularity of Consumer Information.*

Joasia Luzak**

Abstract *This chapter illustrates how the use of the legal design principles and the benefits of modern technology could guide EU policymakers in drafting more effective consumer protection measures, specifically information provisions and information rules. As modern technology enables personalisation of online information, the paper explores the option for this to lead to the rejection of the one-size-fits-all approach embodied by the application of the average consumer benchmark in assessing whether the information was transparent to consumers. The author proposes to gradually oblige online traders to provide more granular, personalised information to consumers.*

Keywords Information Design, Product Design, Personalised Information, Average Consumer, Transparency, Mandatory Information Obligations.

1 Legal design pyramid, modern technology and online disclosures

This chapter proposes improving the legal instrument of mandatory online consumer information through the use of modern technology and legal design principles. In European consumer law, consumer information rights remain the main consumer protection instrument, despite the widespread criticism of its effectiveness.[1] Policymakers perceive it as particularly essential in online transactions, where consumers have no opportunity to assess the quality and characteristics of either products or traders in real life, often relying solely on the information provided to them to make transactional decisions.[2]

Various legislators and regulators attempted, and mostly failed, to alleviate the imbalance of power between consumers and traders by introducing changes on the level of information design.[3] That is to say, they employed mainly text manipulation to simplify the disclosures and prescribed that traders provide consumer information in a transparent manner. Little focus has yet been placed on the technological options enabling personalisation of online information, which could further impact the design thereof.

This paper illustrates how, through the use of modern technology facilitating disclosure personalisation, it would be possible to utilise more sophisticated legal design principles, moving from the level of information design to the next level of product design in the legal design pyramid.[4] The difference between information design and product design lies in the fact that information design principles only request that information is better explained and visualised on a general level. This means that through the manipulation of a way in which the information is visually displayed and of the language in which the information is provided, the chances of effectively communicating it to consumers may increase.

Conversely, this chapter explores options for improving the understanding of consumer information on a more granular level. This aims to help consumers to not only better understand consumer products and services, but also to guide them through the process of making informed transactional decisions. This implies involving product design principles, which are concerned with the way legal instruments could actually become more effective in fulfilling their goals.

The design principles teach us to consider how to make legal products and services more usable, useful and engaging.[5] They seem to be mostly aimed at legal professionals, but they

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[1] See eg O Ben-Shahar and CE Schneider, *More Than You Wanted to Know: The Failure of Mandated Disclosure* (Princeton University Press 2014); O Bar-Gill, D Schkade and CR Sunstein, 'Drawing false inferences from mandated disclosures' (2017) Harvard Public Law Working Paper No 17-96 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2914354> accessed 15 June 2020; E Seira, A Elizondo and E Laguna-Müggenburg, 'Are information disclosures effective? Evidence from the credit card market' (2017) 9(1) American Economic Journal: Economic Policy 277-307.

[2] See eg Recital 39 Directive 2011/83/EU of the European Parliament and of the Council on consumer rights [2011] OJ L 304/64 (CRD).

[3] See eg the re-designed information obligations in Article 6 CRD or Article 8(2) CRD that mandates online traders to inform consumers that the online contract they are concluding places them under an obligation to pay by providing an 'easily legible' label stating 'order with obligation to pay' or a similar unambiguous statement.

[4] See M Hagan, *Law by Design* <https://www.lawbydesign.co/legal-design/> accessed 15 June 2020.

[5] ibid.

could already be accounted for by the legislators, if not at the policymaking stage, then at the stage of providing guidance on how best to apply legal provisions. It seems particularly relevant to account for these principles when thinking about the design of consumer information, which is often perceived as difficult to understand, boring, overwhelming or confusing.[6]

Hagan visualised different design challenges in a legal design pyramid, with the information design forming its very top, as it seems to involve the shallowest use of the design principles. Yet, this paper documents that even this top pyramid level has been underutilised, by first exploring the design of the current information provisions in consumer policy-making and explaining how following information design principles could benefit it (part 2).

However, it further emphasises that even when the information display is modified but still provided in the same way to all consumers, it is unlikely that it would reach its objective and alleviate consumer information asymmetry. Consequently, this paper calls for policymakers to take a closer look at the currently available technological solutions already present on the market that could impact the design of information rules as a product and lead to information personalisation.

Policymakers could account for the presence of these solutions when prescribing to traders what information to provide to consumers and how to do this online (part 3). As modern technology enables personalisation of online information, the paper explores the option for this personalisation to facilitate the descent down the design pyramid – from the information design to the product design level. This would lead to the rejection of the one-size-fits-all approach embodied by the application of the average consumer benchmark in assessing whether the information was transparent to consumers (part 4).

It is argued that this improved legal design could allow policymakers to discontinue the use of the highly contested average consumer benchmark[7] in favour of either adopting a range of more granular consumer benchmarks, accommodating various consumer vulnerabilities, or of fully personalising mandatory consumer information.[8] The gradual introduction of more granular consumer information should better facilitate alleviating the information asymmetry in online consumer contracts, whilst still protecting online traders' interests.

[6] See eg G Milne and M Culnan, 'Strategies for reducing online privacy risks: Why consumers read (or don't read) online privacy notices' (2004) 18(2) Journal of Interactive Marketing 15-30; Y Bakos, F Marotta-Wurgler and DR Trossen, 'Does anyone read the fine print? Consumer attention to standard-form contracts' (2014) 43(1) Journal of Legal Studies 1-35.

[7] See eg R Incardona and C Poncibò, 'The average consumer, the unfair commercial practices directive, and the cognitive revolution' (2007) 30(1) Journal of Consumer Policy 21-38; B Duivenvoorde, *The Consumer Benchmarks in the Unfair Commercial Practices Directive* (Springer 2015) 159-175, 195-211; J Cohen, 'Bringing down the Average: The Case for a Less Sophisticated Reasonableness Standard in the US and EU Consumer Law' (2019) 32(1) Loyola Consumer Law Review 1-44.

[8] Other scholars have previously argued for the introduction of personalised consumer disclosures, although not yet for replacing mandatory information obligations with more granular consumer information, see eg A Porat and LJ Strahilevitz, 'Personalizing default rules and disclosure with big data' (2014) 112 Michigan Law Review 1472-1475.

