

3.2

A DE IURE CONDITO PROPOSAL FOR THE EMPOWERMENT OF INFORMATION ABOUT DATA PROCESSING: LEGAL DESIGN AS AN EX ANTE REMEDY ¹⁹⁰

Introduction – This chapter deals with the causes and the possible remedies of the low awareness issue of the data subjects reading privacy policies. It focuses on the theme of legal design, according to which legal information must be elaborated using an interdisciplinary approach, which includes law, design thinking and technology, to encourage awareness of rules, simplifying the processes and the ways in which they are exposed to the recipients.

Considering an overview of current laws, it is believed that rewriting legal clauses according to the legal design method, represents a possible *ex ante* protection, as it should increase the awareness of the common user.

The complexity of the contracts and the use of a tricky language ¹⁹¹ reduces understanding for the common users ¹⁹².

In this regard, numerous studies ¹⁹³ have focused on contract visualization ¹⁹⁴ as a tool to improve the understanding of contracts. Also,

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¹⁹¹ Hagedoorn J., Heslen G., *Contractual Complexity and the Cognitive Load of R&D Alliance Contracts* (2009) *Journal of Empirical Legal Studies* 818, 847.

¹⁹² Baddeley has provided the first systematic interpretation of memory, still valid today, in terms of both structures and processes, recognizing a limited capacity and potentially susceptible to the overload caused by tasks that require an expensive attention load; Baddeley AD, 'Working memory and language: An overview' (2003) *Journal of Communication Disorders* 189, 208.

¹⁹³ The research in this field offers significant results in support of the effectiveness of UX/UI design techniques in facilitating understanding: according to some empirical evidence, contracts and business documents are more easily understood by the actors involved when they include visual representations of the their content; Passera S., Haapio H., *Transforming Contracts from Legal rules to user-centered Communication Tools: to Human – information challenge* (2013) *Communication Design Quarterly* 38, 45.

¹⁹⁴ On the theme, see: Passera S., Smedlund A., Linasuo M., *Exploring contract visualization: Clarification and framing strategies to shape collaborative business relationships* (2016) *Journal of*

because of the lack of understanding of the contract can constitute a risk for the consumer or the data subject, which are usually the weaker part of the contract.

The need for greater protection of values, in particular those of the awareness of the consumer or the data subject, strongly emerges, dominating the debate about contract understanding¹⁹⁵.

New technologies are imposing new languages and new tools¹⁹⁶ in society. The practical jurist should carry out a functionalistic reading of the current legislation in order to understand the phenomenon rather than ignore it¹⁹⁷. If, on the other hand, the jurist chooses to get to a non-functionalistic reading of the current legislation, he would legitimize a repressive order of those new emerging expressions and needs of the information society.

From the data of the experiment it emerged that the usability of Microsoft's Windows 10 operating system is medium-low. In particular, the examination of biometric data shows that even those who declare that the protection of privacy matters then opts for the default data settings. The reason is that obviously the user is not perceiving the risk.

If an average user employs a few seconds to read an information, which usually requires about three hours to read, it means that he has only turned the pages of the legal document, giving his consent to the processing of his personal data without any awareness.

In this context, it is necessary, for the jurist in front of the development of the computer phenomenon, to develop a practical approach rather than being a mere analyst of the legislative language.

Strategic Contracting and Negotiation 69,100; Kay M., Terry M., *Textured Agreements: Re-Envisioning Electronic Consent, Proceedings of the Sixth Symposium on Usable Privacy and Security* (Association for Computing Machinery 2010) <https://doi.org/10.1145/1837110.1837127>; Passera S., Haapio H., *User-Centered Contract Design: New Directions in the Quest for Simpler Contracting*, in Henschel R.F., *Proceedings of the 2011 IACCM Academic Symposium on Contract and Commercial Management* (Tempe, 2011) 80,97; Passera S., Pohjonen S., Koskelainen K., Anttila S., *User-friendly Contracting Tools – A Visual Guide to Facilitate Public Procurement Contracting* (2013) *Proceedings of the Academic Forum on Integrating Law and Contract Management: Proactive, Preventive and Strategic Approaches* 74, 94; Mamula T., Hagel U., *The Design of Commercial Conditions* (2015) Jusletter IT.

