

When Design Met Law: Design Patterns for Information Transparency*

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The problems of online disclosures, notices, and terms are well-known and documented. Research and experience tell us that consumers dislike and do not read them. Much less has been said and done about the solutions. Building on Proactive Law and Legal Design, this research-based, practice-oriented article introduces proactive legal design patterns as a possible way forward. The article illustrates, with examples, how design patterns can help implement the principle of transparency in consumer-facing communication and elaborates, in an innovative manner, the ways in which legal design patterns can help solve recurring problems.

I. Introduction

“I agree to these terms and conditions” has been called the “biggest lie on the internet”¹ – and with good reason. The problems related to information duties, also known as mandated disclosures, have been largely explored in the behavioural law and economics literature. Some scholars have even proposed to abolish the duty to inform through mandated disclosures, considering them a regulatory failure.² In this article, we adopt a Legal Design approach that investigates the theoretical foundations of the

* Although this paper is the outcome of collective research and discussion, Arianna Rossi is the exclusive author of Sections IV and VI; Rossana Ducato of Section II; Helena Haapio of Section III, while Sections I, V, VII, VIII were written collectively. We would like to thank the anonymous reviewers for their valuable comments and suggestions.

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¹ J.A. OBAR, and A. OELDORF-HIRSCH, “The Biggest Lie on the Internet: Ignoring the Privacy Policies and Terms of Service Policies of Social Networking Services”, *TPRC 44: The 44th Research Conference on Communication, Information and Internet Policy*, 2016, pp. 1-37 (also available at SSRN: <https://ssrn.com/abstract=2757465>).

² O. BEN-SHAHAR and C.E. SCHNEIDER, “The failure of mandated disclosure”, *University of Pennsylvania Law Review*, vol. 159, no. 3, 2011, pp. 647-749. *Contra*, M. RADIN, “Less Than I Wanted To Know: The Submerged Issues in More Than I Wanted To Know”, *Jerusalem Review of Legal Studies*, vol. 11, no. 1, 2015, pp. 51-62; O. BAR-GILL, “Defending (Smart) Disclosure: A Comment on More Than You Wanted to Know”, *Jerusalem Review of Legal Studies*, vol. 11, no. 1, 2015, pp. 75-82.

principle of transparency and suggests interdisciplinary solutions, namely the “patterns”, to give form to the rationale of mandated disclosures dictated by law. In particular, for the scope of this paper, we will focus on information duties that are provided online.

This article is structured as follows: Section II will illustrate the principle of transparency as one key legal foundation for mandated disclosures. The principle will be critically analysed both in the consumer protection and in the data protection framework for three main reasons. Firstly, the problem of mandated disclosures equally affects the legal information provided online, whether it refers to pre-contractual information (usually contained in the Terms of Service) or to the conditions of the data processing (detailed in the privacy policies). Secondly, despite the fact that data protection and consumer law have a different rationale and scope of application (one dealing with fair transactions and the other with fair processing), with the increasing “datification” of our economy, the two pieces of legislation are becoming increasingly connected and complement each other.³ Thirdly, the analysis of these two fields from a comparative perspective is of particular interest: when it comes to the principle of transparency, it is possible to observe several convergences among the two legal areas. Section III will introduce Proactive Law and Legal Design as forward-looking disciplines that seek to provide clarity about legal rights and obligations, secure the achievement of desired objectives, and prevent and solve legal problems through a human-centred approach. Both research areas have adopted from design-erly disciplines the concept of design patterns, i.e. re-usable solutions to commonly occurring problems. After having introduced the concept and function of patterns, in Section IV we will present the matrix of analysis that we have elaborated to categorise, explain and reuse them in different contexts. Given that patterns are essentially a problem-solving tool, as a necessary step the paper will offer an overview of the main hurdles and obstacles to effective legal communication documented in the literature (Section V). Then, Section VI will present a collection of legal design patterns with many practical examples of implementation, while Section VII will envision a searchable online library to support widespread adoption of the hereby proposed legal design patterns.

³ N. HELBERGER, F. ZUIDERVEEN BORGESIOUS and A. REYNA, “The perfect match? a closer look at the relationship between EU consumer law and data protection law”, *Common Market Law Review*, vol. 54, no. 5, 2017, pp. 1427-65.

II. The principle of transparency between consumer and data protection law

Information duties, also known as mandated disclosures, are a central policy technique in European consumer and data protection legislation.⁴ Although the two areas are different in nature and scope, it is possible to observe a “koiné”, i.e. a common language and a common understanding when it comes to mandated disclosure. In both legislations, the rationale of mandated disclosure is the reduction of information asymmetries in order to create a level playing field for all the actors involved, for instance for the consumer-trader in case of transaction or the data subject-controller in the context of a personal data processing. The core idea at the basis of mandated disclosures envisages that if the weak party receives all the relevant information, she will be in the best position to make an informed choice and pursue her interests.⁵ The principle of transparency guarantees such a goal, by establishing temporal and formal requirements.

In the following part of the Section, the principle of transparency in both consumer and data protection law will be critically presented through an analysis of the relevant literature and case law. The goal is to identify the convergences and divergences between these two areas, in order to extract the point of reference to support the practical implementation of the principle of transparency through the patterns.

In consumer protection, the principle of transparency implies that pre-contractual information has to be provided in advance and presented in a certain form. The first aspect, related to the timing of information, requires that the consumer has to be able to gain knowledge of the terms before entering into a contract.⁶ In some cases, the Legislator establishes some information design requirements: for example, in dis-

⁴ C. BUSCH, “The Future of Pre-Contractual Information Duties: From Behavioural Insights to Big Data”, in C. TWIGG-FLESNER (ed.), *Research Handbook on Eu Consumer and Contract Law*, Cheltenham, UK, Northampton, MA, USA, Edward Elgar, 2016; G. HELLERINGER and A.-L. SIBONY, “European Consumer Protection through the Behavioral Lens”, *Columbia Journal of European Law*, vol. 23, no. 3, 2017, pp. 607-46.

⁵ G.K. HADFIELD, R. HOWSE and M.J. TREBILCOCK, “Information-Based Principles for Rethinking Consumer Protection Policy”, *Journal of Consumer Policy*, vol. 21, no. 2, 1998, pp. 131-169; S. GRUNDMANN, “Information, Party Autonomy and Economic Agents in European Contract Law”, *Common Market Law Review*, vol. 39, no. 2, 2002, pp. 269-393; H.-W. MICKLITZ, “The Necessity of a New Concept for the Further Development of the Consumer Law in the EU”, *German Law Journal*, vol. 4, no. 10, 2003, pp. 1043-64; N. HELBERGER, *Forms matter: Informing consumers effectively* (Study commissioned by BEUC), 2013; BUSCH, 2016; HELLERINGER and SIBONY, 2017; A. OEHLER and S. WENDT, “Good Consumer Information: The Information Paradigm at Its (Dead) End?”, *Journal of Consumer Policy*, vol. 40, no. 2, 2017, pp. 179-191.

⁶ It is the case of the Unfair Terms Directive (UTD), which considers unfair those clauses that “irrevocably binds the consumer to terms with which he had no real opportunity of becoming acquainted before the conclusion of the contract” (Annex, 1.i, UTD; see also, recital 20 UTD). The obligation to provide pre-contractual information or make it available before the conclusion of the contract is further recalled at Recital 39 and Article 6.1 of the Consumer Rights Directive, CRD) and can be seen as well in the prohibition of misleading omissions, sanctioned in the Unfair Commercial Practices Directive (UCPD).

tance contracts, the main elements of the contract have to be “displayed in the close vicinity of the confirmation requested for placing the order” (Recital 39, CRD), in order to ensure that the presentation of information allows effectively the user to get acquainted with the terms.⁷

The second aspect, concerning the expression of the information, imposes a duty to inform in a clear and intelligible manner, so that the average consumer can understand without a legal advice.⁸ Such a requirement is more difficult to grasp:⁹ apart from some cases where the European Legislator dictates specific design requirements, as in the food, energy or credit sectors, consumer law usually provides very broad statements, by establishing a general obligation to provide the information using a “plain and intelligible language”,¹⁰ where intelligibility stands also for the legibility of that information.¹¹

The criteria of plainness and intelligibility in the UTD and CRD have been broadly interpreted by the European Court of Justice, issuing some guiding principles that can be summarised as follows:¹²

- 1) information has to be formally and grammatically intelligible (this is the precondition, but it is not sufficient);¹³
- 2) all the elements of the transaction have to be provided in a clear and comprehensible way in order to allow the consumer to evaluate the legal and economic consequences of her choice;¹⁴ in order to assess such criteria, it is necessary to take into

⁷ EC Commission, DG Justice Guidance document concerning Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council, June 2014, available here: https://ec.europa.eu/info/sites/info/files/crd_guidance_en_0.pdf, p. 32.

⁸ Cf. M. LOOS, “Transparency of standard terms under the Unfair Contract Terms Directive and the proposal for a common European sales law”, *European Review of Private Law*, vol. 23, no. 2, 2015, pp. 179-193.

⁹ O. SEIZOV, A.J. WULF and J. LUZAK, “The Transparent Trap: A Multidisciplinary Perspective on the Design of Transparent Online Disclosures in the EU”, *Journal of Consumer Policy*, 2018, pp. 1-25, at 5.

¹⁰ Cf. Article 5 UTD; Articles 5.1, 6.1, 8, CRD.

¹¹ H.-W. MICKLITZ, N. REICH and P. ROTT, *Understanding EU consumer law*, Antwerp, Intersentia, 2009. See also Article 8 CRD.

¹² On pre-contractual “transparency” and principles elaborated by the ECJ in connection to food labelling and misleading advertising, see G. STRAETMANS, “Misleading practices, the consumer information model and consumer protection”, *Journal of European Consumer and Market Law*, 2016, 5, pp. 199-210.

¹³ Judgment of 30 April 2014, *Árpád Kásler and Hajnalka Káslerné Rábai v OTP Jelzálogbank Zrt.*, C-26/13, ECLI:EU:C:2014:282, paragraph 71. See also, Judgment of 26 February 2015, *Bogdan Matei and Ioana Ofelia Matei v SC Volksbank România SA*, ECLI:EU:C:2015:127; Judgment of 28 July 2016, *Verein für Konsumenteninformation v AmazonEU Sà*, C-191/15, ECLI:EU:C:2016:612.

¹⁴ Judgment *Árpád Kásler and Hajnalka Káslerné Rábai v OTP Jelzálogbank Zrt*, ECLI:EU:C:2014:282, paragraph 73. Here the Court traces an analogy with the Judgment of 21 March 2013, *RWE VertriebAG v Verbraucherzentrale Nordrhein-Westfalen eV.*, C-92/11, EU:C:2013:180, paragraph 49. Judgment of

account all the factual elements, such as how the trader represents herself (e.g. in promotional materials) and what is the reasonable expectation of attention from the average consumer.¹⁵

More detailed guidelines about the presentation of information have been offered in soft law instruments. For example, the Guidance document about the CRD contains a model for the display of consumer information about digital products. Interestingly, such a document encourages the use of icons, tables, structured layout and other graphical elements to illustrate the content of a contract.¹⁶ However, the model is not binding, refers to online products only, and serves as a mere exemplification to suggest the trader alternative and more user-friendly ways to present information, without setting specific criteria.

The twofold structure of the principle of transparency (temporal plus formal requirements), just seen in the consumer field, can be retrieved in data protection law as well: the General Data Protection Regulation (GDPR)¹⁷ requires that the mandated disclosures listed at Article 13 GDPR (i.e. the essential information about the processing that has to be given to the data subject when personal data are directly obtained from her) has to be provided at the moment of the collection of personal data. Where the information is derived from third party sources (which is the case enshrined at Article 14 GDPR), the information duties have to be fulfilled:

- 1) within a reasonable time period, depending on the specific circumstances of the processing, which cannot exceed in any case one month;
- 2) if the personal data are intended for communicating with the data subject, at latest at the occurrence of the first communication;

21 December 2016, *Francisco Gutiérrez Naranjo v Cajasur Banco SAU, Ana María Palacios Martínez v Banco Bilbao Vizcaya Argentaria SA (BBVA), Banco Popular Español SA v Emilio Irlés López and Teresa Torres Andreu*, C-154/15, ECLI:EU:C:2016:980.