2 Skimming the top of the pyramid: How to improve information design?

2.1 European mandatory information obligations in B2C online transactions

2.1.1 Content of mandatory disclosures

With the adoption of the Consumer Rights Directive (CRD), the European legislator aimed to fully harmonise mandatory information obligations for online traders.[9] This differed from the previous approach, as the Distance Selling Directive only listed a minimum scope of traders' information duties.[10] Whilst imposing mandatory information duties aims to minimise the information asymmetry between consumers as the weaker transactional parties and traders, a set number of such duties should benefit traders.

Especially in cross-border transactions, traders were supposed to enjoy the legal certainty that the same information obligations would apply, regardless of the Member State in which they offer their goods or services to consumers.[11] This effect is, however, weakened; firstly due to Article 6 CRD containing a long list of twenty items, each specifying disclosures that online traders have to make to consumers. Secondly, due to the fact that, depending on the specific type of the online transaction, other, sectoral information obligations may continue to apply as well.[12]

Whilst the lengthy and still uncertain content of information duties remains burdensome for traders, it is also difficult to claim that policymakers designed it in a consumer-centred way. Most consumers feel overwhelmed by the amount of contractual information they receive.[13] The one-size-fits-all approach to disclosures signifies that all consumers will receive the same information, regardless of whether it is relevant to them personally. For example, traders will need to provide information on their phone number[14] also to mute or deaf consumers; they will also need to inform consumers about codes of conduct they adhere to,[15] even if their significance for and impact on a contractual relationship is likely going to be clear only to a very selective group of sophisticated consumers. These few examples already illustrate why providing consumers with general mandatory information may not be

[9] See Recital 5 CRD.

[10] See Article 4 Directive 97/7/EC of the European Parliament and of the Council on the protection of consumers in respect of distance contracts [1997] OJ L 144/19 (Distance Selling Directive), repealed by the new provisions of the CRD.

[11] Recitals 6-7 CRD.

[12] See Article 6(8) and Recital 12 CRD. For example, in cases of online credit agreements further mandatory information obligations are required by Directive 2008/48/EC of the European Parliament and of the Council on credit agreements for consumers [2008] OJ L133/66 (Consumer Credit Directive). See also eg J Luzak and S van der Hof, 'Directive 2011/83/EU – Consumer Rights Directive (Electronic Commerce Aspects)' in S Gijrath and others (eds), *Concise European Data Protection, E-Commerce and IT Law* (3rd edn, Wolters Kluwer 2018) 352-353.

[13] See eg on the 'less is more' information provision principle in: J Hogarth and E Merry, 'Designing disclosures to inform consumer financial decisionmaking: Lessons learned from consumer testing' (August 2011) Federal Reserve Bulletin <https://www.federalreserve.gov/pubs/bulletin/2011/articles/DesigningDisclosures/default.htm> accessed 15 June 2020; M Elshout and others, 'Study on consumers' attitudes towards Terms and Conditions' (March 2016) European Commission final report <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2847546> accessed 15 June 2020, 68-96; N Helberger, 'Forms matter: Informing consumers effectively' (September 2013) BEUC: The European Consumer Organization study <https://www.beuc.eu/publications/x2013_089_upa_form_matters_september_2013.pdf> accessed 15 June 2020, 7-8.

[14] Article 6(1)(c) CRD.

[15] Article 6(1)(n) CRD.

the most efficient or effective consumer protection tool. Therefore, part 4 presents options for customising disclosures.

2.1.2 Form of mandatory online disclosures

In order to have a chance of making an informed decision, consumers need to receive mandatory information in a clear and comprehensible manner, before they are bound by a contract or an offer.[16] This information needs to be drafted in plain and intelligible language.[17] If there are any delivery or payment restrictions applicable to a given online transaction, these should be transparently indicated before consumers proceed with their order.[18] Furthermore, if an online transaction entails an obligation for consumers to pay, this has to be prominently highlighted to consumers and they are required to explicitly acknowledge this obligation.[19]

These are the main formalities that online traders need to follow to comply with the protection framework awarded to consumers by European consumer law. However, we could question the effectiveness of this framework. Whilst online disclosures should be transparent, further specificity as to what manner of conveying information achieves the required level of transparency is missing.[20] In the above-mentioned provisions of the CRD, the European legislator has used various notions to describe transparency: Clarity, comprehensibility, plain language, intelligibility, prominence, legibility and unambiguity.

What the European legislator failed to do is define these notions further and relate them to each other. Consequently, the evaluation of whether a given online disclosure is sufficiently transparent may differ between consumers, traders, and ultimately also enforcement authorities. When traders are drafting their online disclosures, they may be uncertain, e.g., what level of simplicity of language guarantees satisfying the requirement of a 'plain language' and 'comprehensibility'.[21] In the absence of guidelines and case law on the issue, it is also difficult to assess whether, e.g., a disclosure drafted in plain language would be automatically perceived as comprehensible and clear, or whether a disclosure could be transparent if it is comprehensible but not clear.

A further complication arises from the fact that a disclosure comprehensible to one consumer will not necessarily be understood by another consumer. Consumers have different cognitive abilities, levels of experience, as well as levels of interest and resources they devote to processing (pre-)contractual information. The Court of Justice of the EU (CJEU) assumes that traders comply with the principle of transparency if an average consumer comprehends disclosures.[22]