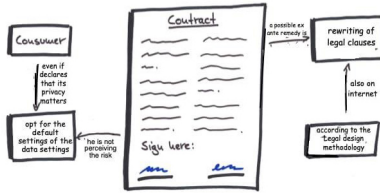
¹⁹⁵ The scenario in which the contract law pays is very different with respect to the origins of the codicist model, but whose speed of global transformation of political, economic and social phenomena is such that one wonders whether the contract to have subjugated the law is now; Conference *Diritto e confini*, Venditti C., 23.05.2019, www.unisob.na.it/eventi/eventi.htm?vr=1&id=19038.

¹⁹⁶ In order to transcribe the legal language into electronic language (symbolic metalanguage) and vice versa, it is necessary to resort to techniques of homogenization and linguistic standardization in syntactic links. Frosini V., *Diritto e informatica negli anni ottanta* (1984) 2 Riv. trim. dir. pubbl. 390,400, now in ID., *Informatica diritto e società* (Giuffrè, 1988) 231.

¹⁹⁷ Clarizia R., *Informatica e conclusione del contratto* (Giuffrè, 1985) 172.

3.2 *De iure condito* proposal for the empowerment of information about data processing

Therefore, an *ex ante* remedy may be the “rewriting of legal clauses” also on the internet, according to the legal design methodology.



30. Example of renewal of the drafting process of the contract

The principles and methods of providing legal information. The article 4 of the 2016/679 European Regulation n. 2016/679¹⁹⁸ on privacy and data protection, so-called GDPR, defines the processing of personal data, as any operation carried out¹⁹⁹ with or without the aid of an automated process and applied to personal data.

The data processing has to be carried out according to the lawfulness principle²⁰⁰ and correctness, and the data must be collected and processed for specific, explicit and legitimate purposes, and used in terms compatible with them²⁰¹.

Consent is one of the six legitimate bases for processing personal data, as enshrined in article 6 of the GDPR. Therefore, the data controller must carefully evaluate the appropriate legitimate basis for the data processing.

Working Party 29, in an opinion on the definition of consent²⁰², specified that the invitation to accept the processing of data should be subject to strict criteria, since the fundamental rights of the interested party are at stake.

¹⁹⁸ The General Data Protection Regulation n. 2016/679, henceforth GDPR is the European legislation on privacy and personal data protection. It was published in the European Official Journal on May 4, 2016, and entered into force on May 24, 2016, but its implementation in Italy took place on May 25, 2018. Its main purpose was to harmonize data protection regulations within the European Union.

¹⁹⁹ These operations are: the collection, registration, organization, structuring, storage, adaptation or modification, extraction, consultation, use, communication by transmission, dissemination or any other form of mass available, comparison or interconnection, limitation, cancellation or destruction. The second paragraph specifies that the data processing concept encompasses all those operations that imply a knowledge of personal data.

²⁰⁰ Illegally collected or processed data cannot be used in any way; otherwise, the user may be subject to penalties and sentenced to compensation for the damages caused, pursuant to art. 2050 of Italian civil code.

²⁰¹ Furthermore, according to the standard, the data must be exact and updated, relevant, complete and not excessive in relation to the purposes of the data processing. They must be kept for a period not exceeding the time necessary to achieve the purposes of the processing, after which the data must be deleted or anonymized.

²⁰² Article 29 Data Protection Working Party: Opinion n. 15/2011 (2011) available at the link: www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/1895739.

In this sense there is also the article 7, paragraph 4, GDPR²⁰³ which dictates the rules for assessing whether consent has been freely given. This is to ensure that the processing of personal data for which consent is requested cannot be transformed directly or indirectly into a contractual performance.

The art. 12 of the GDPR provides that the data controller adopts appropriate measures to provide the interested party with all the information referred to in articles 13 and 14 and in the communications pursuant to arts. 15 to 22 and to the art. 34 relating to data processing in a concise, transparent, intelligible and easily accessible form, with simple and clear language, in particular in the case of information specifically intended for minors. This is to ensure the transparency and accuracy of the data processed right from the design stage of the processing itself, and to be able to prove it at any time²⁰⁴.

The recent European Regulation n. 2016/679 has also introduced the principles of privacy by design and by default where, in art. 25, requires that the design of the software minimizes the use of personal data and the risk for the data subject. Both in the sense of making choices that tend to anonymize data to be collected, and in encouraging the awareness of the people who consent to the data processing.