¹⁵ Judgment *Bogdan Matei and Ioana Ofelia Matei v SC Volksbank România SA*, ECLI:EU:C:2015:127. The ECJ has initially elaborated – in the context of the free movement of goods, labelling and misleading advertising – the concept of the average consumer as someone who is “reasonably well informed and reasonably observant and circumspect” (the leading case where this notion was elaborated is Judgment of 16 July 1998, *Gut Springenheide GmbH and Rudolf Tusky v Oberkreisdirektor des Kreises Steinfurt – Amt für Lebensmittelüberwachung*, C-210-96, 1998, I-04657). As noted in the literature, the benchmark established by European judge is quite high and more similar to the *homo oeconomicus* model, rather than the real consumer (A.L. SIBONY, “Can EU Consumer Law Benefit From Behavioural Insights? An Analysis of the Unfair Practices Directive”, in K. MATHIS (ed.), *European Perspectives on Behavioural Law and Economics*, Springer International Publishing, Switzerland, 2015, pp. 71-106; V. MAK, “The Consumer in European Regulatory Private Law”, in D. LECZYKIEWICZ, S. WEATHERILL (eds.), *The Image of the Consumer in EU Law: Legislation, Free Movement and Competition Law*, Hart Publishing, 2016, pp. 381-400).

¹⁶ Annex I, EC Commission, DG Justice Guidance document concerning Directive 2011/83/EU, p. 69 ff.

¹⁷ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ/L119, 4.5.2016, pp. 1-88.

- 3) if the data controller plans to disclose the personal data, at latest at the time of the first disclosure (Article 14.3 GDPR).¹⁸

With reference to the formal requirements, the GDPR echoes the consumer protection rules: the data controllers shall take appropriate measures to provide the information required by law (Articles 13-14 GDPR) and any communication regarding the right of access, the use of automated individual decision-making, and personal data breach:¹⁹

1) in a concise, transparent, intelligible and easily accessible form; 2) using clear and plain language; 3) provided in writing or by other means, including, where appropriate, by electronic means; 4) provided orally, if requested so by the data subject. Furthermore, where the processing is based on the data subject's consent, the request for it has to be presented in: "a manner which is clearly distinguishable from the other matters, in an intelligible and easily accessible form, using clear and plain language".²⁰

Similarly to the food labelling regulation, the GDPR expressly recognises in the black letter of the law the importance of visualisation as a way to increase transparency.²¹ In particular, the GDPR affirms the importance of iconography as a vehicle of information, establishing the possibility to provide the privacy notice: "in combination with standardised icons in order to give in an easily visible, intelligible and clearly legible manner a meaningful overview of the intended processing. Where the icons are presented electronically they shall be machine-readable".²² This policy provision is highly behaviourally-informed, considering that often online users derive information from icons and pictures rather than from text.²³ A version for the set of icons was

¹⁸ The principle encounters some exceptions: data controllers can be relieved of their duty to inform if the data subject has already the information related to the processing (Article 13.4 and Article 14.5.a GDPR). Or, in case personal data are not directly obtained from the data subject, if: 1) the provision of such information "proves impossible or would involve a disproportionate effort" (Article 14.5.b, GDPR); 2) the obtaining disclosure is laid down by EU or controller's Member States law, which provide measures to safeguard the legitimate interests of the data subjects (Article 14.5.c, GDPR); 3) the controller is bounded to confidentiality or professional secrecy obligations regulated by EU or national law (Article 14.5.d, GDPR). Despite such provisions could appear as a limitation to mandated disclosures, they reconfirm *de facto* the information paradigm, although for conceptually different reasons. In the first case (the information does not have to be given where it is already in the data subject's knowledge), because there is no information asymmetry to rebalance: such a legislative exception indirectly confirms that mandated disclosures have been provided at a previous stage. In the second set of cases, where personal data has been obtained from third parties, we must distinguish between two hypotheses: on the one hand, information duties cannot be fulfilled if it will be impossible to contact the data subjects or this will require a disproportionate effort, in line with the principle that *ad impossibilia nemo tenetur*. On the other hand, the data controller can be exempted by the information duties when the Legislator has subsumed the balancing between the data subject's right to information and other competitive rights, in favour of the latter.

¹⁹ Article 12.1, GDPR.

²⁰ Article 7.2., GDPR.

²¹ N. HELBERGER, F. ZUIDERVEEN BORGESIU and A. REYNA, 2017. See also Recital 58, GDPR.

²² Article 12.7 and Recital 60, GDPR.

²³ OECD, "Protecting Consumers In Peer Platform Markets: Exploring The Issues", 2016, available at https://unctad.org/meetings/en/Contribution/dtl-eWeek2017c05-oecd_en.pdf (accessed 18 August 2018).

released in the Annex of the first reading of the European Parliament on the GDPR proposal.²⁴ But no delegated act has been adopted by the European Commission to inform the development of such code of icons, as per Article 12.8 GDPR.

As in the case of the CRD, soft law has greatly contributed to give form to the principle of transparency. The latter has been recently interpreted by Article 29 Working Party (hereafter: WP29), which issued the final version of their guidelines in April 2018.²⁵ Even if not formally binding, the guidance has a strong influence on how the GDPR will have to be interpreted.

On the one hand, the WP29 provides for general principles and open clauses directed to implement the principle of transparency in practice. For instance, according to the working group, information must be presented efficiently and succinctly. It should be unambiguous, meaning that there should be no room for different interpretations and, in line with the consumer protection case law, data subjects must be able to foresee the scope and consequences of the processing, with particular regard to specific risks on their fundamental rights and freedoms.

On the other hand, the WP29 suggests also hermeneutical and practical recommendations that demonstrate the embedding of behavioural insights. Some of them refer to the linguistic formulation of the privacy policy, for example:

- information should be given in a simple and easy to understand manner, avoiding “complex sentence and language structures”,²⁶
- vague formulas, like “may”, “might”, “some”, “often”, should be prevented. If used, the data controller has to be able to demonstrate why it was not possible to be more precise;
- the text should be clearly and logically structured (using bullet points and indents);
- the active form should always be preferred to the passive form;
- highly technical or specialized language (including “legalese”) should be avoided as much as possible;
- in case of multi-language policy notices, all linguistic versions must be consistent and clear. A version in the data subject’s language should be always available.

²⁴ European Parliament legislative resolution of 12 March 2014 on the proposal for a regulation of the European Parliament and of the Council on the protection of individuals with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) (COM(2012)0011– C7-0025/2012 –2012/0011(COD)) (Ordinary legislative procedure: first reading).

²⁵ WP29, “Guidelines on Transparency under Regulation 2016/679”, 11 April 2018, WP260 rev.01.

²⁶ *Ibid.*, p. 12.

While other recommendations refer precisely to the visual presentation or organisation of information:

- the privacy notice must be differentiated from other legal documents (such as the terms and conditions);
- the controller should adopt “layered privacy statement” that will enable the data subjects to “jump” to the section they are interested to read;
- information shall be clearly visible, e.g. the data controller should give information directly to data subjects, “by linking them to it, by clearly signposting it or as an answer to a natural language question (for example in an online layered privacy statement/ notice, in FAQs, by way of contextual pop-ups which activate when a data subject fills in an online form, or in an interactive digital context through a chatbot interface, etc.”);²⁷
- information about the processing should not be scattered among different links and pages, but contained in one single place.²⁸

Furthermore, recognising the pitfalls of standardisation, the WP29 specifies the importance that information must be “understood by an average member of the intended audience”.²⁹ Notably, the WP29 emphasises the role of empirical research to ensure the respect of the principle of transparency. In fact, “[i]f controllers are uncertain about the level of intelligibility and transparency of the information and effectiveness of user interfaces/notices/ policies etc., they can test these, for example, through mechanisms such as user panels, readability testing, formal and informal interactions and dialogue with industry groups, consumer advocacy groups and regulatory bodies, where appropriate, amongst other things”.³⁰

Significantly, in the above-mentioned Guidelines for Transparency, the WP29 has affirmed that “the concept of transparency in the GDPR is user-centric rather than legalistic”.³¹ Such a statement is the building block of the present paper. We argue that mandated disclosures can still be a valid policy technique as long as the principle of transparency is properly implemented. However, the “how” is a matter that is not usually specified at the legislative level or, if it is, it is context-specific and cannot be extended to other cases in analogy. We believe that this gap can be filled through an interdisciplinary effort: empirical findings from linguistics, information design, human-computer interaction, behavioural sciences can efficiently

²⁷ *Ibid.*, p. 11.

²⁸ See, in particular, *ibid.*, paragraphs 17 and 33.

²⁹ *Ibid.*, p. 9.

³⁰ *Ibid.*, p. 7.

³¹ *Ibid.*, p. 5.

contribute to shape the content of the principle of transparency, providing not only *ex ante* guidance to traders and data controllers, but also a toolkit to enforcement authorities and courts to assess *ex post* the respect of legal obligations.

Along the lines of proactive law – discussed in Section III – for the scope of this paper we focus on the “*ex ante*” phase, by introducing one of the instruments that can guide the process of creating transparent information: legal design patterns. The latter are operative tools that demonstrate how the legal principle of transparency can be translated into practice through behavioural and design lenses.³²

Therefore, in the following Section we present the emerging discipline of Legal Design and we offer our own contribution to the collection, description and categorization of existing legal information design patterns that are meant to implement the principle of transparency both in consumer and data protection law.

III. Proactive Legal Design and Legal Design Patterns

A. Legal Design and Proactive/Preventive Law

Research and practice confirm that the people who use legal information, documents, services, and policies are not being served well by their current design.³³ Legal Design seeks to change this, as an interdisciplinary approach to apply human-centred design to prevent or solve legal problems by prioritizing the point of view of all the ‘users’ of the law: not only lawyers and judges, but also citizens, consumers, businesses, etc.³⁴

In addition to human-centeredness, Legal Design’s core attitudes include proactivity and prevention. Driving desirable outcomes, rather than just dealing with the consequences of failure or punishment, and preventing problems, rather than only intervening to resolve conflicts that have arisen:³⁵ legal designers have naturally found allies in Proactive/Preventive Law. Much of conventional law is reactive, with a focus on the past and on how to react to failures through legal proceedings, remedies, punishment, and so on. Preventive Law, instead, promotes a different approach: one where the focus is on the future and on using the law and legal skills to prevent disputes and eliminate causes of problems.³⁶ Preventive Law emphasizes the lawyer’s role as a planner, advi-

³² See *infra*, Sections III.C and IV.

³³ Legal Design Alliance, “What is Legal Design?”, 2018, available at: <https://www.legaldesignalliance.org/>.

³⁴ *Ibid.*

³⁵ R. DUCATO *et al.*, Legal Design Manifesto v1, available at https://docs.google.com/document/d/1FOL14jHy6-rpEop9aOeY7BFZFPq_rRL8vzCB92s1a6c/edit?usp=sharing (last accessed on 12 March 2019).

³⁶ T.D. BARTON, “Three Modes of Legal Problem Solving – And What to Do about Them in Legal Education”, *California Western Law Review*, Vol. 43, 2007, pp. 389-416, available at <http://works.bepress.com/>.

sor, or problem solver. In the words of Edward A. Dauer: “Litigation law is mostly law. Preventive law is mostly facts. And the critical time for preventive lawyering is when those facts are first being born. As a lawyer speaking to business people, I would have one request of them: Please let us be involved in the making of those facts”.³⁷

With the development of what is now known as the Proactive Law approach, a new dimension was added to Preventive Law. In addition to minimizing problems and risk, the proactive approach focuses on enabling success and enhancing opportunities. Using a medical analogy, in the proactive approach the focus is not just on preventing problems or “legal ill-health”. The goal is to promote “legal well-being”: embedding legal knowledge and skills in corporates’ culture, strategy and everyday actions to actively promote success, ensure desired outcomes, balance risk with reward, and prevent problems.³⁸ Proactive Law emphasizes positive goal-seeking methods, i.e. “ways to use the law to create value, strengthen relationships and manage risk”,³⁹ and lawyers’ role as designers who help clients achieve objectives and thereby succeed.⁴⁰

B. Legal Information Design

The first experiments with Legal Design revolved around legal information and its visual communication.⁴¹ Today, its applications go much further, covering not only the outcome but also the process of designing and prototyping legal artefacts, services, organizations, and systems.⁴² In this article, our focus is on legal information design presenting complex legal content so that it can be easily translated into action.

com/thomas_barton/10/. The term “Preventive Law” was coined by Louis M. Brown in his book *Preventive Law* (New York, Prentice-Hall, 1950).