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[16] Article 6(1) CRD.
[17] Article 8(1) CRD.
[18] Article 8(3) CRD.
[19] Article 8(2) CRD.
[20] See further on the lack of coherence as to the principle of transparency in European consumer law eg: A Rossi and others, 'When Design Met Law: Design Patterns for Information Transparency' (2019) Droit de la consummation – Consumentenrecht (DCCR) 79-121; O Seizov, AJ Wulf and J Luzak, 'The Transparent Trap: A Multidisciplinary Perspective on the Design of Transparent Online Disclosures in the EU' (2019) 42(1) Journal of Consumer Policy 149-173; J Luzak and M Junuzović, 'Blurred Lines: Between Formal and Substantive Transparency in Consumer Credit Contracts' (2019) 3 Journal of European Consumer and Market Law 97-107.
[21] For example, the policymakers are not yet relating the requirement to provide the information in plain language to the criteria of providing it at a particular skill level of language users, which, to ensure legibility, could be designated at B1 or B2 level of the Common European Framework of Reference for Languages, see further <https://en.wikipedia.org/wiki/Common_European_Framework_of_Reference_for_Languages> accessed 15 June 2020.
[22] Initially, the benchmark of an average consumer has been used to address transparency of standard terms and conditions, see eg Case C-26/13 Kásler EU:C:2014:282, paras 73-75; Case C-143/13 Matei EU:C:2015:127, paras

The issues with this assumption are further examined in part 4, where the possibility of abandoning the average consumer benchmark is discussed. Overall, however, this paragraph raises further concerns with the broad strokes, which the EU legislators employs in designing the information provisions, the lack of guidance as to their application and not accounting for individual consumer characteristics when assessing the information transparency.

2.2 Rare examples of information design practices

In anticipation of the revision of the Unfair Contract Terms Directive,[23] the European Commission funded a study that investigated consumers' attitudes to online disclosures and empirically tested whether these attitudes could be improved.[24] However, the findings of this study have so far not resulted in a major policy shift.[25] This is regrettable as the study showed that shortening and simplifying online disclosures could result in a statistically significant improvement of terms and conditions' readership.

Despite this study continuing to perceive consumers as a homogenous group, following its suggestions could have had at least some positive impact on the level of information design practices. It was a welcomed surprise then to see a new draft of a piece of sectoral legislation, in which the European Commission attempts to apply legal information design strategies to strengthen consumer disclosures.

Namely, in the summer of 2019, the European Commission opened a consultation process regarding a new contract summary template for providers of publicly available electronic communications services. Article 102(1) Directive (EU) 2018/1972[26] obliges such service providers to issue mandatory information to consumers, as specified in the CRD.

Furthermore, Article 102(3) Directive (EU) 2018/1972 adds an obligation to draft and provide a contract summary template, which would be 'easy to read, understand and compare, with a common structure and format'.[27] In order to ensure the readability and comparability of contract summary templates, the Commission had an obligation to set its template in an implementing act, which was adopted on 17 December 2019. In drafting the template the Commission employed certain legal design strategies.

First, to ensure the comparability of offers, the contract summary contains 'clearly distinguishable headings', which allow various elements to be grouped separately.[28] For example, prominent headings separate information on 'price' from that on 'duration, renewal and termination' of the contract. The legal design studies have previously documented that consumers may anchor on headings, which help them find answers to the questions they have, thus their prominent display and accuracy is highly relevant to the provision of

74-75. In the past year, the CJEU has extended the application of this benchmark to cases assessing the information requirements in the CRD, see eg Case C-430/17 Walbusch Walter Busch EU:C:2019:47, para 39 and Case C-266/19 EIS EU:C:2020:384, para 37.

[23] Council Directive 93/13/EEC on unfair terms in consumer contracts [1993] OJ L 95/29 (Unfair Contract Terms Directive).

[24] See M Elshout and others (n 13).

[25] Following the Fitness Check of EU consumer law, a new directive has been adopted but it does not further determine the requirements of the principle of transparency, see: Directive (EU) 2019/2161 of the European Parliament and of the Council as regards the better enforcement and modernisation of Union consumer protection rules [2019] OJ L 328/7.

[26] Directive (EU) 2018/1972 of the European Parliament and of the Council establishing the European Electronic Communications Code [2018] OJ L 312/36.

[27] See Recital 1 Commission Implementing Regulation (EU) establishing a template for the contract summary to be used by providers of publicly available electronic communications services, C(2019) 9156 final <https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-4821885_en> accessed 15 June 2020.

[28] Recital 4 Commission Implementing Regulation (n 27).

information.[29]

Second, to help consumers access and process the information, it is supposed to be drafted in 'short sentences'.[30] Further, the Commission specifies that the language of the disclosure should also be simplified, by avoiding the use of the technical jargon, acronyms and specialised terms.[31] This follows empirical research findings that shortening and simplifying disclosures may have a beneficial effect.[32]

Nonetheless, by prescribing the use of a simple language for disclosures, the Commission does not necessarily address the issue of the lack of understanding of consumers. Generally, various scholarship previously addressing the issue of transparent disclosures endorsed the simplification of disclosures.[33] However, empirical findings emphasise the need to look at the comprehensibility of the consumer information as a whole, rather than simply using more common words or shortening long sentences in the disclosure.[34]

Third, it needs to be mentioned that the newest empirical research warns against placing only some of the consumer information in a table format, as consumers' understanding of terms published outside the table decreases.[35] From this perspective, the option left by the European Commission to add 'Other relevant information' in the table could be applauded, provided that service providers were required to include other mandatory consumer information there. The change in the text of Recital 17 between the draft and the final version of the Commission Implementing Regulation suggests that this is indeed the Commission's intention.[36]

Fourth, the Commission issued more precise guidelines regarding the easy readability of disclosures:

> The easy readability of a font depends on various factors, and includes the relation between viewing distance, the character height and whether the font size is easily enlarged when provided electronically. Where read from a close distance, a font size of at least 10 points is considered easily readable for many consumers. Headings should be clearly distinguishable from the text, for example by increased font size. Commonly used sans-serif fonts could be used to improve readability. Easy readability should also be ensured by using sufficient contrast, following state of the art practices, between the font and the background, especially when using colours.[37]

Without limiting the service providers' freedom to choose the design of their websites, the Commission sets some basic rules for providing disclosures. For example, prescribing the use of contrasting colours for the provision of information would prevent drafting of disclosures in a pale yellow text on a white background. Designating font size 10 of a commonly used font style as generally readable, also gives further guidance on what would