The W.P. 29²⁰⁵, on the subject of transparency, established the obligation to adapt the legal communication to the addressee.

The W.P. 29 also provided an in-depth analysis on the notion of consent and on how to provide information. The W.P. 29, in fact, published the guidelines on the topic, in 2018 and 2020.

In particular, the WP29 clarified that the data controller must always use clear and simple language to describe the purpose of the data processing for which consent is requested. This means that the message should be easily understood by an average person, not just a lawyer. The data controller must ensure that consent is provided on the basis of information that allows the data subject to easily identify who the data controller is and to understand what he is consenting to. Therefore, those informations that are necessary to

²⁰³ Article 7, paragraph 4: «When assessing whether consent is freely given, utmost account shall be taken of whether, *inter alia*, the performance of a contract, including the provision of a service, is conditional on consent to the processing of personal data that is not necessary for the performance of that contract».

²⁰⁴ In compliance with the accountability principle enshrined in art. 5 of the GDPR, the data controller, taking into account the nature, context and purpose of the processing, will have to guarantee, and be able to demonstrate that it is carried out in accordance with the legislation and in a way that does not determine risks to the interested parties.

²⁰⁵ Article 29 Data Protection Working Party: Guidelines on transparency under regulation 2016/679, 17/EN WP260 rev.01 (April 2018).

express consent to the processing of personal data cannot be hidden within the general conditions of contract/service²⁰⁶.

Furthermore, even when consent must be expressed electronically, the request must be clear and concise²⁰⁷.

With particular reference to the consent given electronically, the European Data Protection Committee (EDPB), on May 4, 2020 adopted the new Guidelines on consent²⁰⁸.

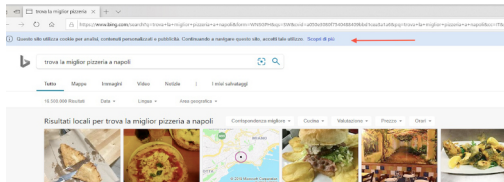
The EDPB has clarified that the consent provided by the interested party when accepting the so-called “cookie walls” is not valid, if the acceptance of cookies is a necessary condition to access the website.

In addition, the EDPB considered the consent obtained by scroll to be invalid, as this action can hardly determine an unequivocal manifestation of consent.

Microsoft also exploits cookies²⁰⁹ for various purposes, including: storage of preferences and settings; access and authentication; safety; storage of information provided by the user to a website; social media; feedback; interest-based advertising; display of advertisements; analysis; performance.

As a result, if a user visits a Microsoft website, the site sets cookies²¹⁰. Most web browsers automatically accept cookies, but provide controls to block or delete them.

In Microsoft, if the “Cortana” assistant is used to search for something on *Bing*, the cookies are automatically installed, as can be seen in the following



31. Example of automatic installation of cookies

²⁰⁶ Article 7 of the GDPR provides that in cases where consent is required in a paper contract that also covers other aspects, then the request for consent must be clearly distinguishable from the rest.

²⁰⁷ Similarly, the Recital 32 of the Regulation provides that if consent is requested electronically, the request for consent must be separate and distinct, and cannot simply appear in a paragraph within the general conditions of contract/service.

²⁰⁸ European Data Protection Board (EDPB): Guidelines 05/2020 on consent under Regulation 2016/679 (May 2020). This is an updated document of the guidelines developed in 2018.

²⁰⁹ Cookies are small text files that store data that can be retrieved from a web server in the domain that stored the cookie. Some cookies are placed by third parties who act on behalf of the device (e.g. Microsoft).

²¹⁰ Companies that provide content store cookies independently.

image. The user, in fact, is notified of the use of cookies by a very small banner at the top where it says: «this site uses cookies for analysis, personalized content and advertising. By continuing to browse this site, you accept this use».

To block or to delete cookies, it is necessary to go to the settings in the privacy and services section.

In this way, the legal information provided to the user does not comply with the principles of clarity and transparency as exposed in the European regulation and the EDPB guidelines.

Therefore, if the user consents to the processing of his personal data without understanding the meaning, or if he continues to browse the site always accepting cookies automatically, he is obviously not perceiving the risk. As said before, a possible *ex ante* remedy could be a “rewriting of legal clauses” also on the internet, according to the legal design method.