³⁷ E. DAUER, “Corporate Legal Health: Preventive Law Dictates Going to Root Causes to Prevent Claims from Arising”, *Preventive Law Reporter*, September 1988, p. 12.

³⁸ H. HAAPIO, *Next Generation Contracts: A Paradigm Shift*, Helsinki, Lexpert Ltd, 2013, p. 39.

³⁹ Nordic School of Proactive Law, <http://www.juridicum.su.se/proactivelaw/main> (accessed on 11 March 2019).

⁴⁰ H. HAAPIO, “Introduction to Proactive Law: A Business Lawyer’s View”, in P. WAHLGREN (ed.), *A Proactive Approach*, Scandinavian Studies in Law, Vol. 49, Stockholm, Stockholm Institute for Scandinavian Law, 2006, pp. 21-34; G. BERGER-WALLISER, “The Past and Future of Proactive Law: An Overview of the Development of the Proactive Law Movement”, in G. BERGER-WALLISER and K. OSTERGAARD (eds), *Proactive Law in A Business Environment*, Copenhagen, DJOF Publishing, 2012, pp. 13-31; and G. SIEDEL and H. HAAPIO, *Proactive Law for Managers: A Hidden Source of Competitive Advantage*, Farnham, Gower, 2001.

⁴¹ S. PASSERA, H. HAAPIO, “User-Centered Contract Design: New Directions in the Quest for Simpler Contracting”, *Proceedings of the 2011 LACCM Academic Symposium on Contract and Commercial Management, 26th October 2011*, Tempe, USA; S. PASSERA, H. HAAPIO, “Transforming Contracts from Legal Rules to User-centered Communication Tools: a Human-Information Interaction Challenge”, *Communication Design Quarterly*, Vol. 1, Issue 3, April 2013, pp. 38-45; S. PASSERA, “Enhancing Contract Usability and User Experience Through Visualization – An Experimental Evaluation”, *Proceedings of the 16th International Conference on Information Visualisation, IV2012*, 11-13 July, Montpellier, France.

⁴² For example, A. PERRY-KESSARIS, “Legal Design for Practice, Activism, Policy and Research”, 46:2 *Journal of Law and Society*, forthcoming, <https://ssrn.com/abstract=3295671>.

This is deeply rooted in the discipline of information design, which offers approaches and solutions to organize and display information in a way that maximizes its clarity and understandability.

For Proactive/Preventive lawyers and legal information designers, thinking like a lawyer is not sufficient. They need to think about what users are trying to reach in a given context, and then present information in a way that can be readily put into action by the users to achieve their goals. To make this happen, promote “legal well-being”, and prevent cognitive accidents,⁴³ they need to think like designers:

“We came to realize that organizations often ask the wrong question. They ask, ‘What information should go into the document?’, when they should be asking, ‘What actions should people be able to perform, easily and quickly, with the information given?’⁴⁴

After finding the answer, what do designers do? They do not overwhelm people with too much information. Instead, they guide them through it with layered information, so people can skim through headings and find explanations. They explain procedures in a step-by-step fashion and with the help of explanatory diagrams. They use companion icons and clear and visible headings that answer or anticipate typical users’ questions, and so on. These information design techniques need not be reinvented – they can be identified, shared, and reused as design patterns.

C. Design Patterns

Design patterns are reusable solutions to a commonly occurring problem, that can be developed, collected, and shared by practitioners. The original idea of patterns stems from Christopher Alexander *et al.*,⁴⁵ who collected reusable architectural and design solutions. The idea was later applied to digital architectures and gained widespread acceptance with Erich Gamma *et al.*⁴⁶ Since then, design patterns have been extensively used in many other fields, such as computer science, interface design, information systems, and biology.

Design patterns offer several benefits. Based on empirical studies, extensive practice and iterated experimentations about their usability, they help identify good practices

⁴³ R. WALLER, “Simple Action 4: terms and conditions: our response to the government’s consultation”, London, The Simplification Centre, June 2017, https://uploads-ssl.webflow.com/5c06fb475dbf1265069aba1e/5c2bc8c81110ec3b8d058ae5_SimpleAction4-TermsAndConditions.pdf (accessed on 11 March 2019).

⁴⁴ D. SLESS, “Designing Documents for People to Use”, *She Ji: The Journal of Design, Economics, and Innovation*, vol. 4, no. 2, Summer 2018, pp. 125-42, at p. 131.

⁴⁵ C. ALEXANDER *et al.*, *A Pattern Language – Towns, Buildings, Construction*, New York, Oxford University Press, 1977.

⁴⁶ E. GAMMA *et al.*, *Design Patterns: Elements of Reusable Object-Oriented Software*, Pearson Education India, 1995.

and set standards on efficient solutions for a given problem. They can expunge the “Babel” of technical languages, by providing a problem-based syntax to people working in different domains.⁴⁷ By offering concrete, replicable, systematized, and extensible solutions, design patterns can support the implementation of abstract legal principles and make their rationale effective in the real world.⁴⁸

Not surprisingly, design patterns have assumed a crucial role in Legal Design as well. Over the last few years, several legal design patterns and pattern libraries have emerged from practice.⁴⁹ Based on our previous research on contract design patterns⁵⁰ and privacy design patterns,⁵¹ we argue that design patterns can help transform currently dysfunctional legal notices about pre-contractual information or data processing into functional communication tools that work for their intended audience. In the following, we build on our previous research on legal information design patterns for the consumer and data protection domains.⁵²

IV. The patterns' structure

Despite their variety, design patterns all respond to the same rationale: they are “useful techniques in terms of the functional problem they aim to solve”.⁵³ In this section, we propose a classification scheme to describe our collection of patterns. Such a classification is not a mere theoretical exercise: in order to be shareable, patterns need to be understandable and identifiable in terms of their purpose, rationale, the problem

⁴⁷ H. HAAPIO and M. HAGAN, “Design Patterns for Contracts”, in E. SCHWEIGHOFER *et al.* (eds), *Networks. Proceedings of the 19th International Legal Informatics Symposium IRIS 2016*, Wien, Österreichische Computer Gesellschaft OCG/books@ocg.at, 2016, pp. 381-88.

⁴⁸ See *supra* note at 35.

⁴⁹ For an overview of legal design patterns, see, for example A. ROSSI *et al.*, “Legal Design Patterns: Towards A New Language for Legal Information Design”, in E. SCHWEIGHOFER, F. KUMMER and A. SAARENPÄÄ (eds), *Internet of Things. Proceedings of the 22nd International Legal Informatics Symposium IRIS 2019*, Bern, Editions Weblaw, 2019, pp. 517-26; H. HAAPIO *et al.*, “Legal Design Patterns for Privacy”, in E. SCHWEIGHOFER *et al.* (eds), *Data Protection/LegalTech. Proceedings of the 21th International Legal Informatics Symposium IRIS 2018*, Bern, Editions Weblaw, 2018, pp. 445-50; HAAPIO and HAGAN, 2016; H. HAAPIO and S. PASSERA, “Contracts as Interfaces: Exploring Visual Representation Patterns In Contract Design”, in D.M. KATZ, M. BOMMARITO and R. DOLIN (eds), *Legal Informatics*, Cambridge University Press, forthcoming.

⁵⁰ HAAPIO and HAGAN, 2016; H. HAAPIO and S. PASSERA, forthcoming.

⁵¹ H. HAAPIO *et al.*, 2018; A. ROSSI, *Legal Design for the General Data Protection Regulation. A Methodology for the Visualization and Communication of Legal Concepts*. Alma Mater Studiorum Università di Bologna. Dottorato di Ricerca in Law, Science and Technology, 31 Ciclo, forthcoming 2019.

⁵² A. ROSSI *et al.*, 2019.

⁵³ R. WALLER *et al.*, “Cooperation through Clarity: Designing Simplified Contracts”, *Journal of Strategic Contracting and Negotiation*, vol. 2, no. 1-2, March/June 2016, pp. 48-68; G. MESZAROS and J. DOBLE, “A pattern language for pattern writing”, *Proceedings of International Conference on Pattern Languages of Program Design*, vol. 101, 1997, pp. 529-74.

they aim to solve and how they solve it, and the context where they can be used. In our case study, each pattern is described according to the following structure:

- *Summary*: this element contains a brief description of the pattern.
- *Problem*: this element lists the existing problem(s) that the pattern aims to solve.
- *Solution*: this element presents the solution identified to solve the problem.
- *Strategy*: this element explains how the pattern (is intended) intends to solve one or more problems on a general level.
- *Constraints and consequences*: this element describes restrictions, conditions and expected outcomes for the implementation of the pattern.
- *Examples*: this element lists a few well-implemented occurrences of the pattern.

A crucial element in characterising the pattern is the problem (or problems) it aims to solve. Without recurrent problems in a specific domain, patterns would not emerge as model, recurrent solutions. Therefore, in the next section we present the results of a literature review about the common problems associated to pre-contractual and privacy-related communication.

V. Recurring issues in pre-contractual and privacy-related communication

The non-readership problem of privacy and pre-contractual terms is so well-known and widespread,⁵⁴ that it has almost become a truism. However, *pacta sunt servanda*, even if you have not read them. Although in some cases the decision of not reading can be the outcome of a rational choice,⁵⁵ in most cases assigning the entire blame of such a behaviour to a free and autonomous decision of the individual would be unfair: privacy policies, terms and conditions, end user license agreements and similar legal documents are written in a way that create objective and recurrent hurdles preventing any person, regardless of her expertise, from reading and understanding them.

In the following paragraphs, we present a concise list of problems recurrently found in the literature on mandated disclosure. In addition, we propose high-level solutions

⁵⁴ Y. BAKOS, F. MAROTTA WURGLER and D.R. TROSSEN, “Does Anyone Read the Fine Print? Testing a Law and Economics Approach to Standard Form Contracts”, *NET Institute Working Paper Series*, 2009; O. BEN-SHAHAR and C.E. SCHNEIDER, 2011; R. CALO, “Against notice skepticism in privacy (and elsewhere)”, *Notre Dame Law Review*, vol. 87, 2011, pp. 1027-72.

⁵⁵ M. FAURE, H. LUTH, “Behavioural economics in unfair contract terms”, *Journal of Consumer Policy*, 34.3, 2011, pp. 337-358; C. SUNSTEIN, *Choosing not to choose: Understanding the value of choice*, Oxford University Press, USA, 2015.

(i.e. the “way forward”) that are meant to tackle the problem and be implemented by the legal design patterns described in Section VII.

A. Illegibility due to small print

An excessively small font size, the use of certain font families and the lack of sufficient spacing among the lines can discourage individuals from reading the document, weary them rapidly if they engage with the reading or affect the intelligibility of the text.⁵⁶

Way forward: Use legible fonts and good practices for line spacing.

B. Language complexity

As in much legal communication, the language used can be highly technical and complex in terms of semantic and syntactic choices – often even in an unnecessary manner. Therefore, it can be difficult for the recipient to understand the document without expert advice.⁵⁷

Way forward: Design information in an intelligible manner for the human brain; visually suggest or exemplify the meaning of the terms.

C. Vagueness of terms

Despite the inherent abstractness and generality of legal language, an extensive use of vague terms may leave the reader bewildered about their intended meaning. For instance, sentences like e.g. “we *may* collect information about you”; “the use of the Services *may* result in charges to you”; “we disclose *certain* personal data with third parties” may leave the reader puzzled about the actual occurrence of certain facts and about her obligations and rights.⁵⁸

⁵⁶ Belgian Commission on Unfair Terms, “Avis sur les conditions générales des sites de réseaux sociaux”, 16 december 2015; WP29, 2018; L. RELLO, M. PIELOT, M. MARCOS, “Make it big!: The effect of font size and line spacing on online readability”, *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*, ACM, 2016. pp. 3637-3648; BEUC, *Fitness Check of EU Consumer Law. Additional BEUC Policy Demands*, 2017, https://www.beuc.eu/publications/beuc-x-2017-040_csc_fitness_check_of_consumer_law_policy_recommendations.pdf.

⁵⁷ B. FABIAN, T. ERMAKOVA and T. LENTZ, “Large-scale readability analysis of privacy policies”, *Proceedings of the International Conference on Web Intelligence*, New York, ACM, 2017, pp. 18-25; C. JENSEN and C. POTTS, “Privacy policies as decision-making tools: an evaluation of online privacy notices”, *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, New York, ACM, 2004, pp. 471-8; J.A. OBAR and A. OELDRF-HIRSCH, 2016; N. ROBINSON *et al.*, *Review of the European Data Protection Directive* (sponsored by the ICO), RAND Europe, 2009; C.R. TRUDEAU and C. CAWTHORNE, “The Public Speaks, Again: An International Study of Legal Communication”, *University of Arkansas Little Rock Law Review*, vol. 40, no. 2, 2017, pp. 249-282.