[29] See eg O Seizov, AJ Wulf and J Luzak (n 20) 168; A Rossi and others (n 20) 89.
[30] Recital 4 Commission Implementing Regulation (n 27).
[31] Recital 8 Commission Implementing Regulation (n 27).
[32] See M Elshout and others (n 13).
[33] See eg O Seizov, AJ Wulf and J Luzak (n 20) 161, 168; A Rossi and others (n 20) 92.
[34] The Behavioural Insights Team, 'Best practice guide. Improving consumer understanding of contractual terms and privacy policies: evidence-based actions for businesses' (August 2019) <https://www.bi.team/wp-content/uploads/2019/07/BIT_WEBCOMMERCE_GUIDE_DIGITAL.pdf> accessed 15 June 2020, 25-26.
[35] ibid 30.
[36] Compare Recital 17 in the draft and the final version of the Commission Implementing Regulation (n 27). The change also follows the suggestion made by the author of this paper during the public consultation on the draft of the Commission Implementing Regulation, see <https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-4821885/feedback/F473188_en?p_id=5734103> accessed 15 June 2020.
[37] Recital 5 Commission Implementing Regulation (n 27).

be considered as a transparent disclosure.[38]

Fifth, the Commission does not prescribe the use of visuals, e.g. symbols, icons, graphics, pop-ups and hyperlinks, but it does not prohibit them either. However, any visuals used may not obscure the readability of a disclosure or otherwise distract or discourage consumers from processing them.[39] This provision clearly still shows the distrust of the Commission in the beneficial effects of visual legal disclosures, but at least it opens up the possibility of trying them out.

Previously, due to the CJEU's judgment in the *Content Services* case,[40] at least the use of hyperlinks has been perceived as potentially diminishing a disclosure's transparency. At the same time, the communication studies indicated the layering of information, also through the use of hyperlinks, as beneficial to attracting the consumers' attention to disclosures.[41] Certain stakeholders have also previously argued that transparency requires the use of more visual rather than textual presentation of the information.[42] The positive findings on the impact of the use of visuals suggest again that the Commission should have elected to encourage their use rather than remain neutral about it.

The above analysis of the most recent information design practices of the European policymaker shows that even if findings from some empirical studies are followed, this is done on a rather piecemeal basis.[43] Such a fragmented application of empirical findings may limit the effectiveness of the adopted information design.

More importantly, however, the current information design practices follow the well-trodden path of designing the same information for all consumers. Consequently, the assumption remains that all consumers should benefit, e.g., from shorter sentences and simpler language in disclosures. This has already been contested, with empirical scholarship suggesting that only consumers with lower qualifications would benefit from such a disclosure's adjustment.[44] The following parts will, therefore, consider whether and to what extent information design could account for consumer vulnerabilities and information needs on a more granular level.

3 Paradigm shift: Modern technology as a gate to personalisation

The rapid and continued development of modern technologies creates new avenues with regard to the provision of mandatory information to consumers. As the previous paragraphs illustrated, the current treatment of consumers as a homogenous group may reduce the effectiveness of the information obligations of online traders and service providers. In order for mandatory information to fulfil its purpose, the design thereof should be adjusted to individual consumers, to the fullest extent possible. This paragraph considers such options.

Marketing experts for years have been propagating the 'know-your-customer' (KYC) maxim, understanding that the key to successful transactions often lay with connecting

[38] See also previous calls for the use of caps on font types, sizes and colours, eg: O Seizov, AJ Wulf and J Luzak (n 20) 166; A Rossi and others (n 20) 92.
[39] Recital 7 Commission Implementing Regulation (n 27).
[40] Case C-49/11 Content Services EU:C:2012:419, para 51.
[41] See eg O Seizov, AJ Wulf and J Luzak (n 20) 160. See, however, contrasting empirical evidence with regards to a specific form of layering of information, namely the use of expendable summaries: The Behavioural Insights Team (n 34) 34-35.
[42] See eg Article 29 Data Protection Working Party, 'Guidelines on Transparency under Regulation 2016/679' (11 April 2018) WP260 rev.01, paras. 49-53; The Behavioural Insights Team (n 34) 11-12, 17-18.
[43] See further on the problem of empirical findings not being fully followed by policymakers eg J Luzak, 'Who calls the tune? Stocktaking of behavioural consumer protection in Europe' in H-W Micklitz, A-L Sibony and F Esposito (eds), *Research Methods in Consumer Law* (Edward Elgar 2018) 239-275.
[44] The Behavioural Insights Team (n 34) 30.

individual consumers' goals and values to specific products and services.[45] However, the knowledge that salespersons can acquire about consumers in the offline world is often based on their subjective perceptions and limited, due to their short interactions with customers, as well as cognitive limits of individual sellers.[46] Therefore, from the outset, technology was facilitating KYC marketing strategies, by providing increasingly more sophisticated methods of gathering and processing data on consumers' characteristics, and needs. Consequently, online traders gained access to databases, which allowed them to classify and objectify consumers based on their disclosed characteristics.[47]

Digital marketing and interconnectivity of various consumer products provide new means of tracking consumer preferences. Despite the increased data protection of EU consumers introduced by the General Data Protection Regulation (GDPR),[48] gathering and storing of consumers' preferences online remains feasible and increasingly easier, as long as it does not lead to a possibility of consumer identification.[49] Some of these user preferences may be collected by online traders through the use of cookies and other online tracking mechanisms, which were created in the big data era, as long as users provide their consent to these practices.[50]

Moreover, online traders may also benefit from data collected in the offline world, e.g., through the use of the Radio Frequency Identification (RFID), the Automated Facial Recognition Systems (AFRS) and other technologies contributing to the Internet of Things (IoT). These technologies allow for consumer purchases, and flowing from them consumer preferences, to be followed, registered online and classified.[51] Consequently, traders and service providers may decide to tailor their online products, services and their marketing, to consumers' needs and characteristics. How would this work?

RFID tags are invisible to human eye devices, which when placed on consumer products collect and store information, as well as facilitate product tracking.[52] Upon the activation of

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[45] See eg JP Peter and JC Olson, *Consumer Behavior and Marketing Strategy* (7th edn, McGraw-Hill 2005) 94-100; M Lindstrom, *buy·ology. Truth and lies about why we buy* (Broadway 2010) 194-205; C Jansson-Boyd, *Consumer psychology* (Open University Press 2010) 54; A Leibtag, *The Digital Crown: Winning at Content on the Web* (Morgan Kaufmann 2013) 23-31.