The legal design approach as an ex ante remedy. The legal design issues the need to simplify the text of the privacy statement, drafted pursuant to art. 13 of Regulation (EU) 2016/679 (GDPR), or the consent form for the processing of personal data²¹¹, pursuant to art. 6, through the legal design approach²¹².

So, we can say that the legal design²¹³ has become a particular discipline that aims to achieving a correct and effective visualization of a legal content, favoring communication and understanding through the use of textual, para-textual and contextual elements, as well as of the information visualization²¹⁴, each of them accurately evaluated according to their own

²¹¹ In most legal elaborations, privacy policy relating to the collection and processing of data is written to simply satisfy the legal requirements of mandatory disclosure, instead of effectively informing the persons concerned about the collection and processing of their personal data. Haapio H., Hagan M., Palmirani M., Rossi A., *Legal design patterns for privacy* (2018) Data Protection/ LegalTech Proceedings of the 21st International Legal Informatics Symposium IRIS 445,450.

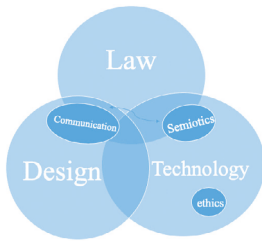
²¹² The notion of legal design was coined by Margaret Hagan in Hagan M., *Law By Design*, (Retrieved March 2018), from www.lawbydesign.co/en/home. Legal Design is the application of human-centered design to the world of law, in order to promote the usability and comprehensibility of legal instruments, and in particular contracts.

²¹³ Legal design is a method to create legal services, focusing on their usability, usefulness and involvement. This is an approach with three main groups of resources – process, mentality and mechanics – to be used by legal professionals. These three resources can help you conceive, build and test better methods of acting in the legal sphere, which will involve and empower both legal professionals and individual users. Hagan M., *Law By Design*, (Retrieved March 2018), from www.lawbydesign.co/en/home.

²¹⁴ Information visualization is the study of (interactive) visual representations of abstract data to reinforce human cognition. The abstract data include both numerical and non-numerical data, such as text and geographic information. On the subject see: Card S.K., Mackinlay J.D., Shneiderman B., *Readings in Information Visualization: Using Vision to Think* (Morgan Kaufmann 2007); Kerren

methodologies of the matter. In this way the sensation of cognitive fluidity of the user would be significantly promoted²¹⁵.

This new discipline realizes a hybridization of knowledge through a proactive *ex ante* methodology. In fact, legal design combines law²¹⁶, technology, ethics, philosophy, semiotics and communication. In particular, semantic technology, law and communication interact in the creation of visual icons which, through design²¹⁷ and following the principles of transparency and clarity, help the user to understand the legal concept.



32. Multidisciplinarity of the Legal design

The principles of transparency and clarity, which are inherent in the Italian legal culture²¹⁸ and more generally in the European one²¹⁹, represent

A., Stasko J.T., Fekete J.D., North C., *Information Visualization – Human-Centered Issues and Perspectives*, Vol. 4950 of LNCS [Springer, 2008] ; Mazza R., *Introduction to Information Visualization* [Springer, 2009]; Spence R., *Information Visualization: Design for Interaction* [Springer, 2014].

²¹⁵ Cognitive fluidity is the human tendency to prefer / act on things that are more familiar and easy to understand. On the point we refer to Kahneman D, 'Thinking, Fast and Slow', [Farrar, Straus and Girox, 2012], that "the general principle is that whatever we do to reduce cognitive tension is useful, so we should first make the sentence maximally legible". According to Kahneman, there are four underlying causes of cognitive fluidity between: an experience repeated over time that fuels the feeling of familiarity; clear and legible characters able to increase the sensation of truth; an idea subjected to priming, which leads to a feeling of positivity; the good mood that is able to fuel the feeling of lack of effort.

²¹⁶ The "legal" concept must go beyond the static positive law approach and therefore must not refer only to the legislative system, but must also include doctrine, jurisprudence, contractual provisions, policies. LeDA, The legal design alliance, www.legaldesignalliance.org The "legal" concept must go beyond the static positive law approach and therefore must not refer only to the legislative system, but must also include doctrine, jurisprudence, contractual provisions, policies. LeDA, The legal design alliance, www.legaldesignalliance.org.