⁵⁸ WP29, 2018; I. POLLOCH, “A typology of communicative strategies in online privacy policies: Ethics, power and informed consent”, *Journal of Business Ethics*, vol. 62, no. 3, 2005, pp. 221-235;

Way forward: Clearly and unambiguously indicate whether a certain clause applies and under which conditions.

D. Wall of text

Legal documents can be displayed as walls of text⁵⁹ that are “impenetrable” to the human eye,⁶⁰ because almost devoid of any information hierarchy and meaningful visual organization (e.g. paragraphs, headlines, variety of font sizes). It is demonstrated that text navigation and information-finding are hindered by visually undifferentiated text, while the task results easier if the reader is guided towards the most salient parts through visual differentiation (i.e. attention hierarchy).⁶¹ Indeed, overall page design helps individuals to reach a conclusion about the text's relevance:⁶² people tend to decide quickly (almost at pre-attentive level⁶³) whether to engage with reading or not, based on estimates of perceived effort, which poorly correlates with the actual effort required.⁶⁴ From this observation follows that, if a document looks effortful, chances are that the reader will give up almost immediately.

Way forward: Pay attention to information presentation, and improve ease of navigation and text skimmability.

E. Excessive length

Legal documents are known for being very long. For instance, it has been estimated that individuals with high school or college education would need between 29 e 32 minutes to read an average privacy policy of around 8 000 words.⁶⁵ Contrary to what is commonly presumed, exhaustive information does not necessarily increase

J.R. REIDENBERG *et al.*, “Ambiguity in privacy policies and the impact of regulation”, *The Journal of Legal Studies*, vol. 45, no. S2, 2016, pp. S163-90.

⁵⁹ S. PASSERA, “Beyond the wall of text: How information design can make contracts user-friendly”, in A. MARCUS (ed.), *Design, User Experience, and Usability: Users and Interactions*, vol. 9187, *Lecture Notes in Computer Science*, Cham, Springer, 2015, pp. 341-52.

⁶⁰ European Data Protection Supervisor, *Opinion 4/2015 Towards a New Digital Ethics*, 2015.

⁶¹ H. HAAPIO *et al.*, “Legal Design Patterns for Privacy”, in E. SCHWEIGHOFER *et al.* (eds), *Data Protection/ LegalTech. Proceedings of the 21th International Legal Informatics Symposium IRIS 2018*, Bern, Editions Weblaw, 2018, pp. 445-50; M. KAY, *Techniques and heuristics for improving the visual design of software agreements* (Master Thesis), Waterloo, University of Waterloo, 2010; M. KAY and M. TERRY, “Textured Agreements: Re-envisioning electronic consent”, in *Proceedings of the Sixth Symposium on Usable Privacy and Security*, New York, NY, ACM, 2010, pp. 13:1-13:13.

⁶² M.J. ALBERS, *Human-information interaction and technical communication: Concepts and frameworks*. Hershey, NJ, USA, IGI Global, 2012, p. 224.

⁶³ F. LINDGAARD *et al.*, “Attention Web Designers: You Have 50 Milliseconds to Make a Good First Impression”, *Behaviour & Information Technology*, vol. 25, no. 3, 2006, pp. 115-126.

⁶⁴ M.G. FENNEMA and D.N. KLEINMUNTZ, “Anticipations of Effort and Accuracy in Multiattribute Choice”, *Organizational Behavior and Human Decision Processes*, vol. 63, no. 1, pp. 21-32.

⁶⁵ OBAR and OELDORF-HIRSCH, 2016.

users' understanding: on the contrary, it can actually cause information overload and can even discourage users from reading.⁶⁶

Way forward: Pay attention to the wording and the structure of the text, and prune unnecessary or repetitive clauses and provisions. Keep in mind that the goal is to reduce information fatigue,⁶⁷ for example by attracting the attention of the user and thereby nudge her towards reading the legal document. An estimation of the effort needed to read the information can be a cost-effective way to engage the user. Furthermore, if such a system would become a common practice or mandatory, it could create an incentive for traders/controllers to prune excessively long documents.⁶⁸

F. Lack of audience-tailoring

Legal communication is mostly not designed with the intended audience in mind: even consumer-facing communication is often written “by lawyers for lawyers”,⁶⁹ instead of being adapted to take into consideration the cognitive capacities and the informational needs of the envisaged audience. Most of the time the provision of information merely aims to “bureaucratically” fulfil the legal requirement of mandated disclosure, rather than effectively inform individuals, who will need to act upon that information.⁷⁰

Way forward: Identify the intended audience of the legal document (e.g., a legal professional or a layperson? An adult or a child? A heterogeneous group of users?) and its informational needs, and offer meaningful information to address those needs. To this end, it is crucial to perform user research to understand the consumers potentially reached by the communication: for instance, a social media that is popular among teenagers has different types of costumers, and thus a different audience for its communication, than an industrial bank. If the audience is mixed, multiple simultaneous manners that respond to different needs can be envisaged to inform more meaningfully, like summaries and layered notices.

G. Wrong timing

Information related to the transaction or the processing is usually contained online in Terms of Service and privacy policies. The latter are generally shown at the time of

⁶⁶ CALO, 2011; FABIAN, ERMAKOVA and LENTZ, 2017.

⁶⁷ WP29, 2018.

⁶⁸ As affirmed by ELSHOUT *et al.*, *Study on Consumers' Attitudes Towards Terms Conditions (T&Cs) Final Report*, Report for the European Commission, Consumers, Health, Agriculture and Food Executive Agency (Chafea) on behalf of Directorate-General for Justice and Consumers, 2016, <https://ssrn.com/abstract=2847546>.

⁶⁹ BERGER-WALLISER *et al.*, 2011, p. 56; G. BERGER-WALLISER, R.C. BIRD, H. HAAPIO, “Promoting Business Success Through Contract Visualization”, *Journal of Law, Business & Ethics*, 2011, pp. 55-75 at 56.

⁷⁰ WP29, 2018; H. HAAPIO *et al.* 2018; and N. ROBINSON *et al.*, 2009.

registration to a service or at the moment of data collection, presenting all the information related to the entire relationship between the parties and the possible options during that time or in case something goes wrong. In more problematic cases, such as the so-called “browsewrap” agreements that pretend to bind the user while she visits the website and that are not considered valid in most of the European legal systems, the information is available on the webpage without any particular effort to bring it to the attention of the visitor.⁷¹ In other cases, the information is presented at the end of the shopping process or when the user is about to complete the registration.

The way of presenting such information can affect the individual in different manners, leading to the very same result: in the case of browsewrap agreements, such a practice does not fulfil the legal requirement, binding the consumer to conditions that she cannot have read;⁷² while the presentation of the whole bunch of information at the moment of subscription hinders the primary task carried out by the individual (e.g. subscription to a service), causing her to “click away” the notice to avoid the nuisance factor.⁷³ Similarly, if the information is presented at the end of a process where the user has already spent a considerable amount of time to reach that point, she might renounce to read the terms and conclude the transaction or the registration.⁷⁴

However, timing is a fundamental factor for the effectiveness of notices. If information is shown at an inopportune time, individuals might disregard it rather than directing their attention to it. On the other hand, lags between the moment when a notice is presented and the moment when a decision should be taken (e.g., change the privacy-settings) can reduce or annihilate the notice’s effect.⁷⁵ Only the provision of information at different times according to the contextual user’s needs results in instructional effectiveness.⁷⁶

⁷¹ N. KIM, *Wrap Contracts: Foundations and Ramifications*, Oxford University Press, 2013; R. MOMBERG, “Standard Terms and Transparency in Online Contracts”, in *European Contract Law and the Digital Single Market. The Implications of the Digital Revolution*, Cambridge, UK: Intersentia, 2016.

⁷² MBM Loos et al., *Analysis of the Applicable Legal Frameworks and Suggestions for the Contours of a Model System of Consumer Protection in Relation to Digital Content Contracts. Final Report: Comparative Analysis, Law & Economics Analysis, Assessment and Development of Recommendations for Possible Future Rules on Digital Content Contracts*, 2011, <http://dare.uva.nl/search?identifier=7d3d806d-8315-4aa6-8fb6-1fc565d2b557>.

⁷³ B. FRIEDMAN, P. LIN and J.K. MILLER, “Informed consent by design”, *Security and Usability*, (2001):503-530, 2005.

⁷⁴ E. ZAMIR, D. TEICHMAN, *Behavioral law and economics*, Oxford University Press, 2018.

⁷⁵ This is notably the case of cookie notices.

⁷⁶ K. SCHRIVER, “The rhetoric of redesign in bureaucratic settings”, in J. FRASCARA (ed.), *Information design as principled action: Making information accessible, relevant, understandable, and usable*, Champaign, IL, Common Ground, 2015, pp. 173-84; A. BOEKELDER and M. STEEHOUDER, “Selecting and switching: Some advantages of diagrams over tables and lists for presenting instructions”, *IEEE Transactions on Professional Communication*, vol. 41, no. 4, 1998, pp. 229-41; S. PASSERA, “Flowcharts, swimlanes, and timelines – Alternatives to prose in communicating legal-bureaucratic instructions to civil servants”, *Journal of Technical and Business Communication*, vol. 32, no. 2, 2018, pp. 229-72, at p. 237.

Way forward: Determine the touchpoints of the intended user⁷⁷ with the system and focus on the specific piece of information that the user might need in those moments to take a decision, in order to avoid nuisance affects that cause the dismissal of the notice.

H. Lack of familiarity

Without specific education and practice, most individuals lack the necessary experience and knowledge to understand, assess and act upon the information contained in legal terms, especially when the language is vague or overly complex.⁷⁸

Way forward: Assume that the readers lack any knowledge about the legal or technical notions implied by the terms, thus simplify, explain and illustrate them when possible.

I. Inaccessibility for visually impaired users

In some cases, the format in which the legal information is incorporated to websites and apps is not accessible to screen reader software.⁷⁹

Way forward: Provide legal documents in accessible formats for screen reader software or provide alternative voice-over communication formats in a conversational tone.

J. Scattered information

Information concerning different legal aspects about the use of the same service is scattered around a variety of legal documents (i.e. privacy policies, terms and conditions, licenses, etc.), thus making it laborious for individuals to find the specific provisions applicable to their case⁸⁰ and integrate the knowledge coming from spatially and temporally separated sources.⁸¹

⁷⁷ To this end, creating personas and reflecting on user journeys can be helpful, see specifically on online contractual disclosures M. HAGAN, “Exploding the fine print: designing visual, interactive consumer-centric contracts and disclosures”, in M. CORRALES, M. FENWICK, H. HAAPIO (eds), *Legal Tech, Smart Contracts and Blockchain*, Springer, 2019, pp. 93-122. On user journeys, see also: K.N. LEMON & P.C. VERHOEF, “Understanding customer experience throughout the customer journey”, *Journal of marketing*, 80(6) (2016), 69-96.

⁷⁸ BEN-SHAHAR and SCHNEIDER, 2011; D.J. SOLOVE, “Privacy Self-Management and the Consent Dilemma”, *Harvard Law Review*, vol. 126, 2013, pp. 1880-903.

⁷⁹ N. HELBERGER, 2013.

⁸⁰ G. NOTO LA DIEGA, “Uber law and awareness by design, An empirical study on online platforms and dehumanized negotiations”, *Revue européenne de droit de la consommation/European Journal of Consumer Law*, 2016, pp. 383-413.

⁸¹ M. BETRANCOURT and A. BISSERET, “Integrating textual and pictorial information via pop-up windows: An experimental study”, *Behav. Inf. Technol.*, vol. 17, no. 5, 1998, pp. 263-73; S. PASSERA, A. KANKAANRANTA and L. LOUHIALA-SALMINEN, “Diagrams in Contracts: Fostering Understanding in Global Business Communication”, *IEEE Transactions of Professional Communication*, vol. 60, no. 2, 2017, pp. 118-46; J. SWELLER, P. AYRES and S. KALYUGA, *Cognitive Load Theory*, Springer, 2011, pp. 111-128.