[46] See eg Jansson-Boyd (n 45) 56-58; R Mullins and others, 'Know Your Customer: How Salesperson Perceptions of Customer Relationship Quality Form and Influence Account Profitability' (2014) 78 Journal of Marketing 38-58.

[47] See eg D Hodgson, '"Know your customer": Marketing, governmentality and the "new consumer" of financial services" (2002) 40(4) Management Decision 322.

[48] Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data [2016] OJ L 119/1 (General Data Protection Regulation, GDPR).

[49] See Recital 6 GDPR, as well as Recital 26 GDPR on the applicability of the data protection framework to '*any information concerning an identified or identifiable natural person*'. Of course, whether any data can be fully anonymised has been contested, see eg L Rocher, JM Hendrickx and Y-A de Montjoye, 'Estimating the success of re-identifications in incomplete datasets using generative models' (2019) 10 Nature Communications 3069.

[50] On the issues of consent see eg J Luzak, 'Much ado about cookies: the European debate on the new provisions of the ePrivacy Directive regarding cookies' (2013) 22(1) European Review of Private Law 221-245; FJ Zuiderveen Borgesius and others, 'Tracking Walls, Take-It-Or-Leave-It Choices, the GDPR, and ePrivacy Regulation' (2017) 3 European Data Protection Law Review 353-368.

[51] See further discussion of these modern technologies and the impact their use may have on product liability in J Luzak, 'A Broken Notion: Impact of Modern Technologies on Product Liability' (2020) European Journal of Risk Regulation 1-20. See on the mix of data that traders accumulate from both online and offline sources eg MN Helveston, 'Consumer Protection in the Age of Big Data' (2016) 93(4) Washington University Law Review 868-869.

[52] See on the current application of the RFID technology by traders, eg SG Stein, 'Where Will Consumers Find Privacy Protection from RFIDs?: A Case for Federal Legislation' (2007) 6 Duke Law and Technology Review 5; J Weinberg, 'Tracking RFID' (2007) 3 Journal of Law and Policy for the Information Society 835; C Mieling, 'Are You Really Going to Eat That – Product Tracing, the Food Safety Modernization Act, and the Promise of

an RFID tag, it will emit a signal, which allows a product's location to be followed. This function may allow for the personalisation of consumer information. Imagine a consumer carrying an everyday object, such as a store loyalty card, in which an RFID tag has been planted. With every repeat visit to any store implementing RFID readers that can activate and pick up signals from the RFID tags, the chances of this consumer being 'recognised' increase.[53]

This process of recognising consumers does not need to provide a store with the personal data of consumers, avoiding their identification and, consequently it does not fall within the practices banned by the GDPR. Instead, this system simply keeps tracks of consumers' shopping habits. As a result, the GDPR will not protect consumers in this scenario. Traders will be able to attempt personalisation of the consumers' subsequent shopping experience. As more traders nowadays offer consumers an online shopping experience even if consumers have physically visited their store, through providing them with various online interfaces on site, the data collected by the RFID readers could ultimately be used in online shopping.

The AFRS further facilitates consumer identification by traders and service providers, by enabling detection and analysis of consumer's facial features.[54] The more sophisticated facial recognition technology expands the analytical options by allowing for the recognition of consumer emotions, as well.[55] With a more widespread use of the AFRS technology, it should thus be feasible to address the preferences' of repeat customers without them having to carry any products containing RFID tags. Shop cameras could register biometrics of consumers entering a given store, record and recall them during subsequent visits, matching them to previously displayed consumer preferences.

Again, this process would occur without the need to register the personal data of any individual consumer. Shopping preferences of consumers would be most easily registered based on the their purchase history. However, the feature of the emotion recognition could also allow traders to gather information on consumers' likes and dislikes. This would further facilitate personalisation of the shopping experience, which could easily move from real world to online.[56]

Finally, the IoT provides traders with even more access to consumer data, due to the enhanced interconnectivity of objects commonly used by consumers in their everyday lives.[57] This will undoubtedly allow traders to further refine their customer profiles, personalising their products and services according to customers' expectations and needs, which are stored and shared within their IoT networks. As an example, we could mention the Amazon Dash button, which allowed consumers to quickly re-order everyday household items, reflecting their preferences in these product categories.[58]

RFID' (2014) University of Illinois Journal of Law, Technology and Policy 272; JM Schmidt, 'RFID and Privacy: Living in Perfect Harmony' (2007) 34 Rutgers Computer and Technology Law Journal 255-258.

[53] Article 29 Data Protection Working Party, 'Working Document on Data Protection Issues Related to RFID Technology' (19 January 2005) 10107/05/EC WP 105, 7.

[54] Article 29 Data Protection Working Party, 'Opinion 02/2012 on facial recognition in online and mobile services' (22 March 2012) 00727/12/EN WP 192, 1.

[55] See eg P Lewinski, J Trzaskowski and J Luzak, 'Face and Emotion Recognition on Commercial Property under EU Data Protection Law' (2016) 33(9) Psychology and Marketing 729.

[56] ibid 730.

[57] For example, it has been argued that collecting and selling data from interconnected cars will be more profitable in 2020 than the business of selling these cars. See M McFarland, 'Your car's data may soon be more valuable than the car itself' (7 February 2017) CNN Business <https://money.cnn.com/2017/02/07/technology/car-data-value/index.html> accessed 15 June 2020. Moreover, an estimation put the number of biometric sensors in IoT devices by 2018 at minimum 500 million, see S-A Elvy, 'Commodifying Consumer Data in the Era of the Internet of Things' (2018) 59 Boston College Law Review 436-437.