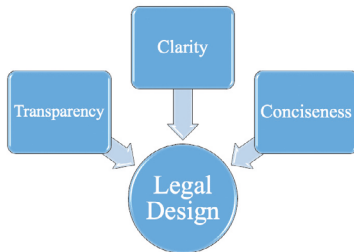
²¹⁷ Design is the approach to a more usable, useful and accessible social system, which aims to experiment and create new documents, services, technologies, rules and systems.

²¹⁸ The art. 35 of the legislative decree n. 206/2005 [so-called Consumer Code] in the first paragraph establishes the obligation to draft the clauses proposed to the consumer in writing clearly and comprehensively. Furthermore, the Consumer Code, in art. 48 establishes that the professional provides the consumer with information clearly and legibly; art. 51, 1 co., states that for distance contracts the professional provides or makes the information available to the consumer in simple and understandable language.

²¹⁹ See articles 12 and 13 of the General Data Protection Regulation n. 2016/679.

3. Solutions to the critical aspects emerging from the experiment: UX&HMI perspective

the foundations of legal design. In fact the visual and textual elements used try to represent the legal information in a clear and understandable way, without compromising the freedom of decision of each user.



33. Basic principles of legal design

Through the tools of legal design not only the graphic layout of the contract is changed. In fact, the aim is to make the consumer or the data subject aware of the legal information provided. So, this also affects the relationship between professional and consumer or data subject, and more generally between the strong subject that predisposes the legal document and the weak person who needs to immediately understand its content.

In fact, the methodology of legal design consists of some steps: classification of the existing situation (discover the status quo); focus on the type of user (focus on a person); re-frame the challenge; develop ideas (wide brainstorming); understanding and prioritizing (make sense, prioritize the information that have to present in the text); elaborate a prototype (creation of a first example of the text); testing²²⁰. The use of clear, effective and easily understandable language, as well as the insertion of graphic icons²²¹ facilitates the usability and accessibility of the legal content (of the privacy policy or of the consent form) even for those who do not have a legal background²²²; this would also favor a better relationship between professional and consumer or data subject, based on the accuracy, transparency and clarity.

²²⁰ Hagan M., *Law By Design*, (Retrieved March 2018), from www.lawbydesign.co/en/home.

²²¹ It should be noted that other studies have been carried out, which similarly to the one in question, have used tools for measuring behavioral analysis and human-centered methods, in order to create a set of so-called graphic icons. DaPIS for legal concepts, in particular on the protection of personal data. On this point we note: Rossi A., Palmirani M., *DaPIS: a Data Protection Icon Set to Improve Information Transparency under the GDPR* (2019) available on gdprbydesign.cirsfid.unibo.it/wp-content/uploads/2019/01/report_DaPIS_jan19.pdf.

²²² Some authors suggest five guidelines that can help everyone deal more easily the documents: 1) develop the information from bite, to snack, to meal; 2) show the structure with an informative title, headings, and links; 3) break up the information with short sections, lists, paragraphs, and sentences; 4) write in plain language, with common words and active verbs; 5) Design for visual clarity. Jarrett C., Redish J., Summers K., Straub K., 'Design to Read: Guidelines for People Who Do Not Read Easily' (2010) 9 User Experience Magazine. www.effortmark.co.uk/design-read-guidelines-people-read-easily.

This demand emerges more clearly where software and devices – as often happens – collect data also for other purposes that are different than those that are recognized as necessary for the service provider (eg marketing, improvement of its systems, collection of big data for analysis), often requiring data that is not strictly necessary, in contrast to the principle of minimization established by the GDPR. So, it is necessary to make common users aware about the purposes of that data processing and about those data types that are actually necessary for the delivery of the service, as well as the destination of all the additional data that is collected.

In this context, legal design could play an essential role, through visual tools that draw the attention of the users, make them more aware of the purposes for which they have given consent to the processing of its data. In particular, they must gain consciousness of their data that will be collected and processed even without explicit consent (or for the other legal bases referred to in article 6), and that their activity involves those data for which is required explicit consent to the processing, either because they are sensitive data (details data categories pursuant to article 9 GDPR) or because their processing is aimed at further purposes, and in the case has to be specified whether the processing takes place in an automated form (Big Data).