Way forward: Integrate relevant information in one place to avoid split-attention and extra clicks (e.g. in explanatory diagrams or summaries).

K. Excessive number of “legals”⁸²

This issue can be considered as a subcategory of the problem of information overload. When landed on a webpage or right before the registration, users are required to agree to a long list of terms and conditions, privacy policy, licenses, norms of the community, etc. (collectively, “legals”), that in some cases can count up to almost 50 different documents (e.g. Uber). Therefore, users are likely to experience up-front discouragement that hinders their willingness to consult the documents.

Way forward: Reduce the number of legals provided, especially at initial interactions, and devise mechanisms (e.g. estimation of time or effort, attention-catching visual means, at-a-glance summaries) to support the motivation to read.

L. Difficult comparability

There is no standard manner to structure the presentation of legal information (e.g. privacy policy⁸³ or Terms of Service) of different services. As a result, it is difficult to compare offers and to efficiently find information items. Therefore, it results impossible to effectively use information as a real decision-making instrument.⁸⁴

Way forward: Adopt a structured format that is commonly used or standardized.

This list represents a selection of the problems most commonly found in consumer-facing documents. For each problem, a high-level strategy that would potentially solve the problem has been advanced. We argue that Legal Design – as a research area – and legal design patterns – as instruments – can be fruitfully applied to implement the rationale of the law and ultimately prevent or solve the identified problems. In the following, we provide an introductory overview of 14 patterns that present punctual solutions to the common hurdles to information transparency outlined in this section.

⁸² By “legals” we refer to the complex web of privacy policies, Terms of Service, licenses, FAQs, norms of the community, etc., that usually populate the section “Legal” on a website and define the contractual relationship between the platform operator and the user. The concept is coined in G. NOTO LA DIEGA, 2016.

⁸³ The ISO/IEC CD 29184 for privacy notices is currently under development, see <https://www.iso.org/standard/70331.html>.

⁸⁴ A.M. McDONALD and L.F. CRANOR, “The cost of reading privacy policies”, *I/S: A Journal of Law and Policy for the Information Society*, vol. 4, no. 3, 2008, pp. 543-68; P.G. KELLEY *et al.*, “A nutrition label for privacy”, *Proceedings of the 5th Symposium on Usable Privacy and Security*, ACM, 2009, p. 4.

		Problems											
		A. Small print	B. Language complexity	C. Vagueness of terms	D. Wall of text	E. Excessive length	F. Lack of audience-tailoring	G. Wrong timing	H. Lack of familiarity	I. Inaccessibility for impaired users	J. Scattered information	K. Excessive numbers of legals	L. Difficult comparability
Patterns	A. Illustrative example		o	o			o		o				
	B. Summaries		o	o	o	o		o	o		o	o	
	C. Order and Label				o						o		o
	D. Table of content				o						o	o	o
	E. Layered notice		o		o	o	o	o	o				
	F. FAQs		o	o	o	o	o	o	o		o		o
	G. Companion icons	o			o							o	o
	H. Cartoons	o	o	o	o		o		o			o	
	I. Timelines	o	o	o	o				o		o		
	J. Audio-video	o	o		o		o		o	o		o	
	K. Reading time estimation					o						o	
	L. Progress mechanism					o						o	
	M. Gamified experience				o		o				o	o	
	N. Q-A chatbot	o	o	o	o	o	o	o	o	o	o	o	o

Table 1: Correspondence between each legal design pattern (left-hand column) and the problem(s) that it addresses (second row from top). The table is an improved and updated version of the previous work conducted in Rossi et al. (2019).

VI. Legal Design Patterns

This section offers an overview of the most recurrent or relevant patterns we have identified through both a review of relevant literature of information design principles and practices in consumer protection and data protection; and an empirical analysis of online privacy policies and Terms of Service pertaining to a selection of online platforms operating in Europe (especially in the sectors of e-commerce and sharing economy), complemented with examples derived from our own work⁸⁵ and from our own libraries of good practices and good examples. For the purpose of this paper, we focus on the online digital environment; however, many of the hereby proposed solutions can be also applied to the analogical world. Some of the patterns presented below are widely used in practice and reported in the literature, paving the way to their establishment as legitimate tools to implement the principle of transparency. For other patterns, instead, only a handful of implementations exists, thus indicating the need to provide tools to sustain experimentation to determine their efficacy in context and to understand the obstacles to a widespread adoption.

⁸⁵ For instance, the redesign of Juro's privacy policy (see Img. 6) and of Buzzsumo's Terms and Conditions (see Img. 2) by Stefania Passera; the design of the EITLab's privacy policy and Terms and Conditions (see Img. 14) by Rossana Ducato; and the contract design pattern library (<https://contract-design.iaccm.com/>) created by Helena Haapio and Stefania Passera in collaboration with the International Association for Contract and Commercial Management (IACCM).

A. Illustrative example⁸⁶

Summary: Provide an understandable example to clarify legal-technical terms or to make an abstract statement or concept more tangible.

Problem: Language complexity; vagueness of terms; lack of audience-tailoring; lack of familiarity.

Solution: Illustrative examples help users to transform abstract or unfamiliar legal information into a factual situation, that they might have experienced or that they can easily imagine applied to their case. Examples also provide practical instances of general categories and can be tailored to the intended audience.

Strategy: Offer information in a manner that is intelligible and tailored to the target user; explain in exact terms what abstract or complex notions mean in practice.

Constraints and consequences: The choice of examples must be relevant to the intended audience. User's socio-demographics characteristics (e.g. age) or the context (e.g. the type of service provided) can be leveraged, while the example's comprehensibility should be tested with the intended audience itself when possible. Naming one example of a class must not hide other practices (i.e. framing effect): for instance, it is unfair to exclusively mention privacy-friendly privacy practices, while omitting the risky ones. It is also advisable to specify that the example is meant for convenience only.

Example: «You have the right of access your personal information and data as well as the right to rectify any discrepancies. This means that whenever you want you can ask us about: 1) the existence of personal data concerning you, the categories of data, the purpose of the processing and the recipient to whom the information is communicated; 2) correct any inaccuracies.»⁸⁷

B. Summaries⁸⁸

Summary: Place language summaries either next to the original clauses throughout the document or at the beginning of the document.

Problem: Language complexity; vagueness of terms; wall of text; excessive length; wrong timing; lack of familiarity; scattered information; excessive number of legals.

Solution: Identify the most relevant information in each section of the document and provide a prominent summary that can be easily noticed and consulted. This pattern

⁸⁶ Reported in R. WALLER *et al.*, 2016.

⁸⁷ Original example from the EITLab's privacy policy, available at <http://eitlab.eu/privacy-policy/> (last accessed: April 29, 2019).

⁸⁸ Reported in IACCM contract design pattern library at <https://contract-design.iaccm.com/clause-summaries?> (last accessed: April 29, 2019).

provides different levels of informational depth, thus simultaneously accommodating the needs of different audiences: those that are satisfied with getting the gist of the document or of a specific section, those that prefer to read the whole document, and those that desire both, according to their respective needs. This pattern preserves the specialists' details, but does not alienate the other readers altogether. The selection of information to be reported in the summary must be therefore thought through, avoiding a deceptive framing of information.

Strategy: Offer different levels of depth, giving the double possibility to delve and to glance over the terms, to accommodate the audience's needs at different moments.

Constraints and consequences: Clause summaries are not always necessary: they might be redundant if the document is already short and in plain language. This solution gives salience to certain information, while other information can be discovered only after attentive reading of the document: therefore, it is important not to frame information in a misleading way. In any case, it is advisable to insert a disclaimer highlighting that summary clauses are for convenience only.

Example: Image 1 and 2.

4. Your Choices & Obligations

4.1 Data Retention

We retain your personal data while your account is in existence or as needed to provide you Services. This includes data you or others provided to us and data generated or inferred from your use of our Services. Even if you only use our Services when looking for a new job every few years, we will retain your information and keep your profile open until you decide to close your account. In some cases we choose to retain certain information (e.g., visits to sites carrying our "share with LinkedIn" or "apply with LinkedIn" plugins without clicking on the plugin) in a depersonalized or aggregated form.

We keep most of your personal data for as long as your account is open.

4.2 Rights to Access and Control Your Personal Data

We provide many choices about the collection, use and sharing of your data, from deleting or correcting data you include in your profile and controlling the visibility of your posts to advertising opt-outs and communication controls. We offer you settings to control and manage the personal data we have about you (for SlideShare, please contact us).

You can access or delete your personal data. You have many choices about how your data is collected, used and shared.

For personal data that we have about you:

- **Delete Data:** You can ask us to erase or delete all or some of your personal data (e.g., if it is no longer necessary to provide Services to you).
- **Change or Correct Data:** You can edit some of your personal data through your account. You can also ask us to change, update or fix your data in certain cases, particularly if it's inaccurate.
- **Object to, or Limit or Restrict, Use of Data:** You can ask us to stop using all or some of your personal data (e.g., if we have no legal right to keep using it) or to limit our use of it (e.g., if your personal data is inaccurate or unlawfully held).
- **Right to Access and/or Take Your Data:** You can ask us for a copy of your personal data and can ask for a copy of personal data you provided in machine readable form.

Img 1. An example of LinkedIn's privacy policy,⁸⁹ showing summaries next to the original verbose clauses. The example also shows the organization of the text and the topics in a consistent and visually-differentiated structure.

⁸⁹ <https://www.linkedin.com/legal/privacy-policy> (last accessed: March 14, 2019).



1. What is this document about?

- This agreement is a binding legal contract between you and BuzzSumo.
- You may not use any Services without agreeing to this agreement: we provide the Services only on these terms.

When you use the BuzzSumo App you agree to these terms and our Privacy Policy.



2. Using the services

- The Services are available only to non-consumers, for their internal, business use.
- If we discover that you are a consumer, we will terminate this agreement immediately.
- To access the Services, you have to create an account (either yourself or via a User in your company who creates an account for you).
- Each User login credential is individual to that User and cannot be used by anybody else.

The BuzzSumo App is only for business use and you have to create an account to use it.

If we allow you to use the Free App without an account, its use is limited and we can revoke it.

Img 2. Terms and conditions of BuzzSumo,⁹⁰ showing summaries and meaningful organization of the topics. Redesigned by Stefania Passera.

C. Order and labels

Summary: Organize the document in a coherent manner, where each topic is covered in a specific, labelled section.

Problem: Wall of text; scattered information; difficult comparability.

Solution: Divide up the document in separate chunks of text by giving relevance to thematic organization: each chunk of text should cover one specific topic and should have an informative heading. An easy-to-implement solution is constituted by providing an answer to the basic W-questions (in the context of a privacy policy, e.g. what information we collect; where we keep your information; how long we keep your information; how we process and keep your information; why we process your information; what are your rights). The thematic order of information is also important: the most pressing questions of a user should be answered first, in a prominent manner (e.g. at the beginning of the document). An additional strategy is constituted by describing regular facts first, and detailing the exceptions to the regular facts in the following.

⁹⁰ <https://buzzsumo.com/terms-conditions/> (last accessed: March 14, 2019).

Strategy: organize the document thematically, hierarchically and visually.

Constraints and consequences: When possible, combine this pattern with a navigable structure. Pay attention to consistently label the chunks of text and report the same headings in the table of content.⁹¹

Examples: Images 1, 2, and 3.

DATA CONTROLLER

Visiting the websites listed above may result into processing data relating to identified or identified natural persons.

The data controller is the Garante per la protezione dei dati personali, located in Piazza Venezia, 11, IT-00187, Roma (Email: garante@gpdp.it, PEC-certified email: protocollo@pec.gpdp.it, phone (switchboard): +39 06.696771).

DATA PROTECTION OFFICER

The Garante's Data Protection Officer (DPO) can be contacted here: Garante per la protezione dei personali - Responsabile della Protezione dei dati personali, Piazza Venezia, 11, IT-00187, Roma, email: rpdp@gpdp.it.

LEGAL BASIS FOR THE PROCESSING

The personal data mentioned on this page are processed by the Garante in discharging its tasks that serve the public interest or are related to the exercise of its official authority; this includes: raising public awareness and fostering public knowledge of the risks, rules, safeguards and rights concerning the processing of personal data as well as promoting data controllers' and processors' knowledge of the obligations imposed on them by the Regulation (Article 57(1), letters b) and d), of the Regulation).

CATEGORIES OF PERSONAL DATA AND PURPOSES OF THE PROCESSING

Browsing data

The information systems and software procedures relied upon to operate this web site acquire personal data as part of their standard functioning; the transmission of such data is an inherent feature of Internet communication protocols.