[58] The Amazon Dash button has raised many issues as to its compliance with consumer and data protection, see eg S-A Elvy, 'Hybrid Transactions and the INTERNET of Things: Goods, Services, or Software' (2017) 74(1)

4 Personalisation facilitating descent down the design pyramid (product design)

As part 2 highlighted, currently European policymakers think, at most, of information design principles, when drafting mandatory information obligations for online traders and service providers. As a result of these considerations they may then adopt the principle of transparency for such disclosures and to a limited extent also elaborate on how to attract the attention of average consumers to mandatory information.[59]

This part of the paper examines first the notion of the average consumer and the limitation of applying it as a benchmark in the assessment of whether consumers received mandatory information in a transparent manner. Then, it indicates how a descent down the design pyramid to the level of product design could allow mandatory information obligations to more effectively fulfil their objectives towards a greater number of consumers by accounting for their individual needs and experience.[60] The following paragraphs consider what steps policymakers would need to take to accommodate a more granular legal design of consumer information.

4.1 Informing average consumers

The notion of an average consumer represents a reasonably well-informed, reasonably observant and circumspect consumer,[61] despite empirical research consistently showing that consumers have weak transactional skills.[62] This notion has so far only been explicitly adopted in the provisions of the Unfair Commercial Practices Directive (UCPD), obliging national courts to assess the impact of a potentially unfair commercial practice on average consumers.[63] As commercial practices may involve the provision of information to consumers, which could potentially be misleading or otherwise unfair, the benchmark of the average consumer would be used in relation to traders' and service providers' information practices, as well.

However, only recently the CJEU has confirmed that the average consumer benchmark should also be applied in the evaluation of the transparency of mandatory consumer information pursuant to the CRD.[64] It seems, therefore, that there is no longer a need to draw a link between the application of the average consumer benchmark and the unfairness test.

The adoption of a singular benchmark in the evaluation of the transparency of consumer information also signifies that the form of a disclosure is supposed to be standardised for all consumers. Regardless of their cognitive abilities, all consumers should receive a disclosure drafted in language that should be comprehensible to a reasonably knowledgeable person.[65] When ensuring the prominence of a disclosure, online traders will need to keep in mind reasonably observant consumers, as well. Some consumer vulnerabilities could only be

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Washington and Lee Law Review 92-97; Ch Busch, 'Does the Amazon Dash Button Violate EU Consumer Law' (2018) 7(2) Journal of European Consumer and Market Law 78-80.

[59] See eg Article 8(1) CRD and Commission Implementing Regulation (n 27).

[60] Hagan (n 4).

[61] See eg Case C-210/96 Gut Springenheide EU:C:1998:369, para 31.

[62] See eg O Ben-Shahar and C Schneider, 'The Failure of Mandated Disclosure' (2011) 159(3) University of Pennsylvania Law Review 666; J Davis, 'Protecting Consumers from Overdisclosure and Gobbledygook: An Empirical Look at the Simplification of Consumer-Credit Contracts' (1977) 63(6) Virginia Law Review 842-844.

[63] See Article 5(2)(b) Directive 2005/29/EC of the European Parliament and of the Council concerning unfair business-to-consumer commercial practices in the internal market [2005] OJ L 149/22 (UCPD).

[64] See EIS (n 22), para 37.

[65] Exceptionally, if a commercial practice is targeted at a particular, vulnerable group of consumers, a member of that group would serve as a benchmark consumer, see Article 5(3) UCPD.

accounted for if the consumer information targeted a particular group of consumers, as then the average consumer benchmark needs to be adjusted to the average member of that group.[66] It would be the consumer who would then need to prove that the trader directed this information at a particular consumer group and should have been aware of their special needs.

Whilst adopting the average consumer benchmark limits the disclosure burden of traders, it does not seem to facilitate reaching one of the main objectives of mandatory information obligations: Alleviating information asymmetry and providing consumers with an informed choice.[67] The one-size-fits-all approach to ensuring disclosures' readability is still likely to leave the majority of less well-informed and observant consumers clueless as to the details and consequences of a transaction they are concluding. Moreover, many scholars have emphasised the disassociation between the standard of awareness and knowledge that this notion implies consumers possess and the empirical evidence on the bounded rationality of consumers.[68] The following paragraph also shows that legal design principles necessitate letting go of the average consumer benchmark to improve the effectiveness of the provision of consumer information.

4.2 Product design principles

In the legal design pyramid the level of product design seems to require policymakers to design mandatory information obligations with two things in mind. First, to design them in a way allowing for an effective achievement of the goals these information obligations are supposed to fulfil. Second, to provide for as optimal consumer experience as possible. Whilst it seems logical to expect that policymakers would adhere to these design principles, this chapter argues that this process has not yet taken place. The current design of mandatory consumer information obligations seems instead to hinder an effective achievement of the objectives that led to their adoption and does not optimise the consumers' experience with such information.

The most obvious reason why the current mandatory information obligations are not satisfying product design principles is that they aim at achieving more than one policy objective at a time. Whilst their purpose is undoubtedly to minimise the information asymmetry between consumers and traders, they also seek to stimulate the cross-border trade by harmonising the traders' information obligations across the EU.[69] Setting such a double-objective, unsurprisingly, weakened the effectiveness of mandatory information obligations as a consumer protection measure. This occurs as the EU policymakers need to make trade-offs between the interests of traders and consumers, not to mention the welfare of the cross-border trade, as a whole.[70]

Still, we could expect that when the balancing act of various policy objectives leading to the adoption of mandatory information obligations fell on the side of the stronger need to protect consumer interests, then product design principles would guide policymakers in facilitating the consumers' experience with this information. Consequently, the EU legislator should attempt to design mandatory information obligations in a way most likely to lead to the reduction of the consumers' information asymmetry, whilst still minding traders' interests. To decrease the information asymmetry, the information should not only reach

[66] ibid. See also eg Recital 34 CRD; Walbusch Walter Busch (n 22), para 39.
[67] M Schaub, 'How to Make the Best of Mandatory Information Requirements in Consumer Law' (2017) 25(1) European Review of Private Law 28-29.
[68] See fn 7. See also eg C Bailloux, 'The Average Consumer in European Consumer Law' (2017) 44 Exeter Law Review 172-177.
[69] Recitals 6-7 CRD.
[70] See eg Luzak (n 43) 273-274.

consumers but also be understandable to them.[71] This seems a Sisyphean task to accomplish on a general level of drafting a standardised disclosure meant to be read and understood by all consumers, with varied cognitive skills. However, requiring traders to draft individualised disclosures for each contract would significantly raise transaction costs and delay contract conclusion, either in turn skewing the balance more in the consumers' favour or forcing traders to re-allocate their costs by raising product and services' prices.