Legal design should increase this awareness because in a perspective of privacy by design and by default, consent cannot be given automatically but the conscious will of the interested party must emerge and therefore that is not inherent in an automatic act.

Moreover, the need to make the user more aware emerges even more when the data subject is a minor, where, pursuant to art. 8 GDPR, in the case of a direct offer of IT services to minors, the processing of the minor's personal data is lawful if the minor is at least 16 years old, and at least 14 years in Italy²²³. Finally, in the case of processing sensitive data, the purpose of the processing should be clearer and more transparent to the common user, in order to guarantee a really informed consent. This is because the qualification of explicit consent²²⁴ remains only with regard to sensitive data, where consent is required for these.

An empirical study²²⁵ carried out on the same subject as the one in question has shown that the privacy policy should be divided into

²²³ See: Caggiao I.A., *Privacy e minori nell'era digitale. Il consenso al trattamento dei dati dei minori all'indomani del Regolamento UE 2016/679, tra diritto e tecno-regolazione* (2018) Famiglia 3, 23.

²²⁴ The explicit consent can be understood as consent not only not inferable from conclusive behavior (expressed), but that is clearly manifested. Caggiano I.A. 'Il consenso al trattamento dei dati personali' (2017) DIMT online 12.

²²⁵ The research was conducted by M. Hagan at Stanford University. 20 participants interviewed, young adults attending Stanford University, and 100 participants from Mechanical Turk,

shorter communications, to be included in a single page, whose terms must be presented in more discreet and pertinent ways in order to cover all conditions and types of situations. Instead, the other types of terms should be communicated to the user only if he is interested in making a decision on that topic. With this different approach, the user should be able to avoid being overwhelmed by an enormous flow of information.

Hence the user's understanding can be facilitated *ex ante*, without generating any type of error or frustration for him, if the service provider, with the help of a legal design expert, designs the privacy policy through the use of the user experience (UX)²²⁷ and the interaction design techniques (behavioral science) together with the application of the principles of private law.

The fact that legal information is not clear and immediate in its understanding contrasts with the need to guarantee a high degree of *situation awareness*²²⁸ in the operational context in which the user moves.

SA is a metric connected to the world of cognitive ergonomics that refers to the understanding of environmental elements in a specific space-time dimension for decision makers. Even in these cases, a reduction in user operations, and a contraction of the mental workload, reduces the SA with consequences in the effectiveness of monitoring and recovery.

The inefficiency of the current *ex ante* protection, which is recognized in a prohibition on data processing, emerged from the experimentation conducted and from the legal-behavioral analysis of the collected data²²⁹.

Therefore, as anticipated in the introduction, if a functionalist²³⁰ interpretation of the current legislation is pursued²³¹, it is possible to conceive another type of *ex ante* protection.

Consequently, in a *de iure condito* vision, the legal design methodology arises as an *ex ante* remedy that could also guarantee a greater degree of situational awareness.

were between 20 and 40 years old, were interviewed and ranked themselves as somewhat tech-savvy or above. Hagan M., *The User Experience of the Internet as a Legal Help Service: Defining Standards for the next Generation of User-Friendly Online Legal Services* (2016) Va. JL& Tech 395, 465.

²²⁶ User Experience (UX) concerns the interaction with a product, a system or a service, and precisely personal perceptions on the utility, on the simplicity of use and on the efficiency of the system.

²²⁷ La situational awareness (SA) is an ergonomics concept, that was defined by Endsley. See Endsley M., 'Toward a Theory of Situation Awareness in Dynamic Systems' (1995) Human Factors Journal of the Human Factors and Ergonomics Society 37 32,64.

²²⁸ Gatt L., Montanari R., Caggiano I.A., *Consenso al trattamento dei dati personali e analisi giuridico-comportamentale. Spunti di riflessione sull'effettività della tutela dei dati personali* (2017) Politica del diritto 343,360.

²²⁹ Clarizia R., *Informatica e conclusione del contratto* (Giuffrè, 1985), 12.

²³⁰ Alpa G., *Intervento conclusivo*, in Gatt L., *Il contratto del Terzo Millennio. Dialogando con Guido Alpa* (Editoriale Scientifica, 2018).