This data category includes the IP addresses and/or the domain names of the computers and terminal equipment used by any user, the URI/URL (Uniform Resource Identifier/Locator) addresses of the requested resources, the time of such requests, the method used for submitting a given request to the server, returned file size, a numerical code relating to server response status (successfully performed, error, etc.), and other parameters related to the user's operating system and computer environment.

These data are necessary to use web-based services and are also processed in order to:

- extract statistical information on service usage (most visited pages, visitors by time/date, geographical areas of origin, etc.);
- check functioning of the services.

Browsing data are kept for no longer than seven days (except where judicial authorities need such data for establishing the commission of criminal offences).

Img 3. Italian Data Protection Authority's privacy policy,⁹² organized in a thematic manner with informative headings.

⁹¹ This has been recently affirmed by the Consumer Protection Cooperation Network in its Common Position concerning the commercial practices and terms of service of Airbnb Ireland (https://ec.europa.eu/info/sites/info/files/final_common_position_on_airbnb_ireland_4.6.2018_en_002.pdf). The national authorities condemned the formulation of Airbnb's Terms, among other things, because the link to the online dispute resolution platform was "not included in the term that refers to the dispute resolution ('23. Dispute Resolution and Arbitration'), as it should be. On the contrary, the link is mentioned in the general provisions ('24. General Provisions'), making it difficult for the consumer to find and access it" (p. 4). Similarly, in January 2019, the Commission Nationale de l'Informatique et des Libertés (CNIL)'s restricted committee has imposed a financial penalty against Google LLC for lack of transparency and accessibility, in accordance to the GDPR. One of the motivations concerns non-explicit titles, i.e. "the title chosen by the company for "Exporting & deleting your information" [that] does not make it easy for the user to understand that this is a section providing access to information concerning retention periods." Available at: <https://www.cnil.fr/sites/default/files/atoms/files/san-2019-001.pdf> (last accessed: April 29, 2019).

⁹² <https://www.garanteprivacy.it/web/guest/informativa-protezione-dati#1> (last accessed: March 14, 2019).

D. Table of Content⁹³

Summary: Place a (navigable) menu either at the beginning of the page or in a floating box on the side, where each item offers quick navigation to the corresponding section in the text of the document.

Problem: Wall of text; scattered information; excessive number of legals; difficult comparability.

Solution: Provide a table of content listing the headings of the document's different sections, thus offering an overview of the topics covered either at the beginning of the document or throughout its navigation. The items of the table can be associated to hyperlinks that connect to the corresponding section in the document and thus support its navigability. This structure is particularly profitable for an efficient display on small screens.

Strategy: Provide a handful and consultable shorthand for the main topics explained in the document.

Constraints and consequences: The sections' headings must be carefully chosen to be meaningful and to allow easy navigation.

Examples: Image 4.

TABLE OF CONTENTS	
1. SCOPE AND APPLICATION:	What and who this Policy covers.
2. COLLECTION OF INFORMATION:	The sources of and methods by which we, our service providers and our advertisers collect information from and about you, including information about your interaction with the National Geographic Services.
3. USE AND DISCLOSURE:	How we use the information we collect from and about you, and who we might share it with and why.
4. SECURITY:	How we protect your information from loss or misuse.
5. USER ACCESS AND CONTROL:	How you can access and control the information we maintain about you.
6. OTHER IMPORTANT INFORMATION:	Other things you should know about this Policy and how we handle your information.
7. THE GDPR AND ADDITIONAL INFORMATION FOR INDIVIDUALS IN THE EUROPEAN ECONOMIC AREA ("EEA"):	What we are doing to meet the obligations of the General Data Protection Regulation and other important information for individuals in the EEA.
8. CONTACT US:	How to contact us about this Policy.

Img. 4. The National Geographic's privacy policy⁹⁴ supports a navigable table of content that additionally provides a short explanation about what the reader can expect to find in each section.

⁹³ Reported in IACCM Contract Design Pattern Library, <https://contract-design.iaccm.com/toc> (last accessed: March 17, 2019).

⁹⁴ <https://www.nationalgeographic.com/community/privacy/> (last accessed: March 14, 2019).

Table of Contents

1. Scope of Airbnb Services
2. Eligibility, Using the Airbnb Platform, Member Verification
3. Modification of these Terms
4. Account Registration
5. Content
6. Service Fees
7. Terms specific for Hosts
8. Terms specific for Guests
9. Booking Modifications, Cancellations and Refunds, Resolution Center
10. Ratings and Reviews
11. Damage to Accommodations, Disputes between Members
12. Rounding off, Currency conversion
13. Taxes
14. Prohibited Activities
15. Term and Termination, Suspension and other Measures
16. Disclaimers
17. Liability
18. Indemnification
19. Dispute Resolution
20. Feedback
21. Applicable Law and Jurisdiction
22. General Provisions

1. Scope of Airbnb Services

1.1 The Airbnb Platform is an online marketplace that enables registered users (“**Members**”) and certain third parties who offer services (Members and third parties who offer services are “**Hosts**” and the services they offer are “**Host Services**”) to publish such Host Services on the Airbnb Platform (“**Listings**”) and to communicate and transact directly with Members that are seeking to book such Host Services (Members using Host Services are “**Guests**”). Host Services may include the offering of vacation or other properties for use (“**Accommodations**”), single or multi-day activities in various categories (“**Experiences**”), access to unique events and locations (“**Events**”), and a variety of other travel and non-travel related services.

Img 5. Airbnb’s navigable table of content for its Terms of Service,⁹⁵ which also offers an overview of the document’s topics.

E. Layered Notice⁹⁶

Summary: Distribute the information on separate layers, where the first layer provides an overview of the document, while more details are contained in the additional layers, explorable at request.

Problem: Language complexity; wall of text; excessive length; lack of audience-tailoring; wrong timing; lack of familiarity.

Solution: Instead of providing the entirety of information at once, identify the most relevant, essential items and include them on the first layer, while leaving more details and explanations to explorable layers on demand. For privacy disclosures, following recital 39 GDPR, the Article 29 WP suggests to include in the first layer the details about the purposes of processing, the identity of the controller, and a description of data subjects’ rights. It is also possible to think of the different layers addressing different audiences: the first layer for those individuals that desire an overview, while the second layer is addressed to those that for various reasons prefer the whole text (e.g. lawyers, judges, supervisory authorities). Timing is also an important dimension in this

⁹⁵ <https://www.airbnb.com/terms> (last accessed: March 14, 2019).

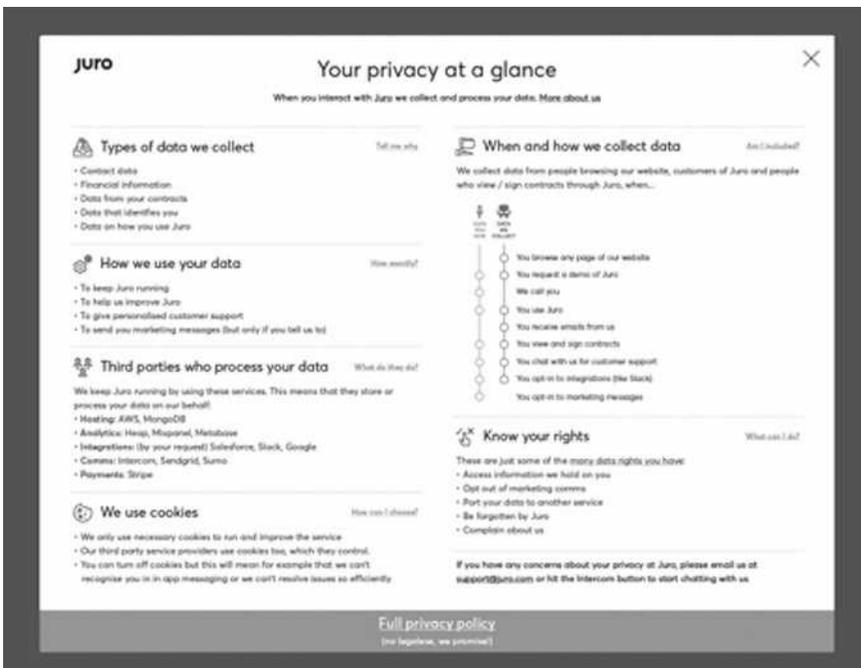
⁹⁶ See WP29, 2018; and the description of “Layering” family in the IACCM contract design pattern library: <https://contract-design.iaccm.com/library/layering> (last accessed: March 14, 2019).

context: the first layer can be shown at relevant moments (e.g. at the moment of landing on a website), while the second layer can be provided on demand (e.g. “Read more”).

Strategy: Differentiate among the needs of different users at different times. Give them the possibility of deciding to which extent they intend to explore the information, while remaining legally compliant.

Constraints and consequences: The information provided on the different layers must be on its whole consistent and harmonized, i.e. the information in one layer cannot conflict with the information on a different layer. The first layer must not include only fair terms, whereas unfair or risky practices are buried down into the other layers.⁹⁷ This multi-layered structure offers compliance in its totality.

Examples: Images 6 and 7.



Img. 6. The first layer of Juro’s privacy policy, shown when the user lands on the main page.⁹⁸ Links next to each section provide expandable paragraphs, while the link at the bottom redirects to the extended privacy policy. This example also shows a possible implementation

⁹⁷ As noticed by the Norwegian Consumer Council in the case of the presentation of Facebook’s facial recognition feature, see Norwegian Consumer Council, Deceived by Design, 2018, <https://fil.forbruker-radet.no/wp-content/uploads/2018/06/2018-06-27-deceived-by-design-final.pdf>.

⁹⁸ Available at: <https://juro.com/#privacy-popup> (last accessed: April 29, 2019).

*of companion icons and of a timeline displaying the moment of collection of the personal data.
Redesigned by Stefania Passera.*



Img. 7. The Creative Commons (CC) Licenses⁹⁹ are among the first examples of multi-layered notices: the traditional license in “legalese” (called the “Legal Code”) is accompanied by the “Common deed” (here represented in the picture), i.e. a more user-friendly version of the license. From the Common deed is always possible to have a quick access to the full license (a link is provided at the top of the page). Furthermore, a third layer complement the system of the CC Licenses, making them machine-readable.

F. FAQs

Summary: Provide easy-to-consult simplified explanations about the most frequently asked questions or about the most relevant topics of the legal agreements.

⁹⁹ <https://creativecommons.org/licenses/> (last accessed: April 29, 2019).

Problem: Language complexity; vagueness of terms; wall of text; excessive length; lack of audience-tailoring; wrong timing; lack of familiarity; scattered information; difficult comparability.

Solution: Identify the questions about processing and contractual conditions that are most frequently asked and dedicate a separate self-contained section on the website to answers in simple terms are provided. FAQs can also cover topics that are not properly legal or that could not find an appropriate section in the legal documents, for example they can contain instructions and “how to...” statements (see Image 8). FAQs might also spare an overburden of questions to the customer service or the legal department.

Strategy: Provide answers in simple terms to the users’ most common and pressing questions, that can be consulted in addition to the legally binding documents.

Constraints and consequences: FAQs only cover a selection of topics and must be consistent with the legal documents, to which they can be linked to provide thorough explanations.

Examples: Images 8 and 9.



Img. 8: Sony's privacy FAQs¹⁰⁰ facing general questions about privacy, but also providing “how to...” tutorials.

¹⁰⁰ https://www.sony.co.uk/eu/pages/privacy/en_GB/privacy_faq.html (last accessed: March 14, 2019).

FAQ Topics

▼ Buying

- How exactly does this promo code work?
- The website won't accept my payment
- The checkout page won't accept my shipping address
- I didn't get a confirmation email - did my order go through?
- A deal is sold out, what can I do?
- How do I find more information about a deal or merchant?
- How can I pay for my Groupon?
- How long do I have to buy a deal?

► Using a Voucher

► Scheduling an appointment or reservation

► Shipping & tracking

Img. 9. Groupon's FAQs model¹⁰¹ where questions are grouped per topic.

G. Companion Icons¹⁰²

Summary: Icons accompany the text (e.g. headings, subheadings, chunks of text) and visually suggest where a specific piece of information in the long text can be found.

Problem: Small print; wall of text; excessive number of legals; difficult comparability.