To accommodate traders' interests, the European legislator introduced, therefore, the benchmark of an average consumer as representative for all consumers. Thanks to the use of this benchmark, relying on reasonably knowledgeable and observant consumers, traders can more easily assume the legal fiction, i.e. that consumers should indeed understand their disclosures.[72] Unsurprisingly, the legal fiction introduced by this benchmark does not allow mandatory disclosures to achieve their intended objective, i.e., actually alleviating the information asymmetry. This paper proposes a solution based on the use of design principles and modern technologies, arguing for moving away from the application of one consumer benchmark, and instead trying to make consumer protection rules more granular.

4.3 Phasing in granular consumer information

Whilst ideally eventually we would be able to fully accommodate the heterogeneity of consumers, at the moment the granularity of consumer information would likely need to be phased in. A gradual introduction of more personalised disclosures should be more palatable to traders. It would also allow for better testing and further development of technological solutions that make the personalisation of mandatory disclosures feasible.[73]

4.3.1 Disclosing to varied consumer groups

In the first stage of the granularization process, we could expect policymakers to oblige traders to draft not just one document with mandatory consumer information, but a certain number thereof, each version slightly differing from the other, in order to accommodate an already-known consumer vulnerability.[74] Admittedly, this solution would still not assist with all the needs of individual consumers. However, the increased granularization should help the groups of vulnerable consumers to better understand mandatory information, not only in situations, as currently, when a given commercial practice was clearly targeting these groups.[75]

Traders should appreciate this solution as they would not need to adjust the disclosure each time to a different consumer in the pre-contractual stage, delaying the conclusion of a contract, but instead could continue to provide pre-drafted, standardised, less costly disclosures. They would only be required to draft more than one version thereof for each of

[71] On the issues of consumers literacy see eg Ben-Shahar and Schneider (n 62); V Mak, 'The myth of the 'empowered consumer': Lessons from financial literacy studies' (2012) 1(4) Zeitschrift für Europäisches Unternehmens- und Verbraucherrecht 254-263.

[72] On the need to simplify legal frameworks in order to minimise costs arising when a system of complex rules is designed see eg L Kaplow, 'A Model of the Optimal Complexity of Legal Rules' (1995) 11 The Journal of Law, Economics and Organization 150–52.

[73] Previously the imperfections in the current personalisation technologies have been pointed out eg by Ch Busch, 'Implementing Personalized Law: Personalized Disclosures in Consumer Law and Data Privacy Law' (2019) The University of Chicago Law Review 324-325.

[74] Policymakers could discuss to what extent and which consumer vulnerabilities should be accommodated, but at the very least we could expect traders addressing vulnerable consumer groups as defined in Article 5(3) UCPD. Pursuant this provision, vulnerable consumers are identified on the basis of their mental or physical infirmity, age or credulity.

[75] See fn 66.

their standard contracts. Consumers would benefit from this solution, as upon traders identifying their vulnerability, the form and content of the disclosure would automatically account for it. Nonetheless, to optimise the chances for the consumers to understand the disclosures, any consumer should be able to access all pre-drafted versions of a disclosure on traders' websites, if they so choose.[76]

In practice, a trader who can see the consumers' previous shopping history either through the data consumers consented to sharing online or through the use of the RFID, or a trader who can register consumers' facial features and expressions through the AFRS or access some of the consumers' other data stored in the IoT devices, may on this basis infer the approximate age of consumers, whether they have mental or physical infirmities or are likely to be credulous. These inferences could determine, which version of a disclosure a trader would show to consumers. To clarify, neither version would necessarily need to be 'simpler'. They would simply differ in the presentation of mandatory consumer information, depending on what empirical research shows is more effective for each consumer group. For example, empirical research showed that younger internet users have more technical digital skills but lower cognitive literacy skills in comparison to older internet users.[77]

Eshet-Alkali and Amichai-Hamburger already emphasised in 2004 the need to 'use the Internet interactive capabilities and design the web in a much more user-friendly manner to answer the users' specific needs and abilities'.[78] Consequently with their findings, when an online trader could extrapolate from the available consumer data that a given consumer belongs to the young adults group, a mandatory disclosure showed to that consumer could e.g. utilise a multi-layered format. This means that through the use of various links and roll-over texts the user would be gradually led to more information about products or services, etc. As an example the initial information on the delivery conditions could only mention the following: 'We offer three types of delivery: regular, express and low-cost'. By clicking on each type of the delivery the young consumer could find out more conditions of each of the delivery types before making their choice as to which delivery suited them the most. The disclosure automatically showed to older consumers would account for their lower technical savviness and more likely passive behaviour online, but higher cognitive literacy skills. Therefore, the delivery conditions would be revealed in full straight away. Again, it should be emphasised, that it would be important to preserve the consumer's choice to see a different version of the disclosure to help consumers' better understand it.

In order to further limit the traders' burden and costs of the adaption of multiple mandatory disclosures, policymakers should prepare guidelines on what factors such disclosure variations need to consider and what justifies their introduction. These guidelines would indicate, on the basis of the available empirical research, which content or design of a standard disclosure requires an adjustment to increase the comprehensibility of providing information to, e.g., young adults, elderly, consumers with various infirmities. The need to address the information asymmetry, as well as the failure of the so-far mandated standardised disclosures[79] drafted with only the average consumer in mind, could justify the introduction of this partial granular solution.

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[76] On the need for consumers to be able to access the chosen defaults and change them, if necessary, see also Porat and Strahilevitz (n 8), 1441-1442; 1469-1470.

[77] See eg Y Eshet-Alkali and Y Amichai-Hamburger, 'Experiments in Digital Literacy' (2004) 7(4) CyberPsychology and Behavior 426; although given time the older internet users develop digital technical skills as well, whilst young internet users fail to improve their cognitive literacy skills, see Y Eshet, 'Thinking in the Digital Era: A Revised Model for Digital Literacy' (2012) 9 Issues in Informing Science and Information Technology 270-271.