Solution: Include icons in the legal document or use them in combination with text on a layered notice to provide a quick overview of the object of the document. Icons represent the main concept or function to which they refer. These graphical elements can attract attention, efficiently support information finding, especially in long texts, and understanding, also bolstering memorization.

Strategy: Provide visual salience to the different sections of the document, while crafting a graphical overview for the reader.

Constraints and consequences: Icons should always be accompanied by a textual explanation, since they are not generally self-explanatory and users might be

¹⁰¹ <https://www.groupon.co.uk/faq> (last accessed: March 14, 2019).

¹⁰² Cf. H. HAAPIO, S. PASSERA, "Contracts as interfaces: Exploring visual representation patterns in contract design", in M.J. KATZ, R.A. DOLIN & M. BOMMARITO (eds), *Legal Informatics*, Cambridge, UK: Cambridge University Press, 2016. Published ahead of print as part of a doctoral dissertation, Available: <https://aalto.doc.aalto.fi/bitstream/handle/123456789/27292/article1.pdf?sequence=4&isAllowed=y>.

unfamiliar with them; this risk lowers if the icons pertain to a shared, standard visual vocabulary (e.g. the CC licenses that have become a *de facto* standard¹⁰³).

Examples: Images 6, 10, 11.



Hello! We are the International Association of Contract and Commercial Managers Inc, but we are usually referred to as IACCM. There are three companies that form IACCM and this Privacy Policy applies to all three:

Our US Parent Company: International Association of Contract and Commercial Managers Inc

Our UK Service Company: IACCM EMEA Limited

Our Australia Service Company: IACCM Pty Limited



IACCM is committed to protecting your privacy and we include this commitment in our Code of Conduct. We have prepared this Policy to describe to you our practices regarding the Personal Data we collect from you, how we protect it and respect your privacy. If you have any questions about this Policy, then please contact info@iaccm.com.



Types of Data We Collect

IACCM collects Personal Data and Anonymous Data from you when you visit our site, use or participate in our services or when you send us information or communications.

"Personal Data" means data that allows someone to identify or contact you, including, for example, your name, address, telephone number, e-mail address, as well as any information about you that is associated with or linked to any of the foregoing data.

"Anonymous Data" means data that is not associated with or linked to your Personal Data; Anonymous Data does not permit the identification of individual persons.

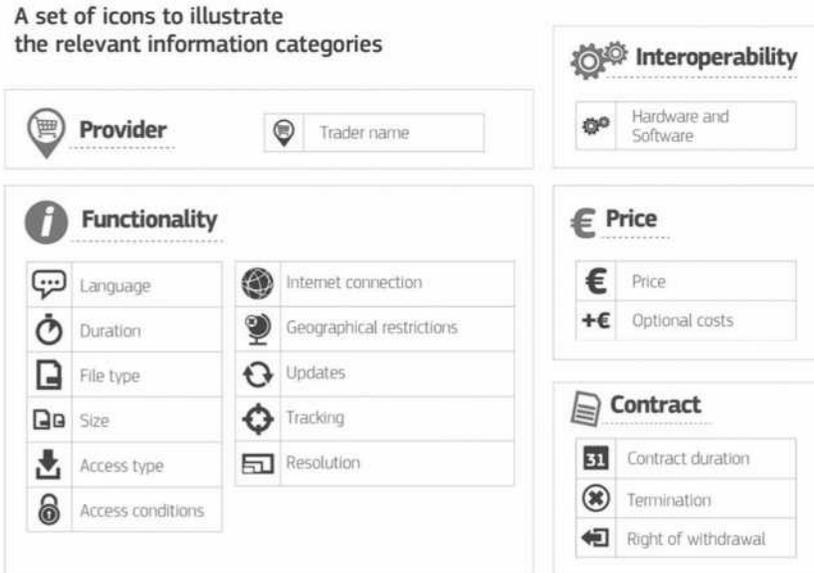
Sometimes you provide us with data and sometimes data about you is collected automatically.

Below we describe when and how we collect data.

Img. 10. IACCM's Privacy Policy,¹⁰⁴ displaying icons for each document's section.

¹⁰³ See *Img. 7*.

¹⁰⁴ <https://www.iaccm.com/about/privacy/> (last accessed: March 14, 2019).



Img. 11. Set of icons to accompany online purchasing, proposed in Annex I, DG JUSTICE GUIDANCE DOCUMENT concerning Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council.¹⁰⁵

H. Cartoons

Summary: Cartoons combine text and graphics to illustrate concepts or courses of action.

Problem: Small print; language complexity; vagueness of terms; wall of text; lack of audience-tailoring; lack of familiarity; excessive number of legal.

Solution: Cartoons and comics strips can attract and retain attention, fighting habituation. They constitute an integration of written and non-written information that can exemplify terms, develop a narrative and show the context where actions take place (e.g. the place and time). They generally use a conversational style and allow the user to identify herself with the character. Cartoons can also convey through the tone of voice the type of relationship that the service intends to foster with its users. For all these reasons, they might win young people's or less literate people's

¹⁰⁵ https://ec.europa.eu/info/sites/info/files/crd_guidance_en_0.pdf (last accessed: March 14, 2019).

curiosity, support their motivation to read and counteract the alienation that traditional legal documents might cause.

Strategy: Identify the intended audience and the core message(s) that needs to be delivered. Provide a graphical representation that skilfully combine text and graphics to illustrate the message and attract attention.

Constraints and consequences: Abstract concepts might be difficult to depict, although they can be illustrated through concrete examples. Cartoons might only show a selection of topics of the whole document, thus in this case are to be intended as complementary manner to deliver the information. The conversational style (e.g. friendly, courteous, formal,¹⁰⁶ serious, humorous, etc.) needs to be carefully chosen, according to the intended audience: for instance, the style will differ if the communication is addressed to kids or teenagers or if it is rather addressed to adults. The tone may also vary depending on the brand of the company: under this perspective, legal communication is integral part of the institutions' communication practices. Although comics are good candidate to attract attention and support motivation to read, there might be audiences that do not consider them appropriate for certain legal contexts. Therefore, the contexts of use and the intended audience must be thoughtfully considered before employing them.

Examples: Image 12.



Img. 12: *The Venetian Mobility Company AVM*¹⁰⁷ displays crucial parts of its privacy policy (e.g. data subjects' rights) through comics strips, that are periodically released on their social

¹⁰⁶ H. HAAPIO and D.A. PLEWE, "Next Generation Deal Design: Comics and Visual Platforms for Contracting", in E. SCHWEIGHOFER *et al.* (eds), *Networks. Proceedings of the 19th International Legal Informatics Symposium IRIS 2016*, Wien, Österreichische Computer Gesellschaft OCG/books@ocg.at, 2016, pp. 373-380.

¹⁰⁷ Venetian Mobility Company S.P.A. (AVM), in-house company of the Municipality of Venice, which, together with the companies of which it is the parent company, manages local public transport, private mobility services, traditional events and marketing. The comics strips are available at: <http://avm.avm-spa.it/it/content/informativa-privacy-veneziano> (last accessed March 12, 2019).

media and on their website. The characters are depicted in the settings of the city of Venice and speak the local dialect, which is the everyday language of many Venetian inhabitants. The comics always end with a humorous twist. Drawings by Maurizio Boscarol.

I. Timelines¹⁰⁸

Summary: Display on a timeline a series of steps or processes taking place within a given timeframe, or a sequence of events.

Problem: Small print; language complexity; vagueness of terms; wall of text; lack of familiarity; scattered information.

Solution: Presenting actions, requirements, or deadlines in chronological order makes sense to the user, because reflects her perception of time. Timelines can explain processes by illustrating when and in what order the steps need to be taken, for example in terms of payments, and show dependencies or preconditions. Timelines also provide an overview of what will or is expected to happen in the future, and what course of action needs to be taken. Timelines also stand out from the rest of the text and can thereby give salience to certain actions or requirements. Inserting the information on a timeline can also support the agreement drafter to ensure that the information is clear and consistent.

Strategy: visually differentiate temporal information from the rest and provide it in a logical manner.

Constraints and consequences: The pattern can be used to visualize a temporal or logical process, thus it is not appropriate for any kind of information. Furthermore, timelines do not give full and complete information about the different steps, thus they cannot substitute the mandated disclosure.

Examples: Image 13.

¹⁰⁸ S. PASSERA, *supra* note 73; see also <https://contract-design.iaccm.com/timeline?>.



3. Subscription and Payments

The process



Img. 13: Buzzsumo's terms and conditions¹⁰⁹ timeline illustrating the process of subscription. Redesigned by Stefania Passera.

J. Audio-video

Summary: The main points of the document are communicated through an audio-visual product.

Problem: Small print; language complexity; wall of text; lack of audience-tailoring; lack of familiarity; inaccessibility to impaired users; excessive number of legals.

Solution: Provide a short, introductory video that explains the key points of the Terms and Privacy Policy – as required by the law (mandated disclosure) and as suggested in

¹⁰⁹ <https://buzzsumo.com/terms-conditions/> (last accessed: April 29, 2019).

softlaw documents¹¹⁰ – at the moment when an overview of the contract or the processing would prove useful. The video can also focus on some specific topics that benefit from an audio-visual clarification. Videos can attract attention and be perceived as a less time-consuming activity than reading the whole document, thus encouraging the view. Unlike other means, a video also has the capacity to convey the tone and feeling of the relationship of the organization with the users. Moreover, it can provide information for visually impaired individuals, children or people with low or levels of literacy.

Strategy: Provide information in an audio-visual manner on demand, in addition to written information.

Constraints and consequences: The video can communicate the fundamental aspects described in the whole document, akin to the first layer of information in a layered approach, and has therefore to be combined with a complete, written document for the sake of compliance. The video must not focus exclusively on fair terms, whereas unfair or risky practices are buried down into the written document, since individuals might watch the video but not read the document. Therefore, the choice about what to include and what to leave out must be carefully made on a case by case basis. Even technical constraints should be considered, e.g. the type of device or the screen size. It is good practice to provide subtitles to allow hearing impaired people to follow the video and to allow for display in silent mode.

Examples: Easyjet's privacy policy;¹¹¹ the Guardian's privacy policy.¹¹²

K. Reading time estimation

Summary: Provide an estimation of reading time before the individual engages with the document.

Problem: Excessive length; excessive number of legals.

Solution: Estimate the reading time of the document according to the average reading speed.¹¹³ Show the estimate prominently, for example at the top of the page, so that the individuals is able to form realistic expectations about the effort required to read the whole document, which can support their motivation to read. Additionally, it is possible to offer a concrete hook that helps the reader to translate into a graspable example what the estimation means (see Img. 14).

¹¹⁰ See Sect. VI.E “Layered notice” for the choice of key information following the recommendations of the working groups. The service provider may also exercise some discretion, provided that it does not give salience to some information items while deliberately hiding the most questionable or unfavourable ones.

¹¹¹ <https://www.easyjet.com/en/policy/privacy-promise> (last accessed: March 12, 2019).

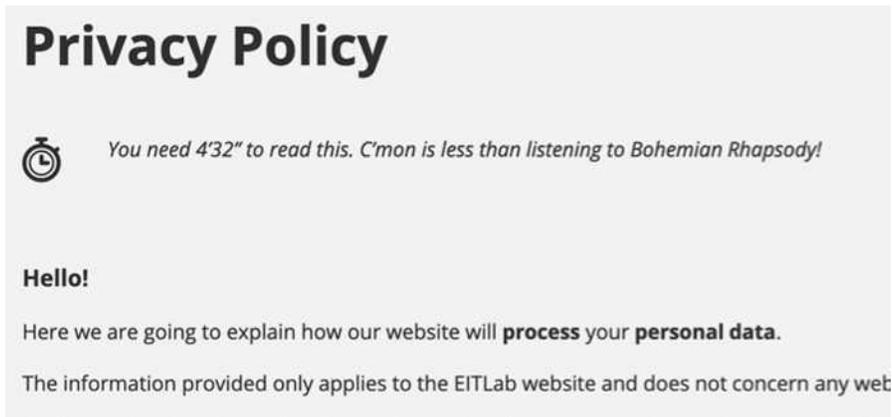
¹¹² Now only available only on Youtube: https://www.youtube.com/watch?v=_nUVk1dFsmo (last accessed: March 12, 2019).

¹¹³ Freely available software that compute the reading time (average reading time is 200 words per minute) exist online, e.g. <http://www.niram.org/read/> (last accessed: March 12, 2019).