[78] Eshet-Alkali and Amichai-Hamburger (n 77), 427.

[79] See eg Annex I to CRD containing model withdrawal form or Annex II to Consumer Credit Directive introducing Standard European Consumer Credit Information.

4.3.2 Disclosing to personalised consumers

By further recognising the technological possibilities in personalising consumer disclosures and regulating the use thereof for the consumers' benefit, policymakers could eventually move away from applying consumer benchmarks. Instead, policymakers could oblige traders to apply the KYC techniques to benefit consumers by improving mandatory consumer information. Algorithms used by traders to estimate consumers' characteristics, such as their geographical location, age, gender, wealth group, could also indicate the expected level of the consumer's literacy and financial literacy, as well as various consumer preferences.[80] This information could then prompt traders to show a particular disclosure to the personalised consumer, adjusted to their expected level of comprehensibility and to their expressed preferences.

This would follow the rules of product design, as it would provide individual consumers with the optimal version of the mandatory consumer information. The default would be personalised to a given consumer rather than to a group of consumers that they belong to. Considering the passiveness of most consumers in changing defaults and accessing information,[81] it seems crucial that the default option is as matched to them as possible, even if an option to change the default and see a different disclosure could be reserved for them.

To give a practical example, a trader selling books online could continue to pre-draft their versions of terms and conditions in a language appropriate to various age groups, as mentioned before. However, to personalise disclosures on an even more granular level they would need to account for more individual consumers' characteristics. This could happen if the previous shopping history of a given consumer, acquired through the use of the RFID or through the data stored and shared through the IoT devices, or simply through the data consumer shared with a given trader via cookies, showed that they read their books on a Kindle. The trader could then immediately prioritise providing this consumer with information on all their books that are offered in the .mobi format to ensure their interoperability with the consumer's e-reader. This would not need to differ much from the already provided personalisation of the currency, in which prices for online products are reflected. Most online traders automatically adjust the currency for their products based on the geographic location of the internet user visiting their site, often asking consumers to confirm the default.

Similarly, consumers could also share their information preferences, e.g. through their IoT devices or cookies, for contact with traders. They could choose to communicate only through email rather than by telephone. Consequently, the traders' obligation to disclose to consumers how they could be reached could be limited to just providing the information on online communication channels. Obviously, if consumers changed their minds on which method of communication they wanted to use in a post-contractual situation, they should be able to access all of the trader's contact information on their website or in the contractual documents. However, the EU legislator could allow traders to tailor the initially displayed pre-contractual information to the declared preferences of consumers, as long as making such preferences known would not put consumers at risk of not receiving the information.

These are just a few examples of how in the age of big data, consumer information could be personalised, making it more optimal for consumers and better fulfilling its objective:

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[80] See eg W Hartzog and E Selinger, 'Big Data in Small Hands' (2013-14) 66 Stanford Law Review 81-88; DL Rubinfeld and MS Gal, 'Access Barriers to Big Data' (2017) 59(2) Arizona Law Review 339-382; Porat and Strahilevitz (n 8) 1436-1440.

[81] See eg JP Kesan and RC Shah, 'Setting Software Defaults: Perspectives from Law, Computer Science and Behavioral Economics' (2006) 82(2) Notre Dame Law Review 587-588.

Informing consumers whether they want to conclude a particular transaction.[82]

One risk involved with such a further granularization of consumer information pertains to the possibility that either the big data on a given consumer is incorrect or the preferences conveyed by consumers are ill-suited to them. In either case this consumer may receive information drafted in a way that would be neither the most relevant for them nor the easiest to understand. This is a valid concern as consumers are known for perceiving themselves and their capabilities in various ways, often having more than one identity, and their self-beliefs do not always correspond to reality. Consequently, consumers may either explicitly make suboptimal choices or provide data to traders that is unsuitable for a particular purpose.[83] In order to minimise the risk this behaviour might have on consumers receiving suboptimal disclosures by default, consumers should always be given an option to access other versions of the same disclosure.

5 Conclusions

When EU legislators design information provisions, they need to ensure that the information rules and standards resulting from them are workable for traders and service providers, but also meaningful for consumers. In the online environment, modern technology and big data have shifted the meaning of what traders could feasibly achieve when providing consumer information, which should translate itself into a better, more personalised informational experience for consumers.

This chapter illustrates how the use of the legal design principles and the benefits of modern technology could guide EU policymakers in drafting more effective consumer protection measures, specifically information provisions and information rules.

At the level of information design, as shown, the European Commission started acknowledging more explicitly the need for improving the form in which traders are to provide the consumer information. However, more could be done in this area by EU legislators more precisely following empirical recommendation as to what style of information ensures its transparency, e.g. regarding the recommended use of visual cues.

At the level of product design, this paper draws a roadmap towards discarding the benchmark of the average consumer and personalising consumer information through the use of modern technology. The author proposes to gradually oblige online traders to provide more granular, personalised information to consumers.

First, the benchmark of the average consumer could be replaced by the use of multiple consumer benchmarks, each accommodating a particular consumer vulnerability. When online traders would account for these consumer vulnerabilities by default and not only when they targeted vulnerable consumer groups with their commercial practices, we could expect the level of consumer protection to increase. In 2005, when the UCPD was introduced, it was a rational choice not to oblige traders to take consumer vulnerabilities into account unless they were targeting a vulnerable consumer group or were aware of vulnerabilities of their consumers. In the big data era, however, we could expect more consumer knowledge of online traders, due to the use of modern technology.

Second, with the even more widespread use of personalising tools, online traders' obligations could increase to having to account for individual consumers' characteristics and preferences. There are likely ethical implications of such a policy change, which cannot, however, be addressed here as this falls outside this paper's scope. What this paper aimed to

[82] See further examples of personalised product information in Busch (n 73), 315-317 and in Porat and Strahilevitz (n 8) 1427.

[83] See eg Jansson-Boyd (n 45) 54-58, 65 (on self-discrepancy theory).

emphasise instead are the added advantages of following legal design principles when advocating for information personalisation. After all, we could paraphrase here the well-known proverb: With great knowledge comes great responsibility.

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