Strategy: Since individuals are used to lengthy texts and decide very quickly whether to read or not the document, basing their choices on immediate aspects like presentation, appearance of length and perceived effort, this pattern can offer a solution to adjust expectations and boost the motivation to read.

Constraints and consequences: If the document is very long, the estimation will discourage readers instead of motivating them.

Examples: Image 14.



Img 14: An up-front estimation of the reading time of the EITLab's privacy policy,¹¹⁴ designed by Rossana Ducato.

L. Progress mechanism

Summary: Display a mechanism showing the progress of the reader through the legal document

Problem: Excessive length; excessive number of legals.

Solution: The advancement of a progress bar or a similar mechanism (e.g. showing a percentage) displays the proportional amount of work that the user has completed, i.e. with respect to the fulfilment of the task of reading an extensive amount of legal terms. Information can be organized in separate chunks or in different windows, but it is important to provide orientation to the users, i.e. suggest them what they have been already accomplished, where they are and what to expect next.

Strategy: Provide a tangible manner to show users their progress through the document and, thereby, support their motivation to read.

¹¹⁴ <http://eitlab.eu/privacy-policy/> (last accessed: April 29, 2019).

Constraints and consequences: Although displaying a progress mechanism is always meaningful, it cannot be expected that users will deterministically read the whole document.

Examples: Images 15 and 16.

The screenshot shows the 'Uber Privacy' page with the 'INTRODUCTION' section selected. The navigation bar includes 'OVERVIEW' and 'PRIVACY POLICY'. The main content area is titled 'Introduction' and contains the following text:

When you use Uber, you trust us with your information. We are committed to keeping that trust. That starts with helping you understand our privacy practices.

This policy describes the information we collect, how it is used and shared, and your choices regarding this information. We recommend that you read this along with our Privacy Overview, which highlights key points about our privacy practices (including what information we collect, when we collect it, and how we use it).

Last Modified: May 25, 2018

Effective Date: May 25, 2018

[Download Previous Policy](#)

*
* *

The screenshot shows the 'Uber Privacy' page with the 'DATA COLLECTIONS AND USES' section selected. The navigation bar includes 'OVERVIEW' and 'PRIVACY POLICY'. The main content area is titled 'Data Collections And Uses' and contains the following text:

Scope

SUMMARY

This policy applies to users of Uber's services anywhere in the world, including users of Uber's apps, websites, features or other services.

This policy describes how Uber and its affiliates collect and use personal information to provide our services. This policy applies to all users of our apps, websites, features or other services anywhere in the world, unless covered by a separate privacy policy such as the Uber Freight Privacy Policy. This policy specifically applies to:

- **Riders:** users who request or receive transportation
- **Drivers:** users who provide transportation individually or through partner transportation companies

*
* *

Choice And Transparency

SUMMARY

Uber provides means for you to see and control the information that Uber collects, including through:

- in-app privacy settings
- device permissions
- in-app ratings pages
- marketing opt-outs

You may also request that Uber provide you with explanation, copies or correction of your data.

A. PRIVACY SETTINGS

The Privacy Settings menu in the Uber rider app gives users the the ability to set or update their location and contacts sharing preferences, and their preferences for receiving mobile notifications from Uber. Information on these settings, how to set or change these settings, and the effect of turning off these settings are described below.

▪ **Location Information**

- Uber uses rider's device location services to make it easier to get a safe, reliable ride whenever you need one. Location data helps improve our services, including pickups, navigation, and customer support.
- You may enable/disable, or adjust, Uber's collection of rider location information at any time through the Privacy Settings menu in the Uber app, or via the settings on your mobile device. If you disable the device location services on your device, your use of the Uber app will be affected. For example, you will need to manually enter your pickup or drop-off location. In addition,

*
* *

Uber Privacy

Updates To This Policy

SUMMARY

We may occasionally update this policy.

We may occasionally update this policy. If we make significant changes, we will notify you of the changes through the Uber apps or through others means, such as email. To the extent permitted under applicable law, by using our services after such notice, you consent to our updates to this policy.

We encourage you to periodically review this policy for the latest information on our privacy practices. We will also make prior versions of our privacy policies available for review.

Img. 15. Uber¹¹⁵ presents a navigable menu displaying the main sections of the privacy policy (Introduction – data collections and uses – choice and transparency – update to this policy). The menu also highlights the active section of the document in a different color as the user scrolls down the page.

¹¹⁵ <https://privacy.uber.com/policy> (last accessed: March 14, 2019).

M. Gamified experience

Summary: Present the legal terms in a gamified environment.

Problem: Wall of text; lack of audience tailoring; scattered information; excessive number of legals.

Solution: Design an interactive experience by making use of gamified mechanics that allows users to gain a reward (e.g. in terms of points, badges, etc.) by exploring the terms or privacy policy, thus enhancing their motivation to read.

Strategy: A gamified experience is meant to attract and retain user's attention, while boosting her motivation to explore the legal document. In addition, it can be an engaging experience that present the terms in a completely novel manner.

Constraints and consequences: The gamified exploration of the terms of the privacy policy must not be compulsory, but rather be seen as an added value: it must reflect the user's free choice to be informed, otherwise it risks to be considered as a nuisance. This is why it must always be available in addition to the legally binding document. The gamification mechanics must be well integrated with the goals or the philosophy and must offer a rewards that is meaningful and spendable by the users. This is why not all traders or controllers might be able to smoothly integrate such mechanisms into their service.

Examples: Image 16.



Img. 16. Two screenshots of PrivacyVille showing implementations of the progress mechanism in Zinga's privacy policy.¹¹⁶ The document was conceived as a gamified experience that rewards those users completing all the steps.

¹¹⁶ <https://www.zynga.com/privacy/privacyville>. Such a privacy policy is not online anymore (last accessed: January 2018).

N. Question-Answering chatbot

Summary: Provide exploration of the legal document in a personalized, interactive and timely way through a conversation with a chatbot.

Problem: Small print; language complexity; vagueness of terms; wall of text; excessive length; lack of audience tailoring; wrong timing; lack of familiarity; inaccessibility for impaired users; scattered information; excessive number of legals; difficult comparability.

Solution: A chatbot is a computer program that simulates human conversations through text chats or voice commands. If properly designed and trained, it can answer users' questions about an organization's legal practices in a reliable manner and in real-time. Thus, users can find the desired information easily and rapidly, while the communication is tailored to their needs and interests. The conversational style (formal or informal) can mirror the organization's spirit. The chatbot can be offered by the organization itself¹¹⁷ or set up by a third party.¹¹⁸

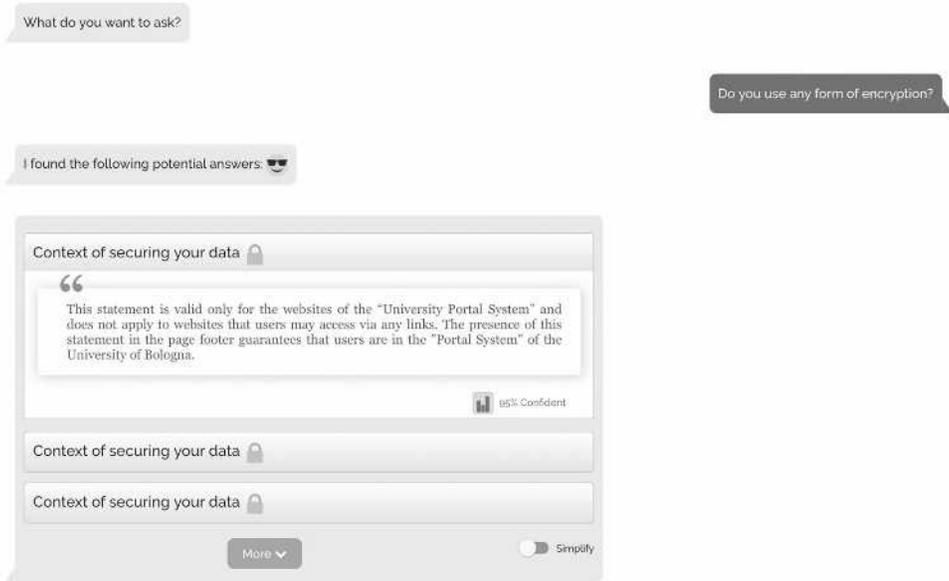
Strategy: Interpose between user and legal document a conversational agent that provides only the relevant information to the user on demand and that brings together information scattered in different parts of the document or in separate documents.

Constraints and consequences: Depending on its level of sophistication, a chatbot shows different flexibility in understanding the questions and giving the answers. Since it is an intermediary between legal text and users, these should be made aware of the fact that the chatbot is not a human being, it might not be completely certain about the answers and might not provide an interpretation of the text.

Examples: Image 17.

¹¹⁷ For instance, by training easy-to-implement solutions offered on the web to answer specific questions about the legal terms, e.g. <https://www.qnamarkup.org/> (last accessed: March 12, 2019).

¹¹⁸ <https://pribot.org/bot> (last accessed: March 12, 2019). See also H. HARKOUS *et al.*, "Pribots: Conversational privacy with chatbots", Twelfth Symposium on Usable Privacy and Security (SOUPS 2016), 2016.



Img 17. A screenshot of the possible interaction with PriBot, a chatbot interfacing an AI-system that can analyse any privacy policy present on the web and answer predefined questions.¹¹⁹ This image also shows that a chatbot can convey the tone of voice through a conversational tone and emoticons. The percentage reports the confidence of the system about the retrieved answer.

VII. Towards an online patterns library

The preceding paragraph has described 14 legal information design patterns that are meant to exemplify the way forward for an effective implementation of the principle of transparency in consumer-facing legal communication. The final goal is to collect these and additional solution models in an online pattern library:¹²⁰ without framing the patterns in an easily accessible, usable and searchable manner, complemented with plenty of real-life examples, chances are that the solutions arising from best practices will remain unknown and will continue to take a backseat in the universe of transparency implementation mechanisms. In order to facilitate drafters and designers of legal documents to conveniently search, retrieve and discover the patterns and apply them to their specific needs, a system of classification is necessary. A classification according to the problem a certain pattern aims to solve or prevent constitutes the first step

¹¹⁹ *Ibid.*

¹²⁰ On the model of <https://privacypatterns.org/> (last accessed: March 12, 2019) or the IACCM patterns library.

towards this goal. A second level of classification will concern the context: online or offline disclosures. For the purpose of this paper, we have exclusively focused on the first element. Yet, other useful categories will only emerge from the implementation and actual use of the library by forward-looking practitioners.

VIII. Conclusions

The article has provided an overview of existing legal design patterns that aim to implement the principle of transparency in a genuinely user-centric, rather than a mere legalistic manner.¹²¹ Based on empirical findings, patterns can be a first basic tool to design (or redesign) effective information disclosures. This supports the necessity of building a fruitful interdisciplinary dialogue with other research domains, like law, design, and behavioural sciences. Such a creative interaction is at the core of Proactive Law and Legal Design. Along these lines, we have presented transparency as a process (and outcome) “by design”: a forward-looking method to envision, create, and design legally compliant solutions that are efficient, usable, and tailored to different contexts. The boilerplate era can hopefully come to an end:¹²² with this initial work, we aim to contribute to enhance the understandability and usability of information to individuals, specifically consumers and data subjects. If the information paradigm is what permeates the consumer and data protection legislation, then it is necessary to investigate how to render information an effective means of empowerment for the weak party.

This article paves the way to a thorough theoretical and empirical investigation into the possibilities of application of legal design patterns and the evaluation of their effectiveness in the real world. The pattern collection proposed in these pages does not aim to be final nor exhaustive: new patterns may emerge in the future, while the existing ones might need revisions as their use increases and diversifies, their implementations flourish and new application contexts arise. As the number and variety of implementations grow, the solution models themselves will be refined accordingly. Moreover, a pattern library is by its nature a resource envisioned to grow, thanks to the contributions of a community of practice. Hostile to a prescriptive nature, the process of creation, classification, and vetting of these legal design patterns is meant to be iterative, collaborative and interdisciplinary.

¹²¹ WP29, 2018, note 27.

¹²² As affirmed by Antti Inananen: “At some point we are going to laugh at the situation where we are now: *do you remember the time when there used to be websites with privacy policies that were over 30 pages long?* It’s not going to be like this forever, but it is difficult to make those systemic changes. Legal design can be very powerful to support such a transition” (Speech at “Transparency by Legal Design” panel, within the CPDP conference, Brussels, 30 January 2019, <https://www.youtube.com/watch?v=rkynCWFy1tE>).